First-Generation College Students' Experiences with Social Class Identity Dissonance

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FIRST-GENERATION COLLEGE STUDENTS’ EXPERIENCES WITH SOCIAL CLASS IDENTITY DISSONANCE

A Dissertation

Presented to the Faculty of the Morgridge College of Education University of Denver

In Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

by

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Abstract

The current study explored the differences in experiences of social class identity dissonance between first-generation college students and non-first-generation college students. Additionally, this study aimed to examine the effect of social class identity dissonance on psychological distress in first-generation college students, as well as, whether an anti-social dominance orientation partially buffers the relationship between social class identity dissonance and psychological distress.

A total of 1,109 college students from two local, four-year institutions participated in the study. The first research objective was to examine the differences between first-generation college students and non-first-generation college students on reported levels of social class identity dissonance. The next objective was to investigate whether social class identity dissonance mediates the relationship between generation status and psychological distress. The last objective was to explore whether having an anti-dominance orientation helps buffer the relationship between social class identity dissonance and psychological distress. An independent samples t-test and hierarchical regression analyses were used to examine the three hypotheses.

A number of important findings were revealed by the results of the study. There appeared to be a significant, positive relationship between social class identity dissonance and psychological distress. As social class identity dissonance increases in individuals,
symptoms of psychological distress also increase. Additionally, social class identity dissonance was a significant predictor of psychological distress. No significant differences were seen between first-generation college students and their peers in this sample, and there did not appear to be a significant relationship between generation status and psychological distress, therefore, hypotheses one and two were rejected. Furthermore, social dominance orientation did not significantly moderate the relationship between social class identity dissonance and psychological distress; thus, the third hypothesis was also rejected.
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CHAPTER ONE

STUDY OVERVIEW

Chapter One will provide background on the challenges faced by first-generation college students as a result of their upward mobility. This chapter will also include a statement of the problem, purpose for studying the problem, hypotheses, the variables and measures associated with the study, discussion of the limitations of the study, and a definition of terms.

Background

Recent statistics reveal the existence of a widening gap between first-generation college students’ and non-first-generation college students’ college degree attainment (Engle & Tinto, 2008). First-generation college students share a number of risk factors that contribute to bachelor’s degree incompletion, such as, having the need to work full-time while enrolled, having children, and being financially independent from parents (Bui, 2002; Engle & Tinto, 2008; Goldrick-Rab, 2006). Furthermore, first-generation college students experience significant and unique challenges both prior to entering college and while enrolled that non-first-generation college students often do not encounter. Prior to entering college, first-generation college students are usually less academically prepared for college courses, have less parental involvement and support regarding academic endeavors, and have less access to information about collegiate
expectations (Bloom, 2007; Bui, 2002; London, 1989; McCarron & Inkelas, 2006; Reid & Moore, 2008).

Once in college, first-generation college students are often overwhelmed by their environment which is filled with new, unanticipated expectations, rules, and norms (McCarron & Inkelas, 2006). Additionally, first-generation college students commonly feel isolated on campus as they are not sure where they fit in (Bloom, 2007). First-generation college students also commonly experience self-doubt about their own abilities, and often attribute any inability to meet college expectations as a personal flaw (Bloom, 2007; Bui, 2002; Nelson et al., 2006). Furthermore, parents of first-generation college students are often unfamiliar with the challenges and disadvantages their children experience while at college, and are therefore unable to help them work through these hardships (Bloom, 2007; Engle & Tinto, 2008; Lareau, 1987). Thus, first-generation college students frequently face difficulties alone, causing further alienation and isolation while increasing the risk of degree non-completion (McCarron & Inkelas, 2006).

Feelings of guilt and shame are another common experience of first-generation college student as a result of “breaking” away from their family and social class of origin by pursuing higher education (Bloom, 2007; London, 1989; Nelson et al., 2006, Piorkowski, 1983). Often times, first-generation college students feel as though they have been disloyal to their family, or are acting selfishly (London, 1989; Nelson et al., 2006). Once a student slowly starts acculturating to academia, a division between family and college life is created causing a significant amount of stress, uncertainty, and sense of
marginalization for the individual (Engle & Tinto, 2008; London, 1989; Nelson et al., 2006).

The challenges faced by first-generation college students can be attributed to their status as upwardly mobile individuals (Bloom, 2007; London, 1989; Nelson et al., 2006). Upward mobility occurs as a result of advancement to a higher, more respected social class through higher education, marriage, and/or occupational promotion (Ross, 1995). In the case of first-generation college students, social class upward mobility results from advancement through higher education. There are a variety of benefits to gaining upward mobility, such as less financial concern, better access to education and material goods, greater respect from society, abundant opportunities, and increased social, cultural and human capital (Nelson et al., 2008). In addition, upward mobility is culturally valued in American society, and is part of the “American Dream.” Thus, individuals are often encouraged to achieve upward mobility and are ridiculed and personally blamed if unable to do so (Jones, 2003; Nelson et al., 2006). Yet, while the benefits are numerous, there are also a variety of negative effects associated with attempting to achieve upward mobility. Individuals who are upwardly mobile frequently feel alienated from their social class of origin. This alienation is not only a result of a growing social distance from family and friends from the social class of origin, but also increased tension and conflict. Results from multiple qualitative studies have shown that upwardly mobile individuals are often accused by their family and friends of origin of becoming “snobs” or having “outgrown their roots” (Aires & Seider, 2007; Ashford, 2001; Beagan, 2005; Jones, 1996;
Nelson et al., 2006; Piorkowski, 1983; Ross, 1995). These accusations and insults make it increasingly difficult for upwardly mobile individuals to share their lives with their family of origin.

Alienation and isolation are common experiences of upwardly mobile individuals, not only in relation to family and friends of origin but also in their new social class status. Those who advance in social standing frequently report that they do not feel like they belong or fit in the advanced status they have achieved (Aires & Seider, 2007; Ashford, 2001; Beagan, 2005; Nelson et al., 2006). Even if an individual is able to advance to another social class standing, they will not be easily accepted unless they conform to the social class values, preferences, norms and ideals. Furthermore, those who choose not to conform to their new social class expectations frequently experience discrimination in the form of jokes and derogatory comments which can cause a significant amount of stress and frustration (Beagan, 2005).

An important aspect of upward mobility is the significant effects on individuals’ sense of identity (Aires & Seider, 2007). Specifically, upwardly mobile individuals have to renegotiate and alter the expectations, preferences, ideals, practices and values of their original social class to fit their newly acquired social class (Aires & Seider, 2007; Nelson et al., 2006). Additionally, upwardly mobile individuals have to build a sense of continuity between their social class of origin and their current, more privileged social status (Aires & Seider, 2007; Reay, 1998). Those who attempt to balance and adhere to two very different social classes of reference experience difficulty, confusion, and stress.
Furthermore, it is common to experience conflicting feelings of shame and pride related to the class of origin (Nelson, Budge, & Huffman, 2008; Ross, 1995). Experiencing these conflictual emotions can make it difficult for individuals to understand exactly to which social class they belong.

Nelson et al. (2008) have suggested that the renegotiation of a new identity is the most difficult challenge to upward mobility. While upwardly mobile individuals attempt to adapt to a new cultural identity, they also grieve the loss and a sense of belonging to their social class of origin (Aries & Seider, 2007). Nelson et al. (2008) have termed this phenomenon social class identity dissonance (SCID). SCID is described as experiences of simultaneously feeling both pride and shame related to one’s social class of origin, feelings of guilt related to leaving behind friends and family to assume a higher social class status, and the fear of alienation and marginalization (Nelson et al., 2008). Having a better sense of the experience of SCID may help lead to a better understanding of how individuals in this position, such as first-generation college students, are motivated, feel, think, and behave.

Statement of the Problem

Many researchers in psychology have suggested that in order to uphold the principles of multicultural psychology, which encourage psychologists and trainees to have awareness, knowledge and skills to work with individuals from a variety of backgrounds, more attention should be paid to issues of social class (Heppner & Scott, 2004; Liu, Ali, et al., 2004). Specifically, researchers have encouraged future studies to
avoid using social class simply as a demographic variable and instead examine complex issues of social class, such as the impact of subjective social class perspectives on career and academic aspirations (Arygle, 1994; Liu, Soleck et al., 2004). Examination of such complex social class issues have been written about theoretically and investigated through qualitative studies, yet little research has attempted to study these issues quantitatively. Therefore, more quantitative studies are needed to better understand the complexities of such an essential and influential aspect of individuals’ lives.

While research has examined the characteristics and challenges of first-generation college students, little research has explored the specific intrapsychic experiences of being a first-generation college student. For example, while research has detailed the disadvantages of being a first-generation college student, little is known about what psychological factors influence these students to withdraw from school, or to persist and attain a college degree. Additionally, while research has asserted that identity dissonance may be one of the most significant, negative aspects of upward mobility, no studies have attempted to measure the experience of social class identity dissonance in a population with whom this experience has occurred (e.g., first-generation college students).

Furthermore, while research has suggested that the challenges and disadvantages of first-generation college students lead to increased stress and the potential for mental health problems, no studies have specifically examined levels of psychological distress in first-generation students.
Understanding what psychological and attitudinal variables might facilitate educational and career aspirations in first-generation college students is also an important issue that has yet to receive attention. Studies have shown that a positive and motivational outcome experienced by upwardly mobile individuals who have felt marginalized and oppressed is the growing awareness of, and commitment to fighting against social inequities and injustices (Beagan; 2005, Jones, 2003; Nelson et al., 2006). Having awareness of structural injustice often impacts one's attitude towards equality, and empowers oppressed individuals to attempt to defy the status quo to achieve their educational and occupational goals (Diemer, 2009). Therefore, this study will attempt to address whether socio-political awareness and attitudes towards social equality (specifically, level of social dominance orientation) in first-generation college students reduces or buffers the amount of psychological distress possibly incurred as a result of taking personal blame for the challenges and hardships present for upwardly mobile individuals attaining a bachelor’s degree.

**Purpose of Studying the Problem**

The present study attempts to (a) assess the level of social class identity dissonance first-generation college students experience as compared to their non-first-generation college peers, (b) address whether social class identity dissonance contributes to levels of psychological distress in this population, and (c) examine whether social dominance orientation is a possible buffer to incurred psychological distress amongst first-generation students. Nelson et al. (2008) postulated that social class identity
dissonance exerts a critical influence on decision making. For example, a first-generation college student may consider leaving college because of the distance and conflict it has caused between him/herself and their family, and the marginalization and isolation experienced at school. This decision making process may not be apparent to a college counselor or higher education official, yet strongly influences the student’s aspirational motivation and behaviors to continue school (Nelson et al., 2008). Having knowledge of these complex issues will help higher education officials and college counselors provide better, more effective services to first-generation college students who are at risk of not attaining a college degree. Specifically, higher education officials will benefit from this knowledge in knowing what university services would be most helpful for struggling first-generation students whether it be counseling, tutoring, mentoring, or student organizations for first-generation students (Astin, 1999). Providing the correct type of services may help decrease the attainment gap between first-generation college students and non-first-generation students. Additionally, college counselors will benefit from having a better understanding of the psycho-social issues presented by first-generation college students. Counselors can help these students to reframe their problems and shift the blame for problems and difficulties experienced in college from being personal to problems caused by the phenomenon of pursuing upward mobility (Piorkowski, 1983). This may contribute to a decrease of internalized classism in first-generation college students who feel that their inability to meet college expectations is a result of personal flaws. Furthermore, if counselors are more attuned to the concept of social class identity
dissonance and its relationship to psychological distress in first-generation college students, they will be able to provide more accurate and effective treatment for the unique psychological problems presented.

**Review of Variables and Hypotheses**

The variables in the present study are used differently in each research question. Information about each variable and what it measures is included below with the study’s hypotheses.

1. First-generation college students will experience higher levels of social class identity dissonance compared to non-first-generation college students. Generation status will be the categorical, independent variable, and social class identity dissonance will be the continuous, dependent variable.

2. Social class identity dissonance will mediate the relationship between generation status (first-generation college students and non-first generation college students) and psychological distress. Predictor variables will include generation status, age, racial/ethnic background, year in school, and gender. The mediating variable will be social class identity dissonance scores. The dependent variable will be psychological distress.

3. Social dominance orientation will moderate, specifically buffer, the relationship between social class identity dissonance and higher levels of reported psychological distress in first-generation college students. Predictor variables will include generation status, age, racial/ethnic background, year in school, gender, and social class identity
dissonance scores. Social dominance orientation scores will be the moderator. The interaction variables will be social class identity dissonance scores and social dominance orientation scores. The predictor variable will be psychological distress.

Overview of Measures

The Social Class Identity Dissonance Scale developed by Nelson, Huffman, and Budge (2008) will be used to measure levels of social class identity dissonance in first-generation college students and non-first generation college students. The Social Dominance Orientation scale (Pratto, Sidanius, Stallworth, & Malle, 1994) will be used to measure participant’s attitudes towards equality. The Brief Symptom Inventory (Derogatis & Melisaratos, 1983) will be used to measure the level of psychological distress the participant is experiencing. Each measure mentioned above is a self-report instrument.

Limitations

Several limitations of the proposed study should be noted. First, this study seeks to examine individual differences that potentially predict psychological distress by using a convenience sample of college students from local institutions. Thus, the external validity of the study is limited. For instance, the colleges used in this study have less stringent acceptance requirements than other universities and colleges in the state (e.g., College automatically admits students with an ACT score higher than 18, regardless of cumulative grade point average); thus, it is unclear whether differences would appear between this sample and a sample from an institution with more rigorous acceptance
requirements. Additionally, both schools are public institutions; therefore the results may not be generalizable to first-generation college students enrolled at private institutions.

Secondly, the Social Class Identity Dissonance Scale (Nelson et al., 2008) is a newly developed measure that needs further study to assess its reliability and validity. Reliability and validity statistics are thus far positive, strong and a good indicator of the scale’s psychometric properties. Yet, further investigation is needed in order to assess the robustness of the scale.

Third, the Social Dominance Orientation scale (Pratto et al., 1994) and the Brief Symptom Inventory (Derogatis & Melisaratos, 1983) may be subject to social desirability because of the sensitivity of some of the items on the scales. Participants may not answer truthfully because they do not want to appear to be bigoted or have psychological problems. However, the anonymity of the survey will serve to buffer this potential problem.

Lastly, using a cross-sectional research design with regression analyses of the data prevents the researcher from drawing conclusions regarding the causal relationship between the psychological distress and social class identity dissonance. An experimental research design with random assignment, and longitudinal data collection would be best suited to address this limitation, yet the feasibility of this type of experiment would be difficult. Several demographic factors will be entered into the analyses as control variables, which will help mitigate the potential confounding variables and control for
limitations of the design. A further, in-depth review of the study’s limitations will be presented in Chapter Five.

Definitions of Terms

First Generation College Students. The federally-funded TRIO program, which provides support for low-income, first-generation, and disabled college students, defines first-generation college students as students whose parents have not earned a bachelor’s degree (Engle & Tinto, 2008).

Social Class. According to the Social Class Worldview Model by Liu, Soleck, Hopps, Dunston, and Pickett (2004), individuals create a schema to make sense of their social class feelings, perceptions, cultures, and economic environment. Social class is not an objective construct, but rather, it is subjectively defined by each person. However, while social class is subjectively defined by each individual, cultures consisting of values, expectations, and ideals exist for each social class grouping.

Social Class Identity Dissonance. Nelson et al. (2008) have defined social class identity dissonance as “experiences of discomfort related to moving away from one’s original social structure to assume a new and more financially and/or educationally respectful social standing,” (p. 3). Social class identity dissonance is comprised of three specific experiences: (1) the experience of simultaneously feeling both pride and shame related to one’s social class of origin, (2) the experience of guilt related to leaving behind friends and family to assume a higher social class status, and (3) the experience or fear of alienation and marginalization related to the inability to feel a sense of belonging in both
the social class of origin and the current social class.

Modern Classism. As proposed by Liu, Soleck et al. (2004), modern classism consists of four types of classism: upward classism, downward classism, lateraled classism, and internalized classism. Thus, it is possible for individuals in perceived “lower social class” or similar social class groups to exhibit classist attitudes and behaviors. According to the Social Class Worldview Model (Liu, Soleck, et al., 2004), modern classism and social class are interconnected.

Social Mobility. As defined by Argyle (1994), social mobility is the movement between social classes either lower or higher than one’s social class of origin. Most often, social mobility occurs through changes in occupation and education, and influences the level of status, respect, and power individuals have.

Upward Mobility. Upward mobility has been defined as a phenomenon in which individuals pursue or receive higher, more socially respected statuses by moving into more privileged positions, such as academia and white-collared careers (Aries & Seider, 2007).

Capital. Capital is “valued goods in a society, the possession of which maintains and promotes a person’s self-interest for survival and preservation” (Lai, Lin, & Leung, 1998, p. 160). Three types of capital have been acknowledged: social, human, and cultural.

Social Dominance Orientation. Pratto et al. (1994) defines social dominance orientation as “the extent to which one desires that one’s in-group dominate and be
superior to out-groups” (p. 742). It is considered an “attitudinal orientation toward intergroup relations, reflecting whether one generally prefers such relations to be equal, versus hierarchical, that is, ordered along a superior-inferior dimension” (Pratto et al., 1994; p. 742).

Psychological Distress. Psychological distress is the intensity to which individuals experience psychological symptoms such as somatization, interpersonal sensitivity, anxiety, depression, paranoid ideation, hostility and psychoticism.

Summary

Chapter One has presented the literature regarding first-generation college students and the challenges incurred while being upwardly mobile. This chapter also provided the rationale for the present study. First-generation college students are faced with numerous challenges and hardships that significantly influence their ability to attain a bachelor’s degree. Additionally, research was presented that suggests that differences between degree attainment for first-generation college students and their peers is increasingly widening, generating a greater need to close the gap. The disadvantages faced by first-generation, upwardly mobile, college students are well-documented, but not often thoroughly examined. Furthermore, little is known about the intrapsychic aspects of upward mobility that play an essential role in the motivation and decision making of first-generation college students. However, social class identity dissonance theory is a promising area of investigation that may help higher education leaders and
college counselors better understand the internal struggles of first-generation college students.

Chapter Two will present a review of the literature relevant to the present study. Chapter Three will describe the methods, procedures, and measures used in the design of the study.
CHAPTER TWO

REVIEW OF SELECTED RESEARCH

Chapter Two will present current literature on first-generation college students; including the demographic makeup, personality characteristics, risk factors, difficulties and disadvantages unique to this group. Additionally, this chapter will provide information regarding the most recent convention of social class theory and will argue the importance of studying the complexity of social class issues related to first-generation college students. Furthermore, upward mobility and the challenges associated with this phenomenon are discussed, and the detrimental implications for upwardly mobile, first-generation college students on their sense of identity. Lastly, the chapter will present literature that indicates that an awareness of socio-political forces may help first-generation college students manage the challenges and hardships they face.

First-Generation College Students

First-Generation, Low-Income College Students Trends

The benefits of attending and completing college are numerous for students in the United States. Recent data suggest that differences between college and high school degrees are considerable, specifically in earnings and lifetime earning potential (Engle & Tinto, 2008). Additionally, college graduates are more likely to enjoy their careers, and have better potential to financially and occupationally advance (Argyle, 1994; Goldrick-
Many in society are familiar with the benefits of attending college, and recent statistics reveal that more individuals are participating in higher education than ever before (Engle & Tinto, 2008). According to a recent study completed by the Pell Institute (Engle & Tinto, 2008), the number of students enrolled in post-secondary education has more than doubled over the last 35 years, and while college has often been considered only accessible to students from middle and upper classes, the number of students from lower income families entering college has increased by 60% since 1970. While significant progress has been made throughout the years regarding accessibility of college to all individuals, a deeper look at the educational system reveals serious gaps in attainment and retention of certain groups of students, specifically first generation college students from low-income backgrounds.

The Pell Institute study revealed that first-generation, low-income students are six times less likely to earn a four-year degree than high-income students. In fact, the study showed that nearly half of all low-income college students had not attained a college degree after six years of school. Additionally, first-generation, low-income students are four times more likely to leave college after one year than non-first generation, high income students. Furthermore, while high income students’ attainment rate has increased over thirty percent over the last forty years, low-income students’ attainment has only increased by six percent. In other words, while more first-generation, low-income
students are enrolling in college than ever before, a significant portion of those students are not graduating with a bachelor’s degree.

Multiple reasons have been attributed to the gap in attainment for first-generation, low-income students. Specific factors contributing to the gap include delayed entry into post-secondary education, working full-time while enrolled, attending school part-time, having children, and being financially independent from parents (Bui, 2002; Engle & Tinto, 2008; Goldrick-Rab, 2006). Unfortunately, these factors are interrelated, suggesting a high likelihood of more than one factor contributing to the possibility of degree incomplection. Furthermore, first-generation, low-income students experience unique challenges and disadvantages that add more layers of difficulty to achieving degree completion (Bloom, 2007; Bui, 2002; Hartig & Steigerwald, 2007; London, 1989; Reid & Moore, 2008; Valadez, 1998). Overall, research implies that attainment and retention of first-generation, low-income college students is an important concern, as the gap between first-generation, low-income college students and their peers continues to widen. Thus, the disadvantages and challenges these students face need further investigation in order to improve the stark attainment gap.

First-Generation College Students’ Characteristics

Currently, there are more than 4.5 million first-generation, low-income students enrolled in higher education, encompassing almost 24% of the overall undergraduate population (Engle & Tinto, 2008). First generation students are defined as students whose
parents have not earned a bachelor’s degree\textsuperscript{1}. Most first-generation, low-income students are likely to first enroll in a two-year college because either academic preparation has been insufficient for admission into a four-year college, they need greater flexibility in their schedules in order to attend to family responsibilities or work, and/or the tuition is less expensive (Bui, 2002). While the majority of first-generation, low-income students tend to enroll in a two-year college, research findings suggest that these students would have a better probability of attaining a bachelor’s degree if they began their academic careers at a four-year college (Bui, 2002; Engle & Tinto, 2008).

A large proportion of first-generation students either come from low or lower-middle income social class backgrounds (Bui, 2002; Engle & Tinto, 2008; Hartig & Steigerwald, 2007; McCarron & Inkelas, 2006; Valadez, 1998). Often times, first-generation students enroll in college to financially support their families once they complete their degree, and to pursue a life more financially stable than they have known (Bui, 2002). Additionally, first-generation students report gaining respect and status, and bringing honor to their families as other important reasons for attending college (Bui, 2002). Demographically, first-generation college students tend to be older, to provide financial support to their families, come from an ethnic minority background, be a non-native English speaker, have a disability, have dependent children, and be financially

\textsuperscript{1}This definition of first generation college students is dictated by the federally-funded TRIO program which provides support for low-income, first generation, and disabled college students.
independent (Bui, 2002; Engle & Tinto, 2008; McCarron & Inkelas, 2006). Furthermore, first-generation students tend to be less academically prepared than their college peers, tend to score lower on the SAT, experience college culture shock, have less parental involvement and understanding of college, fear failing out of college, express having to put more time and effort into studying than their peers, worry significantly about financial debt, and are more sensitive to tuition increases (Bloom, 2007; Bui, 2002; Hartig & Steigerwald, 2007; McCarron & Inkelas, 2006; Reid & Moore, 2008).

Concern regarding financial debt is salient and significant for first-generation students because of fears related to being unable to pay back financial debt and consistently experiencing a financially insecure lifestyle. Additionally, first-generation students may not feel that the benefits of attaining a college degree are worth the financial costs. For example, even if a student attains a degree, it is uncertain whether job earnings may justify the money borrowed (Bloom, 2007). Furthermore, first-generation students who need student loans in order to attend college frequently pay significantly more for the same education than those who did not need to borrow; further increasing the disadvantages of first-generation students (Bloom, 2007). To avoid debt accrued while attending college, first-generation students often choose to work instead of taking out loans (Engle & Tinto, 2008; Reay, Davies, David, & Ball, 2001). While this may alleviate concerns related to debt, it also makes it more likely that students will struggle balancing work, school and social activities. Working while in school decreases
persistence in college as it reduces the amount of time to study, take classes, and the amount of time students spend interacting with peers on campus (Engle & Tinto, 2008; Reay et al., 2001).

Disadvantages and Challenges of First-Generation College Students

The disadvantages and challenges of being a first-generation college student are numerous and vast. While all first-generation students may not experience the same specific constraints, research reveals a common trend of obstacles and hardships (Bloom, 2007; Bui, 2002; Hartig & Steigerwald, 2007; Lareau, 1987; London, 1989; McCarron & Inkelas, 2006; Nelson, Englar-Carlson, Tierney & Hau, 2006; Reid & Moore, 2008). Furthermore, first-generation students may not be consciously aware of the external challenges they face, attributing their difficulties to personal flaws and inabilities (Bloom, 2007; Bui, 2002; Nelson et al., 2006). Regardless, it is clear that disadvantages exist, and better understanding these challenges may help lessen the gap between first-generation students’ and non-first generation students’ attainment levels.

First-generation college students are less likely to be prepared, both academically and psychologically, for their college experience (Bui, 2002; London, 1989; McCarron & Inkelas, 2006; Reid & Moore, 2008). In a qualitative study of urban, first-generation college students, Reid and Moore (2008) found that half of the participants reported that their preparation for college was lacking compared to their peers. Specifically, participants felt that their high school math and science classes were inadequate for
preparing them for college math and science classes. Additionally, students reported lacking study skills and good time management (Reid & Moore, 2008). Additional studies have reported similar findings with regard to first-generation students having more difficulty with time management and study skills (Engle & Tinto, 2008; McCarron & Inkelas, 2006). First-generation college students also report having less access to high school programs that better prepare them for taking college entrance exams and for handling college in general (Nelson et al., 2006; Reid & Moore, 2008). As a result, first-generation students are more likely to score poorly on their college entrance exams and have more difficulty adjusting to the academic rigors of college.

The challenges and disadvantages experienced by first-generation college students do not only occur while attending college, but also prior to enrolling in college. For example, pre-college students from middle to higher social classes have access to information regarding college vicariously through mediums such as parents’ conversations, family friends, and older siblings (Bloom, 2007). First-generation college students are often not privy to this information, and have not been guided into a college education by family members and peers. Furthermore, they may not receive assistance or guidance in choosing which schools to apply to, filling out applications, writing essays, studying for entrance exams, and making a decision on which school to attend (Bloom, 2007).
Lack of preparation for college may also result in psychological difficulties for first-generation college students. Nelson et al. (2006) found that first-generation students’ attempts to balance school and work while in college impacted their level of stress and increased mental health problems, such as anxiety and depression. First-generation students also are more likely to experience “culture shock” when first beginning college (Bloom, 2007; Engle & Tinto, 2008; McCarron & Inkelas, 2006). Culture shock occurs as a result of students’ lack of knowledge related to campus environment and values. If students’ parents did not attend college, they are unable to tell their children about college culture - what to anticipate, the norms, the challenges, the pitfalls, the important things to experience and do, and so on. A good portion of first-generation students enter college blindly, unaware of what is ahead of them. Additionally, for many first-generation students, college is significantly different from their home lives and their previous academic experience (McCarron & Inkelas, 2006). Values specific to academia, such as the pursuit of knowledge, education and independence, may not have been emphasized at home. In addition, first-generation students may be surrounded by college peers from higher social class backgrounds, and may feel isolated and marginalized. In many ways, first-generation students’ experience of entering college is similar to entering another culture where the values, rules and norms are very different from their own (Bloom, 2007).
Starting college is commonly a stressful adjustment for many students; however, college culture shock can add a significant amount of anxiety to what is already a stressful time. In many ways, first-generation college students are placing their self-esteem on the line, as they are unsure whether they will be accepted and belong (Bloom, 2007; Lareau, 1987). First-generation college students often report feeling lack of concern about their academic endeavors from the campus environment, and also report experiencing discrimination on campus (Engle & Tinto, 2008). They face societal and collegiate messages about who does and does not belong in college, and often have to undertake this difficulty on their own (Bloom, 2007; McCarron & Inkelas, 2006). Parents of first-generation college students are often unaware of and distanced from the college lifestyle. They are sometimes not able to understand the struggles of a first-generation student, and are not capable of aiding their children through the challenges they face (Bloom, 2007; Engle & Tinto, 2008; Lareau, 1987). Furthermore, parents of first-generation college students may not be able to grasp the extent of the disadvantages and challenges their children face; the cultural loss, the compromises, and the fight to belong (London, 1989). Therefore, first-generation students lack the familial support they need, and often do not have anyone to turn to when difficulties arise (McCarron & Inkelas, 2006). Furthermore, not having familial support is an additional risk factor contributing to degree attainment, as parental involvement is paramount in influencing educational aspirations and expectations (McCarron & Inkelas, 2006).
Another noteworthy struggle of first-generation college students is the “survival” or “breakaway” guilt they experience as a result of leaving home to pursue upward mobility through higher education (Bloom, 2007; London, 1989; Nelson et al., 2006, Piorkowski, 1983). A sense of loyalty is questioned, and first-generation students often feel torn between two different worlds. Individuals from low to lower-middle class incomes have a strong sense of pride related to their hard work and work ethic (Bloom, 2007; London, 1989). Periodically, when a child is the first in the family to attend college, members of the family feel abandoned and betrayed (London, 1989; Nelson et al., 2006). As a result, children who leave for college when their families are ambivalent or openly disapproving of it, feel as if they are acting selfishly. Additionally, once a child goes away to school, and slowly starts acculturating to academia, the divide between family and college life is further widened and strained (Engle & Tinto, 2008). The differences that result can create a significant amount of stress, confusion, and alienation for the first-generation student (Engle & Tinto, 2008; London, 1989; Nelson et al., 2006).

Summary

As evidenced by numerous research studies and accounts of students’ experiences, first-generation college students encounter a plethora of disadvantages and challenges that begin early on and continue throughout college. First-generation students receive very little information about college from their families, and often have to attend to the application process on their own. Decisions about what colleges to apply to and
attend are often made by the student alone, and expectations about what is ahead are unknown. First-generation students enter college without understanding what is ahead of them, and adjustment to college may be difficult and overwhelming. Some students work in order to pay for college, and struggle with balancing both work and school life. Others are isolated from their peers, and do not experience a sense of belonging in the college environment. Furthermore, first-generation students are likely to attribute their struggles and failures to personal flaws rather than to the specific disadvantages and oppressions placed on them because of their first-generation status. First-generation students often feel confused about their new identities as college students, and also experience feelings of guilt for leaving their family behind. They may bounce from home to school and attempt to delicately balance the two contrasting and conflicting worlds. As a result of the numerous challenges, first-generation students often experience added stress beyond what is normally a stressful time in their lives, and often do not receive the support that is needed to help ease the transitions and struggles as they occur. Without this support, first-generation students are likely to flounder and potentially abandon their college degree aspirations.

While first-generation college students are entering college at greater rates than ever before in history, research points to a discouraging trend in college degree attainment for these students. Until the disadvantages are narrowed and obstacles lessened, the rates of first-generation college students’ attainment will continue to
dwindle. Accessibility to college is an important issue that has received attention from leaders in higher education, and has seen significant progress over the last thirty years. However, while still a significant issue, accessibility to college may no longer be the biggest hindrance to first-generation, low-income students. Instead, retention and attainment, and the roadblocks associated with these problems are clearly in need of desperate attention.

To better understand the disadvantages and obstacles present in first-generation college students’ lives, an examination of social class influences and issues is needed. As previously mentioned, a large number of first-generation college students are from low or lower-middle social class backgrounds (Bui, 2002; Engle & Tinto, 2008; Hartig & Steigerwald, 2007; McCarron & Inkelas, 2006; Valadez, 1998), and are also the first in the family to attend college. Therefore, first-generation college students are likely to experience a complex array of emotions, thoughts and behaviors related to changing social class statuses. However, before investigating the specific social class issues experienced by first-generation college students, it is important to have a clear understanding of how social class has been defined and previously studied, what theories of social class exist, and recommendations for future studies.

Social Class: The Old and The New

Social class, along with gender and race, is one of the most meaningful cultural elements of people’s lives (Liu, Ali, Soleck, Hopps, Dunston, & Pickett, 2004). Yet,
social class remains a difficult construct to define and understand (Argyle, 1994; Heppner & Scott, 2004; Hughes & Perry-Jenkins, 1996; Lui, Soleck, Hopps, Dunston, & Pickett, 2004; Lareau, 2008; Lui, Ali, et al., 2004). Over 400 different words have been used to describe the phenomenon of social class in counseling literature, meaning that the same construct has been defined in hundreds of different ways (Liu, Ali, et al., 2004). When different words are used to describe the same phenomenon, it creates confusion over what is being measured and studied. There are a number of reasons as to why social class has remained such an elusive construct, the way it has been described and assigned to individuals, being the most pertinent. Often, social class is used synonymously with socioeconomic status (SES), a stratification system used to classify individuals into social class groups. In research, the construct of SES is commonly characterized by variables such as personal annual income, personal level of education, parents’ income, and parents’ level of education (Kohn, 1979); however, the measurement of SES varies from study to study and there does not appear to be clear rationale for variables of use (Argyle, 1994; Hughes & Perry-Jenkins, 1996). Furthermore, there does not appear to be a protocol as to when social class and SES are to be used, therefore, a combination of the two terms is frequently used (Lui, Ali, et al., 2004).

Some have argued that social class not only includes education, income and occupation, but also is comprised of economic resources, power, privilege and prestige. Others have argued that these aspects should be considered separate from economic
resources (Liu, Ali, et al., 2004). Furthermore, social class has been defined by some as one’s ability to control their resources, while others believe that social class should encompass the class position of one’s friends and peers. Regardless of whether social class is conflated with SES or is defined as something entirely different, there does not appear to be a clear theory for measuring it (Argyle, 1994; Gecas, 1979; Hughes & Perry-Jenkins, 1996; Lui, Ali, et al., 2004). Without a theory, researchers attempt to measure social class by lumping together groups of individuals based on demographic variables, creating a hierarchy or stratification system of social class that is a representation of American society. One of the main problems with this classification system is that there is not an agreement on what stratification system to use, and what criteria to use to constitute specific social class groups (Hopps & Liu, 2006; Liu, Ali, et al., 2004). Additionally, some have argued that a stratification system is inadequate because traditional hierarchies have declined and new, more complex social differences have emerged (Clark & Lipset, 1996). Furthermore, the stratification system does not explore the secondary gains of social class such as social capital, does not consider individuals’ savings, credit and debt, and neglects certain social class phenomenon such as social mobility (Argyle, 1994; Liu, Soleck, et al., 2004).

Two theoretical models have been commonly used by researchers to better understand social class (Hughes & Perry-Jenkins, 1996). The first is the "cultural approach" which views class differences as indicative of varying cultural values between
different SES groups. This approach has lead to comparisons and evaluations of different social class groups, with the middle class representing the norm (Baca-Zinn & Eitzen, 1990). This approach neglects to examine the influences of greater systems on social class groups, and has been associated with blaming individuals in certain social conditions for their circumstance (Baca-Zinn & Eitzen, 1990). The "structural approach" focuses on social forces that places individuals at specific positions in society, and does not assume that social class cultural norms and values are stable traits but rather ways to cope with the structure of society (Baca-Zinn & Eitzen, 1990). The structural approach to social class is less evaluative of social class groupings, scrutinizing society rather than individuals. Yet, the structural approach does not indicate how to specifically measure the construct of social class, and still situates individuals into a hierarchy. Additionally, it does little to examine the complexities that develop as a result of social mobility (Argyle, 1994), and also does not account for the heterogeneity of social class groups.

Social class has clearly been a confusing and inconsistent construct to define (Hughes & Perry-Jenkins, 1996; Lareau, 2008). There has been no comprehensible theory or rationale for how it is measured, and most often is used to stratify individuals into groups based on “objective,” demographic variables (Kohn, 1979; Lui, Ali, et al., 2004). Once individuals are classified into the various social class groups, it is assumed that the worldview of groups members is the same and that the group is relatively homogeneous in relation to ideologies and lifestyle (Lui, Soleck, et al., 2004). However, research
suggests that worldview varies, even in the context of social class, depending on a variety of issues such as geographical location, religion, and ethnicity (Liu, Soleck, et al., 2004). Another issue with the objective, stratification system of social class is that it neglects to account for individuals who hold attitudes and values that do not appear to be connected to their income, occupation and educational level (Argyle, 1994; Hout, 2008; Liu, Soleck, et al., 2004). For example, one may be highly educated and have a high income, yet they may choose to live a frugal and modest lifestyle by living in a working-class neighborhood, taking public transportation, and vacationing in near-by states. Thus, in this case, the individual’s economic resources are high, indicating a higher level of social class, yet the way in which the person lives and the values he/she holds are more similar to those seen in lower, working-class backgrounds. Additionally, some research has suggested that Americans have flexible and multiple class identities (Hout, 2008). Therefore, using a objective, stratification system to measure class is limiting, rigid, and might possibly exclude of number of individuals.

Another problem with the previous conceptualizations of SES and social class is that group consciousness is often not assumed or considered (Lui, Ali, et al., 2004). Instead, social class is characterized by individual economic resources rather than a system in which common values, ideals and lifestyles are shared amongst a group of individuals. While social class groups are not necessarily homogenous, and diversity exists within each class, mainstream beliefs and values within social class groups prevails
(Leondar-Wright, 2005). For example, for individuals in middle to upper class backgrounds, higher education may be expected, whereas in lower, working class backgrounds, higher education is not assumed and is often a privilege. Therefore, while not every person in each social class is the same, common beliefs and values within the subculture exist, and should be acknowledged as a significant indicator of social class beyond economic resources. Furthermore, previous research has done little to explore affect, motivation and cognitions related to social class (Argyle, 1994; Heppner & Scott, 2004; Liu, Ali, et al., 2004; Liu, Soleck, et al., 2004; Nelson et al., 2006). Most research has concentrated on social class as a demographic variable rather than an aspect of individuals’ lives that helps shape their worldview and lifestyle. A significant disadvantage of not exploring these variables related to social class is that many aspects of individuals’ personality and life are disregarded, such as feelings of shame, guilt and pride, desires to achieve upward mobility, problems in relationships due to social class issues, and thoughts related to social class identity.

Classism is another area that has been neglected by the previous stratification paradigm used to define the construct of social class. Social class and/or SES used purely as a descriptor of economic resources fails to acknowledge classism as an important aspect of peoples’ economic experiences (Lui, Ali, et al., 2004; Liu, Soleck, et al., 2004). Classism is regarded as attempts to keep individuals within a certain social class or economic group (Liu, Ali, et al., 2004). However, classism is not an attempt to keep an
individual within a certain economic status, meaning that one may obtain the economic resources to put them in a higher socio-economic status, but they are discouraged from advancing to a different class group. Downward classism is the most recognized form of classism in American society, and is defined as oppressive perceptions, attitudes, and behaviors towards individuals that are seen as “below” the perceiver (Liu, Soleck, et al., 2004). Individuals who encounter downward classism are marginalized by being reminded of their lower social class all the while having higher social classes reinforced as superior and desired.

“Modern classism,” as proposed by Lui, Soleck, et al. (2004), is a a new, more comprehensive model of understanding classism as it recognizes other types of classism beyond downward classism. This theory includes upward, lateralized, and internalized in conjunction with downward as the various types of classism in American society. Upward classism occurs when individuals view people from higher social classes as “snobs” and “elitists,” and attempt to devalue and denigrate the lifestyle choices and behaviors of that group (Liu, Soleck, et al., 2004). Lateralized classism is defined as “classist attitudes and behaviors among people perceived to be of a similar social class group to render individuals’ social class worldview back into alignment with others in that perceived social class group” (Liu & Pope-Davis, 2003, p. 301). A simpler way of thinking of lateralized classism is the idea of “keeping up with the Joneses,” which is an attempt to maintain a certain type of lifestyle based on the expectations of that social
class group (Liu, Soleck, et al., 2004). A common result of lateralized classism is that when a individual behaves in ways that are opposing or dissonant with the social class group they belongs to, they experience prejudice and discrimination from their social group as an attempt to align the social class worldview of the individual with the worldview of the group. Internalized classism occurs when an individual is unable to meet the expectations and norms of their social class group, often resulting in anger, feelings of failure, anxiety and depression (Liu, Soleck, et al., 2004). The inclusion of various types of classism beyond downward classism is helpful in better understanding what motivates individuals, the potential frustrations and failure they feel in attempt to meet their social class expectations, and the assumptions, rules and messages they have internalized as a result of their social class group.

The Social Class Worldview Model (SCWM; Liu, Soleck, et al., 2004), has recently garnered significant support and praise in the field of psychology as a theory and conception of social class groups and environments (Heppner & Scott, 2004; Nelson et al., 2006). According to SCWM, individuals’ social class identities are contextually formed by the experiences and individuals around them. Therefore, social class is seen as perceptual, subjective, and socially constructed rather than objective and measurable by demographic variables. Individuals’ perceptions of their environment shape their social class reality. SCWM posits that individuals look to people, both past, present and future to help guide their social class identity and behaviors. Generally, the family of origin
plays a significant role in serving as an important socializing agent of providing social class information and norms to children. The socialization of children is the foundation in which social class values, beliefs and ideals are formed. Individuals also look to other groups of individuals in which they desire to belong. In some cases, individuals aspire to move downward in social class, however, most individuals attempt to move upward. Individuals also look to their material items to have a sense of their social class. The perception of one’s property materials is used as an indicator of class identity rather than the objective materials themselves. Additionally, the perception of the way in which an individual lives, or their lifestyle, is also used to define one’s social class (Hout, 2008). Thus, social class identification is subjective, and based on a number of contextual variables in one’s life.

Importance of Social Class

The multicultural psychology movement has encouraged psychologists to consider and explore the social and contextual factors that influence individuals’ lives. Specifically, psychologists are urged to develop awareness and knowledge of how socio-cultural factors influence people’s identities, behavior, and personality (Nelson et al., 2006). Social class has been identified as a socio-cultural component that plays a significant part in people’s lives, yet, psychology researchers have paid little attention to the role and impact of social class, and instead have focused primarily on social class as a demographic variable (Heppner & Scott, 2004; Lareau, 2008; Lui, Ali, et al., 2004;
There have been a few hypotheses for the omission of social class as an important area of psychological inquiry - (1) a reluctance to study those who are perceived to be different, (2) classism is still considered a tolerable form of prejudice and discrimination, (3) avoiding social class may be a natural outcome of a greater culture of silence, and (4) class is no longer considered important (Heppner & Scott, 2004; Lareau, 2008; Nelson et al., 2006). Additionally, psychologists might operate from the assumption that American society is “classless,” which neglects to acknowledge and continues to marginalize individuals who are not in the middle class (Hepper & Scott, 2004; Lareau, 2008). Thus, as Lui, Soleck et al. (2004) have suggested, further research is needed in order to better understand how social class impacts people’s lives on an affective, motivational, cognitive and behavioral level. Doing so will increase the awareness, knowledge and skills necessary to provide the most competent and effective services to individuals from all social classes. Specifically, the present study attempts to better understand social class issues related to first-generation college students as an effort to produce more knowledge and awareness of what services and strategies will best help these students attain college degrees.

One way in which social class has been identified as an important component in people’s lives is its impact on mental health and well-being. Research has shown numerous differences between the various social classes and mental health issues. For example, people from lower social class backgrounds tend to report more symptoms of
depression and anxiety, express more frequently feelings of hostility, and have a lower
sense of optimism and control over their lives (Liu, Ali, et al., 2004). Furthermore,
individuals from lower social classes often experience a steeper stress slope than those
from middle to upper classes as there are more concerns related to finances, lack of social
capital, and experiences of socio-economic inequality and discrimination (Liu, Ali, et al.,
2004). People from lower social classes also have been found to have more negative
emotions and cognitions which increase the likelihood of mental and physical health
problems (Liu, Ali, et al., 2004). Yet while most findings reveal a tendency for increased
mental health difficulties in people from lower social classes, other research suggests that
an increase in income and wealth are not positively related to well-being and feelings of
happiness (Liu, Ali, et al., 2004). Thus, it is unclear whether lack of economic resources
is a primary reason for higher levels of psychological distress for people in lower social
classes, or if there are other, broader reasons related to social class for mental health
problems in this population.

Social class has also been found to play a significant role in educational
attainment and career development (Aries & Seider, 2007; Heppner & Scott, 2004; Jones,
2003; Liu, Ali, et al., 2004; Nelson et al., 2006; Whiston & Keller, 2004). Research has
shown that social class and SES are often the most significant predictors of an
individual’s occupation (Heppner & Scott, 2004; Jones, 2003; Liu, Ali, et al., 2004;
Whiston & Keller, 2004), as individuals have been found to choose their occupations
based on their parents’ occupations. Furthermore, perceptions that certain occupations are out of reach and not options has been shown to be related to one’s social class of origin (Heppner & Scott, 2004). Differences have also been found between individuals from lower social classes and higher social classes in their interest in work for personal satisfaction and career adaptability. People from lower social classes tend to have less interest in work for personal satisfaction and also have more difficulty with career adaptability (Blustein, Chaves, Diemer, Gallagher, Marshall, Sirin, & Bhati, 2002). These findings may be explained by Social-Cognitive Career Theory (Lent, Brown, & Hackett, 1994) which suggests that career advancement is influenced by individuals’ self-efficacy with different resources and obstacles, such as social class background (Nelson et al., 2006). In other words, an individual from a lower social class may not even consider certain high-powered careers because of internalized classism, and the perceived belief that they are incapable of obtaining such a position. Although social class and SES have been found to be important factors in educational attainment and career development, most studies have neglected to really understand the underlying processes of social class in career development (Heppner & Scott, 2004; Liu, Ali, et al., 2004).

Identity development has also been found to be impacted by social class status. Aries and Seider (2007) found that social class played an important role in the formation of identity and also as a domain of identity exploration. One study has shown that children as young as first grade start to develop social class awareness, while children in
six grade are almost perfect in grouping objects and people in their correct social class (Liu, Ali, et al., 2004). Jones (2003) found that preschool children are aware of class differences and that by the third grade, children are have a clear understanding of occupational differences. Thus, children develop awareness of social class at a relatively young age. Experiences with and awareness of social class during formative identity development years continue to inform perceptions of social class identity into adulthood. However, it is unclear when the formative years of social class identity in children occur, and if social class identity is automatically a reflection of parents’ social class background (Liu, Ali, et al., 2004). What has become apparent through the literature, however, is that social class identity can shift and become a confusing and difficult challenge for those who experience “class jumping” (Aires & Seider, 2007; Ashford, 2001 2003; Nelson et al., 2006; Reay, 1998). The experience of class jumping, more commonly known as upward mobility, is a type of social mobility which plays a significant role in the lives of first-generation college students.

Social Mobility

Social mobility has been defined as movement between social classes either lower or higher than one’s social class of origin (Argyle, 1994). Most often, social mobility occurs through changes in occupation and education, and influences the level of status, respect, and power individuals have. Specifically, upward mobility is a phenomenon in which individuals pursue or receive higher, more socially respected statuses by moving
into more privileged positions, such as academia and white-collared careers (Aries & Seider, 2007). Individuals achieve upward mobility through three main routes: (1) marrying someone with a higher social class status, (2) gaining a high-paying career, and (3) attaining higher education (Ross, 1995). Social mobility can also take a downward trend. For example, an individual may experience downward mobility as a result of a demotion, job loss or divorce (Ross, 1995). However, these examples of downward mobility are rarely intentional or planned, and the choice of downward mobility is usually reserved for privileged individuals from higher social classes of origin (Argyle, 1994).

**Upward Mobility**

As many as 40% of individuals in any given familial generation will move up one class status, and almost 25% will advance from blue-collar, working class backgrounds to higher-status, white collar careers (Jones, 1996). Little is known about who specifically from these lower social class backgrounds chooses to pursue upward mobility, and there is a lack of information about why and what specifically motivates these individuals’ choice to break free from their previous social statuses (Nelson et al., 2006). However, research completed in Great Britain has shown that individuals who have higher levels of achievement motivation are more likely to be upwardly mobile, yet little beyond that is known (Argyle, 1994). Research on first-generation college students suggests that individuals who aspire to higher education do so in order to escape the limitations of a low social class status and to accrue the benefits of higher social class status (Bui, 2002).
The benefits of being upwardly mobile are apparent; less worry about finances, better access to education and material goods, greater respect from society, abundant opportunities, and increased social, cultural and human capital. Social, cultural, and human capitals include features of a social structure (in this case, class) that allow for individuals to benefit and advance in certain ways, such as educationally and economically (Nelson et al., 2008). Specifically, social capital (Lin, 1999) encompasses social networks inherited once an individual has advanced to higher social class status. Human capital (Gradstein & Justman, 2000) includes abilities and skills, while cultural capital (Carter, 2003) incorporates tastes and aesthetics that develop or change as a result of upward mobility (Lareau & Conley, 2008; Liu, Ali, et al., 2004). For example, individuals with higher levels of social and human capital have access to information, and the skills needed to help facilitate their advancement, such as knowing the “right” people, having role models, and understanding how a system like higher education works (Aires & Seider, 2007; Heppner & Scott, 2004; Nelson et al., 2006). Individuals from low and lower-middle classes do not have as much social capital as individuals from higher social classes because of less access to information and resources (Heppner & Scott, 2004; Nelson et al., 2006). Therefore, upwardly mobile individuals experience the opportunity to gain social capital as a result of moving up the social class ladder, meaning that the benefits of upward mobility are beyond purely increasing financial worth.
Upward mobility is a cultural value in the United States because of the myths of social equality and meritocracy (Heppner & Scott, 2004; Jones, 2003; Nelson et al., 2006; Ross, 1993). In American, capitalist society, life goals to get ahead and acquire possessions are expected, common, and considered part of the “American Dream” (Nelson et al., 2006). Although relatively few individuals are capable of significantly jumping classes, most individuals believe that social class is permeable (Jones, 2003). Thus, if one is not able to advance upwardly, blame is attributed to the individual rather than to society and the social class system (Hughes & Jerry-Perkins, 1996; Jones, 2003; Ross, 1993). In other words, Americans typically believe that individuals deserve the social class they inhabit, assuming that individuals possess the power to change their social standing (Heppner & Scott, 2004; Ross, 1993). Furthermore, the pressure to achieve upward mobility in American society inherently places stigma on working-class, low-income people - further legitimizing the “American Dream” via upward mobility to advance social class standing (Jones, 2003).

*Negative Aspects of Upward Mobility*

While a number of benefits exist for upward mobility, there are also numerous negative effects as well. Research shows that social mobility has significant effects on individuals’ sense of identity, as a renegotiation and alteration of expectations, preferences, ideals, practices and values occurs (Aries & Seider, 2007; Nelson et al., 2006). Individuals who experience upward mobility often have to build a sense of
continuity between their social class of origin and their current, more privileged social status (Aries & Seider, 2007; Reay, 1998). Furthermore, individuals from working class childhoods tend to maintain aspects of their social class identity into adulthood, regardless of their changing status (Reay, 1998). Thus, although an individual from a lower social class may have advanced their social class standing, they often do not abandon the cultural values and norms of their social class of origin.

Individuals who are upwardly mobile may also risk their psychological health due to an inability to cope with the stress of attempting to advance (Ashford, 2001). Seeking to achieve and maintain a certain lifestyle may mean having to put career as a number one priority over family, friends, social networks, faith, health, and personal well-being. Additionally, if an individual from a low social class of origin is not able to achieve advancement, he/she may attribute their failure to themselves, internalizing the dominant ideology that social class standing is a result of hard work alone (Jones, 1996). Furthermore, upward mobility often alienates individuals from families of origin, creating a detachment from their original culture and community which contributes another layer of unhealthy stress (Aires & Seider, 2007; Ashford, 2001).

Social distance within families due to upward mobility not only results in isolation and estrangement for the mobile individual, but also can create tension and conflict within the family. Several qualitative studies have detailed the friction that often develops in families as a consequence of upward mobility (Beagan, 2005; Heppner &
Scott, 2004; Jones, 1996; Nelson et al., 2006; Ross, 1995). In a study of medical students from lower class backgrounds, participants mentioned feeling as though their families were unimpressed with their accomplishments, and therefore, unsupportive of the challenges the student faced (Beagan, 2005). Students in the study also mentioned being accused of thinking they were better than their families, becoming snobs, and moving past and being ashamed of their roots (Beagan, 2005). Like the students in Beagan’s study, it is a common experience for children from working-class, low-income families to grow up with the understanding of “knowing one’s place” and staying true to their roots (Heppner & Scott, 2004). Thus, when an individual from a lower social class background does socially advance, their loyalty is called into question. Assimilation into another class culture is seen as a betrayal to the culture of origin (Jones, 1996). Naturally, it is a difficult position for an upwardly mobile individual to maintain relationships with their family of origin when they are seen as someone who has betrayed their family, lost their roots, and believes they are of higher status and importance (Jones, 1996). Consequently, upwardly mobile individuals may hide their wealth or knowledge from their culture of origin in an attempt to avoid disgrace. Or conversely, one may disengage from their cultural origins and further the division between their current class culture and their culture of origin. Each of these alternatives has been linked to stress and can be potentially psychologically harmful (Jones, 1996; Nelson et al., 2006; Ross, 2001).
Studies have shown that individuals who experience upward mobility often feel a sense of guilt and loss (Aires & Seider, 2007; Ashford, 2001; Beagan, 2005; Jones, 1996; Nelson et al., 2006; Piorkowski, 1983; Ross, 1995). Upwardly mobile individuals may experience a loss of connection to their original culture, loss of their previous social identity, and a loss of sense of family belonging (Jones, 1996; Nelson et al., 2006). Moreover, upward mobility often means that individuals have to reject their cultural origin, which inherently creates a sense of guilt. In some ways, becoming upwardly mobile is choosing between staying true to ones’ social class of origin and limiting social capital, or separating and disconnecting from one’s culture of origin. Those who choose to separate generally feel guilty for doing so. Additionally, the upwardly mobile individual may feel like they no longer connect with their culture and family of origin because they no longer share commonalities - further exacerbating guilt due to the divide (Piorkowski, 1983; Ross, 1995). It is also possible that upwardly mobile individuals experience feelings of superiority to their culture of origin, exhibiting anger and bitterness at their family for not valuing and providing a higher status lifestyle (Ross, 1995). These feelings inherently create a distance between the upwardly mobile person and his/her family.

Another potentially distressing aspect of being upwardly mobile is the alienation, marginalization, and discrimination that occur as a result of coming from a lower social class statuses. Those who advance in social standing tend to report that they do not feel
like they belong or fit in the advanced status they have achieved (Aires & Seider, 2007; Ashford, 2001; Beagan, 2005; Nelson et al., 2006). The signs of class, which are present in almost every aspect of life, makes it easy for some to fit in and others to stick out (Beagan, 2005). Common examples of class that are often overlooked, but are visible include the way people dress, style of talk, and the activities and tastes that are preferred (Hout, 2008; Kaufman, 2003; Nelson et al., 2006). Even if an individual is able to advance to another social class standing, if they do not conform to the values, preferences, norms and ideals of their new social class culture, they will not be easily accepted. Therefore, upwardly mobile individuals must attempt to conform by wearing the trends, speaking the language and behaving in accordance in order to avoid ridicule (Nelson et al., 2006). Some upwardly mobile individuals are confronted with jokes and derogatory comments about people from lower social classes from those around them, sending the message that they do not belong (Beagan, 2005). Sometimes these messages are overt, yet most of the time; the messages are subtle and tend to be on a systemic level (Beagan, 2005; Kaufman, 2003).

Social Class Identity Dissonance

Researchers have found that those who experience upward mobility are confronted with the dilemma of their social class identity (Jones, 1996; Nelson et al., 2006; Ross, 1995). Individuals in this situation either can (1) choose to accept their current social class identity and abandon their social class of origin identity, (2) accept
their social class of origin identity and deny the current class identity, (3) integrates the
two, attempting to claim both identities, or (4) not claim either social class and feel of
sense of “classlessness” (Jones, 1996; Ross, 1995). Those who attempt to balance two
very different social classes of reference face one world in which certain values and
norms exist, and another that is often filled with differing and sometimes conflicting
values and norms. Attempting to float between the two worlds and adhere to both is
difficult, confusing, and stressful (Jones, 1996; Ross, 1995). Furthermore, the upwardly
mobile individual may at times shifts roles, adhering to a certain role while in their
culture of origin, while adhering to a different role in the newly-designated class.
Whether this is intentional or not, it creates a significant amount of dissonance and
confusion about personal class identity (Jones, 1996; Nelson et al., 2006; Ross, 1995).
Some of the confusion can be attributed to the conflicting feelings that arise for
individuals when they consider their class of origin and current class. It is common to
experience conflicting feelings of shame and pride related to the class of origin: feeling
ashamed of leaving the class of origin, having shame for being ashamed of previous
social class status, shame about feeling superior in one’s new social class reference
group, and pride for advancing (Ross, 1995). Studies have shown that these feelings are
dissonant, confusing and contribute to the struggle of obtaining a secure class identity
(Langston, 1993; Nelson et al., 2006; Ross, 1995).
Nelson et al. (2008) has suggested that the most difficult challenge to upward mobility is the renegotiation of a new identity while also dealing with the loss of leaving the older one behind. Not only is the individual attempting to adapt to a new cultural identity, but also is mourning the loss of their previous culture and a sense of belonging (Aries & Seider, 2007). Additionally, the transition from one social class identity to another is not necessarily fluid and easy. Most often, individuals report straddling the fence between the two, being torn in different ways, and feeling like an impostor in both worlds (Jones, 1996; Langston, 1993). Nelson, Huffman, and Budge (2008) have very recently attempted to better understand the challenges of social class adjustment and identity renegotiation by creating a theory of social class identity dissonance (SCID). SCID is broadly defined as “experiences of discomfort related to moving away from one’s original social structure to assume a new and more financially and/or educationally respectful social standing” (Nelson et al., 2008, p. 3). Experiences of discomfort are related to having uncertainty about how to define and categorize oneself personally and socially. SCID has been comprised of three key types of experiences: (1) the experience of simultaneously feeling both pride and shame related to one’s social class of origin, (2) the experience of guilt related to leaving behind friends and family to assume a higher social class status, and (3) the experience or fear of alienation and marginalization related to the inability to feel a sense of belonging in both the social class of origin and the current social class. Nelson et al. (2008) suggests that the experience of SCID may
influence one’s affect, behaviors, decision making, and motivation. An example of a SCID experience would be a first-generation college student who has experienced alienation from their culture of origin as a result of pursuing higher education, thereby choosing to leave college and pursue a different career that would not include having to acquire further education. An additional example includes a person who feels so much guilt for abandoning their culture of origin that they avoid visiting their family and friends from home in attempt to lessen the feelings of guilt and shame.

Social Dominance Orientation

Silver Lining? Social Dominance Orientation Empowering Degree Attainment

While social class identity dissonance, as well as the overall challenges to upward mobility, appear to impact first-generation college students on a negative level, research has shown that one positive and potentially empowering aspect may develop as a result. Findings have suggested that upwardly mobile individuals (e.g. first-generation college students) who experience and are aware of the negative aspects of upward mobility often develop a sense of socio-political awareness and an attitudinal decrease towards social dominance. This anti-dominance orientation may potentially encourage and empower students to stay in college and complete their degree. In a qualitative study by Beagan (2005), participants expressed having an “anti-elitism” stance and additional respect for the dignity of all people, regardless of social status. Their anti-elitism was used as a weapon against the classism they faced, and also made the participants feel as though
they could better relate to all types of people. Jones (2003) reported similar findings as participants in her study expressed having a new awareness of social injustices as a result of their own experiences with injustice. This awareness led to a greater understanding of all forms of inequalities in the United States, and a desire to make social change. Nelson et al.’s (2006) qualitative findings also revealed that participants developed a sense of empathy or sympathy toward all oppressed groups and as a result, voiced a commitment to social justice. Diemer (2009) has posited that individuals with this type of anti-dominance awareness and attitude may be more successful in achieving educational and occupational attainment. Having an anti-dominance awareness and attitude is seen as an “antidote” to the barriers caused by structural oppression, as individuals become motivated to reduce inequity and produce social change (Diemer, 2009). Thus, individuals who have experienced classism as a result of upward mobility, and who have become aware of societal injustices and inequalities, may be more likely to achieve their educational and career aspirations because of the desire and commitment to ending social inequality.

The Present Study

The present study seeks to better understand the impact that SCID has on first-generation college students. Specifically, the current study addresses whether first-generation college students are more likely to experience SCID than their non-first-generation college student peers. Previous literature has shown that a common
characteristic of first-generation college students is that they come from lower social class backgrounds (Bui, 2002; Engle & Tinto, 2008; Hartig & Steigerwald, 2007; McCarron & Inkelas, 2006; Valadez, 1998). Furthermore, regardless of whether a gain in economic resources occurs as a result of obtaining a college degree, first-generation college students still experience of upward mobility as they are the first in their families to seek higher education (Ross, 1995). As evidenced by numerous studies, the experience of upward mobility is often challenging and complex (Ashford, 2001; Aries & Seider, 2007; Beagan, 2005; Heppner & Scott, 2004; Jones, 1996; Nelson et al., 2006; Piorkowski, 1983; Reay, 1996; Ross, 1995), and it has been suggested that one of most frequent and difficult aspects of upward mobility is identity confusion and dissonance (Nelson et al., 2006). Thus, it is hypothesized that first-generation college students are more likely to experience SCID than their non-first-generation college student peers who might not experience upward mobility as a result of seeking higher education.

The current study will also explore whether the experience of SCID explains the relationship between generation status and psychological distress. Previous studies have shown that first-generation college students have additional challenges and disadvantages to obtaining their college degree, making their college experience incredibly stressful (Bloom, 2007; Bui, 2002; Hartig & Steigerwald, 2007; Lareau, 1987; London, 1989; McCarron & Inkelas, 2006; Nelson, Englar-Carlson, Tierney & Hau, 2006; Reid & Moore, 2008). Results of qualitative studies have shown that first-generation college
students often feel overwhelmed, isolated, and marginalized; all of which contribute to the possibility of increased mental health problems (Bloom, 2007; Engle & Tinto, 2008; McCarron & Inkelas, 2006; Nelson et al., 2006). The theory of SCID, as defined by Nelson et al. (2008), suggests that individuals who are upwardly mobile often experience a confusing and complex mix of emotions coupled with a sense of marginalization and isolation. Thus, it is possible that the experience of SCID is potentially contributing to the mental health problems seen in first-generation college students. However, no research has yet explored this possible connection.

The final question the present study aims to address is whether having awareness of socio-political factors (e.g. social dominance orientation), such as structural injustice and inequality, buffers the potential negative impact of social class identity dissonance on first-generation college students’ psychological distress. Research has shown that having an understanding and awareness of these types of inequalities can often lead individuals’ to become motivated and determined to fight injustices and make social changes (Diemer, 2009). Furthermore, studies show that individuals who are oppressed, but who are oriented towards eliminating social inequalities, often have a better likelihood of obtaining their educational and occupational goals (Diemer, 2009). One could hypothesize that first-generation college students with strong attitudes towards equality are less susceptible to internalized classism which can be a deterrent to completing their bachelor’s degree. In other words, first-generation students who have insight into
structural injustices, and who do not attribute their challenges and hardships to themselves, may be more empowered to complete their college degree. Research suggests that this may be the case, yet no study at present has attempted to address this question.
CHAPTER THREE

METHODS

Participants

Participants consisted of both first-generation college students and non-first-generation college students recruited from two colleges located in the western United States. The first college, Metropolitan State College of Denver (Metro State), is a large, urban, public institution offering four year bachelor’s degrees through three areas of focus: Business, Professional Studies and Letters, Arts and Sciences. Metro State is known for having the most diverse student body as well having the highest number of transfer students of four-year college or university in the state in which it is located. Additionally, Metro State offers the lowest tuition of the state’s five largest institutions. The second college, Adam State College, is a small, liberal arts college located in a rural area of the state offering four-year bachelor’s degrees in Arts and Sciences, Teacher Preparation, and Business. Adam State College has a high number of Latino students (28%), and also has the lowest tuition out of all four-year colleges in the state. Both colleges have a significant number of transfer and non-traditional students. Each college was chosen based on a higher likelihood of enrollment of first-generation students due to the low cost of tuition and each institution’s transfer-friendly systems. These two samples were sought in order to
enhance the external validity of the research design. The goal was to recruit a convenience sample of approximately 300 participants from each college (first-generation college student and non-first generation college students), yielding a total of 600 overall.

For participation in the study, it was required that students be at least 18 years of age and be attending school at least part-time. Participants were asked to complete a demographic questionnaire containing variables included in the study (e.g., age, gender, racial/ethnic background). The demographic questionnaire provided information about the participants that will be necessary for assessing requirements for participation. Those who did not meet the requirements (e.g., not a full-time or part-time student) were excluded from the study. Participants who did meet requirements for participation in the study and who completed the entire survey could choose to enter a raffle to win a $50 gift card. Six gift cards were allotted to Metro State, and four gift cards were allotted to Adam State College as there are significantly more students enrolled in Metro State.

Measures

Demographics. The self-report survey included a demographic information sheet (see Appendix A) requesting information such as the participants’ age, year in school, gender, major, and educational level of their caregivers. Participants were encouraged to complete the entire section of the survey, which also included seven ethnic categories defined by the federal government as follows: African American, American Indian/Alaskan Native, Asian/Pacific Islander, Caucasian, Hispanic/Latino/a, Multi-
racial, and Other.

**Social Class Identity Dissonance.** The Social Class Identity Dissonance Scale (SCIDS; Nelson, Huffman, & Budge, 2008) was used to measure participants’ level of social class identity dissonance (see Appendix B). Social class identity dissonance has been defined as “experiences of discomfort related to moving away from one’s original social structure to assume a new and more financially and/or educationally respectable social standing,” (Nelson et al., 2008). The scale measures psychological components that are related to upward social class mobility including feelings of shame, pride, guilt, as well as the experiences of alienation and marginalization. The scale consists of 17 items with Likert-style responses ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). An example of an item includes: “In social situations with people from lifestyles like the one I aspire to have, I keep quiet about my background, so they will not think less of me.”

The operationalization of the concept of social class identity dissonance was developed as a result of solicitation at local and national conferences as well as conversations between the author of the scale and interested scholars and leaders in the field (Nelson et al., 2008). Twenty-seven test items were originally developed and then piloted in classrooms at a large, state university. The items with the strongest psychometric properties were retained to yield the 17 item scale (Nelson et al., 2008).

Participants in an initial validation study included 164 undergraduate and graduate psychology students who were asked to participate anonymously in completing the SCIDS, the Societal, Attitudinal, Familial, and Environmental Acculturative Stress Scale.
(SAFE; Padilla, Wagatsuma, & Lindholm, 1985), and the Collective Self-esteem Scale (CSES; Luhtanen & Crocker, 1992) via an online survey. A principal components factor analysis was conducted and suggested three factors underlying the data, with all items loaded significantly on the first factor ranging from .475 to .666 (Nelson et al., 2008). Specifically, the authors observed one primary factor yielding an eigenvalue of 5.96, and two minor factors with eigenvalues of 1.87 and 1.38. Further inspection of the item loadings suggested a single factor typified the data, which the authors labeled “social class identity dissonance.” (Nelson et al., 2008).

Nelson et al. (2008) chose the SAFE to examine the concurrent validity for the SCIDS, and hypothesized that the SAFE and SCIDS would be related but not identical constructs. As hypothesized, the SCID was significantly, positively correlated with the SAFE (r = .625, p < .01). The CSES is a measure of the value an individual ascribes to their group identity, and their association with and contribution to it (Nelson et al., 2008). The CSES was utilized to examine divergent validity, and it was hypothesized the SCIDS would be negatively related to the CSES. As hypothesized, the SCIDS correlated negatively with the CSES (r = -.121, p < .05). Additionally, scale scores of the SCIDS produced a reliability coefficient of .843.

Overall, the items chosen for the SCIDS measure a singular construct representative of psychological dissonance created by upward social class mobility. Validity and scale score reliability have been adequate in initial validation studies. Confirmatory factor analysis has yet to be conducted using more inclusive samples, and further validation of the scale using a wide variety of groups is needed.
**Social Dominance Orientation.** The Social Dominance Orientation scale (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994) measures the extent to which an individual wishes one group to have dominance and superiority over other groups (see Appendix C). Social dominance orientation is an attitudinal variable developed from Social Dominance Theory, which assesses one’s orientation towards inter-group relations, either valuing equality within groups or valuing a hierarchical, inferiority-superiority dimension of inter-group relations. It is postulated that social dominance orientation influences an individual’s contribution to social equality or inequality in the kind of roles individuals take on; either to enhance or reduce inequality. Individuals with high levels of social dominance orientation may belong to institutions that promote superiority of certain groups over other groups. Conversely, individuals low on social dominance orientation might belong to groups that promote equality for all types of people and groups. Furthermore, individuals with low social dominance orientation may be more likely to experience feelings of empathy for out-group members, and may have greater awareness of inequality, oppression, prejudice and discrimination than individuals with high levels of social dominance orientation.

The 14-item SDO scale (Pratto et al., 1994) will be used in the present study. The scale consists of Likert-style items with responses ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). Examples of items on the scale include: “Some groups of people are simply not the equals of others,” and “If people were treated more equally we would have fewer problems in this country.” Pratto et al. (1994) conducted a number of tests to assess the validity and reliability of the SDO scale. A principal components analysis revealed a
unitary construct consisting of 14 items. The scale has also exhibited adequate scale score reliability across all multiple samples with an average reliability coefficient of .83. Additionally, item analysis revealed that all items were highly correlated with the remainder of the scale for all samples. Test and retest reliability of the SDO has ranged from .50 and .84 in prior studies.

With regard to predictive and convergent validity of the SDO scale, scores were found to be significantly, positively correlated with higher levels of: political-economic conservatism, nationalism, patriotism, cultural elitism, and lower reported levels of perceptions of equal opportunity (r ranged from .22 to .67). Furthermore, the more that individuals favored group dominance, the more likely they were to be nationalistic and patriotic, and also subscribe to cultural elitism and equal opportunity ideologies. Scale scores on the SDO were also positively correlated with measures of ethnic prejudice and sexism with correlations averaging from .4 and .47 respectively. Thus, SDO appears to positively correlate with conceptually similar constructs. Divergent validity of the scale has been established with observed significant correlations between the SDO and measures of empathy (r = -.46), altruism (r = -.28), communality (r = -.33), and tolerance (r =-.30). Therefore, the scale appears to negatively correlate with conceptually different constructs.

In a more recent study, Pratto, Liu, Levin, Sidanius, Shih, Bachrach, and Hegarty (2000), extended the generalizability of their results by retesting many of their original hypotheses for validity and reliability in four non-American samples including individuals from Canada, Taiwan, China, and Israel. Again, Pratto et al. (2000) found that
the scale produced a single factor accounting for 52% of the variance. Additionally, the SDO scale was found to have a good reliability statistic of .81, as well as good convergent validity with a variety of conceptually similar constructs such as sexism ($r = .30$) and political conservatism ($r = .31$). The results of this study suggest that social dominance orientation is a cross-cultural phenomenon that works to maintain social hierarchy in a variety of cultures.

*Psychological Distress.* Psychological distress was measured using the Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983). The BSI is a widely used measure of psychological distress (see Appendix D). The 53-item self-report brief form of the Symptom Distress Checklist–90—Revised (SCL-90–R) assesses the degree to which individuals have experienced the listed symptoms over the past 7 days. The BSI is rated on a 5-point Likert scale ranging from 0 (*Not at all*) to 4 (*Extremely*). Alternate forms reliability has been estimated using correlations between the BSI subscales and the SCL-90–R; reliability has ranged from .92 to .99 (Derogatis & Melisaratos, 1983). Additionally, Derogatis and Melisaratos (1983) have found that scores on the BSI yield acceptable internal consistency estimates ranging from .70 to .89. Furthermore, 2-week test–retest reliabilities were reported between .68 and .91 for the nine symptom subscales (Derogatis & Melisaratos, 1983). Therefore, the BSI appears to have strong reliability and validity statistics. Hoe and Brekke (2008) have found substantial empirical evidence for the construct validity of the BSI across three different ethnic groups in the United States (African Americans, Latinos, and Whites), and a search for the BSI on psychological databases revealed that the instrument has been used to measure
psychological distress in a variety of ethnic/national groups including Koreans, Kenyans, Croatians, Chinese and Spanish. Thus, there appears to be evidence to suggest good external validity for the BSI amongst a wide range of individuals.

**Procedure**

Permission to conduct the present study was granted by the Institutional Review Board for the use of Human Subjects at the University of Denver. Additionally, permission to invite college students to consider participation in the study was obtained from each institution’s Office of Communications and Office of Institutional Review. After approval, participants were enlisted for participation through an electronic invitation sent through each institution’s student list-serve. The electronic invitation informed potential participants of the purpose of the study including the risks and benefits, and also encouraged their voluntary participation. The anonymity of participant responses was emphasized and assured in writing via the consent form. All participants were discouraged against providing any information on the survey that may lead to potential identification. Furthermore, participants were encouraged to complete the survey on their own and without the assistance of others. If students chose to participate, a link with the electronic survey was presented at the end of the invitation which the participant simply clicked to be navigated to the website of the survey (Survey Monkey). Consent to participate in the study was provided when participants access the provided link to the electronic survey and completed and submitted the survey. The completion time of the survey was estimated at 10-15 minutes.
Participants were requested to complete the survey within two months, and the survey link was disabled after the deadline. The investigator solicited participation on each institution’s list-serve only once. After full completion and submission of the survey, participants could chose to enter a raffle for one of ten $50 gift cards (i-tunes or Target). Participants interested in entering the raffle were advised to directly email the investigator with the subject heading: raffle entry. Participants were discouraged from providing any other identifying information beyond their email address. Once raffle winners were randomly selected, they were emailed individually by the investigator with notice of their prize.

Data Analyses

The alpha level was set a p < .05 for all statistical analyses. A cross-sectional design was used. First, an independent samples t-test was used to assess statistically significant differences between the means on social class identity dissonance scores for first-generation college students, and non-first-generation college students. Secondly, a hierarchical regression analysis was planned to explore the potential mediating effect of social class identity dissonance on the relationship between generation status (e.g. first-generation student) and psychological distress. Lastly, a hierarchical regression analysis was utilized to determine the potential moderating effect of social dominance orientation on the relationship between social class identity dissonance and psychological distress. The regression assumptions of normality, linearity, independence, multicolinearity, and homoscedasticity were determined. In the moderation model, the interactions of independent variables were included in the prediction equation; therefore, a potential
problem with multicollinearity could occur. To prevent this from occurring, the interaction variables (social class identity dissonance and social dominance orientation) were centered or converted to deviation scores so that each variable had a mean of zero (Frazier, Barron, & Tix, 2004; Tabachnick & Fidell, 2007).

Certain demographic variables were controlled for in each regression equation. Research has shown that gender differences exist between levels of social dominance orientation, with males commonly having higher scores of social dominance orientation than women (Pratto et al., 1994). Additionally, some studies have shown that women are more likely to report psychological distress than men (Dambrun, 2007). Therefore, gender was controlled for in the regression models. Racial/ethnic group identification may also influence one’s level of social dominance orientation specifically since many individuals are taught that their race/ethnic background is superior to others (Pratto et al., 1994). Thus, racial/ethnic background was also controlled for. Finally, age has sometimes been associated with political conservatism, which has been significantly, positively related to social dominance orientation (Pratto et al., 1994). Therefore, age was also controlled in the regression models. The study hypotheses are as follows:

1. First generation college students will experience higher levels of social class identity dissonance than non-first-generation college students.

Analysis: A t-test was used to determine differences between means on social class identity dissonance scores between first-generation college students and non-first-generation college students. Generation status was the independent variable and social class identity dissonance scores was the dependent variable.
2. Social class identity dissonance will explain the relationship between generation status and psychological distress.

*Analysis:* In order to investigate directional relations among the variables, a mediation analysis was planned. In accord with the recommendations put forth by Baron and Kenny (1986), the following would be examined: (a) does the independent variable (generation status) predict the mediator (social class identity dissonance), (b) does the mediator (social class identity dissonance) predict the dependent variable (psychological distress) and (c) does the independent variable (generation status) predict the dependent variable (psychological distress). A mediating variable helps establish “why” one variable predicts the other, and helps explains the relationship between the two variables (Frazier et al., 2004). A hierarchical multiple regression analysis was planned to determine the contribution of social class identity dissonance in predicting psychological distress in first-generation and non-first generation college students (Please see Table 1 in Appendix E). Step 1. Demographic variables were to be entered into the regression equation (e.g. gender, racial/ethnic background, age, year in school,). Step 2. Generation status would be entered. Step 3. Social class identity dissonance scores would be entered. Psychological distress would be entered as the dependent variable. If the relationship between generation status and psychological distress controlling for social class identity dissonance was zero, the data would be consistent with a complete mediation model (Frazier et al., 2004). If the relationship between generation status and psychological distress was significantly smaller when social class identity dissonance is in the equation, but still greater than zero, the data would suggest a partial mediation (Frazier et al.,
3. Social dominance orientation will moderate, specifically buffer, the relationship between social class identity dissonance and higher levels of reported psychological distress in first-generation college students.

*Analysis:* A hierarchical regression analysis was used to determine the contribution of the interaction of social dominance orientation scores with social class identity dissonance scores in predicting psychological distress in first-generation college students. In other words, a regression analysis was used to assess for the potential moderating effect of social dominance orientation on the relationship between social class identity dissonance and psychological distress (Please see Table 2 in Appendix F). A moderator variable alters the direction or strength of a relationship between two other variables, such that the moderating variable interacts with predictor variable to impact the direction of the outcome variable (Frazier et al., 2004). The steps of the regression included: Step 1. Demographic variables were entered into the regression equation. Step 2. Social class identity dissonance scores and social dominance orientation scores were entered. Step 4. The interaction of social class identity dissonance scores and social dominance orientation scores were entered. Psychological distress scores were entered as the dependent variable. Moderation occurred if a statistically significant interaction was found between social class identity dissonance and social dominance orientation (Frazier et al., 2004).
CHAPTER FOUR

RESULTS

Overview

In this chapter, the findings of the statistical analyses associated with the study will be presented. Specifically, results of the preliminary analyses will be covered, as well as the results of the primary analyses related to the three stated hypotheses. All preliminary and primary analyses were performed using the Statistical Package for the Social Sciences Version 16.0 (SPSS 16.0). All statistical procedures used two-tailed tests of significance with an alpha level set at $p < .05$.

Preliminary Analyses

This section includes: 1) details regarding the survey response rate and the exclusion of specific types of participants, 2) an analysis of the missing data and how it was treated in analyzing the research hypotheses, 3) participants’ demographic information, 4) descriptive statistics and correlations related to the variables analyzed in the research hypotheses, 5) results of an independent-samples t-test to examine significant differences between the two generation status groups, and 6) an overview of power and sample size associated with this study.

Survey Details, Response Rate and Exclusion of Participants

This study utilized an anonymous, online survey method. Students from two local, four-year colleges were invited to participate in the survey, and a total of 1281
participants completed the survey. One college is located in a more rural area of the state, and the other in a large, metropolitan city. Because of the anonymity of the survey, it is impossible to decipher exactly how many students participated from each college. However, according the number of raffle entries submitted to the investigator, a vast majority of participants who responded to the survey appeared to be enrolled at the large, urban college. Of the total number of respondents, 91 participants were deleted from the data set because they failed one or more of the three validity checks strategically inserted within the survey. The validity checks asked respondents to ignore the question and move to the next question. Those participants who answered at least one validity check question were excluded from the study. The two requirements for participation in the study included being at least 18 years of age, and being enrolled in school at least part-time. One respondent was excluded from the analyses because he/she was not at least 18 years of age. Furthermore, 20 participants were excluded from analyses because they reported being enrolled in school less than part-time. All study variables were assessed for errors, as well as univariate and multivariate outliers. Fifty-nine cases were removed from the data set because they were univariate outliers. Cases in which the participant provided more than one answer on a multiple-choice question were erased and considered missing. After removing cases due to participation requirements, and validity checks, 1,109 surveys were considered usable.

Analysis of Missing Data

According to Tabachnick & Fidell (2007), the pattern of missing data is more vital to data analysis than the amount that is missing. Prior to quantitative analyses, the
data set was examined for the pattern of missingness, with special attention given to the randomness of the missing data. To assess the pattern and randomness of the missing data, a test of mean differences was conducted between missing and non-missing values (Tabachnick & Fidell, 2007). No significant differences were found between the variables, hence, the data was considered missing completely at random (MCAR). In other words, missing values were not related to the main variables in the study (i.e. gender, age, race/ethnicity, generation status, Social Class Identity Dissonance scores, Brief Symptom Inventory scores, or Social Dominance Orientation scores). Data missing completely at random suggests no discernable pattern in the missing data, and the distribution is unpredictable, and therefore, ignorable. Thus, missing data in this set was not manipulated, and listwise deletion was utilized during primary analysis to account for missing data on the particular variables of interest. Listwise deletion is an appropriate method for dealing with missing data as it is a conservative approach that is considered to be less biased than other methods (Tabachnick & Fidell, 2007).

Demographic Information

A demographic questionnaire (Appendix A) designed for this study was used to collect information on the participants’ demographic characteristics, which are presented in Table 1. The demographic variables specifically utilized in the analyses were gender, age, race/ethnicity, and generation status (parental and maternal education levels combined). The results indicated that the sample was relatively heterogeneous with respect to these variables.
Table 1

Overview of Demographic Variables

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<th>Demographics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
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<tr>
<td>Total Participants</td>
<td>1,109</td>
<td>100</td>
</tr>
<tr>
<td>Age Range</td>
<td>1,023</td>
<td>92.2</td>
</tr>
<tr>
<td>18 to 23</td>
<td>459</td>
<td>44.8</td>
</tr>
<tr>
<td>24 to 29</td>
<td>283</td>
<td>27.6</td>
</tr>
<tr>
<td>30 to 35</td>
<td>125</td>
<td>12.2</td>
</tr>
<tr>
<td>36 to 41</td>
<td>58</td>
<td>5.6</td>
</tr>
<tr>
<td>42 to 47</td>
<td>34</td>
<td>3.3</td>
</tr>
<tr>
<td>48 to 53</td>
<td>41</td>
<td>4.0</td>
</tr>
<tr>
<td>54 to 59</td>
<td>19</td>
<td>1.8</td>
</tr>
<tr>
<td>60 to 65</td>
<td>4</td>
<td>0.4</td>
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<tr>
<td>Gender</td>
<td>1,099</td>
<td>99</td>
</tr>
<tr>
<td>Female</td>
<td>813</td>
<td>73.3</td>
</tr>
<tr>
<td>Male</td>
<td>286</td>
<td>25.8</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>1065</td>
<td>96</td>
</tr>
<tr>
<td>African American</td>
<td>32</td>
<td>2.9</td>
</tr>
<tr>
<td>Asian</td>
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<tr>
<td>Asian Indian</td>
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<td>.1</td>
</tr>
<tr>
<td>Caucasian/White</td>
<td>832</td>
<td>75</td>
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<tr>
<td>Latin@</td>
<td>122</td>
<td>11</td>
</tr>
<tr>
<td>Native American</td>
<td>4</td>
<td>.4</td>
</tr>
<tr>
<td>Biracial</td>
<td>40</td>
<td>3.6</td>
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<tr>
<td>Other</td>
<td>9</td>
<td>.8</td>
</tr>
<tr>
<td>Non-White</td>
<td>233</td>
<td>21.8</td>
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<tr>
<td>Marital Status</td>
<td>1096</td>
<td>98.8</td>
</tr>
<tr>
<td>Single</td>
<td>650</td>
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<tr>
<td>Partnered</td>
<td>128</td>
<td>11.5</td>
</tr>
<tr>
<td>Married</td>
<td>258</td>
<td>23.3</td>
</tr>
<tr>
<td>Divorced</td>
<td>56</td>
<td>5</td>
</tr>
<tr>
<td>Widowed</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td>Generation Status</td>
<td>1109</td>
<td>100</td>
</tr>
<tr>
<td>First-Generation</td>
<td>612</td>
<td>55.2</td>
</tr>
<tr>
<td>Non First-Generation</td>
<td>497</td>
<td>44.8</td>
</tr>
</tbody>
</table>
Descriptive Analyses of the independent, dependent, and control variables included in the study were performed to determine if the responses were normally distributed and if the data showed sufficient variability within this sample of college students (see Table 2). An examination of the data indicated that the responses were normally distributed and that there was sufficient variability within the sample.

Table 2

Descriptive Statistics for Continuous Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant Variables</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Age</td>
<td>1023</td>
<td>27.32</td>
<td>9.19</td>
<td>18</td>
<td>62</td>
<td>44</td>
</tr>
<tr>
<td>Independent Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCID</td>
<td>1004</td>
<td>1.92</td>
<td>.589</td>
<td>1</td>
<td>4</td>
<td>3</td>
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<tr>
<td>SDO</td>
<td>932</td>
<td>2.00</td>
<td>.664</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Dependent Variable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI</td>
<td>969</td>
<td>1.76</td>
<td>.548</td>
<td>1</td>
<td>3.77</td>
<td>2.77</td>
</tr>
</tbody>
</table>

Note. SCID = Social Class Identity Dissonance Scale, SDO = Social Dominance Orientation Scale, BSI = Brief Symptom Inventory
Table 3 provides the correlation coefficients for the demographic, independent and dependent variables analyzed in the study. Specific attention was paid to very low and high correlations between variables (the multiple regression assumption of multicollinearity will be discussed further in the primary analysis).

Table 3

Correlation Coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.008</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td>-.020</td>
<td>-.058</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generation Status</td>
<td>.044</td>
<td>-.103**</td>
<td>-.008</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCID</td>
<td>-.034</td>
<td>.009</td>
<td>-.018</td>
<td>-,020</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSI</td>
<td>-.028</td>
<td>-.092**</td>
<td>-.060</td>
<td>.053</td>
<td>.294**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>SDO</td>
<td>.123**</td>
<td>.028</td>
<td>-.057</td>
<td>.011</td>
<td>.064</td>
<td>.060</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Note. SCID = Social Class Identity Dissonance Scale, SDO = Social Dominance Orientation Scale, BSI = Brief Symptom Inventory
*p < .05 level, two-tailed. **p < .01 level, two-tailed.
Listwise N = 820

Mean Comparisons for Variables Between Two Groups

An independent samples t-test was run using SPSS 16.0 to compare the means of gender, age, marital status, race/ethnicity, SDO scores, and BSI scores between participants who identified as first-generation college students (participants who reported that neither one of their parents had received a bachelors degree) and those who did not. Participants who identified Asian Indian (n=1), Native American (n=4), or Other (n=9) as their racial/ethnic identity were not included in the independent samples t-test as there was not enough power to detect differences between these groups. Additionally, participants who identified as widowed (n=4) were also excluded from the t-test due to
the low number of participants in that cell. Results indicated that a statistically significant
difference existed between the groups on age ($F = 7.51 \ p < .01$), with older students more
likely to identify as first-generation college students, and marital status ($F = 15.84, \ p < .01$), with more non-first-generation students reporting to being single. The potential
difference between the two groups on SCID scores was analyzed in the primary analysis,
as it was the first hypothesis of the study. Table 4 provides a detailed overview of the
results of the analysis.

Table 4

*Comparison of Two Sample Means (First-Generation and Non First-Generation
Students)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Difference</th>
<th>SE</th>
<th>df</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.613</td>
<td>.576</td>
<td>1001.9</td>
<td>2.8</td>
<td>.005**</td>
</tr>
<tr>
<td>BSI Scores</td>
<td>-.047</td>
<td>.035</td>
<td>920.6</td>
<td>-1.34</td>
<td>.181</td>
</tr>
<tr>
<td>SDO Scores</td>
<td>-.016</td>
<td>.043</td>
<td>888.5</td>
<td>-.379</td>
<td>.705</td>
</tr>
</tbody>
</table>

SDO = Social Dominance Orientation Scale, BSI = Brief Symptom Inventory
* $p < .05$ level, two-tailed, **$p < .01$ level, two-tailed.

Power and Sample Size

The GPOWER program was used to determine the ideal sample size for the
analyses selected in this study. An a priori analysis indicated that a sample size of at least
86 was necessary for maximum power in a multiple regression including seven
predictors, using a $p < .05$, medium effect size, and a power set at .70. The sample size
for the current study varied in each step of the hierarchical regression equation between
698 and 701; therefore, the sample sizes were more than sufficient for maximum power
in the regression equation. A sample size of at least 271 was necessary for bivariate
correlations using an alpha of $p < .05$, medium effect size, and a power set at .70. The sample size for the current study relating to the correlation analysis was 820, which was more than sufficient for maximum power. Using the same parameters and applying them to an independent samples t-test, a sample size of at least 278 (139 in each group) was necessary for maximum power. For the t-test, the sample size for the current study was 982, thus providing more than sufficient power.

Primary Analysis

This section first addresses the assumptions associated with multiple regression analysis. The discussion then focuses on the analyses and results of the three research hypotheses. The alpha level was set at $p < .05$ for all statistical analyses.

The multiple regression assumptions of normality, linearity, homoscedasticity of residuals, the absence of multicollinearity, and mean independence were examined and evaluated as follows (Tabachnick & Fidell, 2007). Normality was assessed by plotting the residuals for each variable using histograms overlaid by a normal curve. A visual inspection indicated that the residuals were normally distributed about the predicted DV scores. The skewness and kurtosis statistics of the distributions were also analyzed. All variables except for age and gender were within the normal range for skewness (-1 to 1). In large samples such as this study, however, variables with statistically significant skewness (more or less than -1 and 1) do not deviate enough from normality to make a substantive difference in the analysis (Tabachnick & Fidell, 2007). Furthermore, only the race variable had statistically significant kurtosis (less than -3 or more than 3), however, this deviation from normality does not create a substantial difference due to the large
sample size. Therefore, the assumption of normality was met for each of the variables used in the analyses. Please see Table 5 for more information.

Table 5

*Skewness and Kurtosis Statistics*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Skewness Statistic</th>
<th>Kurtosis Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.25*</td>
<td>.42</td>
</tr>
<tr>
<td>Age</td>
<td>1.55*</td>
<td>1.94</td>
</tr>
<tr>
<td>Race</td>
<td>.351</td>
<td>5.79*</td>
</tr>
<tr>
<td>Marital Status</td>
<td>.90</td>
<td>-.57</td>
</tr>
<tr>
<td>Generation Status</td>
<td>.21</td>
<td>-1.96</td>
</tr>
<tr>
<td>SCID</td>
<td>.39</td>
<td>-.43</td>
</tr>
<tr>
<td>SDO</td>
<td>.39</td>
<td>-.58</td>
</tr>
<tr>
<td>BSI</td>
<td>.86</td>
<td>-.01</td>
</tr>
</tbody>
</table>

* = Significant deviation from normality

Linearity was assessed by using scatterplots of the observed predicted values against the expected predicted values and visually determining the fit of the linear model (Tabachnick & Fidell, 2007). Each regression model exhibited acceptable linearity, as the residuals had a straight-line relationship with predicted scores.

Homoscedasticity is closely related to the assumption of normality such that when the assumption of normality is met, the relationships between variables are homoscedastic (Tabachnick & Fidell, 2007). Homoscedasticity was assessed by inspecting the scatterplots for each model. A visual examination of the scatterplots indicated that the variability in scores for all continuous variables were roughly the same at all values of other continuous variables (Tabachnick & Fidell, 2007). Thus, the assumption of homoscedasticity was met.
Multicollinearity is a problem when correlations amongst variables are too high (Tabachnick & Fidell, 2007). Multicollinearity was assessed using tolerances and variance inflation factors (VIF). The values used in the analyses were based on Pallant’s (2007) tolerance cutoff level of less than .10 and a VIF value above 10. Both the tolerance and VIF values were within sufficient range to suggest no problems with multicollinearity. Furthermore, correlation coefficients were also examined in order to evaluate the strength of the relationships between the independent variables. According to the correlation analysis, no independent variables were too highly correlated with one another, indicating no significant overlap between variables.

Mean independence is an assumption of regression that addresses whether the errors of prediction are independent from one another (Tabachnick & Fidell, 2007). This assumption is related to flaws in the research design, such as problems with variability in responses associated with the order in which the cases were received, as well as participants’ physical distance from the source or phenomenon being studied (Tabachnick & Fidell, 2007). Additionally, mean independence is supported when all independent variables that influence the outcome variable are included in the regression model. Therefore, the independent variables used in this analysis were determined by existing literature and theories on the topic so as to prevent from causing non-independence of errors. To statistically evaluate independence of error, the Durbin-Watson coefficient $d$ value was examined, and no autocorrelations were detected ($d = 1.87$. Thus, an independence of errors was assumed.
**Statistical Analyses Addressing Research Hypotheses**

**Hypothesis 1.** The first hypothesis stated, “First generation college students will experience higher levels of social class identity dissonance than non-first-generation college students.” To address this hypothesis, an independent samples t-test was used to determine whether a statistically significant difference existed between first-generation students and non-first-generation students on their social class identity dissonance (SCID) scores. Generation status (first-generation/non-first-generation) was entered as the grouping variable, and SCID scores as the test variable. Results revealed no statistically significant difference between the two groups ($t = 1.38 \ p > .05$). In other words, first-generation college students and non-first-generation students did not significantly differ in the amount of social class identity dissonance they reported. Therefore, the research hypothesis is rejected and the null hypothesis is retained. Please see Table 6 for more information.

Table 6

**Hypothesis 1: Independent Samples T-Test Addressing Mean Differences Between First-Generation Students and Non-First-Generation Students on Social Class Identity Dissonance Scores**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-Generation Students</td>
<td>554</td>
<td>1.94</td>
<td>.61</td>
<td>1.37</td>
</tr>
<tr>
<td>Non-First-Generation Students</td>
<td>450</td>
<td>1.89</td>
<td>.57</td>
<td>1.38</td>
</tr>
</tbody>
</table>

*Note. * $p > .05$

**Hypothesis 2.** The second hypothesis stated, “Social class identity dissonance will explain the relationship between generation status and psychological distress.” To test
this hypothesis, a hierarchical regression was used to assess the directional relationship of the variables. The second hypothesis was based upon the premise of the first hypothesis that first-generation college students would experience higher levels of social class identity dissonance than their counterpoints. However, no statistically significant differences were revealed. Additionally, the correlation between generation status and psychological distress (BSI scores) was non-significant and small ($r = .05, p > .05$). Furthermore, the correlation between generation status and social class identity dissonance scores (SCID) was non-significant, negative, and small ($r = -.02, p > .05$). Regression analysis should only be conducted on data sets in which the independent variables are significantly correlated with one another and with the dependent variable to some degree (Tabachnick & Fidell, 2007). Therefore, because no significant, strong relationships exist between the independent, mediator, and dependent variables, hypothesis two was not tested, as the conditions for mediation were not met.

**Hypothesis 3.** The third hypothesis stated, “Social dominance orientation will moderate, specifically buffer, the relationship between social class identity dissonance and higher levels of reported psychological distress in first-generation college students.” To assess for the potential moderating effect of social dominance orientation on the relationship between social class identity dissonance and psychological distress, a hierarchical regression analysis was conducted. The Mahalanobis distance critical value of 114.06 (df = 7, $p < .05, x^2 = 14.06$) was used to assess for outliers in the multiple regression. A total of 114 multivariate outliers were identified, and were deleted from the multiple regression analysis. Considering the robustness of the sample, generalizability of
the results was not jeopardized due to the deletion of these outlying cases. To control for variables that likely contribute to the relationship between social class identity dissonance and psychological distress, the demographic variables of gender, age, race and generation status were entered in the first block of the regression analysis. Social class identity dissonance scores and social dominance scores were entered into the second block of the regression model. Lastly, the interaction of social identity dissonance scores and social dominance scores (SCIDXSDO) was entered in the third block in model. The BSI was the dependent variable. All continuous, independent variables in the prediction equation (i.e. age, social class identity scores and social dominance orientation scores) were centered in order to prevent problems with multicollinearity (Tabachnick & Fidell, 2007).

The demographic control variables in the first equation (Block 1), contributed significantly to the model, $R^2 = .014 (F = 2.80 [4, 814], p < .05)$, accounting for around one and a half percent of the variance. With respect to social class identity dissonance scores and social dominance orientation scores (Block 2), the block significantly predicted scores on the BSI after controlling for the demographic variables, $R^2 = .10$, $\Delta R^2 = .094, (F = 39.09 [2, 812], p < .001)$, accounting for an additional six percent of the variance. With respect to the interaction of social class identity dissonance and social dominance orientation (Block 3), the block did not significantly contribute to the model after controlling for the demographic variables, social class identity dissonance scores and social dominance scores $R^2 = .100, \Delta R^2 = .000, (F = .05 [1, 811], p > .05)$. For the overall model, the demographic control variable, age, was significant as an individual predictor of psychological distress, $\beta = -.005 t(-2.77) = p < .01$, with older individuals
reporting less psychological distress than their younger counterpoints. Social class identity dissonance was also a significant individual predictor of psychological distress, $\beta = .267$, $t(8.58) = p < .001$. Social dominance orientation and the other demographic variables (gender, race, generation status) did not emerge as individual predictors of psychological distress. Table 7 provides a summary of the analyses.

Table 7

*Hierarchical Regression of Gender, Age, Race, Generation Status, Social Class Identity Dissonance, Social Dominance and the Interaction of Social Class Identity Dissonance and Social Dominance on Psychological Distress (n=706)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Psychological Distress (BSI Scores)</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Block 1.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>-.042</td>
<td>.042</td>
<td>-.035</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>-.005</td>
<td>.002</td>
<td>-.091**</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td>-.034</td>
<td>.027</td>
<td>.044</td>
</tr>
<tr>
<td>Generation Status</td>
<td></td>
<td>.047</td>
<td>.037</td>
<td>.044</td>
</tr>
<tr>
<td><strong>Block 2.</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Gender</td>
<td></td>
<td>-.036</td>
<td>.041</td>
<td>-.030</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>-.005</td>
<td>.002</td>
<td>-.093**</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td>-.016</td>
<td>.026</td>
<td>.021</td>
</tr>
<tr>
<td>Generation Status</td>
<td></td>
<td>.052</td>
<td>.036</td>
<td>.049</td>
</tr>
<tr>
<td>Social Class Identity Dissonance</td>
<td></td>
<td>.266</td>
<td>.031</td>
<td>.288***</td>
</tr>
<tr>
<td>Social Dominance Orientation</td>
<td></td>
<td>.038</td>
<td>.027</td>
<td>.048</td>
</tr>
<tr>
<td><strong>Block 3.</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td>-.036</td>
<td>.041</td>
<td>-.030</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>-.005</td>
<td>.002</td>
<td>-.093**</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td>-.036</td>
<td>.026</td>
<td>.021</td>
</tr>
<tr>
<td>Generation Status</td>
<td></td>
<td>.052</td>
<td>.036</td>
<td>.049</td>
</tr>
<tr>
<td>Social Class Identity Dissonance</td>
<td></td>
<td>.267</td>
<td>.031</td>
<td>.289***</td>
</tr>
<tr>
<td>Social Dominance Orientation</td>
<td></td>
<td>.039</td>
<td>.027</td>
<td>.049</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td>.011</td>
<td>.049</td>
<td>.008</td>
</tr>
</tbody>
</table>

*Note. Psychological Distress: $R^2 = .014$ for Block 1 ($p < .05$); $\Delta R^2 = .094$ for Block 2 ($p < .001$); $\Delta R^2 = .000$ for Block 3 ($p > .05$). **$p < .01$, ***$p < .001*
Summary

Chapter Four provided the results of the preliminary analyses used in this study as well as the primary analyses, which included the results from the statistical tests addressing the three research questions. Hypothesis one was not supported as there was no significant difference between first-generation students and non-first-generation students on social class identity dissonance scores. Preliminary analyses revealed small and non-significant correlations between generation status and social class identity dissonance scores, as well as, non-significant correlations between generation status and psychological distress; therefore, hypothesis two was not tested, as preconditions for mediation tests were not met. With regard to the third hypothesis, the demographic variables of gender, age, race, and generation status did statistically predict psychological distress. In the next step of the regression equation, social class identity dissonance and social dominance explained a significant amount of the variance in the outcome variable over and above the demographic variables. And finally in the last step, the interaction of social class identity dissonance and social dominance did not account for a significant change in variance explained for psychological distress when demographic variables, social class identity dissonance and social dominance were controlled. Finally, the demographic variable of age, and social class identity dissonance scores both accounted for a significant amount of the variance in the final equation; however, the contribution was small. Chapter Five will discuss these results, as well as the implications for these study results, limitations associated with the study, and suggestions for future study.
CHAPTER FIVE
DISCUSSION

This chapter covers a 1) brief summary of the study, 2) discussion of the overall findings related to the three research hypotheses and the implications for these findings, 3) limitations of the study, 4) recommendations for future research, and 5) conclusions.

The multi-faceted characteristics and challenges of being a first-generation college student have been well documented by researchers (Bloom, 2007; Bui, 2002; Hartig & Steigerwald, 2007; London, 1989; Reid & Moore, 2008; Valadez, 1998), but specific psychological factors that may contribute to first-generation students’ experiences of college have received little to no attention. Specifically, while we know that first-generation students are more likely to withdraw from college than non-first-generation students, and that a significant degree attainment gap exists between the two groups of students (Engle & Tinto, 2008), little is known about what factors and experiences influence first-generation students to leave school or to persist and attain college degrees. Furthermore, qualitative studies have revealed that social class identity dissonance is one of the most significant, negative aspects of achieving upward mobility (Aries & Seider, 2007; Jones, 1996; Langston, 1993; Nelson et al., 2006; Ross, 1995), however, no studies have attempted to measure this experience within a population with whom this experience may be commonplace, such as first-generation college students (Aries &
Seider, 2007; Ashford, 2001; Beagan, 2005; Nelson et al., 2006; Reay, 1998).

Additionally, while research has suggested that the multiple challenges and disadvantages facing first-generation college students lead to increased stress and potential mental health problems (Engle & Tinto, 2008; London, 1989; Nelson et al., 2006), no studies have been located that specifically investigate levels of psychological distress in the first-generation population.

Studies on individuals who have felt marginalization and experienced oppression because of their social class status have uncovered a potentially positive aspect of these challenges and disadvantages. Some individuals who have been marginalized because of their upward mobility develop an awareness of social inequality, and a commitment to fighting against social injustices (Beagan, 2005, Jones, 2003, Nelson et al., 2006). When individuals have an awareness and understanding of structural and institutionalized injustice, they may be better able to empower themselves and other oppressed individuals to defy the status quo and surmount challenges. In the case of first-generation college students who are attempting upward mobility through education, having an awareness of inequalities and a passion to fight them may help these students achieve their educational and occupational goals (Diemer, 2009). Furthermore, first-generation college students may be less likely to take personal blame for the challenges and hardships experienced when attempting upward mobility through higher education. Therefore, an awareness of and appreciation for equality may help buffer the negative, psychological repercussions of upward mobility for first-generation students, but this phenomenon has yet to be studied.
The purpose of the present study was to (1) assess potential differences in the level of social class identity dissonance first-generation college students experience as compared to their non-first-generation college peers, (2) address whether social class identity dissonance contributes to psychological distress in first-generation college students, and (3) examine whether an orientation towards equality potentially buffers the relationship between social class identity dissonance and psychological distress. Researchers have postulated that social class identity dissonance exerts a critical influence on individuals’ decision making processes (Nelson et al., 2008), therefore playing a vital role in first-generation students’ decisions to stay enrolled in college. If higher education officials and college counselors have better awareness and understanding of the complex psychological factors influencing the decisions of first-generation students, then more effective services for these students can be developed and implemented in order to close the attainment gap (Engle & Tinto, 2008). Specifically, gaining more knowledge about the intrapsychic experiences of first-generation students will help guide higher education officials towards knowing what types of programs (i.e. counseling, mentoring, tutoring, organizations) would be most helpful for struggling first-generation students (Astin, 1999). Furthermore, college and university counselors will benefit from having a better understanding of the psycho-social issues presented by first-generation college students. Specifically, if college and university counselors are more attuned to the concept of social class identity dissonance and its relationship to psychological distress in first-generation college students, they will be able to provide more accurate and effective treatment for the unique psychological problems presented.
Hypothesis Testing and Implications

The first hypothesis in the present study stated that there would be a difference between first-generation college students’ level of social class identity dissonance compared to non-first-generation college students. Specifically, first-generation students would experience higher levels of social class identity dissonance than their non-first-generation counterpoints. This hypothesis was not supported. An independent samples t-test was used to identify the mean differences between the two groups. No statistically significant differences were found between the groups on social class identity dissonance scores. Thus, first-generation college students and non-first-generation college students did not significantly differ in the amount of social class identity dissonance they reported.

These findings are surprising considering the number of studies that report more difficulties and challenges for first-generation college students. However, there are a number of possible explanations for findings obtained in this study. First, to date, all studies that have examined the concept of social class identity dissonance have been qualitative, with this study being the first that examines this concept in a quantitative nature. The Social Class Identity Dissonance Scale (Nelson et al., 2008) was utilized to measure the experience of social class identity dissonance in this sample; however, this scale was very recently developed and never before used as a psychological, psychometric measure. Nelson et al. (2008) conducted an initial validation study analyzing the factors underlying the scale as well as assessing for reliability. Early analysis of the scale revealed relatively strong psychometric properties, however, results
are tentative until more validation studies are completed. Therefore, because the scale is not yet well established, it is possible that the experience of social class identity dissonance was not accurately captured by the SCIDS used in this study.

Secondly, previous studies that have qualitatively explored the experience of social class identity dissonance have been with individuals who were either enrolled in medical school or had received a Ph.D. (Beagan, 2005; Nelson et al., 2008). Thus, no studies have examined this experience in first-generation college students – a developmentally younger population. It is possible, therefore, that social class identity dissonance is a phenomenon that is experienced by first-generation college students, but is not cognitively and emotionally acknowledged and understood until a later phase in life. Furthermore, it is possible that first-generation students are affected by their experiences of social class identity dissonance, but are not yet able to identify this experience as a primary source of stress and conflict in their lives. In other words, because social class identity dissonance is a psychologically and emotionally complex experience, it may be too complicated for college-aged students to identify during this developmental time period. Therefore, the acknowledgement and identification of social class identity dissonance may be a developmental issue that occurs in a later developmental stage or possibly with even higher degree attainment (e.g., Masters-level or Doctoral-level).

Another potential reason no significant differences were seen between first-generation college students and non-first-generation college students on levels of social class identity dissonance is because of the unique and atypical characteristics of the
sample used in the study. A vast majority of the participants were from Metro State. This particular college is known for and prides itself upon having a diverse, non-traditional student body within a college setting that is uniquely different from many others in that it is located in the heart of large, metropolitan city and has 93% of their population coming from that city (Metropolitan State College of Denver, 2009). Additionally, Metro State enrolls the highest number of students of color in the state (25% of students identify as students of color), and the faculty also has a high number of people of color (21% of faculty identify as people of color). Furthermore, both Adam State College and Metro sampled in this study are the least expensive options for college in the state. Therefore, both colleges are excellent options for students who come from low-income families, cannot afford the cost of other colleges and universities in the state, or who cannot afford to live away from their families. The populations at both colleges, and specifically Metro State, are incredibly heterogeneous, and different from many other larger state schools and private schools which tend to have more homogeneous student bodies. Thus, when a student body comprises more non-traditional and diverse students, there is less concern about isolation and marginalization from the greater, majority student body. It could be that students do not feel isolated and marginalized because there are many students with whom they can identify with. Additionally, it is possible that differences between first-generation students and non-first-generation students at Metro State are not pronounced because of the uniqueness of the college and student body. In fact, the only statistically significant differences found between the two groups were age and marital status. In all other areas, the two groups did not vary significantly.
There are also important implications related to 93% of students enrolled at Metro State coming from the same city. This means that students are not travelling far from home to attend college, and may potentially still be living at home with their families. Therefore, there may not be as much conflict and tension occurring between first-generation students and their parents, as the two different worlds (i.e. home and school) overlap. For example, when a student goes away to attend college, more tension may occur as a result of the student feeling as though they have abandoned their family or left their “roots.” However, when a student attends college in the same city as their family less feelings of abandonment may occur. Furthermore, first-generation students who attend college in the same city where their family lives are better able attend to their family responsibilities since they are near and physically available. Overall, the first-generation students’ motive for attending college may appear and be perceived as less selfish if they stay close to home.

Another important consideration regarding the findings of this study is the prestige, competitiveness and elitism of the colleges from which first-generation students are enrolled at. Institutions of higher education that have very strict requirements for admission, are highly competitive, are known for their prestige, and are costly might be more likely to uphold cultural values in line with upper-class values. Students who attend these types of prestigious colleges and universities are more likely to come from middle to upper class backgrounds, and have more social capital in regards to successfully completing college (Engle & Tinto, 2008). First-generation college students who attend these types of colleges and universities may be more likely to experience heightened
levels of social class identity dissonance, as they have more feelings of isolation and more confusion regarding their social class background. The participants utilized in this study attend colleges that stray from the elitism of more prestigious colleges. For example, the requirements for admission at Metro State are very lenient as the college strives to make it possible for people of all walks of life to enroll in college, with the belief that everyone should have a right to attend college. Therefore, the lack of competitiveness and elitism provides a college setting that is culturally congruent with first-generation college students’ values and upbringings. First-generation college students enrolled at colleges like those in this sample may be more likely to fit in and have higher chances of success than at colleges and universities in which competitiveness, elitism, and prestige dominate the cultural norms.

To summarize, the uniqueness and diversity of the participants in this study could contribute to their not experiencing as much social class identity dissonance as they might at dissimilar colleges and universities. Additionally, the college from which the majority of the sample comes from, Metro State, provides support through a First Year Success Program specifically geared towards first-generation college students. This program is in place to help first-generation students transition into the collegiate life by grouping students from similar backgrounds and interests and provides targeted programs such as peer study sessions, supplemental instruction, personalized advising, academic workshops, mentoring, shared schedules and linked courses. The purpose of this program is to connect students with one another to compound learning and also help students bond with one another and the university so that students are more academically and socially
successful while in college. While no specific statistics are available regarding the effectiveness of this program, it is possible that the type of programming included in the First Year Success Program help orient first-generation students to college life by making it easier for them to connect with peers similar to them and provide additional academic assistance. Unfortunately, this study did not seek information regarding whether students have received support services from their college.

The second hypothesis in the present study stated that social class identity dissonance would partially mediate the relationship between first-generation status and psychological distress. To meet the criteria for running a mediation model, the independent variable (first-generation status) must be statistically correlated with the dependent variable (psychological distress). For this study, being a first-generation student would have to significantly correlate with elevated scores on the BSI (measure of psychological distress). A correlational analysis revealed no such relationship between the two variables and therefore, preliminary criteria for running the mediation model were not met, and the second hypothesis was not tested. In other words, first-generation college status did not correlate with psychological distress as hypothesized.

An independent samples t-test conducted in the preliminary analysis revealed no statistically significant difference between first-generation college students and non-first-generation college students on psychological distress scores. Thus, there again does not appear to be a difference between the two groups of students regarding the amount of distress experienced. Previous research has suggested that first-generation students are more likely be experience higher levels of stress and mental health problems due to their
generation status, however, these findings were not replicated in the present study (Engle & Tinto, 2008; London, 1989; Nelson et al., 2006). This non-significant relationship could again be attributed to the uniqueness of the sample population. Differences between first-generation college students and non-first-generation college students in this sample may not have been found because the college the sample comes from provides effective programming to help first-generation students successfully adjust to college, or the college setting, for multiple reasons stated above, is not qualitatively different from first-generation students’ original background. Thus, conflicts due to value differences, acculturation, isolation, and marginalization may not be as prevalent on this college campus.

The third hypothesis in the present study stated that social dominance orientation would moderate, or buffer, the relationship between social class identity dissonance and higher levels of reported psychological distress in first-generation college students. An independent samples t-test suggested that no significant differences existed between first-generation college students and non-first-generation college students on both social class identity dissonance scores and levels of psychological distress. Thus, the potential moderating effect of social dominance orientation on the relationship between social class identity dissonance and psychological distress was not solely examined in first-generation students, but instead, generation status was controlled for in the first step of the hierarchical model. Gender, age, and race/ethnicity were also included as demographic variables controlled for within the moderation model. Social class identity scores and social dominance scores were entered in the second step of the model, and the
interaction between the two variables was entered in the final step. The findings suggested that the demographic variables entered in the first step were statistically significant predictors of psychological distress, as were social class identity dissonance scores and social dominance orientation scores. The interaction effect was not significant; therefore, the third hypothesis was not supported. Further inspection of the regression analysis showed that age and social class identity dissonance, in particular, were significant individual predictors of psychological distress.

Previous research has primarily defined the experience of upward mobility as negative and difficult for those who advance in social class status. Yet, in some qualitative studies exploring upward mobility, participants have described gaining a positive sense of socio-political awareness in which their marginalized status has allowed them to understand how greater societal injustices and inequalities disadvantage groups of people (Beagan, 2005; Jones, 2003; Nelson et al., 2008). Additionally, participants in these studies have described experiencing more empathy for minority and oppressed groups, and have insinuated an attitudinal stance against inequality and social dominance. While not inherently discussed within these qualitative studies, it was hypothesized that having an anti-social dominance stance would help empower upwardly mobile individuals to work towards their educational and occupational goals in spite of the obstacles and disadvantages faced. Furthermore, an enhanced perspective on the challenges and disadvantages hindering upwardly mobile individuals would hypothetically develop, and self-blame and internalized oppression would be reduced. Yet, this hypothesis was not supported by the current findings of the study.
Three potential reasons exist for why an anti-dominance orientation did not buffer the relationship between social class identity dissonance and psychological distress. First, it is possible that the Social Dominance Orientation scale (SDO; Pratto et al., 1994) used in this study was not the most accurate and appropriate scale to capture the phenomenon being examined. The SDO scale assesses for individuals’ attitudinal orientation towards social dominance and inequality. Questions ask participants for their orientation either towards equality or against it. It is possible that an individual’s orientation towards equality might not be the phenomenon that results from being marginalized. Instead, perhaps one’s awareness of and motivation towards making social change better captures the phenomenon described in previous qualitative studies. Unfortunately, no scales assess this type of orientation towards social justice. While the SDO scale may be the closest related scale to assess this phenomenon thus far, it may still be limited in capturing the true experience.

Secondly, it is possible that participants did not answer the SDO accurately because of issues with social desirability. The questions asked on the SDO (i.e. Some groups of people are simply not the equals of others) are sensitive, and participants may not have felt comfortable answering honestly for fear of seeming intolerant and bigoted. The overall mean score on the SDO was relatively low \( (m = 2) \), indicating that the majority of individuals endorsed low scores on social dominance.

Another likely possibility for the non-significant results for the third hypothesis is that social dominance orientation does not moderate the relationship between social class identity dissonance and psychological distress, but instead mediates the relationship.
between social class identity dissonance and academic motivation. It was assumed that once an individual gains better awareness of the source of their challenges and disadvantages, less internalized oppression takes place, eliminating negative thoughts and emotions related to psychological distress. However, it is possible that while internalized oppression decreases, one still experiences stress and psychological distress as a result of the obstacles faced while in school. Even though an individual may have an awareness of the socio-political climate, and is orientated towards societal equality, the specific challenges faced as a marginalized individual are still very difficult to deal with, causing pain, frustration and anger. Thus, psychological distress is not completely eliminated. Instead, social dominance orientation, specifically an anti-dominance stance, motivates individuals to move forward, defy status quo, and achieve their educational and occupational goals. A similar hypothesis was studied by Diemer (2009), who found that “sociopolitical development” had a positive, longitudinal impact on occupational attainment in poor youth of color. Therefore, while a marginalized individual’s psychological problems aren’t buffered by their anti-dominance orientation or sociopolitical awareness, it is possible that his/her motivation to succeed may be.

Summary of Implications

The literature has provided mounting evidence for the negative psychological effects of experiencing upward mobility. Social class identity dissonance, a new concept within this literature, has been theorized to be an increasingly painful challenge to individuals who experience upward mobility through social class jumping (Nelson et al., 2008). The findings of this study provide the first empirical support for a major tenet of
the theory of social class identity – that social class identity dissonance is associated with psychological distress. Specifically, social class identity dissonance was found to be significantly and positively correlated with, and also a significant individual predictor of, psychological distress. While qualitative studies have insinuated that conflicting and complex emotions, and marginalization and isolation resulting from social class identity dissonance contribute to psychological distress in upwardly mobile individuals, no empirical studies have examined whether an actual relationship exists. Thus, this study contributes to the existing literature by providing support for the premise that social class identity dissonance contributes to general levels of psychological distress among undergraduate students.

Previous research suggests that first-generation college students experience confusion regarding their social class identity, especially compared to their non-first-generation peers. Yet this was not supported in the present study. While surprising, the lack of significant differences seen between first-generation college students and non-first-generation students on levels of social class identity dissonance elicits a number and variety of important questions regarding the phenomenon in this specific population. First, has the concept of social class identity dissonance been accurately defined, assessed, and captured by the SCIDS measure? Can this complex psychological experience be measured psychometrically? Additionally, are first-generation college students experiencing social class identity dissonance, but too overwhelmed by and/or developmentally immature to not know how to identify, define or explain it? Third, was the sample that was used in the present study atypical of the overall first-generation
college student population? If so, what might be working in favor of the first-generation students in the sample who did not have significantly more dissonance and distress than their peers? What characteristics of the colleges used in the sample have helped facilitate first-generation college student adjustment? And lastly, what types of services at these specific institutions have been utilized in helping first-generation college students, and how effective have they been?

The lack of significant findings on the third hypothesis also elicits a variety of questions regarding the potential positive aspects of social class identity dissonance, and how these aspects might buffer psychological distress and/or increase academic motivation and success in first-generation college students. How do we define and measure the experience of first-generation college students gaining insight into the socio-political factors that impact the disadvantages and challenges they face, and the empowerment that results from having this understanding? Does having an understanding and awareness of inequality and injustice, empathy for other minority groups, and social justice empowerment reduce psychological distress in individuals, or does it increase academic motivation and success? Lastly, how does social justice awareness, empathy, and empowerment develop and grow, and how should it be facilitated in the first-generation college student population?

While few statistically significant findings were present in the study, more light has been shed on the concept of social class identity dissonance and its potential impact on first-generation college students. Clearly, more research is needed in order to better understand this complex phenomenon.
Study Limitations

There are several limitations of the present study that deserve attention. First, while the sample was very large and provided a significant amount of power to detect both medium and small effect sizes, it also was a convenience sample from colleges that were known to have a large amount of first-generation college students. Furthermore, the majority of the sample came from one college. The college from which the majority of the data was collected is not a traditional, four-year college in that the majority of the individuals enrolled at the school reside in the same city as the college. Additionally, the college is a commuter college, with no on-campus housing. Moreover, the college has lenient admission standards and requirements, is the second least expensive college, and the most diverse student body in the state, comprising a large number of non-traditional students. The uniqueness of the sample may have played a role in the lack of significant results, and it is unclear how different the findings would be if the sample had been collected from students at traditional four-year colleges, or from private institutions. Additionally, the study was limited by the lack of colleges elicited for participation in the study. Overall, while the sample size of the study was large, the generalizability of the study was still compromised due to the convenience and uniqueness of the sample.

While every effort was made to choose measures that had been tested for reliability and validity within the literature, there are limitations associated with one of the measures included in this study. The Social Class Identity Dissonance Scale (SCIDS; Nelson et al., 2008) is a newly developed measure that assesses the experience of social class identity dissonance in individuals. Previous research has established solid
psychometrics for the scale, including strong reliability and validity statistics. However, no previous studies had yet utilized the scale to measure the actual construct within a population, and the present study was the first to do so. Therefore, the scale has not yet been widely used in the field as the construct was recently defined, and is only beginning to receive attention. Future studies are warranted to determine the overall utility of the scale as little to no information is known about the scale’s use with different sub-populations, what predicts the experience of social class identity dissonance, and what other constructs are positively and negatively related to the construct.

Other limitations of the study include various aspects regarding the research design. First, no information was sought about the types of support services first-generation college students might be receiving while in college. For example, it is possible that a number of the first-generation college students in the sample were either receiving support through the federally funded TRIO program at the college or had participated in the First Year Success Program. These types of support programs might buffer the experience of social class identity dissonance in first-generation college students and therefore, confound the findings of the study.

Secondly, a primary reason for studying first-generation college students is because of the significant degree attainment gap that exists between these students and non-first-generation college students. First-generation college students are more likely to drop out of college early and never attain their degree than their peers are (Engle & Tinto, 2008). A limitation of the present study is the lack of investigation into academic motivation, persistence and degree attainment. This type of study would more than likely
require a longitudinal study, which was not possible within this study. However, the holes in the current literature could potentially be filled by a study that examines the relationships between social class identity dissonance and academic motivation, persistence and degree attainment.

Third, as with any study that is not a randomized, controlled study, causation cannot be inferred. Thus, while the current findings reveal a significant positive correlation and predictor relationship between social class identity dissonance and psychological distress, no information is available about whether social class identity dissonance directly causes psychological distress.

Lastly, similar to other electronic survey studies, this sample utilized only self-report measures, and one measure for each construct was used in order to reduce response burden. It is well established in the literature that scores on self-report measures are often contaminated by social desirability and/or respondent bias (Heppner, Wampold, & Kivlinghan, 2008). Although there was a risk of response bias, utilizing an electronic survey with self-report measures and anonymity of the respondents, was the most efficient and efficacious way to collect data for the current study.

Recommendations for Future Study

This study was designed to explore relationships between social class identity dissonance, social dominance orientation and psychological distress examined within the first-generation college student population. Participants were recruited from two, four-year colleges located in one state in the western part of the country. Both of these colleges were chosen because of the number and variety of non-traditional students
enrolled at the schools. It will be important for future research to focus on first-generation college students attending a variety of colleges in a range of geographic areas, including rural, suburban and urban settings. Additionally, future studies may attempt to sample first-generation college students who moved further away from home—to another state or another region of the country. Furthermore, it would be interesting to sample first-generation college students who specifically grew up in areas of the country where seeking higher education is not the norm (i.e. Appalachia, South Chicago) in order to see if the experience of social class identity dissonance is exacerbated within these types of populations.

Future studies may also consider sampling from more traditional four-year colleges and/or from private institutions of higher learning. The experience of social class identity dissonance may be more prevalent in first-generation college students at these types of colleges and universities as these schools tend to enroll less first-generation students, and as a result, these students may feel more isolated and alone. Furthermore, the actual college setting may feel vastly different from first-generation students’ home lives, and therefore, more dissonance might occur.

An important area of future research is to further investigate the construct of social class identity as well as continue more validation studies on the Social Class Identity Dissonance Scale (Nelson et al., 2008). Future research will continue to establish the reliability and validity of the scale as well as help to further the practical utility of the instrument within the psychology field. Moreover, the scale has thus far only been used with the college student population, and would benefit from further study in other sub-
populations from which this experience might occur (i.e. those who marry into another social class, those who jump classes through their occupation). It would also be interesting to explore whether social class identity dissonance occurs in a downshift of social class. In other words, does social class identity dissonance occur in individuals who go from a higher social class to a lower social class (i.e. individuals who lose their jobs during the recession, individuals who lose social status through divorce)? How is this experience similar and/or different from those individuals who jump class?

Additionally, future studies could examine if differences occur in the experience of social class identity dissonance for ethnic/racial minority populations, and whether more difficulties arise for this population based on both social class identity dissonance and racial/ethnic acculturation problems.

While previous research on first-generation college students has indicated that social class identity dissonance is an experience that is likely to occur within this population, the present findings did not suggest that this experience was more common for these students than for non-first-generation college students. Previous qualitative studies on the challenges and difficulties of upward mobility have only been conducted on individuals who had graduated from the academy and were now academics, and on medical students. Thus, it is unclear whether the experience of social class identity dissonance is more likely realized when individuals either advance further in their academic studies or when they are developmentally more advanced. Future studies should investigate whether social class identity dissonance is a developmental process.
that is only later identified, defined, and understood once an individual is more
developmentally mature or has advanced to an even higher degree of education.

Finally, more information regarding what factors promote academic persistence
and degree attainment would be highly beneficial to closing the degree attainment gap for
first-generation college students. What sort of programs and/or services for first-
generation college students help buffer their experiences with social class identity
dissonance? How does social support and mentoring play a role in easing feelings of
marginalization and identity dissonance for first-generation students? What sort of
counseling interventions would be most effective in helping first-generation college
students cope with their social class identity dissonance? At this time, little information is
known about what services might best help first-generation college students succeed in
college. Yet, it appears as though the current services in place for these students have not
yet helped enough to close the attainment gap (Engle & Tinto, 2008).

Conclusions

The current study examined the differences between first-generation college
students and non-first-generation college students on levels of social class identity
dissonance, as well as the relationships between social class identity dissonance, social
dominance orientation and psychological distress. Results indicate that no differences
exist between first-generation college students and non-first-generation college students
on scores of social class identity. This finding contradicts previous literature suggesting
that first-generation students experience identity dissonance and additional disadvantages
that non-first-generation students to not face. Results also indicate that social class
identity dissonance is positively related to, and a significant predictor of psychological distress. This finding is consistent with theoretical research on social class identity dissonance, and contributes to the field by providing the first empirical support for a major component of the theory. While all three hypotheses were not supported by the data, a number of questions and implications arose from the findings, inciting a multitude of areas for future study. This study had several limitations, yet the findings and implications provide further evidence that social class identity dissonance should be considered an important experience that can cause psychological distress to individuals, and an experience that needs further study to better understand its complexity and effects.
References


APPENDIX A

Demographic Questionnaire

1.) Gender: Male ___ Female ___ Other ___

2.) Age: ___

3.) Race/Ethnicity: African American/Black ____ Asian/Pacific Islander ____ Latin@/Hispanic ___
   White/Caucasian ____ Asian Indian ____ Other (please specify)___________________________

4.) Marital Status: Single____ Partnered____ Married_____ Divorced_____ Widowed_____

5.) Degree working towards: B.A./B.S.______ Associates________

6.) Major: _____________________________

7.) What year are you? (1) Freshman____ (2) Sophomore_____ (3) Junior_____ (4) Senior____
   (5+) Five Year and beyond ____ Other (please specify)_______________________________

8.) What are you enrolled as? Full time____ Part-time____ Less than part-time___

9.) What is your primary paternal caregiver’s highest level of education?
   Ph.D ____ Masters ___ Bachelor’s ____ Some college ___ High School Diploma/GED ___
   Some high school ____ None of the above ___

10.) What is your primary maternal caregiver’s highest level of education?
    Ph.D ____ Masters ___ Bachelor’s ____ Some college ___ High School Diploma/GED ___
    Some high school ____ None of the above ___

11.) What is your sibling’s highest level of education?
    Ph.D ____ Masters ___ Bachelor’s ____ Some college ___ High School Diploma/GED ___
    Some high school ____ None of the above ___
12.) For whom are you a caretaker for: Children _____ Parents _____ Siblings _____ 

Grandparents_____ Other family member: _____ Other (please specify)____________________________

13.) Did you ever receive help or advice from a high school guidance counselor or teacher regarding information about college? Yes/No

14.) Have you received help or advice from a college advisor, professor, or staff member regarding your transition into college? Yes/No
APPENDIX B

Social Class Identity Dissonance Scale

For the following items, we will use the word “lifestyle.” When you think about the lifestyle you would like to have, think about how much money you would like to make, how much education you would like to obtain, and how many material things you would like to have.

Evaluate each item using the following scale: 1 = Strongly Disagree  2=Disagree, 3=Neutral, 4=Agree, and 5 = Strongly Agree.

1. If I chose a lifestyle that was too different from my siblings, I am concerned that they may not want to be close anymore.

2. In social situations with people from lifestyles like the one I aspire to have, I keep quiet about my background, so they will not think less of me.

3. I do not share information about my background to people who have lifestyles like I aspire to have, because I worry that they would think less of me.

4. If I chose a lifestyle that was too different from my parent(s), I would feel bad about hurting their feelings.

5. If I chose a lifestyle that was too different from my sibling(s), I would be afraid that they would feel bad about themselves.

6. If I chose a lifestyle that was too different from my parent(s), I am afraid that they would resent me.

7. If I chose a lifestyle that was too different from my friends, I am concerned I won’t know how to fit in with new people.

8. I do not take new friends home to meet my parents because if they saw the lifestyle of my parents, they would think of me differently.

9. If I choose a lifestyle that was too different from my friends, I am afraid I will lose interest in being with them.

10. If I chose a lifestyle that was too different from my friends, I would feel bad about hurting their feelings.

11. I do not take new friends home to meet my parents because I would be embarrassed for them to see the lifestyle of my parents.
12. If I choose a lifestyle that is very different from that of my parent(s), I am concerned I won’t remain close with my parent(s).

13. If I chose a lifestyle that was too different from my parent(s), I am afraid I will lose interest in being with them.

14. When people talk about lifestyles that are different from the one in which I grew up, I don’t ask any questions, because I’m afraid that they will think less of me if I do.

15. If I chose a lifestyle that was too different from that of the people I grew up with I’m concerned we will then have nothing in common.

16. If I chose a lifestyle that was too different from that of my parent(s), I am afraid my parents won’t want to be close anymore.

17. If I chose a lifestyle that was too different from my friends, I am concerned the new people in my life won’t understand me.
Social Dominance Orientation Questionnaire

Directions: Please rate your agreement or disagreement with the statements using the following scale:

1            2    3          4         5
Strongly Disagree     Somewhat Disagree           Neutral               Somewhat Agree        Strongly Agree

1. Some groups of people are simply not the equals of others.
2. Some people are just more worthy than others.
3. This country would be better off if we cared less about how equal all people were.
4. Some people are just more deserving than others.
5. It is not a problem if some people have more of a chance in life than others.
6. Some people are just inferior to others.
7. To get ahead in life, it is sometimes necessary to step on others.
8. Increased economic equality.
9. Increased social equality.
11. If people were treated more equally we would have fewer problems in this country.
12. In an ideal world, all nations would be equal.
13. We should try to treat one another as equals as much as possible (All humans should be treated equally).
14. It is important that we treat other countries as equals.

APPENDIX D

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Brief Symptom Inventory

“Here is a list of problems people sometimes have. Please indicate how much that problem has distressed or bothered you during the past 7 days including today.

Please answer the question using the following scale: 0 = Not at all, 1 = A little bit, 2 = Moderately, 3 = Quite a bit, 4 = Extremely

DURING THE PAST 7 DAYS, how much were you distressed by:

1. Nervousness or shakiness inside
2. Faintness or dizziness
3. The idea that someone else can control your thoughts
4. Feeling others are to blame for most of your troubles
5. Trouble remembering things
6. Feeling easily annoyed or irritated
7. Pains in the heart or chest
8. Feeling afraid in open spaces
9. Thoughts of ending your life
10. Feeling that most people cannot be trusted
11. Poor appetite
12. Suddenly scared for no reason
13. Temper outbursts that you could not control
14. Feeling lonely even when you are with people
15. Feeling blocked in getting things done
16. Feeling lonely
17. Feeling blue
18. Feeling no interest in things
19. Feeling fearful
20. Your feelings being easily hurt
21. Feeling that people are unfriendly or dislike you
22. Feeling inferior to others
23. Nausea or upset stomach
24. Feeling that you are watched or talked about by others
25. Trouble falling asleep
26. Having to check and double check what you do
27. Difficulty making decisions
28. Feeling afraid to travel on buses, subways, or trains
29. Trouble getting your breath
30. Hot or cold spells
31. Having to avoid certain things, places, or activities because they frighten you
32. Your mind going blank
33. Numbness or tingling in parts of your body
34. The idea that you should be punished for your sins
35. Feeling hopeless about the future
36. Trouble concentrating
37. Feeling weak in parts of your body
38. Feeling tense or keyed up
39. Thoughts of death or dying
40. Having urges to beat, injure, or harm someone
41. Having urges to break or smash things
42. Feeling very self-conscious with others
43. Feeling uneasy in crowds
44. Never feeling close to another person
45. Spells of terror or panic
46. Getting into frequent arguments
47. Feeling nervous when you are left alone
48. Others not giving you proper credit for your achievements
49. Feeling so restless you couldn’t sit still
50. Feelings of worthlessness
51. Feeling that people will take advantage of you if you let them
52. Feeling of guilt
53. The idea that something is wrong with your mind