OCCUPATIONAL ENGAGEMENT VARIATION ACROSS SOCIAL CLASS:
HOW RELATIONSHIP SKILLS MODERATE

BY
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Abstract

The purpose of this study was to better understand variables that influence students of low socioeconomic status in their career development. The study was conceptualized on the basis of Super's (1957) assertion that environmental and individual factors interact to influence the course of a person’s career development. Differential social status, derived from Lent, Brown, and Hackett’s (1994) Social Cognitive Career Theory, includes: economic resources – basic needs, economic resources – amenities, social power, and social prestige; and was operationalized as the environmental variable in this study. Self-differentiation, a central construct of Bowen’s Family Systems Theory, includes: emotional reactivity, emotional cutoff, fusion with others, and ability to take an I-position; and was operationalized as the individual variable in this study. Differential social status and self-differentiation served as independent variables in a step-wise multiple regression analysis to predict amount of career exploration, operationalized by career engagement, a central construct of Krieshok and colleagues (2009) Trilateral Model of Adaptive Career Decision-Making. It was hypothesized that differentiation of self would moderate the relationship between social status and occupational engagement in a student sample of 560 university students. Further, it was hypothesized that self-differentiation would correlate positively with occupational engagement for students of lower socioeconomic status, with no such correlation for higher income students. Finally, self-differentiation was hypothesized to correlate inversely with social status. Results included no significant relationship between self-differentiation and social status; differentiation of self and social status each individually explained a statistically significant, though modest, amount of variance in occupational engagement; however no significant moderating relationship existed in terms of how self-differentiation affected the relationship between social status and occupational engagement. Implications for theory and practice, limitations, and directions for future research are discussed.
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Chapter I

Introduction

The rules of work have changed. Job insecurity will impact everyone at some point, and is now the norm rather than an avoidable consequence. Indeed market surveys in recent years have seen working adults report changing jobs an average of ten times during adulthood (Savickas, 2012). Career engagement will help to prepare for the job insecurities inherent in the job market, where jobs are now “more aptly called assignments” (Savickas, 2012, p. 13). Savickas, a prominent career researcher and theorist, encourages career counselors to prepare clients to be adaptable. Engagement in enriching and exploratory activities is the ideal for which to strive to build adaptability, as it encourages active involvement in pursuing activities that will allow a person to develop interests and acquire transferrable skills, in essence, learning the skill of adaptability.

Occupational Engagement

For college students, learning to be adaptable requires much more than classroom participation. In preparation for acting as their own agent, it involves seeking enriching and exploratory activities like: campus organizational affiliation, interaction with professors in one’s major, volunteer and internship experience in areas of interest, and knowledge of trends and opportunities in one’s field (Krieshok, Black, & McKay, 2009). Engagement provides the decision-maker with the fund of information and experiences on which they can then make informed decisions about their likes and dislikes, their talents and aptitudes, and in general the world of work. Krieshok et al. (2009) developed the Trilateral Model of Adaptive Career-Decision
Making to facilitate the shift away from the matching-model and toward experiential learning as the cornerstone of effective decision making. The authors described the centrality of engagement to career decision-making:

Through occupational engagement, vocational and self-schemas evolve and vocational judgments and decisions are more informed, as are judgments about the larger host of life matters. Adaptive career decision making, in which decision making is enhanced through the accumulation of information and experience, becomes possible as a result of occupational engagement (Krieshok et al., 2009, p. 284).

Beyond the benefits that increased exploration and enrichment activities provide for the vocational decision-maker, engagement also increases the probability that individuals will stumble upon unexpected career opportunities, or planned happenstance (Mitchell, Levin, & Krumboltz, 1999). Given the uncertainties and lack of linearity in today’s career trajectory, it has become advantageous to remain flexible about one’s future. This uncertainty, reframed as open-mindedness, can transform chance encounters into discovery of new interests or possible job experiences. These encounters are not entirely by chance, however, in that they are designed in the sense that the person must seek out experiences and knowledge in areas that they value for careers and keep an open mind when new opportunities present themselves, thus sculpting their own unique career path.

**Socioeconomic Status**

If occupational engagement is the avenue to optimal vocational outcomes, then it is important for career counselors to consider the factors which may inhibit such engagement and intervene whenever possible. In considering the barriers faced by low
socioeconomic status, or low social status students, one might expect a lack of engagement. Many students must focus on financial insecurities and must work more than part-time in order to pay for school. The current economic reality since the housing crash of 2007 has changed how students approach going to college. The Higher Education Research Institute of UCLA sends out national surveys to colleges and universities across the country.

The 2012 Cooperative Institutional Research Program (CIRP) surveyed 192,912 first-year students at 283 four-year colleges and universities across the nation. The most recent data from the CIRP Freshman Survey report showed students’ living and working choices have changed in the wake of a stagnant economy. The percentage of incoming students indicating they planned to live with their family or other relatives rose 2.2 percentage points, from 15.0% in 2011 to 17.2% in 2012. On average, 50% of the students planned to balance school with a job to pay for college expenses. Of those, 7.7% planned to work full time (Pryor et al., 2013). Students such as these, working long hours and dependent on a stable paycheck, would likely find less time to be engaged in campus related activities like volunteering, clubs, spending extra time with professors, or unpaid internships.

Unfortunately, little vocational research has been done on social status and, as Diemer and Ali (2009) argued, the impact of social status “upon career development is obfuscated because social class is a poorly understood construct” (p. 3). Brown (2000) attempted to clarify the multiple variables researchers sought to account for as they consider the impact of social status on vocation. Brown encouraged researchers to consider three salient dimensions of a person’s environment in the context of social
status which research had indicated can greatly influence a person’s career behavior: economic resources, prestige, and politico-legal power (2000). Brown further argued that these dimensions only become salient to the extent and degree to which they differ from the referent group:

[A]ccess to and control of different levels and types of economic resources, social valuation, and societal influence and control are more important to and influential of individual career behavior to the extent that that access and control are distinctive relative to the general population. (2000, p. 375)

Recent research has begun to acknowledge the centrality of social status to vocational behavior. Furthermore, vocational researchers have begun to consider the social group factors that lead up to a person’s behavior, such as how groups conceptualize work. Chaves, Diemer, Blustein, et al. (2004) conducted a qualitative study of low-income urban adolescents to gain an understanding of what value they place on work. Eighty 9th grade students were enrolled in a vocational program and were asked to complete a worksheet asking questions such as “What have you been told in your family about working?” and “Would you work if you could do something else that would give you money?” Coding and analysis of their responses suggested that the students viewed work primarily as a means to an end or a way to make money to sustain one’s living. This value system may at first seem short-sighted until one considers Blustein’s synopsis of career trajectory that most of the low-income students who participated in his students were on; “[a] one-way journey to a world of unskilled and dead-end jobs”(2002, p. 321). This contrasted with the trajectory of middle-class youth in the study, who, if they did work the same unskilled jobs, were doing so
intermixed with more developmentally meaningful experiences and for shorter periods, while knowing they would transition to more meaningful and lucrative work experiences down the road. Furthermore, the parents of the children of higher social status, were more likely to provide financial support and assistance with career planning and valuable community connections, which the lower social status parents did not have the resources and experiences to provide. This supported Brown’s argument (Brown, 2000; Brown, Fukunaga, Umimoto, & Wicker, 1996), and Social Cognitive Career Theory (Lent & Brown, 1996), which posit that the implications of social status extend far beyond income or financial capital.

Given the multiple and compounding negative factors that persons of lower social status face, it seems surprising that underprivileged youth find their way to successful and fulfilling work. However, there is evidence that overcoming such adversities can be advantageous (Kerr, 2011). Kerr (2011) found that the farther from privilege that underprivileged gifted women start, provided they have some access to opportunities, the more likely they are to persist in their career goals. Ironically, upper middle-class white women have more disappointing careers than women from lower incomes who showed similar promise.

Self-Differentiation

In addition to resilience and determination, which underprivileged students likely must draw on to maintain the demands of university study and financial stability, some research on relationship skills suggests that the lower social status participants in the studies may have a greater advantage in interpersonal relationships. Recent studies lend credence to this claim. Kraus et al. (2010) found that the lower socioeconomic
status (SES) participants in their study were able to more accurately read the emotional reactions of their interaction partners than their higher-status counterparts across three studies. Kraus and Keltner (2009) found that the lower SES participants showed more engagement-related behaviors in 5 minute “getting acquainted” interactions with a stranger. Engagement related behavior cues included nodding one’s head, eyebrow raises, appropriate laughter, and sustained eye contact (Kraus & Keltner, 2009). Stellar et al. (2012) suggested that these interpersonal skills could serve several purposes such as garnering support that may provide buffers in facing many vulnerabilities associated with low SES. Stellar’s argument was based on the tend-and-befriend strategy of coping with stress (Taylor, 2006), and the reality that lower socioeconomic class neighborhoods have more incidences of violence and aggression, necessitating more developed interpersonal skills (Wilson, Kirtland, Ainsworth, & Addy, 2004). Stellar’s subsequent study indicated that lower SES individuals did in fact have a greater capacity to respond with greater compassion to others, by being more attuned to and able to interpret the emotional experiences of others (Stellar et al., 2012). The difference in compassionate responding stemmed from a better ability to identify environmental factors that would affect those who were “suffering”. In other words, the lower SES students did not succumb to the attribution bias that often impairs most people’s interpretations of the actions of others.

Differentiation of self is a widely recognized concept of Bowen’s family systems theory. Differentiation of self is considered essential for psychological health as well as for sustaining healthy interpersonal relationships (1978). The construct of differentiation of self encompasses both intrapsychic stability and interpersonal
effectiveness. It may be a reasonable construct to capture the dynamics of prosocial behavior described in the research related to social status and interpersonal skills.

**Purpose and Hypotheses**

Understanding the skills and interpersonal resources underprivileged students use to their advantage and helping them transfer these skills towards career engagement is an important consideration for career counselors. Self-differentiation, a construct which encompasses intra-psychic and interpersonal factors that explain how a person conducts self in relationships with others, may best encompass these factors (Bowen, 1978). Preliminary research suggested that people who were self-differentiated had greater adaptability in navigating the social activities required for effective career engagement (Keller, 2007; Murdock & Gore, 2004; Skowron, Wester, & Azen, 2004; Williamson, et. al., 2007).

The current literature review and subsequent study were guided by the following questions:

- How does social status impact the occupational engagement of college students?
- How does self-differentiation manifest across social status in the college population?
- Does self-differentiation moderate the relationship between social status and occupational engagement?

The literature review highlights the theoretical import of the factors examined in this investigation, as well as the findings of associated studies. The intention is to expand upon and support the rationale presented above. The review underscores the appropriateness of using the Trilateral Model of Career Decision Making to provide a structure for vocational discussion; presents an overview of the Trilateral Model and
Social Cognitive Career Theory; defines Occupational Engagement; summarizes the current occupational engagement research; defines Differential Social Status and related literature; defines Differentiation of Self, and presents a rationale for selecting differentiation of self as a relational variable of interest.
Chapter II

Review of the Literature

Studies have suggested that socioeconomic status is an important predictor of health outcomes. While economic indicators have long been a cursory variable measured in social science research, it is only within the last few years that the study of the impact of socioeconomic disparity has been a focus in the field of psychology. With any construct of interest in research, it is critical to define it in differentiating and measurable terms, especially those which can be generalized in order to derive broader conclusions for further application. It is evident when examining recent socioeconomic research that the social sciences are still in the process of determining the most salient indicators of social and economic status by which to predict differential outcomes. In an honest effort to contribute to this important and growing body of research on the impact of socioeconomic disparity, it is essential to review the evolving methods of defining and measuring SES. The following is a review of several significant findings in relation to SES, in order to show it as a relevant variable of interest in relation to occupational outcomes, among other things.

History of SES measurement in Psychology

In recent decades, the field of psychology has embraced the importance of social justice and endeavored to understand and support marginalized peoples, through practice, as well as through research. Meaningful progress has been made in research and practice to understand the experiences of racial/ethnic minorities and continuing such work is essential to our field. However few in research, public policy, and practice have attended to social status. Several factors have made this endeavor
elusive: first, socioeconomic status groups have exhibited no politically recognized
group identity and thus no political mobilization (Karen, 1991); second, education is
prized to be a way out of poverty (DiMaggio & Mohr, 1985; Trow, 1992) even though
evidence suggests that this is more the American “dream” than reality (Walpole, 2003);
and finally, despite mounting evidence against the possibility of low socioeconomic
status individuals “raising themselves up by their bootstraps” or other hints of the
Protestant work ethic weaved into our cultural identity (Cozzarelli, Wilkinson, &
Tagler, 2001), many Americans still blame personal rather than structural causes for
economic disparities (Kluegel & Smith, 1986), and almost half believe, erroneously,
that opportunities for improving one’s condition have increased in 30 years (Scott &
Leonhardt, 2005). In an effort to resolve the oversight of social status disparities
research, and in order to present the topic with depth and coherency, this study focuses
specifically on social status and limits discussion of race and ethnicity, while
acknowledging that there is significant intersection between race and poverty in the
United States which merits further study as well (American Psychological Association,
2006).

Social inequality research has lacked a theory on which to identify the
population, which may have compromised the predictive and prescriptive utility of
results. For example, Sirin (2005) conducted a meta-analysis of studies relating
academic achievement and SES between 1990 and 2000. He found a medium to strong
relationship between the two; however his results were moderated by the units of
measurement used for SES and the range of measures used. He reported that the
following measures of SES were used, and most in combination: parental education
attainment (30 studies), parental occupational status (15), family income (14),
eligibility for free or reduced-price lunch (10), neighborhood (6), and home resources (4).

The lack of clarity and uniformity in measurement spawned a dialogue about the ways in which we, as researchers, as practitioners, and as a culture define such characteristics as class and privilege (American Psychological Association, 2006; Brown, 2000; Brown et al., 1996; Citro & Michael, 1995; Diemer & Ali, 2009; Fouad & Fitzpatrick, 2009; Liu, Ali, et al., 2004; Liu, Soleck, Hopps, Dunston, & Pickett, 2004; Mueller & Parcel, 1981; Oakes & Rossi, 2003).

Several critics have highlighted the complications inherent in the lack of uniformity predominant in SES classification that exist across disciplines like psychology, health psychology, and sociology (Brown et al., 1996; Diemer & Ali, 2009; Liu, Ali, et al., 2004). In reviewing studies of social status in relation to work and retirement behavior between 1990 and 1996, Brown and colleagues found that SES was included as a control variable or as an exploratory afterthought rather than explanatory (Brown, et al., 1996). Social status is rarely the focus of research in psychology (Brown et al., 1996; Frable, 1997), as psychology has predominantly focused on individual variables, to the exclusion of the important impact of cultural and contextual variables that drive many of our social interactions (Argyle, 1994; Brown, et al., 1996).

Despite the lack of a universally agreed upon social status measurement, medical and social practitioners and scientists recognize the impacts of SES on
physical and emotional health. They have independently set out to begin tracking social status impact within their fields.

**SES and Intrapsychic Factors, Stress, and Interpersonal Relationships**

Social status disparities have been linked to several negative outcomes in terms of mental and physical health and a comprehensive analysis was performed by the APA Taskforce on Poverty (2006). In terms of intrapsychic outcomes, lower social status individuals reported a greater tendency to experience neurotic disorders (Lewis, et. al., 1998), depression (Argyle, 1994) and anxiety (M. M. Black & Krishnakumar, 1998; Gallo & Matthews, 2003). In terms of positive emotions, lower social status individuals reported experiencing fewer positive daily life events (Matthews et al., 2000) less optimism (Chen, Langer, Raphaelson, & Matthews, 2004), lower self-esteem (Twenge & Campbell, 2002), and lower self-efficacy or control over their life (Chen et al., 2004; Rossides, 1990).

Health sociology research has correlated lower social status with an inordinate amount of physical health problems (Argyle, 1994) including stress, which leads to higher morbidity and mortality (Taylor & Seeman, 1999). Some of these can be attributed to inequities in access to health care caused by unemployment or low paying jobs that do not offer insurance (McGinnis, Williams-Russo, & Knickman, 2002). Beyond inadequate health care, further discrepancies in health disparities can be explained by differential exposure to environmental stressors such as housing insecurity and job instability leading to greater reported stress. Their stress is higher episodically as well as more prolonged, resulting in feeling helpless, leading to deteriorating physical health (Lachman & Weaver, 1998).
In terms of interpersonal variables, higher levels of stress may also be attributed to higher levels of hostility and aggression reported by individuals from lower social status (M. M. Black & Krishnakumar, 1998), as well as vigilance (Chen et al., 2004; Chen & Matthews, 2003). The tendency to interpret others as threatening was explained by higher exposure to violence and aggression reported in low SES neighborhoods (Wilson et al., 2004). However the analysis in Chen et al.’s study indicated that it was not exposure to significant violent events, but rather fewer positive reported experiences that predicted a vigilant response to ambiguous situations (2004).

Despite experiences that condition them to initially distrust others and would suggest a preference to avoid interpersonal engagement, individuals from lower social status seem to have a greater appreciation for group belonging. Lower social status predicted a greater connection orientation (Gurin, Miller, & Gurin, 1980), stronger pro-union sentiments (Cornfield & Kim, 1994) and a tendency toward collectivism over individualism regardless of country of origin (Marshall, 1997).

There is evidence from recent studies that this appreciation for group membership and belonging translate into heightened interpersonal skills. In comparisons with higher social status peers, lower social status individuals more effectively engaged with strangers (Kraus & Keltner, 2009), were more adept at accurately reading the emotions of others and expressing accurate empathy (Kraus, Côté, & Keltner, 2010), and expressed more compassion for the suffering of others both in self-report and in physiological indicators such as heart rate (Stellar et al., 2012).
Research on Vocational and Social Disparities

Vocational research that has accounted for social status has used the traditional sociological measurement of objective material resources: income, education, and occupational prestige (Nakao & Treas, 1994), as well as demographic characteristics such as ethnicity or citizenship. Educational and vocational researchers have controlled for social status differences rather than seeking to understand how these differences impact experience and outcomes directly. Recent literature in the field of psychology has called for an emphasis on the impact of social status as a cultural context (Brown, 2000; Fouad & Brown, 2000; Liu, Ali, et al., 2004; Liu & Ali, 2008). These authors encourage the field to consider how economic disparities and class relate to social valuation, and social and political control (M. T. Brown et al., 1996; Liu, Soleck, et al., 2004), and how these impact a person’s identity, experiences and subsequent behavior (Liu & Ali, 2008). Liu et al. (2004) delineated the theoretical differences between the constructs of socioeconomic status and social class and emphasized misleading assumptions that the term socioeconomic status perpetuates. Both socioeconomic status and social class denote a person’s position within an economic hierarchy. The variables that signify position within the hierarchy may include prestige, power, and control of resources. Socioeconomic status implies more agency by using the word “status”, denoting a temporal position and mobility. Liu et al. (2004) criticized SES research for choosing to focus on how people use resources within environments to adapt, rather than focusing on the more pertinent issue of resource disparities. In contrast, social class incorporates group dynamics and awareness of one’s membership within a group of similar individuals, and furthermore, awareness of the position of
their class within the economic hierarchy. Unlike SES, group status dynamics such as class consciousness, prejudice and discrimination or classism are acknowledged (Liu, et al., 2004).

For the purposes of acknowledging and incorporating group dynamics and classism, this study uses the term ‘class’, though minimally. This study does use the word ‘status’ in the construct of differential status identity, as it denotes the relativity of the social comparison inherent in the definition (Brown, 2000). The present study sought to add to the understanding of social status and social class, discern their salience in a university population, and add to a meaningful discussion of their implications for vocational outcomes.

**Social Cognitive Career Theory**

Social Cognitive Career Theory (SCCT) (Lent, Brown, & Hackett, 1994) was derived from Bandura’s (1986) Social Cognitive Theory. SCCT complements other existing career theory, as a larger framework from which to consider the processes that shape career interests, choices and performances. The theory rests on Bandura’s assumption that personal attributes (thoughts and feelings), factors of a person’s environment, and behaviors all work together to mutually influence the person’s self-efficacy, goals, and expectations about the outcomes of their actions (Lent & Brown, 1996).

SCCT posits that a continuous feedback loop of positive efficacious expectations lead to exposure to experiences and formulation of goals to sustain the activity, which lead to practice and thus subsequent success (Lent & Brown, 1996). Goals are revised in the event of failure; however, social and structural forces impede
this process on numerous levels, limiting a person’s expectations, exposures, and experiences. People experience narrowed career interests because of lesser exposure to efficacy-building experiences or because they have developed negative self-efficacy beliefs and outcome expectations (Brown & Lent, 1996).

Social Cognitive Career Theory highlights the influence of a person’s social-cultural environment on their interests, choices, and subsequent performance. In relation to race and gender, SCCT argues that the reactions these characteristics evoke from society, rather than the physical characteristics themselves, are relevant to career development trajectories. For example, a young boy may be teased for caring for a doll in a home with rigid gender norms. The experience squelches nurturing tendencies that may have directed him toward careers in the social domain.

Social Cognitive Career Theory acknowledges the relevance of both developmental influences that shape interests, and self-efficacy beliefs that are internalized by the person, as well as current environmental influences in affecting career decision making. Those direct influences include environmental conditions such as discriminatory hiring practices or hostile, unsupportive peer or supervisory experiences. In other words, socio-cultural variables are believed to influence opportunity on several levels: gender socialization, community norms, access to education, and family expectations, among others.

Social Cognitive Career Theory provides a rationale for the examination of social status variables, both developmental and present, in contextualizing career behavior. SCCT provides a framework for current and future research on the influence
of social status on careers and permeates all factors within current career theory models.

Only recently have researchers begun to develop scales to measure and evaluate the multifaceted life experiences and environments which make up one’s social status. Thompson and Subich (2006) studied the construct validity of one such scale, the Differential Status Identity Scale (DSIS). Their pilot study established its psychometrics and found DSIS not to be related to self-esteem (SES; Rosenberg, 1965) or psychological entitlement (PES; Campbell, et al., 2004). Thompson and Subich went on to evaluate the relationship between an individual’s level of and access to resources, social prestige, and social power (DSIS subscales) with their career decision self-efficacy (CDSE; Betz and Taylor, 2001) and commitment to their career path choice (CDS; Osipow, et al., 1976). Using a pool of almost 300 undergraduates, Thompson and Subich found that career decision self-efficacy fully mediated the positive relationship between social status and career choice certainty. While their psychometrics, methods, and analysis were sound, the present study seeks to improve on their use of matching model based scales with the Occupational Engagement Scale (OES) which is based on the assumption that learning engagement and exploration skills is essential in the contemporary changing job market. This is in contrast to decision-making scales borne out of the theoretical assumption that choosing a career path is the central task of vocational development.

**Trilateral Model of Adaptive Career Decision Making**

Traditional career decision-making models rely heavily on the trait-and-factor matching model (Parsons, 1909), which was formulated on the assumption that people
can effectively use rational thought to make complex decisions such as selecting a career path (Krieshok, 1998). Recent research has called into question the role of rational decision-making in career decisions that underlie the trait-and-factor approach. Trait-and-factor approaches may also perpetuate the unlikely belief that choosing a career path need only happen once in a person’s life; if the person worked hard in their field, they were set for life (Savickas, 2000). The trait-and-factor model, which matches a person to an occupational environment, is the most popularly used method for career counseling to this day (James & Gilliland, 2003), with numerous assessments developed to guide this process. The simplicity of the matching model, plus the variety of assessment tools developed from this theory, would make it ideal for efficiently guiding people to fulfilling careers, but it has limitations. The contemporary world of work scarcely resembles the clearly defined roles and stable job certainty in which Parson’s matching model was first developed: “trying to place an evolving person into the changing work environment is like trying to hit a butterfly with a boomerang” (Mitchell & Krumboltz, 1996, p. 263). In light of these realities, a one-time matching strategy no longer serves career counselors and may even be harmful in further limiting their clients’ development.

Exploration and enrichment form the cornerstone of a more recent career decision-making theory (Krieshok et al., 2009) focused on engendering vocational adaptability, described as “a readiness to cope with the unpredictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by changes in work and working conditions” (Savickas, 1997). Exploration entails active involvement in career-related endeavors that help inform our rational and
intuitive decision making processes when we are in transition and are preparing to make a decision. Enrichment describes our efforts to broaden and deepen our experiences and knowledge of career related trends and our personal interests in the absence of any anticipated transition to be made. Exploration and enrichment in combination define the concept of occupational engagement. Occupational Engagement serves several purposes for the career decision-maker, through providing experiential learning that the unconscious and conscious processes both rely on to make effective decisions (Krieshok et. al, 2009). Furthermore, occupational engagement increases the probability that individuals will stumble upon unexpected vocational opportunities, or planned happenstance (Krumboltz, 2011)

While the concept of career exploration itself is not novel, having first been addressed by Super in his 1957 career development theory, it has been overshadowed by Parson’s matching model because of the latter’s simplicity and because of the availability of assessments built for it. College students have further perpetuated the somewhat misguided overemphasis on decision based career counseling tools by expecting and even demanding a simple test that will result in a simple answer. In essence, ambiguity is frightening and exploration takes work, courage, and perhaps even resources which some students, to varying degrees, may not have access to due to economic disparities.

Vocation and Social Status

A search of existing research focusing on social status in relation to vocational variables yielded only a handful of studies. Social status was tied to type and level of occupational attainment (Rossides, 1990). Furthermore, social status shaped beliefs
about and behavior in work. Upper status individuals were more likely to consider their work central to their identity (Burris, 1991), considered work a source of personal satisfaction, and reported greater career adaptability (Blustein et al., 2002). Before entering their career of choice, higher status students perceived themselves to have more abilities relative to their level of occupation (McDonald & Jessell, 1992), had higher career aspirations (Aries & Seider, 2007) and reported greater career decision self-efficacy and career choice certainty (Thompson & Subich, 2006). In contrast, lower status individuals reported lower job satisfaction (Argyle, 1994), and more days absent from work (Lusk, Kerr, & Ronis, 1995). These differences in behavior and valuation of work are better understood in context of the unskilled, dead-end jobs that Blustein observed to be the only viable options available for low-income youth (2002).

According to Super (1957), exploratory skills and behaviors emerge from both the intrapersonal realm, such as personality characteristics and inherent interests, and the interpersonal realm consisting of the influence of family, peers, and role models. As it pertains to learning skills of career exploration, high school educators and high school counselors are important introductory facilitators to a student’s interpersonal realm. Low-income students frequently have higher teacher turnover (Marinell & Coca, 2013), less access to high performing teachers (Glazerman & Max, 2011), and come from low-income school districts with few resources to guide them, all of which are relational factors that limit their preparedness for college, much less development of career exploration interests and skills.

Research that focuses on the higher educational experience of low social status students is lacking for the reasons previously stated concerning the oversight of the
field in general. However, a few studies have been carried out where it was either the
primary focus or thoughtfully analyzed. Socioeconomic status influenced the extent to
which students were immersed in academic learning while in college, which in turn
influenced the likelihood of further higher level education (Ethington & Smart, 1986;
Walpole, 2003). Walpole (2003) analyzed CIRP data of subjects who were followed
from their first year of study in 1985 through 1994, and conducted a longitudinal
regression analysis across SES on college behaviors and subsequent vocational
outcomes. Lower SES students were less involved in clubs, groups, and talking to
faculty, and working on faculty research projects than were their upper status
counterparts. More low-SES students reported working during school as well as
working more hours: 52% of low SES students worked between 16 and 40 hours a
week compared to only 37% of high SES students. Further down the educational
trajectory, Walpole found that a third of low SES students went on to graduate school
as of 9 years after graduation in contrast to over half of their more privileged peers.
These significant disparities also remained true in terms of income following college,
even for those low income students who went on to graduate school: almost 75% of
low income graduate school attendees had incomes under $30,000, versus 56% of high
income post graduate subjects (Walpole, 2003). Walpole’s findings suggest the
importance of financial support in liberating low social status students to pursue higher
education, though combining it with career intervention to instill the importance of
campus academic involvement may have shored up the post graduate income divide.
Working while in college did not necessarily hinder students’ success, however how
much a student chose or was compelled to work during college partially determined their academic achievement (Pike, Kuh, & Massa-McKinley, 2008).

Pike et al. (2008) analyzed results from the 2004 National Survey of Student Engagement (NSSE) from a sample of over 500,000 students across hundreds of four-year institutions and determined that working more than 20 hours per week lowered student’s grades even after accounting for prior ACT/SAT scores and status as a first generation college student. Twenty hours or more of work also lowered student’s level of engagement, however the NSSE’s construct of engagement focused more on perceptions of current educational experiences including: academic challenge, active and collaborative learning, faculty interaction, enriching educational experiences, and perception of a supportive campus environment. The study did not address social status or socioeconomic variables beyond status as a first generation college student.

As would be anticipated, review of social status and occupational variables in the college population overwhelmingly suggests better outcomes related to privilege; however, a few articles indicate a theme of suppressed or delayed engagement. For example, a few articles showed students’ propensity to underperform in academics and in vocational development when parents provided unmitigated financial support (Hamilton, 2013). Along those lines, teenagers whose parents were in business-managerial positions underperformed in school and were much less likely to go to college. It was hypothesized that they anticipated the inheritance of the family business, and thus a formal career preparation trajectory was superfluous (Davila & Mora, 2004).
While family support, in the form of financial privilege, appears to have a substantial impact on educational and vocational outcomes, the influence of family on vocation does not appear to end there. Family members, by their proximity throughout developmental years, influence one’s career development directly and indirectly: serving as role model, conveying expectations and family norms of behavior, and providing opportunities for exploration of interests in the early stages of development. Family, as a structural microcosm, even influences our interpersonal style, or how we interact with the social world, which may subsequently determine our ability to engage in the world of work in a meaningful way that will allow us to pursue career goals.

**Family Systems, Self-Differentiation, and Support**

Applying a systems theory to the realm of career development was a response to the call of many vocational researchers and theorists to re-envision vocation through a systems lens (Blustein, 2004; Flum, 2001; Whiston & Keller, 2004). Blustein urged vocational research to examine the complex and recursive relationships in people’s lives as they negotiate complex roles and responsibilities…. [I]t seems abundantly evident that the process of exploring oneself and the vocational and educational world, finding work, maintaining work, and disengaging from work are all nested in a relational matrix. (2004, p. 608).

Bowen Family Systems theory is one of the most widely known and utilized theories of family functioning and views all behavior through structural, relational dynamics (Alderfer, 2004). Use of Bowen’s theory of systems has been extended beyond the nuclear family by organizational psychologists to explain workplace
dynamics such as over and under functioning, and chain reactions of leadership styles across organizations (Romig, 2011).

Bowenian constructs such as differentiation of self, the family emotional system, multigenerational transmission processes, societal emotional processes, emotional triangles, and emotional cutoff permeate the literature of family therapy and research. Differentiation of self is the most widely recognized concept of Bowen’s family systems theory and most central to the theory as a whole. Differentiation of self is considered essential for psychological health as well as for sustaining healthy interpersonal relationships (1978). The construct encompasses intrapsychic stability: the ability to tell the difference between one’s feelings and thoughts, and to choose whether to allow rationality or emotion to guide a response, including shifting from one to the other as the situation requires (Bowen, 1978). Self-differentiation also entails interpersonal effectiveness: the ability to have meaningful relationships while still maintaining a sense of autonomy and individual identity within the close relationship.

Bowen suggests that during times of stress, a poorly differentiated person becomes unable to distinguish between cognitions and emotions and reverts to unhealthy interpersonal responses (Nichols & Schwartz, 1998). Bowen described reactions of an undifferentiated person to further illuminate the concept: a person who has not developed a strong sense of self, or I-person, may forfeit thoughts and feelings entirely and take on those of the close other in an effort to maintain the relationship by essentially fusing with the other person. Someone unable to differentiate between feelings during a conflict and thoughts about the other person might display emotional
reactivity. Furthermore, if an undifferentiated person experiences uncomfortable emotions in relationships and has not developed the skills and self-awareness to respond to them effectively, they may \textit{emotionally cutoff} by shifting to rationalization or entirely avoiding the conversation and the individual (Bowen, 1978).

Recent efforts to treat diverse populations has included criticism of psychology’s Western-oriented preoccupation with individualism. Bowen’s theory is recognized as one of the few personality theories which prioritizes connection to others throughout development and as the sign of maturity and emotional health (Guisinger & Blatt, 1994).

As with many theories and studies of its time, Bowen’s theory did not address cultural or social status differences beyond stating that this theory was universally valid in addressing the health of a family and should therefore function similarly across cultures and across other group variables (Bowen, 1978). Until recently, research was lacking to empirically support this claim. Furthermore, lifespan development research since 1978 has revealed that there are marked differences in the functioning of family systems across cultures. Despite this cultural variation in family systems, a few recent studies examining self-differentiation in non European-American populations have indicated that it is in fact a valid indicator of individual psychological functioning in Non-Western samples. Three recent studies substantiated that the construct of self-differentiation was relevant for American people of color and for two distinct Asian international populations (Skowron, 2004; Tuason & Friedlander, 2000; Yang, 1999). Self-differentiation predicted lower anxiety and psychological symptomology in Pilipino adults (Tuason & Friedlander, 2000), and greater self-esteem and interpersonal
competence in Taiwanese young adults (Yang, 1999). In a landmark study, Skowron (2004) examined the relationship between self-differentiation and ethnic group belonging in a sample of ethnic minority students on a college campus. Contrary to her initial hypothesis, Skowron found that self-differentiation predicted greater ethnic group belonging.

Responding to Bluestein’s call to evaluate vocational development from a family system’s perspective (2004), a few studies have examined the relationship between self-differentiation and vocational processes and outcomes. In particular, Keller (2006) conducted a study examining the extent to which differentiation of self-explained variance in career exploration above and beyond that explained by ego strength. Ego identity formation has long been considered a developmental process paired with vocational identity development, in that a person would need to have a coherent and consistent sense of their personality and general interests and preferences in order to explore vocational interests and preferences (Super, 1957). However, Keller sought to determine whether self-differentiation, an indication of interpersonal development and relational skill, uniquely contributed to a person’s career development. Using a clinical population of college students, Keller solicited responses to a battery of questionnaires pertaining to differentiation of self (Differentiation of Self Inventory; DSI; Skowron & Friedland, 1998), career exploration (Career Exploration Survey (CES); Stumpf, Colarelli, & Hartman, 1983), and ego identity status (Extended Version of the Objective Measure of Ego Identity Status (EOM-EIS; Bennion & Adams, 1986). Results suggested that students who had undertaken exploration of their ideological and interpersonal domains of ego identity were also
more likely to engage in more career exploration activities. Differentiation of self, and in particular greater ability to take an I-position, explained variance in career exploration above and beyond ego identity status.

Differentiation of self includes the ability to maintain a healthy sense of self along a continuum of interconnectedness and autonomy, balancing the need for intimacy and independence in a close relationship. For example, driven by fear of losing important relationships, an undifferentiated person may fail to establish an “I-position” which entails understanding and developing their opinions, worldviews, and emotional experiences (i.e., stating “I think…” or “I feel…”). Their sense of identity would be fused with the important relationship and they would instead use “we think” or “we feel”. According to Bowen’s theory, a differentiated person would be able to stand by their convictions despite outside pressures. The weak sense of self that evolves from perpetual fusion with others is thought to lead to behavioral disorders as well as unsatisfying interpersonal relationship (Bowen, 1978). Keller concluded that as it pertained to career exploration, a greater ability to take an I-position enables a person to explore career interests independently, accepting influence from others only when it is helpful and not conflicting with one’s own preferences. Keller suggested the utility of addressing a person’s inability to take an I-position first when working with a student struggling with career exploration in a clinical setting.

The use of a clinical sample of students over the general student population may have complicated her findings. Furthermore, Keller considers self-differentiation to be an environmental factor of development. One’s interpersonal realm, however, as a psychology construct, does not consider the larger environmental context of one’s
social status. Furthermore, a search of extant literature yielded no studies focusing on Bowenian constructs and social status. The present study seeks to expand on family systems vocational research and to include social status.

**Summary of Literature Review**

Evidence suggests that lower social status individuals, if they have made it to college, may be falling through the cracks with higher attrition. Structural, cultural and social inequities compound to stifle their precollege development and may continue to impact how they perceive themselves in relation to their peers. Beyond perceptions, lower-status students have access to fewer resources in the form of money, connections to people who can advance their careers, and supportive mentors. Because they have little else to rely on, relationships and group belonging are very meaningful to many lower socioeconomic status individuals and recent research suggests they may be more adept at relating. These skills could be transferred yielding greater engagement to improve vocational outcomes. Current understandings of how people make effective life decisions, combined with a need to cultivate adaptability to face the uncertainties of the modern job market, signify the importance of engagement as a pathway to fulfillment in work. Career counselors can figuratively open the door of possibilities to students through teaching engagement and its role in effective decision making and adaptability. However understanding what engagement looks like in lower income students and what skills they bring to the process can better help counselors guide them and strengthen their engagement levels.
Rationale & Hypotheses

The current study examined the relationship between social status and occupational engagement. Prior research indicates that lower subjective social status results in worse occupational outcomes in general. Thus it is proposed that subjective social status will correlate positively with engagement. However, research on interpersonal effectiveness (compassion and interpersonal engagement) indicates that lower SES individuals may have developed better interpersonal skills as a method of coping with stressors. In light of these findings, this study sought to determine whether self-differentiation, a construct related to intra-psychic and interpersonal well-being, might attenuate the relationship between engagement and social status for low SES individuals. In other words, underprivileged students who have developed the skill of relating and garnering community support, may subsequently more effectively transfer it to their occupational goals than their less differentiated upper status peers. This provides an explanation for predicting elevated scores in engagement among some low social status students.

Objective measures of socioeconomic status such as income, education, and occupational prestige are predominant in the literature and therefore this information was collected to compare with outcomes of other studies. Objective measures of social status and subjective status are conceptually different in meaningful ways, however objective social status and subjective social status have shown moderate correlations in previous research (Adler, Epel, Castellazzo, & Ickovics, 2000; Thompson & Subich, 2011). Evidence suggests that subjective social status is a better predictor of mental health outcomes (Adler et al., 2000; American Psychological Association, 2006;
Kraus, Piff, & Keltner, 2011), as well as vocational outcomes (Thompson & Subich, 2011), and is therefore a variable of focus for this study.

**Hypothesis 1:** Occupational engagement (OES) will correlate positively with:

(a) Self-differentiation (DSSF), and (b) Social Status (DSIS).

**Hypothesis 2:** Self-differentiation will relate negatively to social status: (a) Students who self-identify as lower social class will score higher on the differentiation of self scale (DSSF); (b) There will be a negative correlation between DSIS and the DSSF.

**Hypothesis 3:** Self-differentiation will moderate the relationship between social status and occupational engagement. Self-differentiation will account for variance in occupational engagement beyond variance accounted for by social status.
Chapter III

Method

This study was designed to determine the influence that socioeconomic status has on occupational engagement within the college student population. An additional goal of the study was to determine the influence that relationship skills may have on occupational engagement, particularly for low-income students. This chapter describes the study’s participants, data cleanup procedures, measures, procedure, data analysis, research questions, and hypotheses.

Participants

Approval was obtained from the university’s Institutional Review Board (IRB) to ensure that participation in this study was not detrimental to subjects (Appendix A) and participants were awarded extra credit for their participation. The survey instruments were accessed through the university’s SONA web system portal which was connected to an online Qualtrix account. Participants were first provided an informed consent document (Appendix B) to read and digitally accept. Those who did not indicate acceptance were redirected to the university’s homepage. Those who indicated acceptance were directed to the survey instruments. Participants were also provided a debriefing statement and links to relevant educational research documents. Most participants received course credit for participation. Participants were undergraduate and graduate students recruited from Psychology courses offered at a large Midwestern University. Roughly six percent were enrolled part-time, their average age was 21 years, 28% were members of racial/ethnic minority groups, 70% were receiving financial assistance of some kind, and 22% were Low Income Students.
Review of the 621 responses revealed that 26 answered none of the questions, 10 did not complete the demographics survey, and 15 more only completed the first of the three surveys before dropping out. The responses of all of the above described were removed from the data set. Upon further analysis of missing data, respondents who were missing more than 15% of any one measure (OES, DSSF, and DSIS) were removed. This eliminated 11 more cases, and resulted in a remaining 560 participants and their completed surveys. Of the 560 participants, 181 were men, 378 were women, and 1 was ‘not sure’. The age of the respondents ranged from 18 to 57 with a mean of 21. Two hundred and seventy-two were first year, 142 were second year, 52 were third year, 21 were fourth year, 27 were fifth year, and 46 were 6th year and beyond. In terms of race/ethnicity, 445 were white, 34 were African American, 26 were Asian, 26 were international students, 24 were Hispanic, 11 reported that they were “other”, and 5 were Native/First American. Seventeen participants self-identified as belonging to the lower class, 56 to lower-middle class, 256 to middle class, 206 to upper-middle class, and 22 to upper class (three did not report a social class category).

**Instruments**

**Demographics Questionnaire (Appendix B):** Objective social status was measured using a predominant method in sociological research: a combination of parental income, education, and occupational prestige. All three were collected in the demographic survey (see Appendix A). Occupational prestige was categorized according to the Socioeconomic Index of Occupations with values ranging from 0 to 100 (Nakao & Treas, 1994). Reported household income was reported according to discrete categories of income, with values ranging from 1 (less than $10,000) to 10
($90,000 and above). Parental education was measured using highest reported level of education for identified parents; values ranged from 1 (no high school education) to 9 (JD/MD/PhD or other advanced degree). Status as a first generation college student was also collected as well as information about how the student’s education was being paid for in order to understand what tangible resources were available to the student. Questions 12-16 pertain to students’ current work while in school, as this has been shown to inhibit engagement unless it is less than 20 hours and on the college campus.

**Differential Social Status: Differential Status Identity Scale (Brown et al., 2002) (Appendix C):** The Differential Social Status Identity Scale (DSIS) is a 60 item Likert-type scale designed to measure social status as outlined by Fouad and Brown (2000), reflecting the social stratification model of Rossides (1990;1997). The theory proposes three components that account for social status: economic resources, social prestige, and social power. The measure is designed for use as a general social status score, but subsequent research has indicated the presence of four interrelated subscales: Economic Resources – Amenities, Economic Resources – Basic Needs, Social Prestige, and Social Power (Metz et al., 2009; Thompson & Dahling, 2010; Thompson & Subich, 2011). Respondents are asked to compare themselves to “what you think the average citizen of the United States is like”, with choices ranging from -2 (very much below average) to +2 (very much above average). The Economic Resources-Basic Needs subscale asks about access to affordable health care and supports like childcare. Economic Resources-Amenities signifies ability to afford such benefits as recreational travel, music lessons for children, and joining a fitness club. Social Power indicates influence one has on socio-political aspects of their surroundings like
overcoming legal problems, and influencing decisions in the community. Finally
Social Prestige represents how valued one feels by society, based on indicators like
ethnicity, neighborhood, or the type of car one drives. Each of the four interrelated
subscales is comprised of 15 items. Item scores are converted to a 1 to 5 point scale
and then summed to create a total score from 60 to 300. High scores reflect high
subjective social status.

Convergent and criterion validity of the DSIS has been established through
exploratory factor analysis in previous research with the measure (Thomson & Subich,
2007). Correlation of the DSIS was strong (r=.56) with subjects’ self- reported social
status (i.e., lower, lower middle, middle, upper middle, upper), and moderate (r=.42)
with their household income in childhood and adolescence (Thompson & Subich,
2007). Furthermore it correlated with race, parental education, and person’s reported
experiences with classism (r=.16); and to a greater extent with perceived educational
and career barriers (r=.29) (Metz, Fouad, & Ihle-Helledy, 2009; Thomson and Subich,
2011). The DSIS has maintained high internal consistency reliability (.97) across four
studies (Metz, Fouad, & Ihle-Helledy, 2009; Thompson & Dahling, 2010; Thompson
& Subich, 2006, 2007). Prior to this study, the DSIS has also been found to explain
variance in vocational outcomes above and beyond ethnicity, ΔR = .037 (Metz et al.,
2009). Thus for the purposes of the present study DSIS represents the social status
variable, or a person’s perception of their standing in society compared to the average
American. For the present sample, the internal consistency reliability (α) of the total
score was .98. α’s for the four subscales of the DSIS were also high: .96 for the

**Occupational Engagement: Occupational Engagement Scale-Student (OES-S; Cox, Krieshok, Bjornsen, & Zumbo, 2015) (Appendix D):** The Occupational Engagement Scale-Student (OES-S) is a 9-item measure of occupational engagement in college students. Participants completed the 57-item single scale version which was first developed by Black (2006), then revised by Krieshok and a taskforce of counseling psychology graduate students, yielding the final 9-item version (Cox, 2009). The OES-S measures the construct of occupational engagement, as defined in the *Trilateral Model of Adaptive Career Decision-making* (Krieshok et al., 2009), and is designed to capture activities that college students might take part in to increase their vocational exploration and enrichment. Cox (2009) found a coefficient alpha of .85, indicating that it is reliable. The items are Likert-scale, with 1 representing *unlike me*, and 5 representing *like me*. For this study sample, α for the OES-S total score was .82.

Various iterations of the Occupational Engagement Scale have been used in several intervention-outcome research settings. The OES was revised from the original scale (Black, 2007) several times in an effort to best capture the experiences of engagement in various populations: for college students (Cox, 2008), for creative students (McKay, 2008), and for Asian American students (Le, 2012). Occupational engagement was found to be related to academic achievement and well-being in college students (Cox, 2008). In a subsequent study utilizing the OES for creative students, McKay, Kerr, Hansen & Krieshok (2008) identified four factors: (1)
Networking, (2) Attunement, (3) Flexibility, and (4) Enrichment. However Le (2012) only identified two reliable factors in his analysis: (1) Cognitive strategies of engagement, and (2) Behavioral/Experiential interventions. A handful of studies conducted in the short time since the measure’s development suggest that the construct of engagement is valid and meaningful across cultures (Le, 2012).

**Self-Differentiation: Differentiation of Self Inventory – Short Form**

*(Drake, 2011) (Appendix E):* The Differentiation of Self-Short Form (DSSF; Drake, 2011) is an abbreviated version of the Differentiation of Self Inventory – Revised (DSI-R), which is a revision of the original scale designed by Skowron and Friedlander (1998) to measure Bowen’s interpersonal construct of self-differentiation. The Differentiation of Self Inventory-Short Form is a 20-item Likert-type scale assessment designed to measure differentiation of self as defined by Bowen (1978) in *Family Therapy in Clinical Practice*. The items are divided into four subscales, which are all components of Bowen’s theory of differentiation of self: Emotional Cut-off (EC), Emotional Reactivity (ER), Fusion with Others (FO), and I-Person (IP). Skowron and Schmitt (2003) chose to revise the original DSI (Skowron & Friedlander, 1998) to strengthen the construct-related validity of the FO subscale, as it had shown weak predictive utility, psychometric rigor, and clarity of construct. Respondents are instructed to decide how much each statement is generally true of them, with choices ranging from 1 (not at all) to 6 (very).

The EC scale represents reactively suppressing or intellectualizing strong emotions. The ER scale indicates a fusion of intellect and emotions resulting in affective impulsive reactions to stressors. The FO scale is characterized by over
identification with significant others resulting in difficulty formulating one’s own opinions and principles. Because all of the subscales except for I-Person are theoretically counter indicators of self-differentiation, items that make up the EC, ER, and FO scales are reverse scored and then summed with the IP scale to calculate the differentiation of self-score. Item scores are converted to a 1 to 6 point scale and then summed to create a total score from 20 to 120. High scores reflect high self-differentiation.

The psychometric properties of the DSI reported by Skowron and Friedlander (1998) support internal consistencies ranging from adequate to good: ER ($\alpha = .88$), FO ($\alpha = .70$), IP ($\alpha = .85$), EC ($\alpha = .79$), and full scale DSI ($\alpha = .88$). Psychometric properties from Drake’s short-form are consistent with those of the DSI: inter-correlations of DSSF subscales and DSI-Full: EC ($\alpha = .69$), ER ($\alpha = .82$), FO ($\alpha = .82$), and IP ($\alpha = .71$). The DSSF subscales were found to have the following correlations with the original DSI subscales and full scale: EC ($r = 98\%$), ER ($r = 95\%$), FO ($r = 92\%$), and IP ($r = 97\%$), and DSI full scale ($r = 99\%$). The use of the full scale score as a summary of a person’s level of differentiation and individuation of self is consistent with many of the empirical studies that use the DSI. The DSI-SF served to measure relationship skills and individuation in the current study. For our sample, $\alpha$ for the DSSF total score was .87. Internal consistency reliability scores in this study for the four subscales were as follows: EC ($\alpha = .83$), ER ($\alpha = .80$), FO ($\alpha = .70$), and IP ($\alpha = .71$).

**Design**

All data collection was multiple-choice or short answer and was done through the online SONA system. Subjects were asked to take three surveys and a demographic
questionnaire (a total of 157 items), the completion of which took on average 40
minutes. The survey was open to participants for the Fall semester at a major
Midwestern university (exact dates: 9/17/14-12/15/14). In total 621 undergraduate and
graduate students enrolled in the study. A power analysis conducted prior to the study
indicated that a minimum of 474 participants was needed to determine results with a
confidence level of .95 and confidence interval of 4.5.

Analyses

The previously stated hypotheses were tested using SPSS version 23. For
hypothesis 1, Occupational engagement will correlate positively with self-
differentiation and social status, Pearson product-moment correlation coefficients were
calculated between scores on the Occupational Engagement Scale, the Differentiation
of Self-Short Form scores, and the Differential Status Identity Scale scores.

For hypothesis 2, Self-differentiation will relate negatively to social status: (a)
Students who self-identify as lower social class will score higher on the differentiation
of self scale (DSSF); (b) There will be a negative correlation between DSIS and the
DSSF, a Pearson correlation coefficient was computed to determine significance and
effect size. Further analysis of self-differentiation across self-reported social class
categories was used to confirm the results. An analysis of variance (ANOVA) between
subjective social status (DSIS) and self-reported social class categories provided
reassurance that the two variables were measuring similar constructs.

For hypothesis 3, Self-differentiation will moderate the relationship between
social status and occupational engagement. Self-differentiation will account for
variance in occupational engagement beyond variance accounted for by social status,
A multiple regression analysis was conducted to predict the amount of variance in occupational engagement accounted for by socioeconomic status. A second analysis was conducted to evaluate whether the interaction of self-differentiation and social status predicted engagement over and above socioeconomic status and self-differentiation independently. Brown, et al.’s (2002) perceived differences in social status construct of differential status identity was used to operationalize environmental variables and serve as an independent variable in a stepwise regression analysis to predict amount of career engagement. Bowen’s family systems theory (1978) construct of differentiation of self was used to operationalize the relational variables, and served as the second independent variable in the first Model. Level of occupational engagement as measured by the sum of the OES-S scale (Cox, et. al., 2015) served as the criterion variable.

A stepwise multiple regression analysis is a statistical technique used to determine the strength of the relationship between one dependent variable and multiple independent variables. Predictor variables are entered into the regression equation in a sequential fashion to determine the amount of variance in the dependent variable that is uniquely accounted for by each set of independent variables (Tabachnick & Fidell, 2007). Model two in the stepwise multiple regression added the centered cross product of differential status identity scale and differentiation of self as the independent variable.
Chapter IV

Results

The methods of this study were designed to broadly address three questions. First, does occupational engagement relate to social status? Second, is social status inversely related to self-differentiation? And finally, do elevated self-differentiation skills in low-socioeconomic students provide a buffer between social status and occupational engagement? Three hypotheses were developed, based on relevant literature, to address these questions. This chapter will present the results of the analyses testing these hypotheses. All variables involved are statistically described, in terms of means, standard deviations, and alphas. All demographic group differences are presented. A correlation matrix of all variables, including subscales of assessment measures, are reported below. Hypotheses were tested using the Statistical Package for Social Sciences (SPSS), version 23.

Exploratory Data Analysis (EDA)

Means, standard deviations, coefficient alphas, and correlations among scaled measures and subscales are presented in Table 1. All coefficient alphas are within the acceptable range, and consistent with those obtained in previous research. Means and standard deviations were also calculated by gender and by race/ethnicity and can be found in Table 4. and Table 5. respectively. A single sample $t$-test was preformed to determine if the current sample had significantly different OES-Student scores for this sample. The mean for the current study of 28.4, is significantly lower than the mean of 32.53 Cox (2008) found in college students $t(559)=-18.45$, $p<.001$ (See Table 3 and Figure 1). This indicates that the student participants in this study reported significantly less engagement in occupational engagement than those students who were used in the normative sample for the OES-S found by Cox (2008).
A second t-test comparison was conducted to determine if the current sample had significantly different Differentiation of Self-Short Form scores from the norm sample. The mean for the current study of 78.1, is significantly lower than the mean of 83 that Drake (2011) found in college students $t(560)=-7.64$, $p<.001$ (Figure 2). This indicates that the student participants in this study reported significantly lower levels of individuation and interpersonal effectiveness than those students who were used in the normative sample for the DSSF found by Drake (2011).

A third t-test comparison was conducted to determine if the current sample had significantly different Differential Status Identity Scale than the norming sample. The mean for the current study of 199, is significantly higher than the mean of 179.78 that Thompson and Subich (2007) found in their normative sample $t(560)=11.50$, $p<.001$ (Figure 3). This indicates that the student participants in this study reported significantly more access to resources and social power and prestige than those students who were used in the normative sample for the DSIS found Thomas and Subich (2007).

Using the entire sample (N=560) bivariate correlations among the three principle variables, as well as seven subscales, were calculated and presented in Table 2. Several of the analyses merit further discussion. Participants’ occupational engagement scores were found to significantly relate to self-differentiation $r(560) = .107$, $p < .05$; and within self-differentiation, occupational engagement was most closely related to “I-Person” scores $r(560) = .221$, $p<.001$. Likewise, occupational engagement was found to significantly relate to social status $r(560) = .163$, $p<.01$; and within social status, occupational engagement was most closely related to Social Power $r(516) = .212$, $p<.001$, and then Social Prestige $r(560) = .160$, $p<.001$. 

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**Analysis of hypothesis 1:** Occupational engagement (OES) will correlate positively with self-differentiation (DSSF)(1a.) and social status (DSIS) (1b.).

Correlations between Occupational engagement and self-differentiation, social status can be found in Table 2. A scatterplot of the correlation between self-differentiation (DSSF) and occupational engagement (OES) (Figure 4.) indicated that their relationship was significant and positive, though minimal at 1%. The regression line suggested that higher self-differentiation related to higher occupational engagement. Thus hypothesis 1a. was supported.

A scatter plot of the correlation between social status (DSIS) and occupational engagement (OES) (Figure 5.) indicated that their relationship was significant and positive, though also modest at 3%. The regression line of DSIS with OES reflected that higher subjective social status related to higher occupational engagement. Thus, hypothesis 1b. was supported.

Further analysis of the correlation between social status (DSIS) and occupational engagement (OES) was conducted after dividing social status scores into self-identified social class responses on an item in the demographics questionnaire. The self-identified social class question was: “In thinking about your past and present experiences, which label best describes your perceived social class?”. In the data collection phase, participants were allowed to select one among five categorical descriptors for class; response options were: lower class (N=16), lower middle class (N=52), middle class (N=234), upper middle class (N=186), and upper class (N=20). The scatter plot of the correlations, with a linear regression line for each reported social class (low, low middle, middle, upper middle, and upper) indicated that specifically for
students who self-identify as low social class, social status (DSIS) and occupational engagement (OES) are negatively correlated at the 25% level (Figure 6.).

**Analysis of hypothesis 2:** *Self-differentiation will relate negatively to social status: (a) Students who self-identify as lower social class will score higher on the differentiation of self scale (DSSF); (b) There will be a negative correlation between DSIS and the DSSF.*

After confirming that the self-identified social-class responses from the demographics questionnaire were highly correlated with social-status scores on the differential status identity scale (DSIS) $F(4, 552) = 66.91, p<.000$ (see Table 5), an analysis of variance was preformed of social class on self-differentiation scores, using the differentiation of self-short form (DSSF). Results were again split into five groups by self-identified social class based on one item responses in the demographics questionnaire. The results of the analysis of variance were not statistically significant $F(4,552) = .478, p = .752$ (Table 7.). Thus hypothesis 2a was not supported.

The correlation coefficient between DSSF and DSIS which was not significant (see Table 2.) indicates that there was no relationship between self-differentiation and subjective social status. A scatter plot of the correlation between self-differentiation and social status with a regression line better illustrates the results (Figure 7.). Thus hypothesis 2b was not supported.

**Analysis of hypothesis 3:** *Self-differentiation will moderate the relationship between social status and occupational engagement. Self-differentiation will account for variance in occupational engagement beyond variance accounted for by social status.*
Interactions between primary variables were tested via multiple regression in SPSS. An interaction was said to be observed when the nature and or strength of the relation between two variable changes as a function of a third variable, a moderator. Moderation analysis was conducted by a method described by Howell (1992), through a hierarchical analysis. Further analysis of the interaction effect was done using correlations on a scatter plot.

The two independent variables were social status, as measured by the Differential Social Status Identity Scale (DSIS) and self-differentiation, as measured by the Differentiation of Self-Short Form (DSSF), and the dependent variable was occupational engagement, as measured by the Occupational Engagement Scale-Student (OES-S). The hypothesis was that social status would be related to occupational engagement, but the nature and or strength of that relationship would depend upon the level of self-differentiation a person experiences. So, a person may be low in socioeconomic status, but if they had a strong sense of self and have highly effective interpersonal skills in the form of self-differentiation, they would still have a high level of occupational engagement. In other words self-differentiation was predicted to provide a moderating effect of social status on occupational engagement.

To test this hypothesis statistically, the interaction effect was modeled by creating a product term in which self-differentiation scores are multiplied by social status scores. In other words, the main effect of social status is multiplied by the main effect of self-differentiation. Table 2 indicated that social status positively correlates with occupational engagement at .163, so the higher social status one had, the higher occupationally engaged a person would report. Social status and self-differentiation do
not correlate significantly (Figure 9.). Self-differentiation and occupational engagement did correlate positively and significantly, but minimally as well, at .107. A product term of social status multiplied by self-differentiation revealed that there was a predictably high correlation between the product term and each of the main effect variables (Table 8.).

Prior to conducting this analysis the two predictor variables were centered as recommended by Aiken and West (1991). A hierarchical regression analysis of variance was then conducted (Table 9.). Self-differentiation total scores (DSSF) and social status scores (DSIS) regressed independently on Occupational Engagement (OES) in Model one. In Model two, the interaction effect of Self-differentiation with Social status (SSXDSSF) was assessed. Model two resulted in an adjusted $R^2$ of .037, meaning that 4% of the variance in occupational engagement was accounted for by the model that included the interaction effect. The regression Model Two was statistically significant $F(3, 559)=8.12 \ p<.001)$. Within Model Two, social status accounts for a significant, though minor, amount of the variance in engagement ($B=.023; \ p<.001$), and self-differentiation accounts for a significant, though minor, amount of the variance in engagement ($B=.016; \ p<.009$); however, the interaction effect of social status with self-differentiation did not account for a significant amount of variance ($B = -.00005; \ p<.092$). The results of the stepwise regression indicate that lower levels of socioeconomic status were associated with lower levels of occupational engagement regardless of the level of self-differentiation. Additionally, higher levels of self-differentiation were related to higher levels of occupational engagement regardless of social status.
Chapter V

Discussion

Introduction

The following chapter will review the major findings of the current study and discuss their implications within the existing literature. Conclusions that can be drawn from the current study for practice and future research will be reviewed, including limitations.

Summary of Study

In broad terms, the current study sought to investigate the relationship between social status and occupational engagement. Super (1957) theorized that individual and environmental variables combine to shape career development. Prior research indicates that lower socioeconomic status results in worse occupational outcomes in general; however, research on individual relational skills has indicated that people from lower socioeconomic status environments may have developed better interpersonal skills as a method of coping with stressors (Kraus & Keltner, 2009; Kraus et al., 2010; and Stellar et al., 2012). In light of these finding, this study sought to determine whether self-differentiation, a construct related to interpersonal measures of well-being, might attenuate the relationship between engagement and social status, specifically for low SES individuals.

There is a dearth of research literature in which socioeconomic status inequality is a focus of determination. For example Brown and colleagues reviewed studies of social status in relation to work and retirement conducted between 1990 and 1996, and found that SES was included only as a control variable as an exploratory after thought (Brown et al., 1996). Social status inequality research has lacked a theory on which to identify the population, which may have compromised the predictive and prescriptive utility of results. The lack of a unifying theory
indicates confusion for researchers, practitioners, and as a culture as to what defines characteristics of social status and privilege.

Social Cognitive Career Theory highlights the influence of a person’s social-cultural environment on their interests, choices, and subsequent performance. Using the SCCT model, Thompson and Subich went on to evaluate the relationship between an individual’s level of and access to resources, social prestige, and social power (DSIS subscales) with career decision self-efficacy (CDSE; Betz and Taylor, 2001) and commitment to their career path choice (CDS; Osipow, et al., 1976). Using a pool of almost 300 undergraduates, Thompson and Subich found that career decision self-efficacy fully mediated the positive relationship between social status and career choice certainty. While their psychometrics, methods, and analysis were sound, the present study sought to improve on their use of matching model based scales with the Occupational Engagement Scale (OES) which is based on the assumption that learning engagement and exploration skills is essential in the contemporary changing job market. This is in contrast to decision-making scales born out of the outdated theoretical assumption that choosing a career path is the central task of vocational development. This current study addressed a hole in the extant literature by examining the relationships among self-differentiation and occupational engagement within the context of social status as defined by differential status identity.

Summary of Results

Overall results indicate that one’s social status and one’s self-differentiation are positively, though weakly, related to one’s level of occupational engagement. The correlation between DSSF and OES was significant and positive, indicating that higher self-differentiation is related to higher occupational engagement. The correlation between DSIS and OES was also
significant and positive reflecting that higher subjective social status is related to higher occupational engagement. This result suggests that one who perceives their standing as equal to or better than the average American in terms of their ability to access resources and benefits, influence their socio-political environment, and enjoy social prestige, and has undertaken identity exploration tasks such as friendships, dating, and conflict resolution to the extent that they have developed a clear sense of self, was also likely to be engaged in greater amounts of activities involving vocational exploration and enrichment. A closer look at the subscales that make up both social status and self-differentiation revealed that individual scales related more closely with occupational engagement than their full scales. Within self-differentiation, the I-Person factor, relating to a person’s ability develop and maintain their sense of self in terms of likes and dislikes, opinions, and self-awareness, appears to account for 3% of the variance in occupational engagement. Within differential social status, both social power and social prestige were found to correlate significantly with occupational engagement. Social power accounts for 4% of the variance, and social prestige accounts for 3% of the variance, respectively in occupational engagement. These results suggest that, as one might expect, people who perceive that they have influence in their community and are valued by society (based on external markers) are able to engage in higher levels of career exploration and enrichment. A further analysis of the way in which social status related to occupational engagement revealed that for the lowest self-identified social class participants, their social status actually related negatively with occupational engagement and accounted for 25% of the variance, meaning that for low social status students, the worse off they perceive themselves to be in terms of social status (i.e. access to resources, valued by society, and influential in their community), the more likely they are immerse themselves in career exploration and enrichment activities. This did not appear to be
the case for students in the other four levels of social status above them; within most social status groups, higher social status translated, though very minimally, to more engagement.

When five social class levels were analyzed separately, there did not appear to be a statistically significant relationship between a student’s social status and their amount of self-differentiation. However, it is worth noting that there were elevations in the self-differentiation scores of the very lowest reported social class group above every other reported class. As a whole, though, a person’s social status does not appear to relate to whether or not they have developed a strong sense of self and whether they are able to effectively resolve conflict. The lack of significant relationship between social status and self-differentiation for low social status students may be related to conflicting accounts of the impact that low social status has on the development of differentiation of self. Several studies report that lower SES individuals exhibited seemingly antisocial behaviors: hostility and aggression (Black & Krishnakumar, 1998) as well as vigilance (Black & Krishnakumar, 1998), which were attributed to environmental factors, including, higher exposure to violence and aggression (Wilson et al., 2004) and fewer positive experiences to counteract the violent events (Chen et al., 2004). Conversely, several studies report elevated prosocial behaviors among low SES individuals in comparison with their high SES peers, including: interacting more effectively with strangers (Kraus & Keltner, 2009), more accurately interpreting the emotions of other and expressing empathy (Kraus et al., 2010), and expressing more compassion for the suffering of others both in self-report and in physiological indicators such as heart rate (Stellar et al., 2012). The prosocial behaviors were hypothesized to serve several purposes such as garnering support that may provide buffers in facing many vulnerabilities associated with low SES. Stellar’s argument was based on the tend-and-befriend strategy of coping with stress (Taylor, 2006). In other words,
Stellar and Wilson, et. al. propose opposite reactions to the same stress of environmental violence and aggression noted earlier in the aforementioned studies in relation to antisocial behaviors ( Stellar et al., 2012; Wilson, Kirtland, Ainsworth, & Addy, 2004)

The final analysis sought to determine whether self-differentiation had any effect on the relationship between social status and occupational engagement. This hypothesis was borne out of the research indicating that lower social status appears to promote prosocial skills (higher self-differentiation), and furthermore that upper social status appears to suppress the need to develop social skills (lower self-differentiation). While a person’s social status, self-differentiation level, and the interaction between self-differentiation and social status appeared to be significant, and explain 4% of variance seen in occupational engagement, the interaction effect of self-differentiation on social status, independently, did not appear to contribute meaningfully to the variance seen in occupational engagement. This answers the question of how these variables interact. Social status directly affects occupational engagement, and self-differentiation directly affects occupational engagement, but there is no evidence to suggest that self-differentiation affects the relationship between social status and occupational engagement.

The university in this study’s College Portrait of Undergraduate Education website reports the following demographics: of the 19,169 undergraduates, 22% are low income students, 75% are white, and 73% are from Kansas. Only 15% of the respondents in this study reported themselves to be one standard deviation below the average American in social status. When evaluating the discrepancy between the university’s reported low income students and the percent of students reporting low social status in this study, it is important to remember that construct of social status is a multidimensional theory and may encompass multiple intersecting identities, including ethnicity, gender, and able-bodiedness. Furthermore, while the term “low
“Income” is a nominal figure, it is unknown how that cutoff score was developed and in relation to whom. Social status captures perception and therefore is most influenced by a person’s most immediate environment. University campuses historically have a leveling effect on social status, in that the visible markers of status (cars, homes, and neighborhoods) are not as present on campus. It is also possible that enrollment in courses offering credit for participation in research was not representative of the full university population.

Limitations of Study

Participants were all recruited from a large Midwestern university. The entry level psychology course from which the participants were recruited is taken by a representative subset of the general undergraduate population. The size of the university and relative cost of tuition may deter many students from low-income families from attending. The author speculatest that the factors listed above may explain the disproportionate number of upper-income students in the study. This created a skew and may have affected the reliability of some of the results.

Further, the order of assessments was not taken into consideration in the present study despite the potential of triggering internalized classism described in the stereotype threat paradigm (Steele & Aronson, 1995). Participants have been shown to perform worse on tests of intellectual ability after being asked questions pertaining to their parents’ SES (parents’ occupation and education level) triggered internalized classism (Croizet & Claire, 1998). The ordering of tests may have triggered such a bias: demographic questions about income and self-identified social class, then self-differentiation, then social status, and finally occupational engagement. This ordering has an unknown effect on the OES scores.

While the Differential Social Status Identity Scale is a valid and reliable measure, one must consider that participants are susceptible to reference group effects (Credé, Bashshur, &
Niehorster, 2010). In the case of this study, the participants’ were asked on the DSIS to “compare yourself to the average American”. As previously stated, students from upper middle and upper income families were disproportionately represented in the participant pool. Therefore, for these students, the “average American” may appear to be someone with parents earning $80,000 or above. This misperception may have suppressed scores, in some cases, on the DSIS and thus impacted other correlational results of the studies. Of interest, self-identified social class (a single item on the demographics questionnaire) was not entirely representative of their annual income.

In terms of the design and analyses conducted in this study, there are notable methodological and statistical limitations. Most of the analyses in this study were correlational in nature, which provides no cause and effect conclusions among variables. The multiple regression analysis suited to answer the mediation question of the study, but limited the conclusions that could be drawn. For example, only a modest amount of variance in occupational engagement was accounted for by either social status or self-differentiation. Other factors which may explain a much larger amount of variance were not included. The scope of this study was limited to a few questions, however data were collected which, when analyzed, may further elucidate the concepts in this study; data that included: parental occupational status, students’ reported career goals, students’ reported hours worked, and students’ source of funding for tuition.

In regard to the selection of self-differentiation as an appropriate variable to represent interpersonal skills, it was perhaps not comprehensive enough to capture the constructs that were measured in the research on compassion and SES (Stellar, et al 2014), empathy and SES (Kraus et al., 2009), and effective interpersonal skills with strangers among students of lower SES (Kraus & Keltner, 2009). However, there was sufficient evidence from prior research to suggest
that it was closely related to interpersonal effectiveness: self-differentiation related to interpersonal competence in Taiwanese young adults (Yang, 1999); empathy, sensitivity, and concern for others (Charles, 2001; Crespi & Sabatelli, 1997); ability to properly disclose and process emotions (Skowron, 2004; Skowron & Dendy, 2004; Wei, Vogel, Ku, & Zakalik, 2005); social connectedness (Williamson, Sandage, & Lee, 2007); social problem solving in adolescents (Knauth & Skowron, 2004); and social problem-solving in older adults (Kim-Appel, Appel, Newman, & Parr, 2007). Therefore, self-differentiation appeared to be a reasonable candidate for measuring interpersonal effectiveness.

**Implications for Future Research**

The current investigation has added to an emerging recognition of the role of social status on vocational outcomes, and could be elaborated and improved upon in several ways: While studies have identified elevated prosocial behaviors among low SES individuals, this does not appear to translate to their vocational development. It may be that self-differentiation did not effectively capture social skills that were observed by Kraus and Keltner (2009), Kraus et al. (2010), and Stellar et al. (2012). Future research is recommended to better conceptualize the skills that marginalized individuals use to their advantage and which may translate to vocational development.

Lower social status translates to lower levels of occupational engagement, and self-differentiation may play a part in engagement; however, no conclusions can be drawn about what interventions would best shore up deficits in career exploration for the population of interest. Rather than focusing on what factors contribute to career engagement deficits, research and practice would be better served to determine the most relevant intervention to engage these students.
Finally, ethnicity and gender data were collected, and relevant demographics were reported, however this study limited its scope to the variable of social status. Meaningful conclusions may be drawn by further analysis and exploration of the data related to gender and ethnicity.

**Implications for Future Practice**

Continue to target resources to support lower income students in exploring vocational identity. The relationship between one’s interpersonal self-concept (self-differentiation) and career exploration and enrichment found in this study has practical implications. Deficiencies in pursuing tasks of occupational engagement were related to an underdeveloped sense of self and skills of relating to others, therefore, career interventions may need to incorporate modeling of self-differentiation, assertive conflict resolution, and assist the students in reinforcing an independent sense of self in relationship to the world of work. Rather than launching directly into exploration of different potential careers, interventions should include a focus on developing a salient sense of self through bringing forth deeply held beliefs and values. In terms of what the current study tells us about targeting populations for particular interventions, it appears that low income individuals would benefit most from access to resources and opportunities which would allow them to explore interests alongside interventions that focus on solidifying an independent sense of self and effective communication skills. Self-differentiation also encompasses emotional reactivity, therefore, students low in self-differentiation might also struggle with emotional regulation.

For upper social status students, developing an independent sense of self and effective communication skills does not appear to affect their ability to engage in occupational engagement. Furthermore, there is evidence in this study to suggest that the higher one’s status
is, the less differentiated one tends to be. This begs the question of whether being self-differentiated is an inherently good thing, or whether it is irrelevant in certain populations.

Given the entirety of the results of this study, practitioners are advised to develop an understanding of the clients’ social status and occupational exploration from a subjective perspective, and help those with deficits in identity development, conflict resolution, and emotional regulation to incorporate their development into the tasks of career exploration at hand.

Conclusion

In conclusion, there were positive aspects of this study, including: adding to the emerging literature focused on social inequality in career trajectories, further supporting the proposed relationship between self-differentiation and occupational engagement, and highlighting the importance of both social status and self-differentiation in understanding career exploration among a diverse sample of university students.
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APPENDIX A

The Department of Psychology at the University of Kansas supports the practice of protection for human subjects participating in research. The following information is provided for you to decide whether you wish to participate in the present study or not. You should be aware that even if you agree to participate, you are free to withdraw at any time without penalty.

We are conducting this study to better understand how socioeconomic status impacts career engagement in college students. The study will entail your completion of an on-line survey, which is expected to take approximately 30 minutes to complete.

The content of the questionnaires should cause no more discomfort than you would experience in your everyday life. Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of career engagement and career barriers related to socioeconomic status.

Your participation is solicited, although strictly voluntary. Your name will not be associated in any way with the research findings. It is possible, however, with internet communications, that through intent or accident someone other than the intended recipient may see your response. If you would like additional information concerning this study before or after it is completed, please feel free to contact us by phone or mail.

Completion of the survey indicates your willingness to participate in this project and that you are at least eighteen years old. If participation in this study raises issues about which you would like to speak with someone, you may contact the following counseling sources: KU’s Counseling and Psychological Services at 785-864-2277; or Bert Nash Community Mental Health Center at 785-843-9192.

If you have any additional questions about your rights as a research participant, you may call (785) 864-7429 or write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7563, email irb@ku.edu.

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APPENDIX B
DEMOGRAPHIC QUESTIONNAIRE

1. Age ______

2. Gender (circle one)  Male   Female   Transgender

3. Race/ethnicity (circle all that apply)
   Black/African American   Native/First American   Hispanic American
   Asian American   White/Caucasian/European American
   International Student   Other (Please Specify): ____________________

4. Student Standing (circle one)
   First Year   Fourth Year
   Second Year   Fifth Year
   Third Year   Sixth Year & Beyond

5. Cumulative GPA: _________________

6. Relationship Status (circle one)
   Single   Widowed
   Married   Partnered
   Divorced

7. Highest Education received by persons who raised you (circle one)
   Mother/person #1
   No high school education   Associates Degree
   Some high school   Bachelor’s degree
   GED   Master’s Degree
   High School Diploma   JD/MD/PhD or other advanced degree
   Technical Certificate
Father/person #2

No high school education    Associates Degree
Some high school            Bachelor’s degree
GED                          Master’s Degree
High School Diploma          JD/MD/PhD or other advanced degree
Technical Certificate

Other/Person # 3

No high school education    Associates Degree
Some high school            Bachelor’s degree
GED                          Master’s Degree
High School Diploma          JD/MD/PhD or other advanced degree
Technical Certificate

8. What was the NAME/TITLE of the longest-held OCCUPATION of persons who raised you
Mother/Person 1: _____________________
Father/Person 2: _____________________
Other/Person 3: _____________________

9. What is the combined annual income of the persons who raised you in your home

Please estimate if you are unsure. (Circle one)

Less than $10,000          $50,000-59,999
$10,000-19,999             $60,000-69,999
$20,000-$29,999            $70,000-79,999
$30,000-$39,999            $80,000-89,999
$40,000-$49,999            $90,000 and above
10. In thinking about your past and present experiences, which label best describes your perceived social class (circle one)
   - Lower Class
   - Upper Middle Class
   - Lower Middle Class
   - Upper Class
   - Middle Class

11. How do you pay for your college education? (please circle the MAIN source of money used to pay for college)
   - My parents pay for it
   - Another family member pays for it
   - A friend pays for it
   - My partner and I pay for it
   - I have scholarships
   - I pay for it
   - I am taking out loans to pay for it
   - Other (please describe): ________________________

12. Are you currently working while going to school (during the academic school year)?
   - Yes
   - No

13. If YES, how many hours on average per week? __________________

14. If YES, please describe your current job (i.e. residential housing assistant, cook, babysitting, research assistant, restaurant server, etc.)________________________

15. If YES, does your current job relate to future career aspirations beyond paying for school?
   - Yes
   - No
16. If YES, how does it relate to future career aspirations?

______________________________________________________________________________

______________________________________________________________________________

THANK YOU for completing this survey!
APPENDIX C
Occupational Engagement Scale – Student
(57-item Version)

How Well Does Each Statement Describe You?

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all like me</td>
<td>Somewhat like me</td>
<td>Very much like me</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I have a list of careers I might consider.
2. I'm at a stage in life where I don’t need to think much about my career path.
3. I daydream about career possibilities.
4. I read about careers I find interesting.
5. I talk about my career choices with family or friends.
6. I am actively involved in groups or organization
7. I keep an eye on trends and events that might impact potential occupations
8. I keep an open mind about jobs I might apply for right out of school.
9. I am aware of the educational requirements for a career that I find interesting.
10. I take classes that are not required, just because they seem interesting.
11. I am comfortable with the possibility that factors I cannot predict may affect my future.
12. I make connections with people who might be helpful to me later.
13. I have contact with people working in the fields I find interesting.
14. I have created a list of working conditions that appeal to me.
15. I seldom discuss my career plans with a teacher, advisor, or counselor.
16. I am fixed on my career path.
17. I look for ways my strengths might apply to different kinds of work.
18. I haven't given much thought to my future experiences at work.
19. I gain hands on experience that I might use in the future.
20. I don't have much volunteer experience.
21. I imagine how it might feel to do the kind of work I'm considering.
22. I notice how I feel in different work environments.
23. I picture how my life might branch out in unplanned directions
24. I volunteer in an area that I find interesting.
25. I think it's foolish to trust my gut when making career decisions.
26. I just know when I encounter a situation worth pursuing.
27. I attend lectures, exhibits, and community events.
28. I don't let my emotions influence my career plans
29. I learn little from trying new things.
30. I discuss my strengths and weaknesses with a teacher or mentor.
31. I keep my resume up to date.
32. I think my career plan is fool proof.
33. I ask myself how well a particular career fits with who I am.
34. I picture myself actually doing the kind of work I'm considering.
35. I don't need a back-up plan for my career.
36. I attend presentations or talks related to a career I might find interesting.
37. I have not talked with people working in my field of interest.
38. I don't often discuss ideas from readings or classes with others outside of class (students, family members, coworkers, etc.).
39. I can succeed in my field without talking to people who work in it.
40. I tutor or teach other students.
41. I hang out with people who are different from me.
42. I take part in a variety of activities to see where my interests lie.
43. I work(ed) part-time or as an intern.
44. I ask people in social settings about what they do for a living or what they are interested in doing.
45. I visit places I'm interested in working at so I can learn more about them.
46. I have no interest in studying abroad.
47. I avoid speaking up in class.
48. I can succeed by sticking to what I know.
49. I pursue opportunities in life because I just know they will come in handy.
50. I avoid talking to teachers outside of class.
51. I trust that a career I have in mind is right for me, even if I can't explain why.
52. I picture the kind of life I might have with a particular career.
53. I try to dress or look the part of the career I have in mind.
54. I imagine what my future workplace might look like.
55. I work with teachers or staff on activities other than coursework (committees, orientation, student life activities, etc.).
56. I do lots of things that are interesting to me.
57. I have meaningful conversations with students of a different ethnicity.
### APPENDIX D

**DIFFERENTIAL STATUS IDENTITY SCALE**

Compare yourself to what you think the average citizen of the United States is like. Please indicate how you compare to the average citizen in terms of the items below using the following scale:

<table>
<thead>
<tr>
<th>Very Much</th>
<th>Below Average</th>
<th>Below</th>
<th>Average</th>
<th>Equal</th>
<th>Above</th>
<th>Above Average</th>
<th>Very Much</th>
</tr>
</thead>
<tbody>
<tr>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
<td></td>
<td>+2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For example, if you believe you are equal to the average U.S. citizen in terms of the financial resources needed to pursue a high-quality university education, you would mark “0” to item 1 below.

1. Ability to give your children (now or in the future) additional educational experiences like ballet, tap, art/music classes, science camp, etc.
   
   -2  -1  0  +1  +2

2. Ability to afford to go to the movies, restaurants, and/or the theater on a regular basis
   
   -2  -1  0  +1  +2

3. Ability to join a health club/fitness center
   
   -2  -1  0  +1  +2

4. Ability to afford regular dental visits
   
   -2  -1  0  +1  +2

5. Ability to afford dry cleaning services on a regular basis
   
   -2  -1  0  +1  +2

6. Ability to travel recreationally
   
   -2  -1  0  +1  +2

7. Ability to travel overseas for business and/or pleasure
   
   -2  -1  0  +1  +2

8. Ability to shop comfortably in upscale department stores, such as Saks Fifth Avenue
   
   -2  -1  0  +1  +2

9. Potential for receiving a large inheritance
   
   -2  -1  0  +1  +2
10. Ability to secure loans with low interest rates
   -2   -1   0   +1   +2

11. Ability to hire professional money managers
   -2   -1   0   +1   +2

12. Ability to go to a doctor or hospital of your own choosing
   -2   -1   0   +1   +2

13. Ability to hire others for domestic chores (e.g. cleaning, gardening, child care, etc.)
   -2   -1   0   +1   +2

14. Ability to afford prescription medicine
   -2   -1   0   +1   +2

15. Ability to afford elective surgeries and/or high-cost medical examinations, such as MRIs or CAT scans
   -2   -1   0   +1   +2

Compare what is available to you in terms of type and/or amount of resources to what you believe is available to the average citizen of the United States. Please indicate how you compare to the average citizen in terms of the type and amount of resources listed below using the following scale:

<table>
<thead>
<tr>
<th>Very Much</th>
<th>Below Average</th>
<th>Below Average</th>
<th>Equal</th>
<th>Above Average</th>
<th>Above Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
</tr>
</tbody>
</table>

For example, if you believe you are equal to the average U.S. citizen in home(s), you would mark “0” for item 1 below.

1. Home(s) -2  -1  0  +1  +2
2. Land   -2  -1  0  +1  +2
3. Stocks and Bonds -2 -1  0  +1  +2
4. Money  -2  -1  0  +1  +2
5. Cars   -2  -1  0  +1  +2
6. Computers -2 -1  0  +1  +2
7. New Appliances (Washers, Dryers,
Refrigerators, etc.) -2 -1 0 +1 +2

8. Amount of Education -2 -1 0 +1 +2

9. Quality of High School(s)
   Attended -2 -1 0 +1 +2

10. Life Insurance -2 -1 0 +1 +2

11. Quality of Health Insurance -2 -1 0 +1 +2

12. Savings -2 -1 0 +1 +2

13. Maids or Cooks -2 -1 0 +1 +2

14. Close Connections to the Rich and Powerful -2 -1 0 +1 +2

15. Quality of Health Care -2 -1 0 +1 +2

Compare yourself to what you think the average citizen of the United States is like. Please indicate how you compare to the average citizen in your ability to do the things below using the following scale:

Very Much   Below      Above       Very Much
Below Average  Average  Equal   Average  Above Average

-2        -1        0        +1            +2

For example, if you believe you are equal to the average U.S. citizen in your ability to be respected and heard by others in your community, you would mark “0” to item 1.

1. Contact people in high places for a job or position.
   -2        -1        0        +1            +2

2. Contact people who can help you get out of legal problems.
   -2        -1        0        +1            +2

3. Start in a high-profile position of responsibility.
   -2        -1        0        +1            +2

4. Get information and services not available to the general public.
   -2        -1        0        +1            +2

5. Control how your group is represented in history, media, and the public.
   -2        -1        0        +1            +2

6. Receive a fair trial.
7. Become a millionaire by legal means.
8. Control the type and amount of work of others.
9. Control the salary and compensation of others.
10. Influence the laws and regulations of your state or city/town.
11. Influence state or federal educational policies.
12. Influence the policies of a corporation.
13. Influence where and when stores are built and operated.
14. Influence where and when waste treatment facilities are built and operated.
15. Influence the decision-making of foundations, charities, hospitals, museums, etc.

Compared to how society values or appreciates the average U.S. citizen, how does society value or appreciate your . . . ?

<table>
<thead>
<tr>
<th></th>
<th>Much Less</th>
<th>Less</th>
<th>Equal</th>
<th>More</th>
<th>Much More</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
<td>+2</td>
</tr>
</tbody>
</table>

1. Ethnic/racial group
2. Socioeconomic group
3. Nationality
Compared to how society values or appreciates the average U.S. citizen, how does society value or appreciate the . . .?

<table>
<thead>
<tr>
<th></th>
<th>Much Less</th>
<th>Less</th>
<th>Equal</th>
<th>More</th>
<th>Much More</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
<td>+2</td>
</tr>
</tbody>
</table>

1. Neighborhood in which you live
2. Type of home you live in
3. Places where you shop
4. Places where you relax and have fun
5. Type and amount of education you have
6. Type of car you drive
7. Position you hold in society

Compared to how society values or appreciates the average U.S. citizen, how does society value or appreciate your . . .?

<table>
<thead>
<tr>
<th></th>
<th>Much Less</th>
<th>Less</th>
<th>Equal</th>
<th>More</th>
<th>Much More</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>+1</td>
<td>+2</td>
</tr>
</tbody>
</table>

1. Physical appearance
2. Occupational success
3. Financial success
4. Physical abilities
5. Economic background
APPENDIX E
Differentiation of Self Inventory-Short Form

These are questions concerning your thoughts and feelings about yourself and relationships with others. Please read each statement carefully and decide how much the statement is generally true of you on a 1 (not at all) to 6 (very) scale. If you believe that an item does not pertain to you (e.g., you are not currently married or in a committed relationship, or one or both of your parents are deceased), please answer the item according to your best guess about what your thoughts and feelings would be in that situation. Be sure to answer every item and try to be as honest and accurate as possible in your responses.

1. I tend to remain pretty calm even under stress.
2. I usually need a lot of encouragement from others when starting a big job or task.
3. No matter what happens in my life, I know that I’ll never lose my sense of who I am.
4. I tend to distance myself when people get too close to me.
5. When my spouse/partner criticizes me, it bothers me for days.
6. At times my feelings get the best of me and I have trouble thinking clearly.
7. I’m often uncomfortable when people get too close to me.
8. I feel a need for approval from virtually everyone in my life.
9. At times, I feel as if I’m riding an emotional roller-coaster.
10. There’s no point in getting upset about things I cannot change.
11. I’m overly sensitive to criticism.
12. I’m fairly self-accepting.
13. I often agree with others just to appease them.
14. If I have had an argument with my spouse/partner, I tend to think about it all day.
15. When one of my relationships becomes very intense, I feel the urge to run away from it.
16. If someone is upset with me, I can’t seem to let it go easily.
17. I often feel unsure when others are not around to help me make a decision.
18. I’m very sensitive to being hurt by others.
19. My self-esteem really depends on how others think of me.
20. I tend to feel pretty stable under stress.
APPENDIX G
Debriefing Form: OCCUPATIONAL ENGAGEMENT VARIATION ACROSS SOCIAL CLASS: HOW RELATIONSHIP SKILLS MODERATE

Thank you for agreeing to participate in this study! The general purpose of this research is to better understand the relationship between socioeconomic status and career engagement in college students.

We invited people who are attending a university and over 18 years of age. The experimenter does not know how you responded individually to any of the questions asked. In this study, you were asked to respond to questions about how you pay for your schooling, how you perceive your social status, your relationships with significant people in your life, and how you approach future career goals and interests. These questions pertain to the study’s interest in better understanding differences in career engagement experiences of students in different socioeconomic statuses. The results from this study will guide further research and career interventions tailored to the needs and strengths of people in different statuses.

If you feel especially concerned about any aspect of your participation in this study, please feel free to email Meg Givens (mgivens@ku.edu) about options for counseling. Alternatively, you could also phone the KU Counseling and Psychological Services at (785) 864-2277 or the KU University Career Center at (785) 864-3624.

In addition, if you have any concerns about any aspect of the study, you may contact (785) 864-7429 or (785) 864-7385, write the Human Subjects Committee Lawrence Campus (HSCL), University of Kansas, 2385 Irving Hill Road, Lawrence, Kansas 66045-7568, or email hscl@ku.edu. Thank you for your participation in this study.

Additional Reading:


Table 1. Means, Standard Deviations and Coefficient Alphas among Instruments and Subscales

<table>
<thead>
<tr>
<th></th>
<th>N of items</th>
<th>M</th>
<th>SD</th>
<th>Alpha</th>
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<td>78.1</td>
<td>15.0</td>
<td>.87</td>
</tr>
<tr>
<td>DSSF EC</td>
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</tr>
<tr>
<td>DSSF ER</td>
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<tr>
<td>DSIS ER-A</td>
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<td>50.2</td>
<td>12.7</td>
<td>.96</td>
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<tr>
<td>DSIS ER-B</td>
<td>15</td>
<td>50.1</td>
<td>11.3</td>
<td>.95</td>
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<tr>
<td>DSIS-Po</td>
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<td>44.5</td>
<td>10.9</td>
<td>.95</td>
</tr>
<tr>
<td>DSIS S-Pr</td>
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<td>8.9</td>
<td>.91</td>
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<tr>
<td>OES Full</td>
<td>9</td>
<td>28.4</td>
<td>5.52</td>
<td>.82</td>
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</tbody>
</table>

Note. DSSF = Differentiation of Self – Short Form; DSIS = Differential Status Identity Scale; OES = Occupational Engagement – Student; EC = Emotional Cut-off; ER = Emotional Reactivity; FO = Fusion with Others; IP = I-Person; *p< .05; **p< .01.
Table 2. Correlation Matrix for DSSF and subscales, DSIS and subscales, and OES

<table>
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<tr>
<th></th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
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<td></td>
<td>.521**</td>
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<tr>
<td>2.DSSF EC</td>
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<td>.866**</td>
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<td>5.DSSF IP</td>
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<td>Sig.</td>
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<td></td>
<td>.027</td>
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<td>.010</td>
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<td></td>
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<td>.000</td>
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<td>Sig.</td>
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<td>9.DSIS S-Pr</td>
<td>Corr.</td>
<td>Sig.</td>
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<td>Sig.</td>
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<td>.107*</td>
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<td>.163**</td>
<td>.093</td>
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</table>

Note. DSSF = Differentiation of Self – Short Form; DSIS = Differential Status Identity Scale; OES = Occupational Engagement – Student; EC = Emotional Cut-off; ER = Emotional Reactivity; FO = Fusion with Others; IP = I-Person, *p<.05, **p< .01.
Table 3. *Simple t-test comparison of Primary Variables with Normative samples*

<table>
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<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Normative Mean</th>
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<td>DSSF</td>
<td>-7.64</td>
<td>559</td>
<td>.000</td>
<td>83</td>
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</tbody>
</table>


Table 4. *Descriptive Statistics for each measure by gender*

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<tr>
<th>Variable</th>
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<th>Female</th>
</tr>
</thead>
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</tbody>
</table>

*Note.* DSSF = Differentiation of Self – Short Form; DSIS = Differential Status Identity Scale; OES = Occupational Engagement – Student; EC = Emotional Cut-off; ER = Emotional Reactivity; FO = Fusion with Others; IP = I-Person; *p< .05; **p< .01.
### Table 5. Descriptive Statistics for each measure by Race/Ethnicity

<table>
<thead>
<tr>
<th>Variable</th>
<th>White</th>
<th>Black</th>
<th>Native</th>
<th>Hispanic</th>
<th>Asian</th>
<th>International</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>DSSF Full</td>
<td>78.3</td>
<td>14.9</td>
<td>82.6</td>
<td>16.9</td>
<td>86.8</td>
<td>7.0</td>
<td>72.8</td>
</tr>
<tr>
<td>DSIS Full</td>
<td>202.3</td>
<td>35.4</td>
<td>18.9</td>
<td>4.6</td>
<td>204.5</td>
<td>53.0</td>
<td>172.4</td>
</tr>
<tr>
<td>OES Full</td>
<td>28.4</td>
<td>5.64</td>
<td>29.0</td>
<td>6.2</td>
<td>28.8</td>
<td>4.9</td>
<td>27.4</td>
</tr>
</tbody>
</table>

*Note.* DSSF = Differentiation of Self – Short Form; DSIS = Differential Status Identity Scale; OES = Occupational Engagement – Student.

### Table 6. Analysis of Variance of Social Status (DSIS) by self-reported social class

#### Between-Subject Factors and Descriptive Statistics

<table>
<thead>
<tr>
<th>Group</th>
<th>Value Label</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lower Class</td>
<td>17</td>
<td>133.24</td>
</tr>
<tr>
<td>2</td>
<td>Lower Middle</td>
<td>57</td>
<td>165.14</td>
</tr>
<tr>
<td>3</td>
<td>Middle Class</td>
<td>255</td>
<td>192.66</td>
</tr>
<tr>
<td>4</td>
<td>Upper Middle</td>
<td>205</td>
<td>214.44</td>
</tr>
<tr>
<td>5</td>
<td>Upper Class</td>
<td>23</td>
<td>250.65</td>
</tr>
</tbody>
</table>

#### Test of Between-Subject Effects

Dependent Variable: DSIS TOTAL

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Group</td>
<td>242567.75</td>
<td>4</td>
<td>64797.289</td>
<td>66.914</td>
<td>.000</td>
</tr>
<tr>
<td>Within Group</td>
<td>461122525</td>
<td>552</td>
<td>968.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>703690.27</td>
<td>556</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 7. Analysis of Variance of Differentiation of Self-Short Form (DSSF) by self-reported social class V

Descriptive Statistics of DSSF by social class V

<table>
<thead>
<tr>
<th>Group</th>
<th>Value Label</th>
<th>N</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lower Class</td>
<td>16</td>
<td>80.41</td>
</tr>
<tr>
<td>2</td>
<td>Lower Middle</td>
<td>52</td>
<td>76.30</td>
</tr>
<tr>
<td>3</td>
<td>Middle Class</td>
<td>234</td>
<td>77.78</td>
</tr>
<tr>
<td>4</td>
<td>Upper Middle</td>
<td>186</td>
<td>78.68</td>
</tr>
<tr>
<td>5</td>
<td>Upper Class</td>
<td>20</td>
<td>79.73</td>
</tr>
</tbody>
</table>

Test of Between-Subject Effects for DSSF by social class V

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Group</td>
<td>582.73</td>
<td>4</td>
<td>108.281</td>
<td>.478</td>
<td>.752</td>
</tr>
<tr>
<td>Within Group</td>
<td>110922.248</td>
<td>552</td>
<td>226.682</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>111504.982</td>
<td>556</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 1. Means Comparison with Normative Sample OES

- Normal
  - Mean = 28.25
  - Std. Dev. = 5.472
  - N = 560
Figure 2. Means Comparison with Normative Sample Differentiation of Self-Short Form (DSSF)

- Normal
  - Mean = 78.15
  - Std. Dev. = 15.013
  - N = 560
Figure 3. Means Comparison with Normative Sample Differential Status Identity Scale (DSIS)

---

Normal
Mean = 199.21
Std. Dev. = 37.916
N = 560

---

Frequency

SS_tot

0 10 20 30 40 50
50.00 100.00 150.00 200.00 250.00 300.00 350.00

---
Figure 4. Scatterplot of correlation between Occupational Engagement and Self-Differentiation

\[ r^2 \text{ Linear} = 0.012 \]
Figure 5. Scatterplot of correlation between Occupational Engagement and Social Status
Figure 6. Scatterplot of correlations between Occupational Engagement and Social Status by Social Class V
Figure 7. Scatterplot of correlations between Self-Differentiation and Social Status
Figure 8. Model of Moderation with correlations between Variables

- Social Status
- Self Differentiation
- Occupational Engagement

- $r = 0.027$, $p = 0.517$
- $r = 0.107^*$, $p = 0.011$
- $r = 0.163^{**}$, $p = 0.000$