

## ABSTRACT

**GRIFFITHS, JANE HELEN.** Academic Self-Efficacy, Career Self-Efficacy, and Psychosocial Identity Development: A Comparison of Female College Students from Differing Socioeconomic Status Groups. (Under the direction of Stanley Baker, Ph.D.)

A review of current literature indicates the existence of a dynamic theoretical intersection between identity, self-efficacy, gender, education, and socioeconomic status (SES). To facilitate an understanding of that dynamic, differences in academic self-efficacy, career self-efficacy, and psychosocial identity development among freshmen and sophomore female college students ( $n = 275$ ) from differing socioeconomic groups were investigated. Class and gender inequities in the educational system and the world of work are also discussed, illustrating their affect on individual identity development, and on academic and career self-efficacy.

Due to societal oppression and the lack of privileges otherwise afforded to individuals from higher SES groups, it was hypothesized that women from lower SES groups would experience lower academic self-efficacy, career self-efficacy, and psychosocial identity development, particularly when adjusting to a higher SES dominated college environment. Participants completed three measures in addition to demographic questions used for determining SES. Administered measures included the Objective Measure of Ego Identity Status (OMEIS; Adams, Shea, & Fitch, 1979), the short form of the Career Decision-Making Self-Efficacy Scale (CDMSE-SF; Betz & Taylor, 2001), and the College Academic Self-Efficacy Scale (CASES; Owen & Froman, 1988). SES was determined using a combination of annual family income, parental occupation, and parental education level. The use of a one-way Analysis of Variance (ANOVA) and *t*-tests revealed significant differences for female students in the lowest SES group when compared to female students in higher SES groups on

measures of both career self-efficacy and academic self-efficacy. A chi-square analysis was used to determine differences in identity development among SES groups; findings were mixed. For example, despite the lowest SES group having the largest number of female students occupy the highest identity status, when compared to all other SES groups, they also represented the largest number of female students in the lowest identity status. These findings indicated significant representation of two identity extremes for women students in lower SES groups. These and other findings are discussed at length. Implications for practice and recommendations for future research are also discussed.

**ACADEMIC SELF-EFFICACY, CAREER SELF-EFFICACY, AND  
PSYCHOSOCIAL IDENTITY DEVELOPMENT: A COMPARISON OF FEMALE  
COLLEGE STUDENTS FROM DIFFERING SOCIOECONOMIC STATUS GROUPS**

by  
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## DEDICATION

This work is dedicated to the man who stole my heart, my devoted husband Jon. Throughout this process you have supported me, encouraged me, and always believed in me. This work is also dedicated to the efforts of all first generation college students.

## BIOGRAPHY

Jane Helen Griffiths was born in Wales, Great Britain. During Jane's teenage years, Wales fell into an economic depression following the closure of many coal mines; an industry which supported entire communities. Jane's social class background and the experiences of her youth have had a strong influence on her research interests, which include the dynamic intersection of socioeconomic status (SES), women's issues, education, and identity development.

Jane attended a business school in Wales and received an A.S. in Business and Finance. She also worked as a statistical and administrative clerk for the South Wales Police Constabulary. Despite having the opportunity to attend college, as a woman from a lower class background in an economically depressed climate, Jane saw few career prospects or life choices open to her if she remained in her hometown. At 19 years of age, Jane left Wales for San Francisco, CA.

While in San Francisco, she took multiple jobs to supplement her income and pay for college, working as a construction worker, a stationery artist, and an au-pair. In 1995, Jane received her B.A. in humanities and psychology from New College of California in San Francisco. During her eight years in California, Jane spent much of her time in the company of a diverse, multinational group of individuals; an experience that deepened her sense of how important it is for individuals and societies to gain a greater understanding and appreciation of the value and contributions of diverse groups.

In the early 90's, Jane hired an attorney and was eventually granted permanent resident status in the United States. Soon after, she began a business to assist psychotherapists and individual business owners with administrative work and daily errands.

In time, one client offered Jane a position as an office manager and assistant to the CEO of a pharmaceutical company in Raleigh, NC. Jane took the position, moved to Raleigh in 1997, and soon met her beloved husband, Jon.

In 2001, Jane received her M.Ed. in Counselor Education from NC State University. While completing her Master's degree, Jane made a career transition and began working in a career counseling center. She also completed her Master's internship as an elementary school counselor in the Wake County School System. Jane continued in her position as a school counselor while working on her doctorate and also completed her doctoral internship as counselor and disabilities counselor at Meredith College. While completing her dissertation, Jane was offered a position as a private practice counselor at Clayton Counseling Services, where she continues to work today.

Jane is a Licensed Professional Counselor, a Licensed School Counselor, and National Certified Counselor. Jane is member of Phi Kappa Phi, the American Counseling Association, and the Licensed Professional Counselors Association of North Carolina. Jane intends to continue her research in SES, gender, and identity development, and hopes her work will help expose social class differentials in society and institutions, particularly with regard to education. Jane views her professional development, like her personal development, as a work in progress and continues to strive to improve her knowledge and skills as a counselor, researcher, and educator.

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## CHAPTER ONE

### INTRODUCTION

#### *Need for Study: Theoretical Premise*

In the United States, those who come from meager beginnings and work their way up into the ranks of the middle and upper classes are revered. Society equates such movement with the cultural symbol of what American life can offer, if only its citizens work hard enough. For many, economic prosperity and high social status are considered to be a requisite for fulfilling the American dream of success and, thus, happiness. However, according to some researchers the American dream is becoming harder to attain. For example, in 1999 Aronowitz reported that overall earnings had declined in the past decade, while fewer individuals controlled the majority of America's wealth. More recent reports by the United States (U.S.) Census Bureau confirm this trend; at best, majority income earnings have remained stagnant despite inflation, whereas high earners have benefited from increasing annual incomes. Moreover, poverty rates have increased and median incomes for the very lowest income group have declined. This trend is reflected in the gap in incomes for women from lower SES groups and the chances afforded those women with regard to gaining a college education and having an opportunity to pursue a professional, economically sustainable career. Therefore, it is hoped that the present study will serve to illustrate the challenges faced by women from lower SES groups, in particular by those women who have broken through societal barriers and who have taken on the task of pursuing a college degree and adjusting to a middle-class university environment.

Historically, high-wage manufacturing jobs made the American dream a possibility for the working-class; however, high-wage manufacturing jobs have gradually been replaced

with low-wage temporary, part-time and service jobs (Gorman, 2000). In addition, according to Aronowitz (1999), top corporate executives (mostly male) earn about 25 times the average wage of an industrial worker in the auto or electronic industries. Therefore, despite America's impressive economic growth in past decades, a closer examination reveals that only those in the highest income groups have benefited economically. Despite usual gains in inflation, the U.S. Census Bureau (DeNavas-Walt, Proctor, & Mills, 2004) reported a decline in real median household incomes during the years 2000 through 2002; in the following year, those same median incomes failed to increase. Moreover, between 2002 and 2003, both the poverty rate and the number of people living in poverty increased. "The share of aggregate income received by the lowest quintile declined from 3.5 to 3.4 percent" (DeNavas-Walt et al., p.2). This translates into a 1.9% decline in household incomes, from \$18,326 to \$17,984, for people categorized in the lowest percentile income group. Conversely, the highest percentile of household incomes increased by 1.19% from \$85,941 to \$86,867.

As a result of the growing disparities between rich and poor, the social construction of class has upheld and even strengthened its grip on class elitism. The process of defining social class is complex; however, "class is a reality in the United States as are the related stereotypes, prejudices, and discrimination that provide that basis for our classism. Because of classism the wealthy and the financially better off are privileged and assigned high status, while poor and working-class people and their cultures are stigmatized and disadvantaged simply because of their relative wealth" (Cyrus, 2000, p. 315). America's social classes and individuals' social status are often identified by income, occupation, and material possessions; unfortunately, these measures are frequently used to determine individual self-worth as well as the worth of others. "Unquestioned in contemporary social and educational

policy is the notion that upward social mobility is the desired outcome of social improvement. This is an implicit assumption that runs through all variations of the discourse of ‘social capital’” (Lucey, Melody, & Walkerdine, 2003, p. 286). Such assumptions perpetuate the *good verses bad* discourse associated with a comparison of characteristics of various social classes.

Typically, a lack of material possessions and low social status are viewed as undesirable; such indicators are often stigmatized as one’s self-imposed fate and are ultimately judged to be the individual’s responsibility. Societal discourse suggests that Americans live in a meritocracy, in which personal success is measured in terms of one’s ability, hard work, and achievement. Classism is less visible than racism or sexism, and unlike race or sex, it is easier for people to believe that individuals can control their economic status (Cyrus, 2000). In general, individuals are deemed to be responsible for their economic prosperity or failure. Given that America is referred to as *the land of opportunity*, lower SES groups are often judged to be lazy or lacking in ambition. Examples of this are documented in Steedman’s (1997) account of the lives of working-class women who, historically, have been labeled as repulsive, untrustworthy, purposeless, and lacking self-control. These beliefs hold strong and are reinforced by decades of economic and social oppression. This oppression continues for some groups, particularly women and minorities. However, it is important to recognize that ones’ *life chances* are often dictated by other forces such as social, economic, institutional, and cultural boundaries that limit the available options accompanying *free choice*.

In reaction to patriarchy and sexism, the women’s movement—although having been accused of class elitism—has stood up to the traditional stereotypes of women’s work and



educational limitations. Despite their progress, women continue to struggle to attain equal pay for equal work and to establish gainful employment in positions of power, often being relegated to the ranks of the lower socioeconomic classes. Individuals with low SES often face difficult physical and psychosocial challenges. For example, it is not uncommon for lower SES groups to be defined as *other* and viewed as incapable of living up to the norms embodied by the middle and upper classes. *Otherness* serves the purpose of social exclusion and denigration (Lawler, 1999) and helps preserve the hierarchical position of the upper and middle classes. Consequently, it serves to belittle self-worth and stifle individual identity development of lower SES groups. Although little research has been directed toward the oppressive experiences of individuals from lower social classes, the available research indicates that their experiences—such as feeling devalued—and their consequent methods of identity adaptation (i.e., passing) are characteristic of those in other groups that navigate societal oppression (see Granfield, 1991; Walkerdine et al. 2001; Willis, 1977). Experiences of societal oppression help form one's social adaptation and thus influence development patterns; these have been identified in numerous identity development models (see Cass, 1979; Cross, 1971; Myers, Speight, Highlen, Cox, Reynolds et al. 1991; Sullivan, 1998).

Erik Erikson's theory of psychosocial development serves as the root of numerous identity development models, and provides as a strong theoretical foundation for understanding identity development. Erikson (1994a) believed that identity is reflected in a person's connection to the distinct values of his or her culture, whereby acceptance by others in society and the ability to share and interact in ways that confirm one's value is essential to healthy identity development. Individuals from oppressed groups, however—such as women from lower SES groups—may struggle to gain acceptance from dominant society. The

struggle for acceptance can impede healthy identity development. The struggle for acceptance or confirmation of one's value can become more salient for individuals from lower SES groups when they move from a lower SES dominated environment to a higher SES dominated environment. This experience is inevitable for many first generation women college students as they transition into a university environment. It is not unusual for individuals from lower SES backgrounds to move from a lower working-class high school setting and neighborhood, into a middle-class university setting in a more prosperous city. In this instance, students face a prohibitive transition between two worlds and two identities. For female college students, this transition can be compounded by past and present experiences with gender stereotyping and sex discrimination, experiences more commonly observed among lower SES cultures.

When one's social class changes—even when that change is desired and planned for (e.g., by way of gaining a professional degree)—what is ignored in the dialogue of mobility and gains in social capital are “the losses that are fundamental to and unavoidable in change...; of the enormous amount of psychological work involved in transformation; and of the costs of that work” (Lucey et al. 2003, p. 286). Even when one moves from a lower SES group into a higher status group or when one has to frequent environments dominated by higher SES groups, the sense of being *other*, being a *stranger in paradise*, can become more salient and present a great challenge during the synthesis of one's identity. In general, SES influences the way individuals behave toward each other, and that behavior will eventually influence their sense of identity. If people equate lower class with lower social status, individuals from lower socioeconomic backgrounds will be inclined to view themselves in that same way and, as a result, experience lowered self-worth (Twenge & Campbell, 2002).

The basis of Erikson's theory can, therefore, be applied in the current study for the purpose of helping educators and mental health professionals understand the identity development and psychosocial experiences of female college students from lower SES groups as they adjust to a middle-class college environment. Adams, Shea, and Fitch (1979) developed a measure of identity development—the Objective Measure of Ego Identity Status (OMEIS)—based on Marcia's (1981) adaptation of Erikson's concept of crisis and commitment, which are fundamental processes in the development of one's identity. The OMEIS was used in the current study to help determine differences in identity development between college women from differing SES groups.

Between 1950 and 1998, the number of working women participating in the labor force has almost doubled (United States [U.S.] Department of Labor, 2000). In addition, women's employment in higher earning occupations has grown. Despite this increase, many women continue to enter occupations traditionally associated with women. The U.S. Department of Labor (2000) reports that women are much less likely than men to be employed in higher paying occupations such as engineering, mathematical and computer science. Women are more likely than men to work in professional occupations with comparatively lower earnings (for example, school teachers and registered nurses). Furthermore, women are four times more likely than men to be employed in low paying administrative support occupations. In 1999, the U.S. Census Bureau (Weinberg, 2004) reported the median income for secretaries and administrative assistants as \$26,000, 21% below the national median, and \$14,000 and \$15,000 for child care workers and housekeeping maids respectively. Even today, people-care and clerical work remain socially

constructed as women's work and, as demonstrated, the social value of this work is reflected in the level of income received.

According to U.S. Census Bureau *Current Population Reports* (DeNavas-Walt, Proctor, & Mills, 2004), from 2002 to 2003 women earned only 76 cents for every \$1 that men earned, showing a 1% decline since the previous year. A similar decline was also reported in female-to-male earnings ratio between 1998 and 1999. In calculating the gender gap in earnings, the U.S. Census Bureau controlled for factors influencing gender differences in earnings. These differences included, for example, that women work for fewer hours per week and for fewer years than men (withdrawing from the workforce for longer periods than men). Occupation type, marital status, and race were also controlled for, yet a significant gap in earnings remained (DeNavas-Walt et al. 2004). A gender gap in the rate of promotion between men and women continues to exist; such differentials in opportunities for promotion may contribute to the existing wage gap between the genders (Cobb-Clark and Dunlop, 1999). With regard to education, women with four or more years of college earn about the same income as men with a high school diploma (Weinberg, 2004, U.S. Census Bureau). Clearly, the research demonstrates that “women are over represented in lower level, lower paying, traditionally ‘female’ occupations” (McLennan, 1999, p. 1691).

Mickelson (1990) and Smith (1983) agree that despite having comparable educational backgrounds, women and ethnic minorities rarely receive the same wages, jobs, and promotions that are offered to White middle-class males. Established social systems contribute to the self-perpetuating cycle of economic inequity and discrimination. For example, the lower one's level of education the harder it is to find a good job with good pay, yet affordable housing is often situated in neighborhoods with poor schools; therefore, it

becomes far more difficult for the next generation to obtain higher education levels than their parents and the cycle is perpetuated (Cyrus, 2000). Access to adequate schools and opportunities for gainful employment is extremely limited for lower income women living in depressed inner city neighborhoods. Consequently, many fail to perceive career opportunities, lack sufficient academic skills, and have limited career related experiences (Weiler, 1997). Such limitations serve to diminish feelings of academic and career self-efficacy. Self-efficacy as defined by Bandura (1997) is "people's judgment about their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). Low self-efficacy can elevate individual tendencies to "not persist in a difficult task, they may have thoughts that they will be unable to do the task well, and they may feel discouraged or overwhelmed by the task" (Sharf, 1997, p. 349). The beliefs that individuals have regarding their own capabilities, combined with the perceived options available to them, become major factors affecting the career goals they set, the choices they make, and the resulting performance and outcomes they attain (Sharf).

The more recent economic climate in the United States has forced job skills and credential requirements to increase, thus heightening the importance of completing an education beyond high school (Gladieux & Swail, 2000). On average, the higher the education, the higher the salary earned. The level of one's college education and the specific college attended "determines who has access to the best jobs and the best life chances" (Gladieux & Swail, p. 688). Opportunities for gaining a higher education remain unequal in the United States and wealth and wage discrepancies are greater than ever (Gladieux & Swail).

Socioeconomic status and gender have a significant influence on early learning experiences. Exposure to role models, available resources, and variety of experiences help form the cognitive processes that influence future education and career behaviors (see Betz & Hackett, 1981, 1983, and Gottfredson, 1981, 1996, as cited in Sharf, 1997). Unfortunately, many established career development theories, such as trait and factor and life span theories, fail to account for contextual factors affecting career and educational behaviors and, thus, ignore important variables affecting some populations. Women, for example, typically face barriers such as sex stereotyping, discrimination, and gender role socialization, as well as the additional challenge of integrating work and family. In addition, women from lower SES backgrounds might not have equal opportunities when compared with individuals from higher SES groups. For example, if one's parents have received little education and earn minimum wage, it may be difficult for those parents to provide help with homework, expose their children to nontraditional role models, or accommodate adequate educational resources. Such factors influence key early learning experiences which ultimately effect future education and career behaviors. Unlike trait and factor and lifespan career theories, social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1996), derived from Bandura's (1997) social cognitive theory, is unique because it not only focuses on the cognitive processes that influence future education and career behaviors but also integrates important contextual factors: "SCCT highlights the interplay of social cognitive variables (such as self-efficacy) with other key person, contextual, and experiential/learning factors, such as gender, culture, support systems, and barriers" (Lent et al. 1996, p. 416).

Betz and Taylor (2001) developed an empirical measure derived from the research literature supporting the theory of SCCT: the short form of the Career Decision-Making Self-

Efficacy Scale (CDMSE-SF). The CDMSE-SF will be used in conjunction with the College Academic Self-Efficacy Scale (CASES; Owen & Froman, 1988) to assess participants' career and academic self-efficacy levels. As a result of the social and economic inequities that exist for women in lower SES groups and the need to better understand their experiences, this research study will investigate the differences in academic self-efficacy, career self-efficacy, and psychosocial identity development among freshmen and sophomore female college students from differing SES groups. If women in lower SES groups are not provided with equal opportunities so that they too may excel in their educational and career pursuits, then this will affect them not only economically but also psychologically; affecting the formation of individual identity and beliefs in their ability to create individual *life chances* and to exercise *free choice*. It is important for educators, administrators, and counselors to educate themselves about this unique group if they are to support these women in their educational and career pursuits.

#### *Purpose of the Study*

The purpose of this research study was to investigate the differences in academic self-efficacy, career self-efficacy, and psychosocial identity development for freshmen and sophomore female college students from differing SES groups. Due to societal oppression and a lack of privileges otherwise afforded higher SES groups, it was expected that female students from lower SES groups would experience lower levels of academic self-efficacy, career self-efficacy, and psychosocial identity development, particularly as they adjusted to a higher SES dominated college environment. Accordingly, the participants were limited to female students in their freshman and sophomore years; during the freshman and sophomore years issues of transition would be more prominent than during their junior and senior years.

When an individual moves from predominantly lower SES environments, such as one's local high school, neighborhood, or social group, to an environment dominated by higher SES groups, such as a middle-class university in a prosperous city, the sense of being other or being a *stranger in paradise* becomes apparent and can present great challenges in the synthesis of one's identity and in the development of career and academic self-efficacy. Women from lower SES backgrounds seldom have access to (or a history of access to) adequate role models, resources, or support to help facilitate their transition into a university environment. Given these challenges, women from lower SES groups may begin to question their self-worth, values, beliefs, and abilities, which may ultimately affect healthy identity development as well as academic achievements and career related choices. It was expected that this study would provide data to help educators and mental health professionals understand the experiences and challenges faced by female college students from lower SES backgrounds, particularly as they adjust to a higher SES dominated university environment.

For the purpose of the current study, SES was determined to be the best indirect and practical indicator of social class. Therefore, SES was determined using three independent variables: family income, parental educational, and parental occupation. Test scores from the OMEIS (Adams, Shea, & Fitch, 1979), the CDMSE-SF (Betz & Taylor, 2001), and the CASES (Owen & Froman, 1988) were used as dependent measures. Participant scores in dependent variables were compared in order to identify differences between various SES groups.



### *Definition of Terms*

For the purpose of this study, the following definitions apply:

*Classism:* Societal, institutional, and individual practices and beliefs that “stigmatizes poor and working-class people and their cultures and assigns high status to the affluent and their culture solely because of their relative wealth” (Cyrus, 2000, p.6).

*Cultural Capital:* Cultural capital, termed by Bourdieu (1984), encompasses the preferences, habits and social structures associated with different social class groups. These might include among other things, manners of speech, experiences, resources, dress, aesthetic choices, hobbies, and value systems.

*Identity:* “Identity is a social-psychological construct that reflects social influences through imitation and identification processes and active self-construction in the creation of what is important to the self and to others” (Adams, 1998, p. 6). Large discrepancies between the self-as-known and the self that could be or should be, creates significant anxiety. This anxiety drives the desire to find congruity and coherence of the real self with the ideal self. Marcia’s (1981) adaptation of Erikson’s theory of identity development draws on two concepts fundamental in the formation of identity: crisis and commitment. A combination of the presence or absence of a crisis period (an exploration period) and the presence or absence of clear and firm commitment to personal values and ideology are used to conceptualize Marcia’s four statuses levels of identity formation: Identity Achieved, Moratorium, Identity Foreclosed, and Identity Diffused (Adams). For the purpose of this study, the four statuses are applied as a measure of identity development. To obtain a full explanation of each status, refer to the Objective Measure of Ego Identity Status (OMEIS; Adams, Shea, & Fitch, 1979) described in the method section, chapter 3.

*Self-Efficacy*: Self-efficacy is "people's judgment about their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1997p. 391). For the purpose of this study, participants are assessed on their academic and career related self-efficacy.

*Socioeconomic Status (SES)*: "Relative social ranking based on income, wealth, status, and/or power" (Jaques, Staton, & Lucey, 2005, p.1). SES is frequently quantified by researchers using a combination of one or more of the following: income, occupation, and educational indicators. In the present study, SES was determined using a combination of three variables: family income, parental education, and parental occupation.

*Social Class*: "Class is an experience of shared economic circumstances and shared social and cultural practices in relation to positions of power" (Cyrus, 2000, p. 103).

## CHAPTER TWO

### LITERATURE REVIEW

#### *Introduction*

The introduction outlined how women in society, particularly women from lower socioeconomic backgrounds, are relegated to lower status positions in society more often than men. For women from lower SES backgrounds, dual roles are at play in determining life outcomes. Research data indicates that women in general have lower paying, lower status jobs than men. Furthermore, the insidious cycle of the rich getting richer and the poor getting poorer is evident in U.S. Census Bureau reports. Attaining a college education is one avenue for women to push beyond repressive boundaries and to increase their income, power, and status in society; however, for women from lower SES backgrounds, the task of attaining a college education can be complex and challenging. This literature review discusses those complexities and challenges and ties together the integral roles SES, gender, identity, and self-efficacy play in attaining a college degree.

#### *Inequities: Women, Education, and Socioeconomic Status (SES)*

Gender and class inequities have been documented in the educational system, such inequities serve to limit the best life chances for women and individuals from lower SES groups. For example, with regard to class differentials, the introduction of federal student aid has enabled more opportunities for students with financial limitations and has also spurred the enormous growth in college attendance and educational attainment (Gladieux & Swail, 2000). Nonetheless, large discrepancies persist with regard to SES and who benefits from higher education in the United States (Gladieux & Swail). Furthermore, rates of college preparedness, entry and completion, and the caliber of institutions attended, are closely

correlated with SES. For example, in all income groups, college attendance rates have increased for 18 to 24 year old high school graduates; however, those graduates from low-income backgrounds attend college at far lower rates than those from higher income backgrounds. Currently, the gap in college participation between divergent SES groups is almost as wide as it was in 1970 (Gladieux & Swail). According to the U.S. Department of Education (2003), “rigorous academic preparation and accomplishment can partially compensate for disadvantaged backgrounds” (§ 1). This is easier said than done, since many individuals from lower SES backgrounds face multiple obstacles that hinder their academic preparation and accomplishment.

In a longitudinal study following 1988 8<sup>th</sup> graders, the U.S. Department of Education (2003) found that the probability of completing a college education increased with individuals’ level of SES: 60% for high SES students, 24% for middle SES students, and only 7% for low SES students. Even among high achieving math students, attainment of a college degree decreased as SES levels decreased. In addition, two out of three students from the highest SES quartile enrolled in a four-year college, compared to one out of five in the lowest quartile (U.S. Department of Education, 2003). The most disadvantaged students were also reported to enroll in a two-year college more often than any other income group. Furthermore, in another report prepared for the U.S. Department of Education in 2004, Myers, Olsen, Seftor, Young, and Tuttle state that, based on grades and test scores, the vast majority of high school graduates from high-income families have the necessary qualifications to attend a four-year educational institution, while only half of students from low-income families have sufficient qualifications.

Although women's participation in higher education has increased in recent decades gender inequities persist particularly with regard to class. Flanagan (1993) found the most reliable indicator of grades and test scores in eighth graders was social class. Several of his studies revealed that a disproportionate number of lower class girls dropped out of school due to family-related problems and responsibilities (cited in Robinson & Howard-Hamilton, 2000). In addition, a report by the American Association of University Women (AAUW) revealed that schools were "shortchanging" girls and that, academically, girls are ahead of boys when they first enter school yet upon leaving school they end up further behind the boys (Robinson & Howard-Hamilton). Furthermore, in their longitudinal study, Walkerdine et al. (2001) found that despite demonstrating similar academic abilities in elementary school, middle-class girls completed high school and moved on to college while working-class girls barely managed to complete a high school education. The authors also noted that unlike their middle-class counterparts, working-class mothers struggled with being heard by teachers and with negotiating educational issues for their children. However, Walkerdine et al. believe that education has become more accessible to women yet question whether equal opportunity is afforded lower and working-class women: "when the attainment figures are checked carefully it becomes clear that what is described as girls high performance is in fact mostly in 'middle-class' schools....high [educational] attainment is still, as it ever was, a class-related phenomenon, even if that class attainment is cross-cut by gender" (p.112).

### *Identity, SES, and Education*

Group affiliation and social acceptance have critical significance in the formation of identity development and in providing individuals with *life chances* (Granfield, 1991). As with gender and race, social class is one of the most significant components in defining our

lives and affording us our *life chances* (Walkerdine et al. 2001). Certainly, women and minorities have been examined from the perspective of stigma and oppression; however, little research has been directed toward the oppressive experiences of individuals from lower social classes (Granfield). Moreover, working-class history is rarely informed by the perspective of a working-class individual, but instead becomes obscured by the interpretations of an outside observer, someone not a member of the working-class. Nonetheless, the available research indicates that experiences of individuals from lower social classes—such as feelings of being devalued—and their consequent methods of identity adaptation (i.e., passing) are characteristic of those in other groups that experience societal oppression (see Granfield, 1991; Walkerdine et al.; Willis, 1977). For example, experiences of societal oppression and inequitable social power help form one's social adaptation and, thus, influence development patterns that have been identified in numerous identity development models (see Cass, 1979; Cross, 1971; Fowler & Keen, 1978; Helms, 1990; and Sullivan, 1998). Invariably, the developmental phases in these models share common characteristics. In examining psychosocial identity development models, Myers, Speight, Highlen, Cox, Reynolds et al. (1991) contend that most share a similar progression of development:

- (a) a denial, devaluation, or lack of awareness of their oppressed identity; (b) a questioning of their oppressed identity; (c) an immersion in the oppressed subculture; (d) a realization of the limitations of a devalued sense of self; and (e) an integration of the oppressed part of the self into their whole self-identity. (p. 55)

In essence, identity development models describe how individuals progress from lower levels of identity awareness through to higher levels of understanding of themselves as

well as others and their relation to those others. The experience of developing awareness of one's identity status is especially apparent and challenging with regard to interactions across differing social class groups (Granfield, 1991). Educational systems across the United States provide poignant examples of environments where such interactions commonly occur and where, in higher educational institutions, individuals in lower socioeconomic groups are a minority attempting to navigate an *unfamiliar* social environment.

Similarly, Lucey et al. (2003) describe the concept of *hybridity* that was originally used to identify and understand patterns of ethnic identities in the process of transmission and transformation when subject to dissimilar cultural environments; Lucey et al. apply this concept in a longitudinal study to examine both the challenges and the triumphs experienced in academic success and the subsequent upward mobility of working-class women. The authors describe the women's experiences as involving "crossing borders of social class, gender and ethnicity, of negotiation between competing subjectivities as other spaces, other possibilities are opened up" (p. 286). The authors classify hybridization as a complex process, one that cannot be explained by simple principals of cultural assimilation. A quote by Bhabba (1996) is used by Lucey et al. to illustrate the enormity of coping with hybridity while adjusting to upward mobility: "the hybrid strategy or discourse opens up space of negotiation where power is unequal but its articulation may be unequivocal. Such negotiation is neither assimilation nor collaboration" (p. 287). Given that hybridization is described as neither assimilation nor collaboration, Lucey et al. pose several questions: "Are these women forced to live in the interface between two worlds? And what of the hybrid who moves back and forth between competing identities? Can the 'border-crosser' ever find a place or condition of their own and therefore some stability?" (p. 287).

Through the process of applying a perspective of stigma and oppression common to marginalized groups, Granfield (1991) examined working-class students' adjustment as they transitioned into a prestigious law school and, likewise, experienced a form of hybridization. Through interviews, participant observation, and questionnaires, Granfield found that social class stigma created identity problems for these students. In addition, when compared to students from middle and upper social classes, working-class students faced additional academic stressors. Like many marginalized groups, these students learned to conceal their class backgrounds in order to gain acceptance and to more easily navigate the oppressive environment; however, in an effort to conceal their social class, the students experienced identity conflict.

Upon entering the law school the working-class students felt a great deal of class pride, however, not long after arriving, they began to describe themselves as different when compared to the majority student body, and often viewed their backgrounds as a burden. Lacking appropriate manners of speech, experiences, resources, dress, and value systems—termed by Bourdieu (1984) as *cultural capital*—working-class students developed a feeling of being cultural outsiders and experienced a corresponding crisis in academic competency. In general, working-class students indicated significantly higher levels of personal stress when compared to students from higher social classes. For example, only 35% of freshman students from middle and upper social classes experienced excessive grade pressure, compared to 62% of the working-class freshmen (Granfield, 1991). When compared to their more privileged peers, even the most competent of these students felt out of place.

Erikson (1997) has emphasized the importance of feeling valued and accepted by one's community in forming a healthy identity. Regrettably, the students in Granfield's



(1991) study lacked a sense of being accepted by the academic subculture central to their everyday lives. In his theory, Erikson (1997) describes eight consecutive stages of psychosocial development within which individuals strive to resolve core *crises* of each stage. Through the process of resolving various crises and synthesizing different experiences, one's identity develops throughout the lifespan: over time individual attitudes toward the environment, others, and the self are integrated as part of one's personal identity. Therefore, social interactions and experiences during one's college years are central to the development of a young adults' personal, academic, and occupational identity. Although Erikson (1994b) does not clearly delineate how individuals work toward an integrated identity, he does suggest that acceptance by either the dominant culture or a valued subculture, such as the academic subculture of a university, is a key element in forming a healthy identity:

It is this identity of something in the individual's core with an essential aspect of a group's inner coherence which is under consideration here: for the young individual must learn to be most himself where means most to others—those others, to be sure, who have come to mean most to him. The term “identity” expresses such a mutual relation in that it connotes both a persistent sameness within oneself (selfsameness) and a persistent sharing of some kind of essential character with others. (p.109)

For Erikson, identity is reflected in a person's connection to the distinct values of his or her culture, and fostered by a unique history. Acceptance by others in society and the ability to share and interact in ways that confirm one's value is according to Erikson, essential to health identity development. However, individuals from oppressed groups (e.g., the minority population of working-class students) may struggle to gain acceptance from dominant culture (e.g., a law school with a majority student body from privileged class

backgrounds). When individuals struggle to gain acceptance from dominant society, Erikson (1994b) suggests they look to sectors of society that share similar characteristics and values:

One person's or group identity may be relative to another's and that the pride of gaining a strong identity may signify an inner emancipation from a more dominant group identity, such as that of the "compact majority." An exquisite triumph is suggested in the claim that the same historical development which restricted the prejudiced majority in the free use of their intellect made the isolated majority sturdier. (pp. 21-22)

Therefore, looking to similar others, provides individuals with the opportunity to acknowledge and validate their shared beliefs and characteristics and to recognize differences between themselves and the dominant culture. It also helps strengthen individual identity development, particularly in the face of oppression. However, achieving these tasks may be particularly challenging when few of those similar others are in one's immediate environment. In many university settings across the United States, individuals from lower SES backgrounds most often represent a smaller population of students. Furthermore, it may be difficult to identify other individuals from similar social backgrounds, particularly if those individuals are attempting to fit into the dominant middle-class milieu. Fitting in was an alternative coping strategy for the working-class students in Granfield's (1991) study. Some would avoid individuals who might reveal to others their social class; others might change their attire or change their manner of speech in order to conceal their difference (Granfield). Erikson (1994a) also suggested that individuals who lose trust in themselves adopt a false self in order to conform to an ideal, the ideal being "a standardization of individuality and intolerance of 'differences'" (p. 96).

Unlike gender or racial differences, class differences—to some degree—can be concealed. For example, the students in Granfield's (1991) study were advised by professional career counselors to downplay their working-class backgrounds if they wanted to take advantage of the most lucrative opportunities. As a result, students adopted identities associated with more elite social classes. The working-class students lacked the *cultural capital* of their more privileged classmates, yet quickly learned to mimic middle-class behaviors. Nonetheless, many struggled to transcend their working-class identities but in their attempt to fit in, experienced identity conflict; they could neither embrace nor deny their working-class backgrounds and often experienced a *stranger in paradise* syndrome (Granfield). Their experience is much like the hybridization concept explained earlier.

Similarly, in a presentation of her research, Skeggs (1997) reflected on her transition from a working-class community into a university setting. She discussed her recognition of the idea that she could be categorized as being working-class, her awareness of being caught between two worlds, and her subsequent feelings of insecurity:

I was forced to remember how I had lied about my mother's and father's occupations because I was scared to be recognized as inferior...My capacity to accrue educational and cultural capitals, however, has only increased my sense of marginalization. I am more aware of the 'right' standards and knowledge and also of the judgments made of those who do not fit. I understand the desire to belong, to be normalized, to go unnoticed, not to be judged, but I am also aware of its impossibility. Proximity to the 'right' knowledge and standards does not guarantee acceptance. They just generate more awareness of how 'wrong' your practices, appearance and knowledge actually are...I felt caught between two worlds. (p.15)

For many college students, the difficulties associated with straddling between class identities is not limited to those faced in the genre of middle-class academic environments. When working-class individuals begin to experience upward mobility, difficult emotional dynamics start to occur in their families. Academic success can symbolize a profound form of separation from one's family and peer group (Lucey et al. 2003). Many of the working-class women's narratives of academic success presented by Walkerdine et al. (2001) describe years of watching their own parents struggle with having little pay or security for working hard, long hours in boring, dirty, repetitive jobs and, as a result, feeling their own desire to escape the same fate. These experiences played a large part in forming these women's identities and in giving them the motivation to persevere and succeed; however, in wanting their lives to be different, these women send a message to their parents that not being like those parents is central to the women's success. Feelings of guilt were commonly expressed in their narratives and frequently led to feelings of ambivalence about their success (Lucky et al.; Walkerdine et al.).

Heisserer and Parette (2002) provide a review of literature and educational reports indicating the challenges low-income students face when preparing for college. In addition to the familial and financial limitations, students from lower and working-class backgrounds are particularly at risk for feeling that they do not fit in to the college environment. These students often develop a sense that they are being rejected and devalued. This leads to difficulties in adjusting to academic challenges related to college life. Research has demonstrated that a student's sense of belonging is directly correlated with their decision to persist with their studies and remain in college (Tinto, 1993). Tinto suggests that this sense of belonging is increased or decreased by positive or negative interactions respectively and the

social and academic experiences associated with the student's college. Indeed, the research suggests that a lack of acceptance of students from lower SES backgrounds within a predominantly middle or upper class academic subculture hinders academic achievement and, in turn, stifles healthy identity development.

*Marcia's Four Identity Statuses: Measuring Identity Development*

Although Erikson (1994b) introduced the concept of identity development as the primary task of adolescence, many researchers have extended his concept to apply to individuals of all ages from young adulthood through to old age (Schwartz, 2002). Following the development of Erikson's theory, a great deal of research has been conducted on identity stages. Advances have been made both in identity theory and in the development of identity measures, much of which Marcia (1966, 1980) generated (Schwartz). One critique of Erikson's theory is that he provided no means with which to measure the constructs he proposed. By using Erikson's concept of crisis (an exploration period) and commitment (extent of personal investment) as independent variables to form a new identity construct, Marcia was the first researcher to derive an empirically measurable construct from Erikson's theory (Schwartz). Adams, Shea, and Fitch (1979) developed the OMEIS, a measure of Marcia's identity statuses; in defining ego identity, Adams (1998) referred to Erikson's concept of crisis and commitment:

All societies offer a psychosocial moratorium, wherein the adolescent is expected to make 'commitments for life,' and to establish a relatively fixed self-definition....Thus a psychosocial moratorium, as a critical phase of life, is accompanied by a sense of crisis. Crisis is defined a normative life event....This normative identity crisis is

thought to stimulate identity consciousness that compels the individual to explore life alternatives...and is resolved through personal ideological commitment. (pp. 3-4)

In Marcia's theory, crisis and commitment relate to two general domains: the interpersonal and the ideological. For example, individuals may try and resolve an identity crisis (e.g., deciding whether to be a college student or a full-time worker) by making choices regarding their future (e.g., committing to go to college for four years) in several life domains (which are encompassed under the two general domains). The life domains categorized under ideology include occupation, values, religion, and politics, whereas the interpersonal domain is comprised of friendship, gender roles, dating, and recreation (Marcia, 1980). The independent variables of crisis and commitment allow individual identity to be distributed over four statuses: Identity Achieved, Moratorium, Foreclosure, and Identity Diffusion. Identity Achieved indicates an individual has experienced a crisis period (e.g., considered and explored various occupations) and has made a commitment (to, for example, a self-chosen occupation). Moratorium represents an individual in crisis (e.g., struggling with occupational or ideological issues) and who has not yet made a commitment. Foreclosure indicates an individual who has made a commitment but has done so without experiencing a crisis. This commitment is largely influenced by the opinions of others rather than being self-chosen, a result of failing to experience a period of exploration through crisis. Identity Diffusion represents an individual who has experienced neither crisis nor made a commitment and has not yet determined an occupational or ideological direction (Marcia). Analysis of research using Marcia's theory (Marcia; Waterman, 1982) indicates that two basic groups can be applied when referring to the statuses: Identity Achievement and Moratorium are associated with strong characteristics such as high self-esteem and healthy

autonomy, whereas Foreclosure and Identity Diffusion are associated with weak characteristics such as low self-esteem and low autonomy (Meeus, 1993).

Marcia's (1980) focus on ideological issues—including, for example, domains of occupation and value systems—provides suitable descriptors of identity variables pertinent to the issues addressed in the current study. Students from lower SES backgrounds entering higher and middle-class educational institutions will more often experience feelings of disequilibrium and experience stress (crisis) in reaction to this change. As demonstrated earlier in Granfield's (1991) study, when students from lower SES backgrounds enter higher SES dominated educational institutions, their personal worth, values, and beliefs are challenged. While some students attempt to work through this crisis by experiencing an exploration process (Moratorium), others may avoid the crisis by making commitments without working through an exploration stage and, thus, make decisions and assumptions based on the opinions of others (Foreclosure). Therefore, it was expected that fewer students from lower SES backgrounds would reach an Identity Achieved status and more often would be Identity Moratorium or Foreclosed. The application of the OMEIS (Adams, Shea, & Fitch, 1979), which was developed for the purpose of measuring Marcia's identity statuses, provided a suitable empirical method for quantifying the construct of identity.

#### *Identity Development and Self-Efficacy Beliefs*

Women's identity development is entangled with role conflict, SES, and sex discrimination. Individual characteristics—gender and ethnicity—as well as family demographics—socioeconomic status, parental employment and education level—significantly influence the development of self-concept (Johnson & Mortimer 2002; Gottfredson, 2002). Self-concept is the formulation of how one views oneself and includes

multiple elements such as abilities, gender, values, and place in society. Individuals act in accordance with their self-concepts, thus self-concept has significant affect on individual life choices and life chances (Gottfredson). For example, beginning at a young age, individuals gradually limit their occupational choices in accordance with their developing self-concept. Initially, children rule out occupations affiliated with the opposite sex, followed by a rejection of those occupations that fall outside their realm of social class. In later adolescence, interests and abilities become more apparent and occupations viewed as too difficult to attain are discarded as possible options (Gottfredson). Even Erikson (1994a) emphasizes the importance of having an occupational choice: “In general it is primarily the inability to settle on an occupational identity which disturbs young people...to the point of apparent complete loss of identity” (p.97). Therefore, life-altering decisions such as occupational choice are often *circumscribed* by ones *belief* of what is reasonably obtainable as well as by social characteristics including gender and social class.

Erikson (1994a) explained that “the development of a healthy personality, depends on a certain degree of *choice*, a certain hope for an individual *chance*, and a certain conviction in freedom of *self-determination*” (p.99). Work by Robinson (1993) and Pinderhuges (1989) suggests a close relationship exists between social class, power, identity, and self-efficacy beliefs. Social class can have an immediate impact on individual variables including income, housing, access to medical care, children’s social environment, and numerous signifiers that dictate the quality and style of one’s life. Therefore, “class and status affect one’s economic, social, and to a large extent, psychological power in this society” (Robinson, p.50). Pinderhuges equates power with having the ability to elicit personally desirable outcomes and jurisdiction over not only the self but also other individuals and the environment. If one



believes he or she has little power or ability to manifest desirable outcomes in life, then this can result in lowered levels of self-efficacy. Self-efficacy is the degree to which one believes in his or her ability to perform specific tasks (Lent & Brown, 1996) or, as defined by Bandura (1997), “people's judgment about their capabilities to organize and execute courses of action required to attain designated types of performances” (p. 391). For example, lowered self-efficacy beliefs can result in women limiting educational options simply because they believe certain occupations are not open to them (Sharf, 1997). Often, barriers such as stereotyping, discrimination, and low SES determine outcomes despite personal efforts; because perceived barriers undermine self-efficacy beliefs about one’s ability to assert one’s freedom of self-determination, one’s ability to pursue a higher education and to find viable work become immobilized.

Self-efficacy plays an integral role in social cognitive career theory (SCCT), which states that individual contextual variables, such as SES and gender, have a significant influence on one’s career self-efficacy and, subsequently influence one’s career related interests and goals. In these instances, social cognitive theory can help explain the self-efficacy beliefs and outcome expectations limiting individual goals and behaviors (Lent, Brown, & Hackett, 2002). Women from low socioeconomic backgrounds do not have equal opportunities when compared to women from higher SES or middle-class backgrounds and, therefore, the primary mechanisms influencing self-efficacy beliefs may be compromised particularly with regard to education and careers.

### *Social Cognitive Career Theory*

Social Cognitive Career Theory (SCCT) is derived from Albert Bandura’s (1997) general social cognitive theory. SCCT serves to integrate the interactive roles of individual,

environmental, and behavioral influences in the development of career and academic interests, as well as in the adaptation of such interests into career choices, goals, actions, and attainments (Chronister & McWhirter, 2003). Three distinct social cognitive constructs are the foci of SCCT: (a) self-efficacy expectations, a belief in one's ability to successfully perform particular tasks or behaviors; (b) outcome expectations, a belief about the likely outcomes or consequences of performing specific behaviors; and (c) goals, an intention to act in order to achieve a specific future outcome (Lent & Brown, 1996). In turn, self-efficacy expectations, outcome expectations, and goals are thought to be directly influenced by three sets of criteria: (a) contextual and background influences (i.e., exposure to role models and diverse opportunities, individual cultural and gender role socialization, and the influence of supports versus barriers), (b) individual factors (i.e., gender, ethnicity, socioeconomic status, intrinsic abilities or personal limitations), and (c) learning experiences (i.e., relational, educational or work related). Each criterion impacts the formation of interests into goals and achievements (Lent & Brown). Together, these factors help form the general schemata (acquired thought patterns) that determine career development and decision-making within the individual.

*Self-Efficacy Expectations.* Self-efficacy expectations refer to an individual's belief in his or her ability to successfully perform particular tasks or behaviors. Self-efficacy expectations are influenced by four primary mechanisms: (a) performance accomplishments (i.e., past achievements), (b) vicarious learning (i.e., modeling of others), (c) verbal persuasion (i.e., encouragement from others), and (d) physiological arousal (i.e., anxiety). (For a more extensive description of each mechanism, refer to Bandura, 1997.) When related to career issues, self-efficacy theory (otherwise termed career self-efficacy), focuses on

individual cognitive processes that govern actions related to career choice and decision-making. “How individuals view their abilities and capacities affects academic, career, and other choices. Individuals with a low sense of self-efficacy may not persist in a difficult task, they may have thoughts that they will be unable to do the task well, and they may feel discouraged or overwhelmed by the task” (Sharf, 1997, p. 349). Thus, even presumed yet unsubstantiated obstacles can have a direct impact on an individual’s career decision-making process. Alternatively, higher self-efficacy expectations enable some individuals to persist and succeed even in predominantly unsupportive environments (Sharf).

*Outcome Expectations.* Outcome expectations refer to what individuals estimate will be the probability of a particular outcome. For example, one could begin the assessment of possible outcomes by asking, “If I apply to North Carolina State University, what will most likely happen?” or “If I choose to go straight into the workplace and skip college, what career options will I have?” Unlike self-efficacy expectations, which are concerned with estimates of one’s ability to achieve or perform certain tasks, outcome expectations relate to predictions of what may happen. Sharf (1997) says that when making decisions, individuals consider both outcome expectations (“If I take this job, what can happen?”) and self-efficacy (“Can I do this job?”).

*Goals: Career Interests and Choice Goals.* Individuals set goals in order to help them direct their actions and organize their behavior over certain periods of time (Sharf, 1997). For example, a recently divorced mother who decides to become an accountant before her children reach high school must set goals and follow through with certain tasks in order to reach her end goal. Interests are influenced by the combination of outcome expectations and self-efficacy expectations. Subsequently, those interests influence the identification of career

choice goals and preparation for those goals, and determine consequent actions (Lent & Brown, 1994).

Goals, outcome expectations, and self-efficacy are intrinsically related and affect each other in a variety of ways (Sharf, 1997). For example, a recently divorced mother has a goal to earn more money in order to support her family. She decides to become an accountant and her outcome expectation is that, if she goes to college part-time and enters a paid internship with an accounting firm, she can obtain the goal and support her family. However, her self-efficacy expectations cause her to believe that she is a poor test taker and will be unable to pass the required exams even if she studies many hours. These beliefs will directly affect her outcome expectations and may deter her from following through with her original goal.

It is important to acknowledge that women from lower SES backgrounds may have had limited opportunities in order to accrue academic or work experience achievements, had few examples of female role models exhibiting career or academic success in diverse professions, received little encouragement or reinforcement from others to pursue a higher education, and possibly the thought of pursuing a vocational path different than their family members and peers incites feelings of anxiety. Factors such as these will ultimately affect one's self-efficacy expectations and, therefore, have a significant influence on academic and career interests and goals. As a result, it is expected that women from lower SES backgrounds may have lower levels of career and academic related self-efficacy. For example, with regard to experiencing fear and anxiety (a factor which affects self-efficacy), Lucey et al. (2003) provide an example of how these feelings develop for girls from working-class backgrounds when they pursue higher education:

Whether envy and anger are spoken or not, the knowledge that they are being given a chance that their parents (or siblings) never had is embedded in the experience of educational success for working-class children. The recognition that one might be the object of others' envy may not exist on a conscious, rational level, precisely because it is so irrational to think that a parent with whom we share a loving relationship could harbour such negative feelings toward us. However, on an unconscious level, the fear that this envy may cause us to be the target of parents' aggressive feelings continues to operate and may in turn provoke our own aggression. (p. 291)

Individuals with low self-efficacy may “not persist in a difficult task, they may have thoughts that they will be unable to do the task well, and they may feel discouraged or overwhelmed by the task” (Sharf, 1997, p. 349). Thus, perceived barriers (those not tested in actuality), can have a direct impact on an individual's decision-making process. The beliefs that individuals have regarding their own capabilities, combined with the perceived options available to them, become major factors affecting identity development and academic and career decision-making processes; this encompasses the career goals they set, the life choices they make, and the resulting performance and outcomes they attain. Therefore, higher self-efficacy expectations enable some individuals to persist, show resiliency, and succeed even in predominantly nonsupportive environments (Sharf) and vice versa. Taylor and Betz (2001) created a measure of self-efficacy expectations with regard to specific tasks and behaviors required in career decision-making: The short form of the Career Decision-Making Self-Efficacy Scale (CDMSE-SF; 2001). In addition, to help assess academic self-efficacy, which is intrinsically connected to one's career choice and achievement, Owen and Froman (1988) developed a College Academic Self-Efficacy Scale (CASES). The CASES measures

students' self-efficacy in completing routine and frequent academic behaviors. Using domain specific self-efficacy measures such as these, rather than more general self-efficacy measures, can provide more accurate empirical results: "Self-Efficacy is reported have a particularly higher predictive validity when the specificity of the construct is closely aligned with the specificity of the criterial performance task" (Choi, 2004, p. 149 in reference to Bandura, 1997).

As outlined in this paper, social class can become more salient for individuals from lower SES backgrounds when they enter institutions of higher education. Class inequities are not simply an economic issue but an issue of "superiority/inferiority, normality/abnormality, judgment/shame" (p. 4), which serves to pathologize the working-class individual (Lawler, 1999). For example, if student peers and/or educators consider lower class to be lower status and associate that status with lower ability and value, then it is likely that students of lower class backgrounds will begin to view themselves that way and, thus, experience lower self-efficacy in relation to that academic environment. Students with lower socioeconomic backgrounds may be discriminated against and may not be offered as many opportunities as students from middle-class backgrounds. Students from lower SES backgrounds may have to cope with prejudice rather than receiving verbal encouragement from others, and may also have few positive *like* role models available to them in a predominantly middle-class environment. Ultimately, these experiences may impede academic performance, career development, and healthy identity development.

*Self-Efficacy Research: Women and Lower Socioeconomic Groups—Education and Careers*

Betz and Hackett (1981, 1983) have applied self-efficacy theory toward the exploration of career and occupational related development processes for women. Their work

on career related self-efficacy explains how early learning experiences form cognitive processes that influence career behaviors. Occupational choice and performance, persistence in the face of adversity, and one's perception of experiences are directly influenced by the level of self-efficacy (Lent & Brown, 1996). In turn, a woman's self-efficacy beliefs can be greatly impacted by the gender role socialization of women into traditional feminine roles.

Studies demonstrate that differential gender socialization limits a woman's orientation in order to attain the knowledge required for developing more positive self-efficacy expectations that are necessary for career-related achievement and success. For example, Betz and Hackett (1981) investigated gender differences in self-efficacy in relation to the work tasks and educational requirements of 10 traditionally female and 10 traditionally male occupations. Significant differences were found between male and female self-efficacy expectations. Female self-efficacy beliefs were dependent upon the gender-appropriateness of the job: significantly higher self-efficacy beliefs were indicated in traditionally female occupations than were indicated in traditionally male occupations. In contrast, men's self-efficacy beliefs remained relatively stable regardless of the gender dominated occupation. Despite differences in male and female efficacy expectations, no significant differences were found between genders in math or English abilities. To extend this research further, Betz and Hackett (1983) examined efficacy expectations with regards to math and verbal problems among college students. Despite showing no difference in verbal and math scores on standardized tests, women had lower self-efficacy expectations in subjects such as science and math, often necessary prerequisites for nontraditional careers. Consequently, women indicated lower self-efficacy expectations in the pursuit of nontraditional careers than did men. Therefore, despite having comparable academic ability, the women in these studies

indicated lower self-efficacy expectations in the pursuit of traditionally male dominated occupations which, in many cases, provide greater opportunities for earning higher wages and for gaining positions of authority.

Similarly, in a longitudinal study of 25,000 teachers, eighth-grade students, their parents, and school administrators, from over 1000 schools, Correll (2001) found that, despite comparable scores in math, women and girls perceived lower mathematical competence than their male counterparts. Belief in the female's ability to perform a given task had a significant influence on career related decision-making, even after controlling for measures of ability. Correll reiterates that such perceptions foster traditional gender differences in career decision-making choices. Clearly, differential gender socialization hinders women's ability to develop positive academic and career self-efficacy and outcome beliefs extending beyond traditionally mandated roles. This demonstrates the power of internalized societal schemata in directing individual life choices.

Gender bias and discrimination are additional obstacles that women face during the course of career development. Such obstacles have been correlated with lower levels of self-efficacy expectations in women. For example, Ancis and Phillips (1996) found that academic gender bias significantly encumbered undergraduate college women's beliefs about their ability to successfully engage in proactive educational and career enhancing behaviors. Furthermore, in a study of 274 junior and senior college women, Scheye and Gilroy (1994) found higher nontraditional career self-efficacy in students who attended single-sex educational institutions. Results suggest that the influence of environmental gender bias may have lost its potency for those women attending single-sex institutions. In part, this may be explained by the dominant female environment, which provides opportunities for both direct



and vicarious learning experiences with women in positions of leadership and authority, such as female administrators and faculty. Possibly, this study demonstrates the latent power of significant role models in one's proximal environment.

Indeed, the work of Betz and Hackett (1981, 1983) has spurred greater interest in the exploration of factors influencing women's career, educational, and occupational development. Current research suggests that social cognitive factors are especially influential in women's career development, particularly self-efficacy. Although existing studies indicate that self-efficacy theory may be a promising tool for comprehending women's career development, few studies have examined its application in career intervention programs. Sullivan and Mahalik (2000), however, developed a group intervention program aimed at improving women's career self-efficacy. Over a six-week period, 31 women participated in a career self-efficacy treatment group while 30 other women participated in a no-treatment control group. Results indicated that during career decision-making, measures of self-efficacy, vocational exploration, and commitment increased in treatment group participants. The group interventions integrated Bandura's four primary mechanisms for improving self-efficacy: achievement accomplishments, vicarious learning, verbal persuasion, and physical arousal. This, in addition to having the group confront gender socialization patterns and sex discrimination, had "a positive effect on decision making and vocational exploration" (Sullivan & Mahalik, p. 59). The results indicate that by increasing self-efficacy (using Bandura's four mechanisms), while also attending to issues of gender socialization and sex discrimination, women's career development and career potential can be enhanced. Alternatively, results might suggest that when self-efficacy expectations are low and environmental barriers are perceived as limiting, women resist opportunities to explore broad

career options and pursue varied academic and occupational paths as well as avoid commitment to a career path, thus limiting the development of their full career potential.

SES has a significant impact on individual postsecondary educational attainment (Hanson, 1994) as well as on the degree of education adolescents expect to attain upon leaving high school (Hanson; Trusty, Robinson, Plata & Ng, 2000). For example, Mickelson (1990) found that African American males and females from lower-class family backgrounds had lower academic performance and cognitive belief systems about the value of education than did middle-class African American girls. Not only does SES affect educational attainment but also the occupations that young adults choose. Current research suggests that individuals choose occupations in accordance with their sex and social class. Initially, children rule out occupations affiliated with the opposite sex, followed by a rejection of those that fall outside their realm of social class (Gottfredson, 2002). Thus, individuals may not have opportunities to develop positive self-efficacy beliefs and favorable outcome expectations for those occupations traditionally extending beyond their level of social class or gender type. For example, Bandura, Barbaranelli, Caprara, and Pastorelli (2001), studied the sociocognitive influences governing children's career aspirations and trajectories. The authors found that familial SES had an indirect, yet significant affect on children's career trajectories.

SES may also contribute to attitudes relating to work role participation and career decision-making. Hodge (2001) examined social indicators and cognitive variables influencing 104 female welfare recipients' work role participation. Results indicated that the majority of participants experienced dysfunctional career thoughts. For example, when compared to a normative sample of college females, participants showed lower career

decision-making efficacy. In addition, participants who did not complete high school showed lower career decision-making self-efficacy and more decision-making confusion and commitment anxiety than those who had completed high school. Hodge concluded that self-efficacy is a leading predictor of work role participation. Explanations for the career development differences found between lower and middle classes could include access to greater learning opportunities for the middle classes as well as differential familial influences (i.e., role models) and the range of occupational options open to each group (i.e., the need to contribute wages to one's family verses paying for a college education).

Moreover, Hannah and Kahn (1989) investigated the socioeconomic status (SES) background and gender of 334 adolescents in relation to gender composition of occupations. Findings indicated that girls in higher SES groups were more likely to be attracted to nontraditional occupations than their female counterparts in lower SES groups. Similarly, Trusty, Robinson, Plata, and Ng (2000) found that girls in lower SES groups preferred more traditional college majors than girls in higher SES groups. These studies suggest that women in lower SES groups have more rigid schemata in their gender role based occupational choices. Furthermore, if the social utility assigned to more masculine traits is considered, women of lower SES groups may be more vulnerable to developing low career self-efficacy beliefs. It is unfortunate that, despite the unique challenges faced by women in lower SES groups, "many contemporary models of career choice ignore the effects of gender and SES" (Trusty et al. 2000, p. 471).

To summarize, education and occupational choice may often be circumscribed by one's belief or schemata of what is reasonably obtainable in relation to one's individual characteristics such as gender and social class. Certainly, one's belief in what is a reasonably

obtainable career or educational path is relative to one's self-efficacy beliefs as well as to one's outcome expectations with regards to that endeavor. Given the significant career and educational barriers experienced by women from lower SES groups, it is expected that they will have lower career decision-making self-efficacy scores and lower academic self-efficacy scores than female students from higher SES groups; particularly as they transition into a middle-class university environment.

### *Conclusion and Hypotheses*

Given evidence presented in the research literature, the investigator hypothesized that freshman and sophomore female college students from lower SES groups would have lower career self-efficacy scores, and lower academic self-efficacy scores when compared to female students from higher SES groups, particularly as they adjusted to a middle-class university environment. The short form of the Career Decision-Making Self-Efficacy Scale (CDMSE-SF; Betz & Taylor, 2001) was used to measure career self-efficacy and the College Academic Self-Efficacy Scale (CASES; Owen & Froman, 1988) was used to measure academic self-efficacy. It was also hypothesized that female students from lower SES groups would identify with the ego identity statuses of Foreclosure and Moratorium more frequently than students from higher SES groups, who were expected to identify more frequently with the higher status of Identity Achieved. (The highest or most developed of Marcia's identity statuses is Identity Achieved, followed by Moratorium, then Foreclosure, and finally, the lowest or least developed identity status is Identity Diffused.) The Objective Measure of Ego Identity Status (OMEIS; Adams, Shea, & Fitch, 1979) was used to measure Marcia's four identity statuses.

## CHAPTER THREE

### METHOD

#### *Introduction*

This chapter presents the research methodology used in this study. Described below are the research hypotheses, participant descriptors, dependent and independent measures, data collection procedures, and the data analysis strategy.

#### *Research Hypotheses*

Due to societal oppression and a lack of privileges otherwise afforded higher SES groups, it was expected that female students from lower SES groups would experience lower levels of academic self-efficacy, career self-efficacy, and psychosocial identity development; particularly as they adjusted to a higher SES dominated university environment. Accordingly, the participants were limited to female students in their freshman and sophomore years, as issues of transition would be more prominent for this group than for students in their junior and senior years. The research hypotheses were as follows:

1. Female students from lower SES groups will have lower career decision-making self-efficacy scores when compared to female students from higher SES groups.
2. Female students from lower SES groups will have lower academic self-efficacy scores when compared to female students from higher SES groups.
3. Female students from lower SES groups will identify with the ego identity statuses of Foreclosure and Moratorium more frequently than students from higher SES groups, who are expected to identify more frequently with the higher status of Identity Achieved.

### *Participants*

Two hundred and eighty six participants were surveyed; however, 11 of the surveys were rejected due to missing or inappropriate responses. As a result, the final number of surveys used in the data analysis totaled 275. The remaining sample consisted of 275 freshmen and sophomore female students from North Carolina State University (NC State). The sample was not randomly selected; students volunteered their participation time in exchange for college credit. Participants were limited to students in the freshman and sophomore college years because issues of transition were expected to be more prominent during these years, in contrast to the junior and senior years. In addition, a minimal 6-week enrollment in classes on campus was required for students to participate. This stipulation allowed students to gain sufficient interactive college related experiences to report upon when completing the measures. The data were collected during the 2005 spring and fall semesters using students enrolled in an introductory level psychology class. This class contained a large number of freshman and sophomore students from which to draw participants and also provided a good representative sample of the general university population.

The mean age of participants was 18.6 years ( $SD = .85$ ) with an age range of 18 through 23 years. Only 11 students were above the age of 20 years. The median age of participants was exactly 18 years. Of the students surveyed, 79% identified themselves as Caucasian, 14% African/African-American, 3% Asian/Asian-American, 2.5% multiracial, and .5% each for Hispanic/Hispanic-American, Native American, and Other. In addition, 15% described the primary community in which they were raised as urban, 52% suburban, and 33% rural. The participants were enrolled in a broad range of majors representing

various academic disciplines including engineering, education, life sciences, physical sciences, design, business, social sciences, and mathematical sciences.

### *Dependent Measures*

#### *Objective Measure of Ego Identity Status (OMEIS; Adams, Shea, & Fitch, 1979)*

The Objective Measure of Ego Identity Status (OMEIS; Adams, Shea, & Fitch, 1979) was used to identify participants' ego identity status. Four identity statuses were measured: Diffusion, Foreclosure, Moratorium, and Achieved. Six items represent each of the identity statuses, resulting in a total of 24 items. Participants who failed to score high enough to qualify for any of the four categories above were classified as Undifferentiated. The instrument measures three ideological domains that relate to each of Marcia's (1980) four identity statuses; these domains are occupation, religion, and politics.

Participants rate each item using a six-point Likert-type scale. The score of each item is added to its appropriate subscale, thus, continuous scores are obtained for each of the four identity subscores. A series of three rules are followed in the process of comparing participants' raw subscale scores against score cutoff points. A different cutoff point is provided for each identity status. When participants score above one identity cutoff point, they are classified as identifying with that particular status. When participants score above two identity cutoff points, a rank order procedure from high to low is used to collapse the statuses downward into the less sophisticated identity status. For example, when a participant scores Diffusion-Foreclosure or Diffusion-Moratorium, these transition types will collapse into Diffusion. In each case, Identity Achievement is considered the most advanced identity status, followed by Moratorium then Foreclosure, while Diffusion is the least advanced. If

participants score above three or more identity cutoff points, their responses are not discriminating and their scores are dropped from the research study (Adams, 1998).

Identity Achievement, the first identity status subscale, indicates a commitment to ideological issues after having experienced a period of crisis (crisis is also referred to as exploration). Moratorium represents an individual in crisis (e.g., struggling with occupational or gender role issues) yet who lacks a sense of commitment. Foreclosure indicates an individual who has made a commitment but has done so without experiencing a crisis or exploration. Identity Diffusion indicates that no crisis has occurred and no commitments have been made (Marcia, 1980). Those scores that are low on all four identity statuses are categorized as *low profile* Moratorium which means that these participants have an undifferentiated form of Moratorium. No further character description or discussion was provided for the *low profile* Moratorium. For the present study, *low profile* Moratorium participants were classified as Undifferentiated.

Adams, Shea, and Fitch (1979) conducted four separate studies for the purpose of demonstrating reliability and validity of the OMEIS. Study 1 used a sample of 48 college freshman. Internal consistency correlations for the identity subscales ranged from .67 to .76. In addition, correlates of identity statuses derived from the OMEIS and the Marcia Ego Identity Incomplete Sentence Blank (EI-ISB) indicated that Diffused participants showed significantly less commitment than Achieved participants (Adams, 1998). Study 2 assessed 76 college students for the purpose of demonstrating construct and predictive validity. For example, using statuses derived from the OMEIS and the EI-ISB, a one-way analysis of variance indicated that Achieved participants had significantly higher overall identity than Diffused participants. Studies of predictive validity found that Foreclosure participants



scored higher on an authoritarian measure than all other statuses and also had higher mean scores on rigidity than Achieved participants. Achieved participants showed significantly higher scores of self-acceptance than Foreclosed and Diffused participants (Adams). Study 3 consisted of 88 male and 84 female college students. No significant sex differences were found in the results. Study 4 compared classification statuses derived from the OMEIS and the EI-ISB using 54 randomly assigned college students. Comparisons of the classification statuses indicated similar yet not identical congruence and test-retest correlations of subscales, ranging from .71 to .93 (Adams).

Using a sample of 70 freshman college students, Adams and Mortemayor (1987 as cited in Adams, 1998) demonstrated internal consistency of the subscales for three consecutive years with Cronbach alphas reported as follows: Achieved .84 to .89, Moratorium .70 to .77, Foreclosure .81 to .86, and Diffusion .69 to .73. Francis (1981 as cited in Adams) used a sample of 353 freshmen college students to test predictive validity of the OMEIS. This study reported Moratorium and Achieved participants' scores as significantly higher on the University Completion Test (ego development) than Diffused and Diffused-Moratorium participants' scores. Diffused participants also showed significantly more reliance on external control than Moratorium and Achieved participants. Finally, Achieved participants had higher GPA scores and significantly more desire to persist with their studies than Diffused and Diffused-Moratorium participants.

*Short Form of the Career Decision-Making Self-Efficacy Scale (CDMSE-SF; Betz & Taylor, 2001)*

Career self-efficacy was measured using the short form of the Career Decision-Making Self-Efficacy Scale (CDMSE-SF; Betz & Taylor, 2001). Each of the 25 items

represents a task on which respondents rate their degree of confidence in completing. A five-point Likert-type scale measures responses ranging from *no confidence* (1 point) to *complete confidence* (5 points). Higher scores indicate higher Career Decision-Making self-efficacy. Sample items include “Figure out what you are and are not willing to sacrifice to achieve your career goals” and “Make a plan of goals for the next five years.”

Internal consistency alphas ranged from .73 (Self-Appraisal) to .83 (Goal Selection) for the subscales and .94 for the total scale (Betz, Klein, & Taylor, 1996). Similarly, Gloria and Hird (1999) reported alphas from .95 to .97 for the total scale. Using a sample of 233 college students, Luzzo (1996) reported a 6-week test-retest reliability coefficient of .83. In addition, using 184 students enrolled in an introductory psychology class, Betz et al. (1996) reported strong evidence for validity and reliability. For example, concurrent validity was demonstrated with the Career Decision Scale (CDS) and the Vocation Situation (MVS) scale. To summarize, Betz et al. stated, “the short form of the CDMSE possesses psychometric characteristics comparable to or better than the long form with only half their length” (p. 54). *College Academic Self-Efficacy Scale (CASES; Owen & Froman, 1988)*

The College Academic Self-Efficacy Scale (CASES; Owen & Froman, 1988) was used to measure academic self-efficacy. Each of the 33 items represents typical academic behaviors on which respondents rate their degree of confidence in completing. A five-point Likert-type scale measures responses ranging from *quite a lot* (5 points) to *very little* (1 point). Higher scores indicate higher college academic self-efficacy. Sample items include “Participating in a class discussion” and “Challenging the professor’s opinion in class.” Owen and Froman reported good empirical support for both factorial and concurrent validity and obtained a test-retest reliability coefficient at .85 with an 8-week period. Owen and

Froman also reported internal consistency coefficients between .90 and .92. Similarly, in a sample of 215 undergraduate students, Choi (2004) reported an internal consistency coefficient of .93.

### *Independent Measures*

#### *Socioeconomic Status*

Socioeconomic status (SES) is one of the most frequently measured variables in research and is considered a viable indicator of economic and social status/class; however, there is no consensus with regard to the definition of and methods for measuring this construct (Stawarski & Boesel, 1988). Including indicators such as income combined with education will typically increase the explained variance. Using multiple indicators helps represent a more complete picture of the construct (Nam & Terrie, 1981). Granted, SES can be difficult to measure. Yet, Twenge and Campbell's (2002) meta-analytic study of 446 research articles exploring the relationship of SES and self-esteem found that either the participant's (or family's or parents') occupational status, income, and educational attainment—or a combination of these—were used in the various definitions of SES. Although occupational status, income, and educational attainment are distinct, they are nonetheless correlated (Twenge & Campbell). Such indicators can be included in the same hypothetical rubric, measuring both social status and social class. For example, occupations with higher status typically provide a higher salary than those with low status (Twenge & Campbell). To ensure more accurate assessment of SES, annual family income, parental occupation, and parental education were combined in the present study. The following sections discuss these variables in detail.

### *Occupation*

Occupation was assessed with the occupational classification system of the U.S. Census Bureau using Nam-Powers's (1980 Census) Socioeconomic Status Scores (as cited in Miller, 1991). In collaboration with the U.S. Census Bureau, Nam and Powers formulated socioeconomic scores for occupations using 1980 census data. This is one of the most current measures of SES and unlike more dated versions (e.g., the Duncan Socioeconomic Index, 1961) Nam-Powers incorporated SES scores for both sexes.

To test reliability, Nam and Powers took a complete list of detailed occupations for men in the years 1950 and 1960 and compared the two. The two sets of scores shared a correlation coefficient of .97. They then compared 126 occupations for men in 1960 and 1970 and calculated a correlation coefficient of .97. Moreover, a correlation coefficient of .91 was calculated when comparing scores for men in 1950 and 1970 (Miller, 1991). The figures indicate a high degree of stability in status scores over time. When comparing status scores for all women in 1960 and 1970, the correlation coefficient remained reasonably high at .85. In 1980, little difference was demonstrated between men and women's scores, and a single set of scores was devised for both men and women (Miller). In addition, very high correlations have been reported when Nam-Powers SES scores are measured against the Duncan Socioeconomic Index (1961) and Siegel's Prestige Scores (Miller).

The socioeconomic status of the occupation classifications are rated on a scale from 1 to 100 points (e.g., dishwashers are ranked as one of the lowest socioeconomic status occupations with a score of 2 points, and judges have one of the highest scores of 99 points). This rating includes a supplementary general scale for classifying more obscure and less easily defined occupations. For the purpose of the current study, this scale was divided into

five separate occupation status level groups. The groups were divided using the following point system categories: (a) group 1 = 1 through 20 points (score of 1), (b) group 2 = 21 through 40 points (score of 2), (c) group 3 = 41 through 60 points (score of 3), (d) group 4 = 61 through 80 points (score of 4), (e) group 5 = 81 through 100 points (score of 5). Parent occupations were matched with the identified Nam-Powers occupation SES scores and assigned their respective occupational status group. Therefore, group 1 represents the lowest occupation SES score and group 5 the highest. Although participants were asked to report both parents' occupations, only the highest parent occupation score was used in the criteria to determine SES. Rather than combining an average of the two scores, using only the highest score to calculate occupational status eliminated the dilemma of determining what to score the stay-at-home mothers and the retired, disabled, or deceased parents for which Nam-Powers does not provide a classification. In addition, a majority of the stay-at-home mothers had husbands with high occupation SES scores, and if this score were averaged with the wife's low score (or non-existent score in this case) the result would provide a distorted view of occupational SES for that family. Given this situation, it is important to acknowledge that those families with at least one parent who has attained higher occupational status are afforded more privilege, knowledge, access, and status than, for example, a combination of two parents both with low status occupational SES. If an average was taken of both parent occupational scores, a combination of two lower occupational SES scores might compute with a similar result as a family with one high occupational status and a stay-at-home mother and, thus, provide an inaccurate representation of status.

### *Education*

The educational scale is adapted from the Hollingshead Two-Factor Index of Social Position (1958 as cited in Miller, 1991) which is composed of an educational scale and an occupational scale. A high correlation is reported between the Hollingshead measure and Ellis, Lane, and Olesen's (1963 as cited in Miller) Index of Class Position. A correlation of .91 was reported between judged class with education and occupation (as cited in Miller, 1991). Multiple research studies have been conducted to assess the measure: "Hollingshead and others made extensive studies of the reliability of scoring and validity of the index on more than 100 variables" (Miller, p. 352).

The educational scale in the present study was based on the educational factor scale devised by Hollingshead (1958 as cited in Miller, 1991). The premise for the educational scale is based upon the assumption that men and women who possess comparable educational backgrounds would have comparable tastes, attitudes, and behaviors (Miller). Unlike Hollingshead's use of seven educational categories, the current study used only five categories. After examining first-year student survey demographic data tables posted on the NC State website, the investigator determined that relatively few parents of students enrolled in the university had below a high school education. As a result, the investigator chose to combine the three categories Hollingshead originally used to define levels of education below high school graduate into one category: *Less than high school*. Therefore, the scale in the current study does not specify how many years below high school were completed because it is not needed. Instead, only the following five Hollingshead educational scales were used:

1. Graduate professional training: Persons who completed a recognized professional course that led to the receipt of a graduate degree were given the highest score of 5. No differentiation was made between state universities and private colleges.
2. Standard college or university graduates: All individuals who had completed a four-year college or university course leading to a recognized college degree (score of 4). No differentiation was made between state universities and private colleges.
3. Partial college training: Individuals who had completed an Associate Degree or some college (score of 3). No differentiation was made between state universities and private colleges.
4. High school graduate: All secondary school graduates (score of 2).
5. Less than high school: Individuals who had not completed high school (lowest score of 1).

For the current study, only the highest education level of the two parents was used in the final computation of SES. Similar to determining occupation scores, if the highest education score of 5 was averaged with the lowest educational score of 1 then this would provide a distorted view of educational attainment for that family. If scored in this manner, two lower parent education scores might compute with a similar result as a family with one high parent education score when combined with one low parent education score. For example, a combination of a mother who is a veterinarian with a graduate degree (highest score of 5) and a father who has dropped out of high school to become a farmer (lowest score of 1) has the following education score:  $(5 + 1) \div 2 = 3$ . This result can be compared to a scenario producing the same score but with very different circumstances: two parents who

both began a college education but dropped out before graduating (score of 3 each) and currently work in retail sales would have the same education score:  $(3 + 3) \div 2 = 3$ . The family with two parents with lower education attainment and who are college drop outs is less likely to receive the same privilege, knowledge, access, status, and prestige than the family with just one parent with a higher educational attainment such as a veterinarian degree. This is also an important distinction because parental role models, available resources, and variety of experiences help form the cognitive processes that influence what children view as attainable for their own future education and career behaviors (Betz & Hackett, 1981, 1983; Gottfredson, 1981, 1996 as cited in Sharf, 1997).

### *Income*

The Assistant Director of NC State Planning and Analysis was consulted to help determine the most effective stratification of income groups. As a result, a total of eight income categories were used to capture more reliable and detailed income reports. Providing a greater number of income categories helped reduce the probability of having the majority of participants fall into one or two income categories and increased the probability of obtaining more accurate information. For example, it was expected that a certain amount of error would be associated with gathering students' estimation of parent earnings, therefore, by offering more income categories with narrower income ranges one can reduce the chance that students would choose an income range including incomes far different than the actual parent earnings. If the income ranges were much larger and choices far fewer, guessing as little as \$1,000 out of the actual earnings range could put the family in a group including others with much higher or much lower incomes and increase the chance of error in determining SES.



The income categories were designed to encompass the range of NC State students' family income. This income range was documented in first-year student survey demographic data tables posted on the NC State website. For example, the first-year student survey demographic data revealed that annual family income grossing over \$100,000 had increased from 9.4% in 1994 to 31.6% in 2003 while income grossing \$30,000 or below had declined from 18.6% to 10.9% respectively. The continuation of this trend was confirmed in the *2004 First-Year Student Survey Data Tables* (2005): "Separate analyses, not reported here, suggest that the increase [in the \$100,000 plus income group] is not solely the result of inflation, but also indicative of a real shift in the income levels of first year students' parents/guardians." This information precipitated the decision to include a greater number of higher income categories and fewer lower income groups than those typically used in U.S. Census reports. The income range within each category was also relative to the level of income for that category. For example, it would not have been prudent to set the highest income brackets (e.g., \$200,000 plus) with a narrow income range of only \$20,000 which, by comparison, is a relatively broad range for the lower income group of \$30,000 – \$50,000; the range is more practical if it remains relevant to income amount. Consequently, the aggregate family income groups were divided as follows: (a) group 1 = \$30,000 or less (score of 1), (b) group 2 = \$30,001 – \$50,000 (score of 2), (c) group 3 = \$50,001 – \$75,000 (score of 3), (d) group 4 = \$75,001 – \$100,000 (score of 4), (e) group 5 = \$100,001 – \$150,000 (score of 5), (f) group 6 = \$150,001 – \$200,000 (score of 6), (g) group 7 = \$200,001 – \$250,000 (score of 7), and (h) group 8 = \$250,001 or more (score of 8). Accordingly, the scores shown here were used in the final computation of SES described below.

### *SES Groups*

The final SES scores were computed using the three independent variables described above: family income, parental education, and parental occupation. To determine the SES scores for each participant, an average was taken of the total of family income score, plus the highest parent education score, plus the highest parent occupation status score. For example, a participant with an income score of 5, an occupation score of 4, and an education score of 4 would produce the following results:  $(5 + 4 + 4) \div 3 = 4.3$  SES score. Calculating the results in this manner provided a continuum of participant SES scores. In order to obtain comparable sample size groups, this continuum was divided into SES Quartiles using the SAS® (2003) statistical program (version 5.1) published by the SAS Institute. The First Quartile (scores  $< = 3.0$ ,  $n = 72$ ) represents the lowest SES group, followed by the Second ( $3.0 < \text{scores} \leq 4.0$ ,  $n = 69$ ) and Third ( $4.0 < \text{scores} \leq 4.7$ ,  $n = 72$ ) Quartiles respectively, and the Fourth Quartile ( $4.7 < \text{scores}$ ,  $n = 62$ ) represents the highest SES group. An SES score of 4.3 shown in the example above, places this student in the Third Quartile SES group. Using quartiles allowed the investigator to obtain a relatively equal number of participants for each SES group from which to make comparisons. Using four groups of SES also allowed for more detailed comparisons than if only two or three SES groups had been used.

### *Student Self-Identified Social Class*

Since the current study assessed students' self-efficacy beliefs and identity as they transitioned into a middle-class university environment, it was helpful to have some measure of how students assessed their own social class. This personal assessment was used as a form of cross-validation to establish whether SES groups (as determined by the investigator) corresponded with scores for the social class group with which students self-identified. To

measure the social class with which students most identified the following question was included in the survey:

If you were asked to use one of the following to describe your social class, to which would you say you belong: (a) lower-class, (b) working-class, (c) middle-class, (d) upper middle-class, or (e) upper class.

The answers to this question were assessed using a five-point scale: a = 1 point, b = 2 points, c = 3 points, d = 4 points, e = 5 points.

### *Demographic Information*

The personal data questions integrated into the survey booklet were used to obtain information about participants' college major, high school grade point average (GPA), age, race, and SES.

### *Procedure*

#### *Data Collection*

Approval was obtained from the NC State Institutional Review Board for the use of human participants in this study and permission was secured from the NC State Department of Psychology to survey up to 300 female freshman and sophomore students enrolled in an introductory psychology class during the 2005 spring and fall semesters. This particular participant pool was selected because students enrolled in this class were diverse and representative of the general university population (i.e., with regard to SES, race, and the variety of chosen majors). It also provided access to a large participant pool which was a requirement for the success of this research study. In addition, the class curricula provided a format that allowed researchers to offer credit to students for participating in a research study. University-affiliated researchers post their experiments, including participant criteria,

on a university web page, and students enrolled in the introductory psychology course sign up for those experiments for which they are eligible. For the present study, the investigator arranged multiple group appointment times to conduct the study throughout the 2005 spring and fall semesters. Students were awarded credit relative to the amount of time they participated in the study. In order to reduce mistakes and missed questions, the participants were given a generous amount of time to complete and review the survey prior to placing it in an envelope located on the investigator's desk. Furthermore, the investigator consulted with a professional survey designer in the NC State Department of University Planning and Analysis in order to produce the most effective survey format for minimizing participant mistakes and missed questions. This format was also effective in increasing the ease and accuracy of data entry. In addition, immediately after results were entered from a survey, the data were checked for accuracy and any required corrections were completed.

Prior to administration of the survey, the investigator distributed and briefly reviewed informed consent statements (Appendix A). Submission of the survey indicated the students' agreement to participate; this stipulation was specified on the consent form. Student confidentiality was maintained and no names were attached to the surveys; only necessary demographic details were requested. During the beginning of each experiment, the investigator recited a scripted introduction explaining participant requirements and procedural instructions. The investigator then distributed and administered the survey, which included a compilation of three self-report measures: the OMEIS (Adams, Shea, & Fitch, 1979), the CDMSE-SF (Betz & Taylor, 2001), and the CASES (Owen & Froman, 1988). These measures were contained in individual sections in the survey booklet, in combination with several other questions originally devised by the investigator (Appendix B). The latter

set of questions incorporated various demographic questions, including key questions for determining the independent variable, SES. SES was determined using a combination of three criteria: family income, parental education, and parental occupation. Students were asked to provide their best estimate of these criteria using categories provided on the survey.

Participants had the option to decline participation at any time during the study and, in doing so, could choose to have their survey destroyed or keep the survey for themselves. Any participant who chose to withdraw after the experiment began was given credit for their time spent up to that point, even if they did not complete the survey. If students chose to decline participation and required more credits, they were given the option to participate in another experiment for equivalent credit or to complete an alternative written assignment as directed by their professor. Once all participants had handed in their surveys, the investigator was available to answer questions. The investigator also offered written information describing the study. Students had the option of entering into a prize drawing to win one of two gift certificates for the university book store. In order to maintain confidentiality, participants were provided with a piece of paper separate from the survey on which to submit their contact information for the prize drawing. Two names were drawn at random and the individuals were contacted via email and provided with instructions for collecting their certificates.

### *Data Analysis*

All statistical procedures were conducted using the JMP SAS® (2003) statistical program (version 5.1) published by the SAS Institute. To compare the means of survey responses for different categories of SES, the investigator used a total of five one-way Analyses of Variance (ANOVAs). The first ANOVA was used to determine if a difference

existed between SES groups with regards to career self-efficacy scores. The second ANOVA was used to determine if differences existed between SES groups with regards to academic self-efficacy scores. To determine which SES group self-efficacy scores were significantly different from one another, comparisons of career and academic self-efficacy scores for each SES group were conducted using one-tailed *t*-tests. To assess whether the self-efficacy responses were mediated by differences in actual ability (assessed using high school GPA scores) rather than student's perceived ability (assessed using self-efficacy measures) a supplementary one-way ANOVA was included to determine if differences existed between SES groups with regards to unweighted high school GPA scores. An additional one-way ANOVA was used to determine if differences existed between SES Quartile groups on responses of students' self-identified social class group. Means and standard deviations for those responses were assessed against a five-point categorical response scale and those responses were compared to their corresponding SES group.

A chi-square analysis was used to examine whether female students from lower SES groups identified with the ego identity statuses of Foreclosure and Moratorium more frequently than students from higher SES groups, who were expected to identify more frequently with the higher status of Identity Achieved. The chi-square analysis tested for independence in SES groups across the five identity statuses and provided data needed for examination of the nature of that independence.

## CHAPTER 4

### RESULTS

#### *Introduction*

The following chapter presents the findings from the data analyses used to examine whether female students from lower SES groups had lower career decision-making self-efficacy scores (referred to here simply as self-efficacy scores) and lower academic self-efficacy scores when compared to female students from higher SES groups. To test if these outcomes were influenced by differences in academic ability rather than self-efficacy, a supplementary one-way ANOVA was included to determine if differences existed between SES groups with regards to unweighted high school GPA scores. In addition, this chapter presents findings from the data analyses used to examine whether female students from lower SES groups identified with the ego identity statuses of Foreclosure and Moratorium more frequently than students from higher SES groups, who were expected to identify more frequently with the higher status of Identity Achieved. Finally, an additional one-way ANOVA was used to determine if differences existed between SES groups among responses of students' self-identified social class; mean scores and standard deviations are presented in table form.

#### *Comparison of Career Self-Efficacy Scores by SES Group*

The first research question examined if differences existed in career self-efficacy scores between female college students from lower SES groups and female college students from higher SES groups. The following hypothesis was proposed: Female college students from lower SES groups will have lower career self-efficacy scores when compared to female college students from higher SES groups.

A one-way ANOVA was conducted with SES group as the independent variable and career self-efficacy as the dependent variable. The data for career self-efficacy scores and SES were normally distributed. SES groups were split into ordered quartiles from the lowest SES group to the highest SES group: the First Quartile represents the lowest SES group, followed by the Second and Third Quartiles respectively, and the Fourth Quartile represents the highest SES group. The one-way ANOVA for comparing group means for all four levels of SES was significant at the  $p < .05$  level,  $F(3, 275) = 2.85, p = .038$ . To determine which SES group mean scores were significantly different from one another comparisons of career self-efficacy scores for each SES group were conducted using a one-tailed  $t$ -test with an alpha level of .10. As predicted, the First Quartile SES scores ( $M = 87.28, SD = 11.88$ ) were significantly lower, than the Second ( $M = 92.23, SD = 11.45$ ),  $t(271) = 2.49, p = .01$ , Third ( $M = 91.03, SD = 10.30$ ),  $t(271) = 1.9, p = .06$  and the Fourth ( $M = 92.42, SD = 13.68$ ),  $t(271) = 2.51, p = .01$  SES Quartile scores. No other significant differences between group scores were found. Means, standard deviations, and sample sizes for career self-efficacy scores for each SES group and are presented in Table 1.

#### *Comparison of Academic Self-Efficacy Scores by SES Group*

The second research question examined if differences existed in academic self-efficacy scores between female college students from lower SES groups and female college students from higher SES groups. The following hypothesis was proposed: Female college students from lower SES groups will have lower academic self-efficacy scores when compared to female college students from higher SES groups.

A one-way ANOVA was conducted with SES group as the independent variable and academic self-efficacy as the dependent variable. The data for academic self-efficacy scores



and SES were normally distributed. The one-way ANOVA for comparing group means for all four levels of SES was significance at the  $p < .05$  level,  $F(3, 275) = 8.66, p = .0001$ . To determine which SES group mean scores were significantly different from one another comparisons for each pair were conducted using a one-tailed  $t$ -test with an alpha level of .05. Academic self-efficacy scores for the First Quartile SES scores ( $M = 107.92, SD = 12.51$ ) were significantly lower at the  $p < .05$  level than the Second ( $M = 115.46, SD = 14.94$ ),  $t(271) = 3.13, p = .002$ , Third ( $M = 117.74, SD = 14.00$ ),  $t(271) = 4.11, p = .0001$ , and Fourth ( $M = 119.34, SD = 15.89$ ),  $t(271) = 4.60, p = .0001$  SES Quartile scores. No other significant differences between group scores were found. Means, standard deviations, and sample sizes for academic self-efficacy scores for each SES group and are presented in Table 1.

Table 1

*Means and standard deviations for career self-efficacy scores and academic self-efficacy scores by socioeconomic (SES) group (N = 275).*

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<u>SES group</u>	<u>n</u>	<u>Academic Self-Efficacy</u>		<u>Career Self-Efficacy</u>	
		<u>Mean</u>	<u>SD</u>	<u>Mean</u>	<u>SD</u>
First Quartile	72	107.92	12.51	87.28	11.88
Second Quartile	69	115.46	14.94	92.23	11.45
Third Quartile	72	117.74	14.00	91.03	10.30
Fourth Quartile	62	119.34	15.89	92.42	13.68

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*Manipulation Check: GPA Scores and SES Group*

Given the significant findings, the researcher ran a manipulation check to assess whether the self-efficacy responses were mediated by differences in actual ability and achievement rather than student's perceived ability. Accordingly, a one-way ANOVA was used to determine if differences existed in high school GPA by SES group. SES Quartile was the independent variable and GPA was the dependent variable. Ten of the 275 participant surveys were excluded from this computation because of missing GPA data. The excluded data was distributed across all four SES Quartiles: First Quartile – 1 exclusion; Second Quartile – 4 exclusions; Third Quartile – 2 exclusions; Fourth Quartile – 3 exclusions. The one-way ANOVA for comparing group means for all four levels of SES by high school GPA was not significant at the  $p < .05$  level,  $F(3, 265) = 0.24$ ,  $p = .87$ . This finding is far from significant; therefore, it is unlikely that, even if available, the 10 excluded items would affect this result, particularly given that the exclusions were distributed across all four SES Quartiles and that the excluded items represented a very small percentage of the original sample total. The investigator also attempted to collect weighted high school GPA scores for comparison; however, too few students reported this variable and equivalent comparisons could not be completed. Differences in means and standard deviations for high school GPA by SES Quartile are displayed in Table 2.

Table 2

*Means and standard deviations for GPA by socioeconomic status (SES) group (N = 265)*

<u>SES Group</u>	<u>n</u>	<u>GPA</u>	
		<u>Mean</u>	<u>SD</u>
Fist Quartile	71	3.61	0.38
Second Quartile	65	3.57	0.32
Third Quartile	70	3.61	0.31
Fourth Quartile	59	3.62	0.33

*Identity Development Status and SES*

The third research hypothesis stated that female students from: (a) lower SES groups would identify with the ego identity statuses of Foreclosure more frequently than female students from higher SES groups, (b) lower SES groups would identify with the ego identity statuses of Moratorium more frequently than female students from higher SES groups, and (c) higher SES groups would identify more frequently with the ego identity status of Achieved than female students from lower SES groups. A chi-square analysis was used to compute different identity status score counts for each SES group across five identity statuses: Achieved, Moratorium, Foreclosed, Diffused, and Undifferentiated. Only 262 of the 275 participants' data could be used for this computation because some participant scores resulted in outcomes that could not be categorized into one identity status. That is, responses cannot be categorized when participants score above three or more identity cutoff points and, as a result, their responses are not discriminating. When this occurs, Adams (1998)

recommends those scores are dropped from the research study. Even with these items excluded, the remaining sample was large enough to satisfy minimum assumptions for the chi-square analysis. The Cochran Criterion for this test requires that no more than 20% of the cells have a count less than 5 (Sall, Lehman, & Creighton, 2001). In the current study, only 10% of the cells had less than 5 counts. The results from the chi-square analysis for SES quartile by identity status suggested independence in identity development status according to SES,  $\chi^2 (12, N = 262) = 24.036, p = .021$ . This finding was grounds for investigating a pattern in the results as it related to the hypotheses.

The first part of the research hypothesis stated that female students from lower SES groups would identify with the ego identity statuses of Foreclosure more frequently than female students from higher SES groups. As seen in Table 3, the opposite of this prediction was found in the data. In the Foreclosure category, the First Quartile SES group had a count of 3 which was lower than the Second (count of 6), Third (count of 6), and Fourth (count of 10) SES Quartile groups.

The second part of the research hypothesis stated that female students from lower SES groups would identify with the ego identity status Moratorium more frequently than students from higher SES groups. Table 3 shows mixed results. The First Quartile SES group had a count of 8 which was higher than the Second (count of 1) and Fourth (count of 5) Quartile SES groups, whereas the Third (count of 9) Quartile SES group showed one count higher than the First Quartile. Even if the investigator decided to combine the Undifferentiated Moratorium counts with Moratorium counts, the results would show that the First Quartile SES group had a lower combined count when compared to all other combined counts in each SES group. In this case, the findings would be opposite to those predicted.

The third part of the research hypotheses stated that female students from higher SES groups were expected to identify with the ego identity status of Achieved more frequently than students from lower SES groups. Table 3 shows that the opposite of this was found in the data. The First Quartile SES group had a count of 11 which was higher than the Second (count of 5), Third (count of 8), and Fourth (count of 8) Quartile SES groups.

Table 3

*SES Quartile by identity status*

SES	Diff	Fore	Mora	Achieve	Undiff	Total
<u>First Quartile</u>						
Count	27	3	8	11	18	67
Total %	10.31	1.15	3.05	4.20	6.87	25.57
<u>Second Quartile</u>						
Count	27	6	1	5	28	67
Total %	10.31	2.29	0.38	1.91	10.69	25.57
<u>Third Quartile</u>						
Count	18	6	9	8	29	70
Total %	6.87	2.29	3.44	3.05	11.07	26.72
<u>Fourth Quartile</u>						
Count	13	10	5	8	22	58
Total %	4.96	3.82	1.91	3.05	8.40	22.14
Totals Count	85	25	23	32	97	262
Totals %	32.44	9.54	8.78	12.21	37.02	100

*Note: Diff = Differentiated, Fore = Foreclosure, Mora = Moratorium, Achieve = Achieved, Undiff = Undifferentiated.*

Further examination of the data in Table 3 revealed that the highest count for the First Quartile SES group was in the lowest status, Identity Diffused (count of 27), while the very lowest count was in Identity Foreclosure (count of 3). Similarly, the Second Quartile SES group shared the same count in Identity Diffused as the First Quartile but had twice as many counts in Identity Foreclosed.

### *Student Self-Identified Social Class*

An additional one-way ANOVA was used to determine if differences existed between SES Quartile groups on responses of students' self-identified social class group. The one-way ANOVA for comparing mean responses for all four levels of SES was significant at the  $p < .05$  level,  $F(3, 275) = 75.50, p = .0001$ . This finding suggested differences existed in student self-identified social class between SES groups. For example, as shown in Table 4, the Second Quartile SES group had a score of 3.16 which indicated that this group identified as *middle-class*, whereas the Fourth Quartile SES group had a score of 3.90 which indicated this group identified as *upper middle-class*. The scoring key for answers to student self-identified social class is displayed directly below Table 4 (see chapter 3 for a more detailed example). By closer examination of Table 4, one can easily determine that student self-identified social class status increases as SES increases.

Table 4

*Mean scores and standard deviations for student self-identified social class by socioeconomic (SES) group (N = 275).*

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		<u>Self-Identified Social Class</u>	
<u>SES group</u>	<u>n</u>	<u>Mean</u>	<u>SD</u>
First Quartile	72	2.51	0.60
Second Quartile	69	3.16	0.56
Third Quartile	72	3.61	0.55
Fourth Quartile	62	3.90	0.58

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*Note: Five-point scoring key: 1 = Lower class, 2 = Working class, 3 = Middle class, 4 = Upper middle class, 5 = Upper class*

## CHAPTER FIVE

### DISCUSSION

#### *Introduction*

Due to societal oppression and a lack of privileges otherwise afforded to individuals from higher SES groups, the investigator hypothesized that women from lower SES groups would experience lower levels of career self-efficacy, academic self-efficacy, and psychosocial identity development when compared to women from higher SES groups; particularly as they adjusted to a higher SES dominated college environment. Participants completed three measures in addition to demographic questions relating to SES. Administered measures included the Objective Measure of Ego Identity Status (OMEIS; Adams, Shea, & Fitch, 1979), the short form of the Career Decision-Making Self-Efficacy Scale (CDMSE-SF; Betz & Taylor, 2001), and the College Academic Self-Efficacy Scale (CASES; Owen & Froman, 1988). SES was determined using a combination of three variables: annual family income, parental occupation, and parental education levels. Further, patterns in students' self-identified social class group were compared to corresponding SES groups. Findings indicated that the higher student the SES group (as determined by the investigator), the higher self-identified social class status group score.

The following chapter will discuss the research findings, limitations, and recommendations for future research and practice. The first section will examine the research findings and their relation to current research. The second section will address limitations of the study and the final sections will discuss implications for future research and practice.



### *Research Findings and Relationship to Current Research*

The first hypothesis presented in this study proposed that female college students from lower SES groups would have lower career self-efficacy scores than female college students from higher SES groups. As predicted, career self-efficacy scores for women in the lowest SES Quartile (First Quartile group), were significantly lower than those in the Second, Third, and Fourth SES Quartile groups. The second hypothesis presented in this study proposed that female college students from lower SES groups would have lower academic self-efficacy scores than female college students from higher SES groups. As with the first hypothesis, the findings illustrated significantly lower scores of academic self-efficacy for women in the First SES Quartile group when compared to those in the Second, Third, and Fourth SES Quartile groups. Given the significance of these findings, the investigator performed a manipulation check to determine if differences existed in high school GPA scores between SES groups; no significant differences were found. The findings presented here support the supposition that SES has a significant influence on early learning experiences and, in turn, this affects beliefs and behaviors in adulthood relating to education and careers despite academic ability.

Few comparative studies are available in the areas of interest explored in this study; however, results from Hodge's (2001) study, cited in chapter 2, support similar findings to those in the current study when examining differences in career self-efficacy by SES. Hodge examined social indicators and cognitive variables influencing 104 female welfare recipients' work role participation. The results indicated that the majority of female welfare recipients experienced dysfunctional career thoughts when compared to a normative sample. The lower SES group of female welfare recipients showed lower Career Decision-Making self-efficacy.

As with the current study, explanations for career development differences between the lower and middle SES groups of women might include limited access to greater learning opportunities for the lower SES group as well as differential familial influences (i.e., traditional role models) and the range of occupational options open to each. In the late adolescent and early adult years, occupational options might also be limited by the need to contribute wages to one's family versus paying for a college education.

The findings in the current study build upon theoretical foundations discussed in earlier chapters. Researchers such as Betz and Hackett (1981, 1983) and Gottfredson (1981, 1996 as cited in Sharf, 1997), propose that exposure to role models, available resources, interpersonal supports, and variety of experiences help form the cognitive processes that influence future education and career behaviors. For example, in a study of 1,193 African American high school seniors, Mickelson (1990) found that both males and females from lower-class family backgrounds had lower academic performance and more negative belief systems concerning the value of education than comparative groups of African Americans females from middle-class backgrounds.

Gottfredson (2002) maintains that individuals choose occupations in accordance with their sex and social class. Initially, children rule out occupations affiliated with the opposite sex, followed by a rejection of those that fall outside of their realm of social class. Children incorporate determinants of social class into their self-concepts and reject educational and occupational alternatives that seem incongruent with those elements of the self-concept. Individuals from higher SES backgrounds are subject to higher educational and occupational expectations, and are encouraged to obtain higher achievement levels to avoid being judged as a failure in their social group. Conversely, low SES backgrounds weaken aspirations by

lowering standards of what is considered acceptable and what is possible (Gottfredson). Perhaps familial influences of self-concept become more apparent as students from lower SES groups enter a college environment. Sensing that they could be categorized by others as lower class might increase awareness of the *correct* middle-class standards and of the judgments made toward those who are different. Despite academic achievements gained in high school, the early college years may represent a time of questioning how their self-concept fits in a place dominated by individuals not quite like them. As a result, students from lower SES backgrounds begin to feel marginalized and question themselves and their ability to succeed in this new environment.

Gottfredson acknowledged that ability influences one's desire to reach for higher standards of academic and occupational achievement, as does SES, but she does not address which influence is more salient. However, a study by Hossler and Stage (1992, cited in Sharf, 1997) examined the educational plans of ninth-grade students and found that parental educational expectations (known to be higher in higher SES groups) were a stronger influence on those plans than student achievement, parent education levels, or student involvement in school activities. This suggests that the influence of family background can have a significant influence on academic and career self-efficacy regardless of ability. Similarly, in the current study, no differences were found in actual ability levels between SES groups, only in perceived ability and perceived confidence in career decisions and academic performance. Tinto (1993) may help to shed light on this finding:

Since it has been demonstrated that individuals from disadvantaged and/or minority origins are much more likely to be found in public schools generally and in the lower quality public schools in particular, it follows that they will be less prepared for

college. As a result, they will also be more likely to experience academic difficulty in college regardless of measured ability, and more likely, therefore, to leave because of academic failure. Of course, this is also partially explained by the differential social experiences of disadvantaged youth and thus the difficulty they encounter in attempting to successfully act out the largely middle-class role of “college student.” (p. 49)

Given Tinto’s observations, as well as those of other researchers cited in the current study, it is likely that women from lower SES backgrounds have limited access to sufficient resources and positive social influences. Another example of this is illustrated in a study by Zeldin and Pajares (2000) who examined the influence of family and background on the development of self-efficacy beliefs. Through an exploration of personal accounts of women, they found that messages women received from important individuals in their lives, such as parents and teachers, in combination with vicarious learning experiences, significantly influenced self-efficacy beliefs in their ability to succeed in male-dominated academic domains. The findings suggested that women who received encouragement to persevere when faced with academic and social difficulties and who were raised in environments that stressed the importance of education while discouraging female academic stereotypes, developed higher career and academic self-efficacy beliefs. If one considers that women from lower SES groups are likely to have mothers in more traditional, lower paying occupations, it is reasonable to assume that opportunities for exposure to examples of non-traditional career options and alternative female role models would be limited. Lower SES is also associated with lower levels of education and fewer financial resources; therefore, when individuals need to find full-time work to help support themselves and/or their family, the

importance of education may take low priority and family members may find it difficult to support a decision to attend college. Conversely, it is important to acknowledge that not all students from lower SES groups lack the support or encouragement from their families to attend college or to pursue alternative careers.

Alfassi (2003) states that it is important to recognize it is not enough for students to have academic knowledge and skill, they also need positive self-efficacy beliefs in order to increase chances of success. Unfortunately, in the present study, despite levels of actual ability as measured by high school GPA, cognitive beliefs regarding perceived academic and career abilities for the lowest SES Quartile group were more negative when measured against all higher SES Quartile groups. The findings suggest that SES does indeed affect the beliefs women students have in their ability to succeed in a college environment. When comparing themselves to the ways of a majority middle-class student body, lack of resources, supports, and differentials in *cultural capital* (i.e., behaviors, preferences, and social structures associated with different social class groups) may become more salient, particularly as they make the transition into a university environment. The identification of such differences may have a residual effect and provoke further questioning about differences in comparative ability. Given the findings presented here, it is reasonable to suggest that, despite ability levels, women from lower SES groups are at greater risk for academic failure when compared to those in higher SES groups.

The third research hypothesis stated that female students from: (a) lower SES groups would identify with the ego identity statuses of Foreclosure more frequently than female students from higher SES groups, (b) lower SES groups would identify with the ego identity statuses of Moratorium more frequently than female students from higher SES groups, and

(c) higher SES groups were expected to identify with the ego identity status of Achieved more frequently than female students from lower SES groups. As indicated in chapter 4, for the first part of the hypothesis, part (a), the results revealed findings opposite to those predicted. In the Foreclosure identity category, the First Quartile SES group had a count which was lower than the Second, Third, and Fourth SES Quartile groups. It is interesting to note, however, that the First Quartile SES group shared the highest count with the Second Quartile for the lowest identity status, Diffusion, while the Third and Fourth Quartiles showed far fewer counts in this status with the Fourth Quartile having the lowest count of all Quartile groups.

For the second part of the hypothesis, part (b), the findings were mixed. For the identity status Moratorium, the First Quartile SES group had a count higher than the Second and Fourth Quartile SES groups but not the Third Quartile SES group. Consequently, no definitive pattern is evident here. For the third part of the research hypotheses, part (c), the results revealed findings opposite to those predicted. For the identity status Achieved, the First Quartile SES group had a count higher than the Second, Third, and Fourth Quartile SES groups.

Given this was an exploratory type study with no available analogous studies from which to draw, it was no surprise that the findings deviated from the proposed hypotheses. Consequently, the results provided an opportunity to consider explanations for identity development differences between female students from different SES groups.

In general, the research indicates that Identity Achieved individuals have more adaptive interpersonal skills and often better mental health than individuals in other identity statuses. Identity Achieved and Moratorium have also been described as more adaptable and

effective in conducting their lives than Foreclosed or Diffused individuals (Berzonsky & Kuk, 2000; Clancy & Dollinger, 1993). For example, Identity Achieved and Moratorium individuals exhibit greater ability for more complex cognitive integration of information and demonstrate more confidence in their own ideas, particularly when compared to Foreclosed or Diffused individuals (Berzonsky & Kuk, 2000; Read, Adams, & Dobson, 1984).

Foreclosed individuals have also shown higher scores on rigidity and lower scores on self-acceptance than Identity Achieved individuals (Adams, 1998). Identity Diffused individuals in particular, have demonstrated reluctance in coping with problems directly and indicate more avoidant behaviors than other identity statuses (Grotevant & Adams, 1984). Diffused participants have also shown significantly more reliance on external control than Moratorium and Achieved participants (Francis, 1981 as cited in Adams, 1998) and also score higher than other statuses on measures of depression and anxiety (Clancy & Dollinger). Finally, Achieved participants tend to have higher GPA scores and significantly more desire to persist with their studies than Diffused participants (Francis, 1981 as cited in Adams).

The findings in the current study revealed that, when compared to all other SES Quartile groups, the First Quartile SES group had the highest count of students who were Identity Achieved. Possibly those students in the First SES Quartile and who were Identity Achieved had been required to develop a higher level of coping and, consequently, had a more adult like identity. Certain students from the lower SES group may have previously worked through issues of adapting to adulthood responsibilities and forming independent behaviors. They may more frequently be subject to limited resources as well as limited support from family members. Therefore, it would be reasonable to assume that students from lower SES backgrounds have learned how to sustain a job, manage a budget, maintain a

home, and conduct various adult responsibilities. In addition, many students from lower SES backgrounds may be first generation students and have little support from parents in helping them determine the steps needed to get into college. This would require students to figure out those steps for themselves and to seek out additional resources from which to draw information. Tasks such as applying for college loans, choosing an appropriate college, acquiring access to a computer, arranging housing, figuring out transportation, and various other adult type tasks may need to be accomplished with little help or guidance. These examples present significant developmental challenges that help transform adolescent identity into an adult identity.

Moreover, by attending college, students from lower SES backgrounds may have broken out of a family archetype and challenged the limits of what is acceptable in their social group. They may face possible rejection and alienation from family members who feel threatened by their education. Pursuing higher education may send the covert message that in order to be successful they have to become something different than the role models represented in their family of origin. Perhaps some parents view the idea of their child going to college as a rejection of who they are and how they have lived and raised their family. Their decision to pursue higher education might also provoke sibling rivalry between those who go to college and those who do not. When individuals from lower SES backgrounds begin to experience upward mobility, it is not unusual for difficult emotional dynamics to begin occurring in their families. Academic success can symbolize a profound form of separation from one's family and peer group (Lucey et al. 2003). The findings in the current study suggest that some students from lower SES groups have subsequently worked through issues of separation from their families. They may have been forced to create and internalize



an identity of their own in order to maintain equilibrium while dealing with the contextual dichotomy of their two worlds: working-class family environment verses middle-class university environment. The ability to manage challenges such as these demonstrates the ability to process complex issues, to navigate multiple divergent situations with purpose, and to have confidence in decision-making and behaviors regardless of external judgments. The ability to perform development tasks such as these indicates characteristics of an Identity Achieved individual.

Despite the lowest SES group having the largest number of female students in Identity Achieved, when compared to all other SES groups, they also had the largest number of female students in Identity Diffused, indicating significant representation of two identity extremes. How then does one explain the much larger number of First Quartile students in Identity Diffusion; almost two and half times more First Quartile students than those in Identity Achieved? One explanation might be that these students have struggled with the same issues as students who are Identity Achieved yet react differently by feeling overwhelmed with the tasks encountered. Balancing practical tasks of supporting themselves financially while managing the demands of academic schedules may appear too great. In a large university such as NC State, these individuals may not have the compensatory backup of individual attention and school supports once available in their local high school environment. In addition, these students have to adjust to a new environment where the majority population is socially different from them. One might begin to question whether the realization of being a cultural outsider is associated with a corresponding crisis in academic competency.

According to Tinto (1993), students from disadvantaged backgrounds, from families that have not attended college, may find the transition into college more difficult than students with parents who are college educated: “For them, separation may represent a major shift in the way they conduct their daily lives. But for many individuals from college educated families, the transition into college may be an accepted, indeed encouraged, movement that most persons are expected to make in the course of their adult lives” (p. 97). Combine this dynamic shift, with feelings of guilt or alienation that may be experienced by leaving families who never had the opportunity to attend college or who would have benefited from them working full-time, could greatly increase levels of stress and related adjustment difficulties. Lucey et al. (2003) and Walkerdine et al. (2001) found that it was common for women from lower SES backgrounds who attained academic success to experience feelings of guilt; this often resulted in ambivalence about their success. Furthermore, given the nature of traditional female gender roles (e.g., selflessness, need for connection, consideration for others and harmony of the group) and the notion that women from lower SES groups may be inclined to possess more rigid gender role schemata (see Hannah & Kahn, 1989; Trusty, Robinson, Plata, & Ng, 2000), perhaps feelings of guilt are especially intensified for women with these backgrounds.

As a result of the multiple stressors involved, women students from lower SES backgrounds may feel overwhelmed with confusion and self-doubt and, as a form of psychological defense against such stressors, react by shutting down any desire to engage in the process of self-exploration. This reaction may appear easier than choosing to persist and work through such challenges as an Identity Achieved individual might. By responding in typical Diffusion style, problems are avoided and, for the meantime, feelings of anxiety and

depression are suppressed. Nonetheless, it is perplexing that such a large proportion of students from the lower SES groups in the present study are Identity Diffused. At least with regard to education and career issues, it seems probable that these students would have gone through a process of exploration in order to discover educational and career options other than those represented by their principal social group or family of origin. As previously discussed, women students from lower SES groups typically have the fewest opportunities for exposure to diverse career options and are least often provided opportunities and resources needed to attend college; therefore, in order to get to college in the first place, this group would have likely made an effort to explore higher education opportunities for themselves. However, it may be important to acknowledge that theoretical rhetoric can oversimplify human behavior and that development may not necessarily occur in a linear pattern. For example, according to Myers et al. (1991), human development is not rigid or fixed but rather moves back and forth during a lifetime. There is fluidity in development that enables individuals to revisit those damaged parts of themselves in an effort to heal them. Possibly, the findings in the present study support the idea that movement may occur in more than one direction; in this case women students from lower SES groups may have previously begun a phase of Moratorium; however, if they felt too uncomfortable in the university environment, the idea of taking chances and exploring within that environment may become too intimidating and the easiest way for them to cope is to emotionally shut down in order to prevent experiencing a crisis.

Another explanation for this finding is that, given the variety of contexts individuals live in, it is unlikely that most individuals fit exclusively into one level of identity development. Levels of identity development may be different depending upon the domain

experienced. Accordingly, phases of development can overlap; therefore, although many individuals may largely exhibit characteristics of one phase, such as Identity Diffusion seen here, they may continue to share some characteristics with a higher phase such as Moratorium. In the present study, perhaps Identity Diffused students from lower SES groups predominantly function as Diffused individuals in a majority of contexts yet may also share some Moratorium characteristics in the domain of careers or education.

It should be noted that students in the Second Quartile SES group shared the same count in Identity Diffusion as the First SES Quartile group and had fewer counts in Identity Achieved when compared to any other SES Quartile group. Second Quartile students may face similar challenges as those in the First Quartile SES group; however, perhaps students from the First Quartile group feel that, since they have pushed through considerable barriers to get this far and have experienced greater extremes of disadvantage, they have more to lose if they do not persist in college; therefore, more are motivated to push through their struggles and in the process build characteristics that lead to an Achieved Identity. Again, greater extremes of disadvantage may have led to greater numbers of the lowest SES group forming a more adult identity.

A study by Berzonsky and Kuk (2000) may help elucidate some findings in the current study. Using a sample of 363 freshmen college students, Berzonsky and Kuk conducted a study to examine whether adaptation within a university environment was related to differences in identity status and identity style. In drawing from studies Berzonsky completed in 1988 and 1990, it was proposed that individuals with different identity statuses use different social-cognitive processes to solve personal problems, process identity relevant information, and make decisions. Identity Achieved individuals, for example, demonstrate

the ability to successfully structure their lives and manage their academic demands in a responsible, self-directive manner. They also demonstrate emotional autonomy which enables them to function interpersonally in a self-directed manner without the need for approval and validation from others. Moratorium individuals can share similar social-cognitive qualities but typically to a lesser extent. Identity Achieved individuals easily establish and maintain positive, supportive relationships and describe themselves as being tolerant and accepting of others and having open and honest relationships (Berzonsky & Kuk). Berzonsky and Kuk concluded that students with the identity processing style of Identity Achieved individuals possess the necessary skills to be successful within a university setting.

Further research by Jordyn and Byrd (2003) suggests that Identity Achieved individuals see themselves as being in control of their lives and feel little need to draw upon family for support, preferring to manage problems themselves. These characteristics may be necessary for women students from lower SES backgrounds since, when concerning educational issues and career decisions, they may have little family support and few resources beyond those which they have created for themselves. Therefore, in order to overcome the challenges of adapting to a middle-class university environment, it is reasonable to assume that women students from lower SES backgrounds would benefit greatly from having skills similar to those exhibited by Identity Achieved individuals. Qualities demonstrated by Identity Achieved individuals can facilitate successful adjustment to a new college environment which, in turn, could facilitate academic and career success and reduce attrition rates for this at-risk group. It is likely then, that students in the First Quartile

SES group who are Identity Achieved have a good probability of succeeding and remaining in university until the completion of their degree.

When compared to other SES Quartile groups and when compared to other statuses within its SES group, the lowest count for Identity Foreclosure was in the First Quartile SES group. The very nature of the Foreclosed individual may explain this result. Berzonsky and Kuk (2000) describe the processing style of Foreclosed individuals as conforming to the expectations of significant others and as having a low tolerance for uncertainty and a strong need for structure. Foreclosed individuals are less flexible in their tolerance of others and their sense of academic purpose is externally based. This means that decisions and behaviors are based upon what is acceptable according to their principal social group. Given that individuals from lower SES backgrounds are less likely to have external educational supports or resources to rely on and that, according to Gottfredson (2002), low SES backgrounds actually weaken academic and career aspirations by lowering standards of what is considered acceptable and what is possible, it seems reasonable to assume that Foreclosed individuals from lower SES backgrounds may be predisposed to conform to lower expectations, maintain the status quo, and follow examples of parents and peers. If parents of Foreclosed individuals are not college educated and do not encourage their children to obtain a college degree then it is unlikely that their children would break from established family norms and attend college to pursue a very different career path. Interestingly, the highest count of any SES Quartile for Foreclosure is in the Fourth Quartile. This finding fits with Gottfredson's (2002) theory that individuals from higher SES backgrounds are subject to higher educational and occupational expectations, and are encouraged to attain higher achievement levels to avoid being judged as a failure in their social group. Therefore, students from higher SES groups may be inclined to

follow parental wishes by going directly to college without having explored or questioned alternative career paths.

As stated earlier, a large number of students in the lower SES Quartiles were Identity Diffused. Berzonsky and Kuk (2000) found Diffused students to have low levels of self-discipline and processing styles that suggested an increased risk for adjustment difficulties in college as well as academic problems. Individuals with Diffused identity styles indicate a lack of clear and consistent academic goals and anticipated problems in independently managing their time and academic demands. Berzonsky and Kuk cited additional studies in support of their findings and concluded that individuals with a Diffused Identity style would experience difficulty in establishing and maintaining social support systems and are at significant risk for developing high levels of depression, neuroticism, and low self-esteem, as well substance abuse related problems. Given these findings, Identity Diffused students from lower SES backgrounds may be at great risk for academic failure and high attrition rates. Moreover, individuals (such as those from lower SES backgrounds) who come from families, communities, or schools whose norms and behaviors are very different than those experienced in a middle-class university setting may face an especially difficult task when trying to fitting in. These students may have been successful in meeting the demands of their previous high school environments; however, they may not have grasped the social and academic skills needed to be successful in their new college environment (Tinto, 1993). Combine incoming challenges with adjustment difficulties, a lack of defined academic goals, and a limited ability to develop social supports, chances for academic success in a middle-class university appear limited for students who have Diffused Identities and who are from low SES groups.

### *Limitations and Threats to Validity*

As with any research study limitations and threats to validity need to be addressed. The limitations will be discussed as they relate to participants, procedures, instruments, and research design. First, the design of this study was not experimental; therefore, it is not possible to claim causal relationships between the variables and SES. Although, it is reasonable to propose that, for example, SES is related to female students' career self-efficacy, academic self-efficacy, and identity development. This limitation does restrict the extent to which conclusions can be made about the variables but does not discount the significance of the current findings.

The participant sample was drawn from one Southeastern university using only female participants and, for this reason, may not generalize as well to other freshmen and sophomore college students from different educational institutions. Although the introductory psychology class was utilized as a means to draw from a large number of diverse students, those who participated were volunteers; therefore, it is possible that a certain type of participant was attracted to the study. Nonetheless, this limitation might have been offset by the fact that available college credit was limited by the number of studies available, therefore, students who might not have otherwise chosen to participate in the study needed to do so in order to acquire enough credit for course completion.

The present study used the OMEIS (Adams, Shea, & Fitch, 1979) to measure ego identity, the CDMSE-SF (Betz & Taylor, 2001) to measure career decision-making self-efficacy, and the CASES (Owen & Froman, 1988) to measure academic self-efficacy. Each has been well documented in the literature as having good validity and being a sound measure of the construct it is intended to measure. Despite this, all measures used in this



study were self-report and may have introduced bias if participant responses were slanted toward social desirability. To counteract this possibility, the investigator made the surveys anonymous; therefore, none of the responses could be traced to individual participants. During the introduction to study procedures, participants were instructed not to put their names anywhere on the survey and were reassured that their answers could not be traced back to them.

After consulting with a professional research survey designer it was decided that the measures would not be counterbalanced as this would disrupt the efficiency and flow of the survey design. As a result, there is a possible risk of ordering effects. Furthermore, only one measure was used to represent each construct. Therefore, one must question the accuracy of a single measure in capturing the essence of a construct (Heppner, Kivlighan, & Wamplod, 1999). Included, however, were two measures of self-efficacy in related domains and scores from both yielded similar patterns in the results; this may suffice as a form of cross validation. Only one measure of identity development was used in the present study.

In order to prevent differences in survey administration across individual study sessions, the investigator provided consistent procedural conditions and recited the same scripted introduction prior to survey administration. In addition, to help reduce the possibility of human error in the scoring procedures, scoring formulas were set using the JMP® statistical program (SAS Institute, 2003). However, despite precautions such as formula set up and procedural checks to detect data entry mistakes, the process of entering responses by hand is clearly subject to human error.

As for many researchers, obtaining an accurate measurement of SES is most challenging; particularly since there is no consensus with regard to the definition and

methods for measuring this construct (Stawarski & Boesel, 1988). U.S. Census Bureau collaborators such as Nam and Terrie (1981) point out that using multiple indicators helps represent a more complete picture of SES. Accordingly, the current study included multiple indicators such as income combined with occupation and education to help increase the explained variance. In addition, it was expected that most participants had first hand knowledge of parent occupations and education levels, given that parents may be inclined to freely discuss these topics with their children. Accessibility of this knowledge increased the probability that education and occupation were known entities and participant reports were accurate in this regard. However, parents may be less inclined to directly discuss family income with their children. As a result, income earnings may not be “known” and some participants may have estimated parent earnings. In acknowledging this weakness, a greater number of income categories was provided with the intention of increasing the probability of obtaining more accurate information. Offering more income categories with narrower income ranges, was intended to help reduce the chance of students choosing an income range which include incomes far different than the actual parent earnings. For example, if the income ranges were much larger and choices far fewer, guessing as little as \$1,000 out of the actual earnings range could put a family in a group including others with much higher or much lower incomes and increase the chance of error in determining SES. Moreover, using three variables and combining income with education and occupation helped offset less reliable income reports. Further, when patterns in students’ self-identified social class group were compared to corresponding SES groups, findings indicated that the higher student the SES group (as determined by the investigator), the higher self-identified social class status group

score. Given that social class is related to SES, this finding provides some support for the validity of the calculated SES groupings.

Finally, generalizability could have been improved by including males and greater proportions of differing racial/ethnic groups, and students from multiple educational institutions across the country. In addition, by including male students, gender comparisons could have been made between different SES groups.

### *Implications for Future Practice*

Many years of research have established that academic performance is influenced by students' academic self-efficacy beliefs (Bandura, 1997). Although existing studies indicate that self-efficacy theory may be a promising tool for comprehending women's career and educational development, few studies have examined its application in the form of intervention programs. In particular, little progress has been made to explore the means by which higher education institutions could implement programs to increase at-risk students' self-efficacy in an effort to improve academic and career success.

One study by Alfassi (2003) explored the implementation of an instructional program designed to increase academic self-efficacy in at-risk high school students. Students exposed to the structured academic program demonstrated higher achievement levels and higher self-efficacy scores than the control group. Suggestions for practical application of methods to increase self-efficacy and achievement in at-risk students included providing frequent feedback to students on performance and setting clear standards upon which students could evaluate their progress. Guiding students in setting their own proximal goals (rather than more obscure distal goals) was also effective in increasing motivation and self-efficacy. To maximize the effectiveness of these interventions, Alfassi suggests implementing this form of

instruction across a broad range of educational tasks. Alfassi also advocates the importance of providing a warm supportive learning environment but warns that by itself will not increase academic success; it should be supported by a stimulating curriculum and constructive ongoing supervision of students' academic progress. Similar instructional methods could easily translate to the university setting as an effective means for increasing academic success in students from lower SES backgrounds as well as other at-risk student groups.

Sullivan and Mahalik (2000) also developed a group intervention program aimed at improving women's career self-efficacy. Over a six-week period, 31 women participated in a career self-efficacy treatment group while 30 other women participated in a no-treatment control group. The findings indicated that during career decision-making, measures of self-efficacy, vocational exploration, and commitment increased in treatment group participants. The group interventions integrated Bandura's four primary mechanisms for improving self-efficacy: achievement accomplishments, vicarious learning, verbal persuasion, and physical arousal. This, in addition to having the group confront gender socialization patterns and sex discrimination, had "a positive effect on decision making and vocational exploration" (Sullivan & Mahalik, p. 59). These findings suggest that by increasing self-efficacy (using Bandura's four mechanisms), while also attending to issues of gender socialization and sex discrimination, women's career development and career potential can be enhanced.

A similar program based on integrating Bandura's (1997) four mechanisms for improving self-efficacy could be implemented in the university setting and targeted at increasing both academic and career self-efficacy for lower SES groups of women and at-risk students. For example, identification of achievement accomplishments could be used to

increase confidence by reminding students of existing personal strengths and help them explore available resources to better manage future obstacles. This task might include requiring students to generate a list of past successes as a way to encourage recognition of previous occasions they overcame career, educational, and life related barriers (Albert & Luzzo, 1999). To help reinforce classroom learning, multiple homework assignments could be given and kept in the form of a journal: after completion of each assignment students could consistently document their reactions and track their own progress.

The findings in the current study suggest that women students from lower SES groups have lower self-efficacy levels despite demonstrated academic ability; therefore, it may be productive to help these students explore cognitive appraisals of past achievements and identify to what causes they attribute those successes. If, for example, appraisal is generally negative in nature and past successes are attributed to luck rather than individual effort or ability then, by itself, acknowledgement of achievement accomplishments may not be effective. However, when used in combination with the application of cognitive behavioral methods, students could increase awareness of their negative self-defeating thought patterns and begin to acknowledge ways in which they have contributed, and can continue to contribute, in determining their own success; at the same time, they can develop skills to help them reframe and dispute distorted thought patterns.

In order to provide the benefit of verbal persuasion, it would be most effective to offer the program in a group format. This format would help students establish peer relationships and benefit from mutual learning experiences with students from similar backgrounds. It could also present the opportunity for a professional female group leader, who was also a first generation student, to model constructive behaviors. In addition,

methods of verbal persuasion could be reinforced in classroom settings whereby educators provide frequent positive verbal feedback to students as they perform various academic or career related tasks. Encouragement and reinforcement of successes from faculty advisors can be used as yet another effective source of verbal persuasion. Research suggests that when students have good relationships with their advisors, their chances for academic success and educational satisfaction increase significantly (Tinto, 1993). These positive verbal connections with individuals in the university community could also improve students' sense of belonging. Students' feelings of belonging in a university community have been directly linked to perseverance and the decision to remain in school (Tinto). Therefore, fostering a sense of belonging may be crucial for the success of at-risk students who often struggle to fit in.

To encourage successful vicarious learning experiences, it may be helpful to present examples of professional role models in nontraditional settings; giving these students the opportunity to witness successful women in divergent roles and to observe and discuss examples of coping methods applicable to current and future career and academic obstacles (Albert & Luzzo, 1999). Female educators also have the opportunity of modeling professional practices while acknowledging their own professional challenges and discussing with students ways they dealt with those challenges. Again, such forms of contact have the potential to foster a sense of connection and acceptance for students with the university as well as toward various career settings.

Low self-efficacy expectations faced in coping with career-related barriers can result in much anxiety (Bandura, 1997); the same can be said for coping with academic pressures. Therefore, anxiety reduction and management techniques such as systematic desensitization

could be demonstrated and practiced in order to provide skills to help women students from lower SES groups cope more effectively. Given their poor management of stress, low levels of confidence, and high levels of depression and anxiety, similar techniques may also benefit Identity Diffused individuals. Further interventions for these individuals are discussed more extensively at a later point in this chapter.

Finally, as discussed in chapter 2, traditional patterns of gender socialization are more prevalent in educational and career choices by women in lower SES groups. In general, women in lower SES groups appear more rigid in their gender role-based educational and occupational choices. Furthermore, young adults from at-risk groups, including women and individuals from lower SES backgrounds, may develop a limited range of occupational interests simply because they have had little exposure to diverse educational courses or work activities (Lindstrom & Benz, 2002). Therefore, career and academic programs targeting women of low SES groups and other at-risk students need to encompass the critical task of reducing psychological barriers and building self-efficacy while acknowledging unique and real issues, such as discrimination and gender socialization, as well as targeting specific challenges faced by low SES groups. Techniques for increasing problem solving skills as well as cognitive behavioral approaches might be helpful here. In addition, the introduction of proximal goal setting, as suggested by Alfassi (2003), may be applied as a tool for motivating students to work through certain challenges by helping them define realistic, specific, and manageable steps needed to move toward their goals and better cope with obstacles. These are just some examples of how educational institutions could work toward increasing career and academic self-efficacy in women students from lower SES groups as well as in other at-risk student groups.

With regard to student identity development, current research suggests that it may be a key factor in contributing to student academic success and adjustment to university life; particularly during the early college years. In the current study, a significant proportion of women students from lower SES groups was linked to the lowest identity status, Identity Diffused. Accordingly, characteristics associated with Identity Diffused individuals, when combined with challenges faced by women from lower SES groups upon entering college, render this group vulnerable to academic and career difficulties despite ability levels.

Typically, universities offer orientation and skill related programs designed to increase student success. Given the findings in the current study, and given differing social cognitive identity styles associated with various identity statuses, students with different levels of identity development will face different challenges and, therefore, have different needs. For example, Identity Achieved and Moratorium students may be more inclined to take initiative to visit the career center, talk with their advisor, be interested in self-exploration, and participate in supplementary programs offered on campus. The traditional types of programs may, in themselves, be more appealing or accessible to students with higher levels of identity development. Foreclosed students would be less inclined to explore alternative educational and career options but in general may do quite well academically. They will have made career decisions and be more inclined to follow previously set goals; that is until they hit a stumbling block or an unexpected challenge that interferes with their plans and disrupts the status quo. Nonetheless, when faced with difficulties Foreclosed students are prone to rely on supports from others. If one considers findings in the present study that suggest students who are Identity Foreclosed are least often associated with lower SES groups of women and have likely chosen to go to college due to encouragement from



other college educated family members, these students may more often have access to the supports they need.

The research indicates that Identity Diffused students are most at risk for academic difficulties. Furthermore, this study suggests that a Diffused identity appears more prevalent in women students from lower SES groups. Therefore, it may be efficacious to implement individualized programs for women students who are Identity Diffused and from lower SES groups as well as for Diffused students who are otherwise at-risk for academic failure.

Diffused individuals are prone to avoidant behaviors and, thus, would be least inclined to voluntarily seek help from a university career or counseling center. Boyd, Vivian, Hunt, Kandell, and Lucas (2003) propose intervention strategies appropriate for dealing with characteristics associated with Identity Diffused students. For example, Diffused students are poor at attending to detail and tend to be lax about follow through and often forget commitments. Accordingly, straightforward, clear, structured activities, including homework assignments and worksheets, would be most effective if presented and reintroduced in a variety of ways. Boyd et al. also recommend proactive outreach programs in non intrusive yet accessible environments such as classrooms and residence halls. Furthermore, the application of activities to help students connect their own desires and dreams with academic success could be used as a means to enhance development and self-motivation.

It may also be beneficial to expose Diffused female students from lower SES backgrounds to alternative ways of thinking and learning about how to work through potential challenges while, at the same time, fostering relationships with other individuals in the university environment. For example, under the guidance of a facilitator, matching groups of Identity Achieved first generation students with Identity Diffused first generation

students (while being careful not to label them) could provide opportunities for students to compare and contrast the different ways in which they cope with a variety of challenges. For example, together, students could distinguish between effective and ineffective approaches of coping, examine their reasoning behind certain choices and decisions, and identify positive and negative consequences of various actions and behaviors. Activities might include performing role plays, introducing educational film and literature with an interactive element, or reflecting on personal narratives. These approaches would enable developmentally different groups of students to connect and to learn from one another. Similarly, older, more mature students could participate in similar activities but instead take the role of classroom leaders or mentors. Mentoring partnerships could provide a much needed supportive element for these students and help engender feelings of acceptance within the university environment.

It is important to recognize not only characteristics of students who attend educational institutions but also the milieu of the institution itself. It is important to consider whether an institution contributes to the chance of success for women students from lower SES backgrounds or whether it impedes those chances. In a longitudinal study of 294 freshman students, Adams, Ryan, and Keating (2000) found considerable support to suggest that the college environment influences cognitions and identity formation. For example, they cited several studies suggesting that the critical analysis of societal issues expands students' self-awareness and encourages formulation commitment to personal ideological and social perspectives. It was concluded that the application of this type of analysis enhances Identity Achievement while decreasing characteristics of Identity Diffusion. This approach may be

particularly helpful to students from lower SES groups who have had limited exposure to more global or “worldly” issues.

Similarly, Adams et al. (2000) found that self-expression and development of individuality is best encouraged by warm, supportive, and helpful social contexts. If universities want to facilitate students’ personal growth and social development, it is important that they provide opportunities for performance, expression, and analytical thinking but do so within a warm, supportive, and communal setting. Perhaps the provision of a warm supportive environment would help women students from lower SES groups perceive a middle-class university setting as less intimidating and more welcoming. For some students from lower SES groups, it may be difficult to experience higher educational institutions as warm and supportive because, as some theorists argue, these institutions are organized to serve the needs of established social and educational elites. For example, when students from disadvantaged backgrounds drop out of college, their departures may not be viewed as isolated events but as a more insidious form of social stratification which serves to maintain the hierarchy of educational and social inequality (Tinto, 1993).

Adams et al. (2000) suggest that when students enter a new university, they quickly formulate perceptions of that environment which remain stable for some time. As a result, it is important that women from lower SES groups are made to feel welcomed and accepted early on if they are to increase chances of developing a healthy identity. In turn, feeling welcomed and accepted will help improve chances for academic success and strengthen adaptability to a new university environment. Erikson (1997) has emphasized the importance of feeling valued and accepted by one’s community in forming a healthy identity. Erikson (1994b) suggests that acceptance by either the dominant culture or a valued subculture—such

as the academic subculture of a university—is a key element in forming a healthy identity. In recognition of this, it would be efficacious to assess levels of identity development in students from lower SES groups as they enter the university environment as well as to assess the type and amount of access they have to critical supports and resources. This assessment could set the foundation for both the development and allocation of programs suited to the specific needs of at-risk students from lower SES groups upon their entry to the university environment.

### *Suggestions for Future Research*

The current study measured student variables at one point in time during the early freshmen and sophomore years of college and does not reflect developmental changes over time. The application of a longitudinal study beginning in high school and ending in college graduation (or college drop out) would provide a means for tracking changes in psychosocial development, self-efficacy, and academic achievements that occur as students transition into college and progress throughout college at different points in time. In addition, it is important to recognize that SES is a dynamic process and can change over time; therefore, the implementation of a longitudinal study would present the opportunity to track significant changes that occur in family SES levels and, in turn, their effect on student development as it relates to academic and career outcomes. Further, the inclusion of a qualitative element could provide opportunities for students to give voice to their experience. Finally, generalizability of the findings would be improved with the inclusion of male students, greater proportions of differing racial/ethnic groups, as well students from multiple educational institutions across the country. Unfortunately, a project such as this would require significant resources and present complex challenges for most researchers.

Despite the possibility that SES can change over time, Lynch, Kaplan, and Salonen (1997) studied a large random sample of 2682 men and found evidence to suggest that SES remains relatively stable across both the life course and generations of family members. For example, men in the sample born to parents from lower SES groups, received little education, had lower paid blue-collar jobs, and possessed the least material resources when compared to men born to parents from higher SES groups. Lynch et al. concluded that educational and occupational attainments have their roots in SES background influences. Given the powerful influence of family background on future outcomes, one must question the limits of *free choice* with regard to education and occupational options when one is born into certain SES backgrounds; more complex forces are at work of which past research has revealed little. Continued research of this nature may help subdue the attitude that all one need do is to *pull up their bootstraps* in order to break the family pattern and get ahead. Explanations such as these serve to perpetuate existing stereotypes and strengthen gross social inequities. When individuals have few available resources, they have little opportunity to acquire the skills, knowledge, foresight, and tools that can lead to new options and new possibilities. Future research can help educators and counselors better understand and assist students who want to break this cycle, succeed in school, and pursue productive careers.

Significant mental health challenges identified among lower SES groups may add to the difficulty of realizing individual *free choice*. The Centers for Disease Control (CDC; 2004) has reported that mental distress among American adults is more frequently reported by women and persons from low SES groups regardless of racial/ethnic group. Similarly, in review of multiple research studies, Gallo and Mathews (2003) concluded that lower SES is associated with higher rates of negative cognitive styles as well as anxiety and depression.

Accordingly, it is important to consider reciprocal effects of SES and psychosocial and mental health factors and ask how this dynamic mediates effects on academic and career success rather than merely assuming these problems exist within the individual. Gallo and Matthews (2003) suggest that low levels of physical, interpersonal, and intrapersonal resources may reinforce the impact of SES-associated stress on negative emotions and attitudes. In other words, low SES can contribute to the depletion of resources and impede development while limiting the replenishment of resources. Similarly, emotions and cognitions can change interpretations of stressful situations and can, in turn, affect the availability of those resources. Therefore, as an example, reciprocal affects should be considered when examining differences in student perceptions about personal academic success or failure: What is the relationship between external obstacles and internal psychological programming? How do these dynamics interact and influence one another? Acknowledgement of reciprocal effects can present more in-depth information about the mediating forces of SES on education and inform future recommendations for the development of effective and inclusive student intervention programs. Moreover, acknowledgement of mediating forces releases blame of responsibility on groups that are oppressed and forces individuals and institutions to look more closely at how their practices affect others.

The findings in the current study as well as others cited here, demonstrate the powerful influence of SES background on educational and occupational pursuits for women. Given that SES appears to be such a strong influence in individual lives and in forming self-concept, more inclusive measures of SES and social class need to be incorporated in future research. This might require inclusion of a combination of social indicators such as value

systems, manners of speech, experiences, resources, social skill set, and dress. Indicators such as these have been termed by Bourdieu (1984) as representing one's *cultural capital*.

In chapter 1, separate definitions for class and SES were presented. SES was defined as a “relative social ranking based on income, wealth, status, and/or power” (Jaques, Staton, & Lucey, 2005, p.1) and is frequently quantified by researchers using a combination of income, occupation, and educational indicators, whereas social class was defined as “an experience of shared economic circumstances and shared social and cultural practices in relation to positions of power” (Cyrus, 2000, p. 103). As such, unlike SES, social class is a social construct derived from what large numbers of individuals in a society consider to be true and is, therefore, a far more complex construct to quantify for the purpose of conducting research. Social class is more inclusive of the multifaceted differences separating various class groups. For example, individuals can be categorized in a particular economic status group using standard measures of SES yet when individuals move from poverty into middle-class status, they may maintain a sense of their former class identity: “What needs to be understood is that although class identity is shaped by income and wealth, money is only a part of the story. It is what economic privilege can purchase in terms of access and power that really marks class difference” (Cyrus, 2000, p.103). Economic advantages provide easier access to experiences and opportunities that augment social, cultural, and academic capital (Barratt, 2005). This statement is recognition of the relationship of social class to SES and could be considered one argument for continuing to use standard measures of SES as an indirect measure of social class.

Barratt (2005) has coined the term *academic capital* as it refers to social class on college campuses and acknowledges the difficulty students face by rising in social class.

Change in social class can alienate students from their families of origin while they continue to feel uncomfortable around others from higher social classes. On a fundamental level, Barratt states that attainment of academic capital begins at home. Second generation students have the privilege of accumulated academic capital which they can quickly build upon to gain more privileges. These privileges might include supplemental school materials and technology, social skills to help them navigate relationships with faculty, staff, and students, adept critical thinking, writing, and general study skills, few work related demands and family responsibilities, greater worldly knowledge, and easy access to academic clubs and organizations. Clearly, first generation students do not have such privileges afforded second generation students. It is essential that future research begins to acknowledge and better examine the challenges faced by lower class and first generation students from a social class perspective and to include identifying social indicators students bring to the college experience. Possibly, little has been done to explore the classed experiences in college because, as Barratt says, unlike gender or ethnicity, social class is rarely discussed and remains hidden in plain site. Clearly, opportunities for gaining a higher education remain unequal in the United States (Gladieux & Swail, 2000). Therefore, one must ask how discounting an issue such as classed differences in higher education contributes to institutional perpetuation of economic inequity and discrimination. Further, it begs the question as to whether a lack of research in this area reflects the institutional barriers set up by those in society who are privileged as a way to uphold personal prestige and power, whether it be conscious or not.



### *Conclusion*

The dynamic intersection between identity, self-efficacy, gender, education, and SES was explored and provided compelling grounds for completing the current study. Findings indicated that, during the early college years, female students from lower SES backgrounds have lower career self-efficacy and academic self-efficacy when compared to female students from higher SES groups, despite levels of academic ability. Fortunately, a good portion of the female students from lower SES backgrounds in the present study showed high levels of identity development; however, even larger numbers exhibited very low levels of identity development. These findings suggest that SES background has a powerful influence on educational and occupational pursuits for women.

Given that SES appears to be a strong influence in individual lives and in forming self-concept, more inclusive measures of SES and social class need to be incorporated into future research. The lack of recognition of the challenges faced by female students from lower SES groups and the paucity of research in this area served as the motivation for the present study. Therefore, it is intended that the findings in the current study will help educators, administrators, and mental health professionals better understand the unique challenges faced by female students from lower SES groups as they transition into a middle-class university setting. It is hoped that greater understanding will help people and institutions provide equal access to the physical, psychosocial, and educational resources suited to the needs of this unique group; further, it is our responsibility as educators and researchers to expose the social class inequities *hidden* in our education systems and to propel them into plain site.

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## APPENDICES

## APPENDIX A

### INFORMED CONSENT FOR RESEARCH

**TITLE:** Academic Self-Efficacy, Career Self-Efficacy, and Psychosocial Identity Development: A Comparison of Women College Students From Differing Socioeconomic Groups.

**Principal Investigator:** Jane Griffiths, M.Ed., LPC

**Faculty Sponsor:** Stanley Baker, Ph.D.

Hello, my name is Jane Griffiths, I am a doctoral candidate, under the supervision of Dr. Stanley Baker, Professor, Counselor Education Program, and Dr. Baker-Ward, Professor, Department of Psychology, North Carolina State University. I am inviting you to participate in a research study. The purpose of this study is to help college educators and counselors better understand academic, career, and psychosocial issues faced by women college students from various socioeconomic backgrounds.

**INFORMATION & INSTRUCTIONS:** If you agree to participate in this study, you will be asked to provide some demographic information plus answers to a set of straightforward multiple-choice questions relating to your career and academic experiences, as well as to some ideological issues. It should take approximately 35-40 minutes to complete the survey. It is important to answer ALL questions on the survey unless you are uncomfortable doing so. When finished, place your survey in the envelope located on the researcher's desk and pick up the information sheet provided.

**RISKS & BENEFITS:** The questions asked in this study may promote personal reflection regarding one's career, academic, and personal ideology. If answering any of the questions causes discomfort, feel free to stop and any information you have provided will be destroyed. On the other hand, thinking about your experiences and beliefs may be useful in helping you and other college students like you to become more successful in their academic and occupational efforts.

**CONFIDENTIALITY:** The information in the study records will be kept strictly confidential. Your name and contact information will not be attached to the survey; thus, we have no way of linking your name to your answers. Data will be stored securely in a locked cabinet. No reference will be made in oral or written reports which could link you to the study.

**COMPENSATION:** Students in the PSY 200 course will receive 1 credit for every 30 minutes of research participation or fraction thereof. This study will require approximately 35-40 minutes of your time and is worth a total of 2 credits. If you choose to withdraw after the experiment begins, you will receive credit for your time involved, even if you do not complete the study. You have the option to decline participation in the study at any time. If you do so, and require more credits, you may choose to participate in another experiment for equivalent credit or complete an alternative written assignment directed by your professor. Participants are also invited to enter into a prize drawing for a chance to win one of two NC State bookstore certificates, worth \$75 each. If you choose to be entered into the drawing, write your contact info. on the separate card provided and place in the container provided.

**CONTACT:** If you have questions at any time about the study or the procedures, you may contact the researcher, Jane Griffiths and/or Dr. Stanley Baker, Counselor Education Program, Box 7801, 520 Poe Hall, NC State University, 27695-7801, (919/515-2244). If you feel you have not been treated according to the descriptions in this form, or your rights as a participant in research have been violated during the course of this project, you may contact Dr. Matthew Zingraff, Chair of the NCSU IRB for the Use of Human Subjects in Research Committee, Box 7514, NCSU Campus (919/513-1834) or Mr. Matthew Ronning, Assistant Vice Chancellor, Research Administration, Box 7514, NCSU Campus (919/513-2148).

**PARTICIPATION:** Your participation in this study is voluntary. If you decide to participate, you may withdraw from the study at any time without penalty and without loss of benefits to which you are otherwise entitled. If you withdraw from the study before data collection is completed your data will be destroyed.

**CONSENT:** If you understand the above information and agree to participate, please complete and submit the survey. Your submission of a completed survey will indicate your willingness to participate.

## APPENDIX B

## PSY 200 PARTICIPANT RESEARCH SURVEY

**INSTRUCTIONS:** Unless otherwise instructed, for each question, please check **one** box that best represents your answer. For some questions, you will be asked to write in your answer.

**Confidentiality is assured:** we do not require you to write in your name or contact information on any part of this survey; therefore, we cannot connect you to the answers you provide. Your participation is greatly appreciated.

**PART A**

1. In which semester and year did you begin classes at NC State?  
☐ Fall                      ☐ Spring                      ☐ Summer                      Year \_\_\_\_\_
  
2. How old are you? \_\_\_\_\_ years
  
3. What is your ethnic/racial group?  

<input type="checkbox"/> African/African American	<input type="checkbox"/> American Indian/Native American
<input type="checkbox"/> Hispanic/Chicana/Latina	<input type="checkbox"/> Caucasian/European (non-Hispanic)
<input type="checkbox"/> Multiracial	<input type="checkbox"/> Asian/Asian American
<input type="checkbox"/> Other _____	
  
4. If you were looking for a new job, which **ONE** of the following are you most likely to do?  
☐ Ask family  
☐ Ask friends  
☐ Visit the university career center  
☐ Apply to the "help wanted" ads  
☐ Approach different employers: pass out your resume and ask if they had work  
☐ Don't Know
  
5. Do you feel you fit in well and are comfortable interacting with individuals in the NC State University Environment?  

<input type="checkbox"/> All of the time	} If "Some of the Time," "Rarely," or "Never," briefly explain:
<input type="checkbox"/> Most of the time	
<input type="checkbox"/> Some of the time	
<input type="checkbox"/> Rarely	
<input type="checkbox"/> Never	

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Note: Parts B, C, and D, which include previously published measures, are excluded from this version

## PART E

Remember, you are not required you to write in your name or contact information on any part of this survey; confidentiality is assured. Please answer the following questions to the best of your knowledge. Thank you!

1. How would you describe the primary community in which you were raised?

- ☐ Rural area
- ☐ Suburban
- ☐ Urban

2. *Approximately* how many AP courses did your high school offer?

- ☐ None    ☐ 1-5    ☐ 5-10    ☐ 10-15    ☐ 15+

3. How many AP courses did you take in high school? \_\_\_\_\_

4. What was your SAT score? Verbal \_\_\_\_\_ Math \_\_\_\_\_

5. What was your high school GPA? Weighted \_\_\_\_\_ Unweighted \_\_\_\_\_

6. Which of the following types of financial aid are you receiving? Check all that apply.

- ☐ Not receiving any financial aid
- ☐ Academic
- ☐ Athletic
- ☐ Need-based
- ☐ Other

7. Are you receiving a Federal Pell Grant?

- ☐ Yes    ☐ No

8. What is the *best estimate* of your family's 2004 income before taxes?

- ☐ \$30,000 or less
- ☐ Between \$30,001 and \$50,000
- ☐ Between \$50,001 and \$75,000
- ☐ Between \$75,001 and \$100,000
- ☐ Between \$100,001 and \$150,000
- ☐ Between \$150,001 and \$200,000
- ☐ Between \$200,001 and \$250,000
- ☐ \$250,001+



9. What are your parent's occupations? Be specific as possible. For example, if "sales" specify what kind, e.g., "retail sales—manager, clothing store."

Father (or male guardian)\_\_\_\_\_

Mother (or female guardian)\_\_\_\_\_

10.

What is the highest education level obtained by your mother (or female guardian) and father (or male guardian)?	Mother or Female Guardian	Father or Male Guardian
1. Less than High School	<input type="checkbox"/>	<input type="checkbox"/>
2. High school graduate	<input type="checkbox"/>	<input type="checkbox"/>
3. Associate Degree or some college	<input type="checkbox"/>	<input type="checkbox"/>
4. Bachelor's or four-year degree	<input type="checkbox"/>	<input type="checkbox"/>
5. Graduate or professional degree	<input type="checkbox"/>	<input type="checkbox"/>

11. If you were asked to use one of the following to describe your social class, to which would you say you belong:

- ☐ Lower class
- ☐ Working class
- ☐ Middle class
- ☐ Upper middle class
- ☐ Upper class

**Please check you have answered ALL questions. Thanks for your help!**