# Southern Illinois University Carbondale OpenSIUC

#### Theses

Theses and Dissertations

8-1-2013

## Socioeconomic Status and Social Class as Predictors of Career Adaptability and Educational Aspirations in High School Students

Alec Eshelman Southern Illinois University Carbondale, alec.eshelman@siu.edu

Follow this and additional works at: http://opensiuc.lib.siu.edu/theses

#### **Recommended** Citation

Eshelman, Alec, "Socioeconomic Status and Social Class as Predictors of Career Adaptability and Educational Aspirations in High School Students" (2013). *Theses.* Paper 1265.

This Open Access Thesis is brought to you for free and open access by the Theses and Dissertations at OpenSIUC. It has been accepted for inclusion in Theses by an authorized administrator of OpenSIUC. For more information, please contact opensiuc@lib.siu.edu.

## SOCIOECONOMIC STATUS AND SOCIAL CLASS AS PREDICTORS OF CAREER ADAPTABILITY AND EDUCATIONAL ASPIRATIONS IN HIGH SCHOOL STUDENTS

Alec Eshelman

Southern Illinois University Carbondale

A Thesis

Submitted in Partial Fulfillment of the Requirements for the

Master of Arts Degree

Department of Psychology

in the Graduate School

Southern Illinois University Carbondale

August 2013

### THESIS APPROVAL

### SOCIOECONOMIC STATUS AND SOCIAL CLASS AS PREDICTORS OF CAREER ADAPTABILITY AND EDUCATIONAL ASPIRATIONS IN HIGH SCHOOL STUDENTS

By

Alec J. Eshelman

A Thesis Submitted in Partial

Fulfillment of the Requirements

for the Degree of

Master of Arts

in the field of Psychology

Approved by:

Dr. Patrick Rottinghaus, Chair

Dr. Paul Etcheverry

Dr. Jane Swanson

Graduate School Southern Illinois University Carbondale May 08, 2013

#### AN ABSTRACT OF THE THESIS OF

Alec Eshelman, for the Master of Arts degree in psychology, at Southern Illinois University Carbondale.

## TITLE: SES AND SOCIAL CLASS AS PREDICTORS OF CAREER ADAPTABILITY AND EDUCATIONAL ASPIRATIONS IN HIGH SCHOOL STUDENTS MAJOR PROFESSOR: Dr. Patrick J. Rottinghaus

#### Abstract

This study examined socioeconomic status (SES) and perceived social class as predictors of career adaptability and educational aspirations in a sample of American high school students. SES was measured using caregivers' occupation and education, and the MacArthur Scale of Subjective Social Status—Youth Version (Goodman et al., 2001) assessed subjective social class. Career adaptability was be measured using the Career Futures Inventory-Revised (CFI-R; Rottinghaus, Buelow, Matyja, & Schneider, 2012) and the Career Maturity Inventory (CMI) Form C (Savickas & Porfeli, 2011). Data were analyzed using hierarchical multiple regressions. SES and perceived social class independently predicted educational aspirations and expectations, while SES independently predicted occupational aspirations and expectations. Expected correlations between CFI-R and CMI Form C scales were found, providing convergent validity evidence and supporting the use of the CFI-R with adolescents. This study represents a step toward developing empirically informed vocational interventions that take SES and social class into account.

Keywords: socioeconomic status, social class, career adaptability, educational aspirations

i

#### ACKNOWLEDGEMENTS

I would like to thank Kate Eshelman for your constant support and for your myriad contributions to this project. Without you, this work would not be possible.

Thanks to Aaron Miller for providing guidance along the way. To my cohort, many thanks for your useful suggestions, particularly when this project was in its infancy. If only you weren't years ahead of me with your theses! Thanks also to Dr. Yu-Wei Wang, who helped me to develop my early ideas for this project.

Many thanks to my committee members. Your thoughtful suggestions were greatly helpful in shaping and improving my work. Finally, I would like to thank my chair, Dr. Patrick Rottinghaus. Your guidance and direction throughout this process, along with the manner in which it was provided, as well as your enthusiasm for the work, was essential and is immensely appreciated.

ABSTRACTi
ACKNOWLEDGEMENTS ii
LIST OF TABLES iv
CHAPTERS
CHAPTER 1: Introduction1
CHAPTER 2: Literature Review5
CHAPTER 3: Method28
CHAPTER 4: Results
CHAPTER 5: Discussion46
REFERENCES
APPENDICES
Appendix A: Demographic and Career Planning Questionnaire
Appendix B: Perceived Social Class85
Appendix C: Career Futures Inventory-Revised-Adolescent
Appendix D: Career Maturity Inventory Form C87
Appendix E: Informed Consent Statement90
Appendix F: Debriefing Form91
VITA

## TABLE OF CONTENTS

## LIST OF TABLES

## TABLE

## PAGE

Table 1	56
Table 2	57
Table 3	58
Table 4	59
Table 5	60
Table 6	61
Table 7	62
Table 8	63
Table 9	64
Table 10	65
Table 11	66
Table 12	67
Table 13	68
Table 14	69
Table 15	70

#### CHAPTER 1

#### INTRODUCTION

Vocational psychologists are increasingly calling for a heightened emphasis on historically underserved populations (Blustein, 2011b; Liu & Ali, 2005). Blustein (2011b), for instance, noted that vocational psychology has tended to focus on individuals from middle-class populations who enjoy above-average levels of occupational choice. Liu and Ali (2005) argued that vocational psychology has often implicitly embraced a classist bias towards upward mobility. These and other scholars (Gottfredson, 1981; Richardson, 1993) have called for vocational psychology to broaden its focus to address issues facing underserved populations such as the poor and the unemployed.

Although it is generally agreed that socioeconomic status (SES) and social class merit increased research attention, Liu et al. (2004) have argued that these constructs have been inconsistently used in research and are often erroneously conflated. They contend that, even though both SES and social class both relate to power, prestige, and access to resources, a primary distinction between the two involves group awareness. Specifically, social class implies a collective consciousness of a group's relative position within society (Liu et al., 2004), whereas SES can be understood as an index of access to resources and power (Saegert et al., 2007). This suggests that different measures might be helpful in capturing these distinct constructs. Objective measures are often used to assess SES, and subjective measures have been helpful in assessing social class, which inherently involves individuals' perceptions (Adler et al., 2000; Liu et al., 2004).

The body of vocational literature addressing these issues is beginning to grow. Liu and Ali (2005) and Blustein, McWhirter, and Perry (2005) have elucidated an emancipatory

communitarian (EC) approach to vocational psychology. The approach is *communitarian* in its emphases on "compassion, social obligation, and mutual determination" (Blustein et al., p. 150). The EC approach is *emancipatory* in that it seeks liberation for individuals held captive by social injustices. Additionally, Duffy and Dik (2009) have explored some of the external influences, such as family and societal influences, that affect career decision making across the life span.

These efforts have provided a helpful framework for understanding both the importance and complexity of assisting those who have been largely overlooked by vocational psychology, but more empirical research is needed. Blustein (2011b) recently argued that the initial task facing researchers pursuing this goal is to "document the impact of unemployment and poverty for individuals, communities, and nations" (p. 320). One such study by Blustein et al. (2002) assessed the role of social class in the school-to-work transition. This study provided a large amount of qualitative data on the influence social class and SES has upon a number of key career-related constructs. In particular, the narrative data suggested that one key construct in vocational psychology, career adaptability, was linked to SES in the young-adult (mean age of 21.9) participants. Specifically, high-SES students exhibited more self-exploration and environmental exploration and engaged in more future-oriented planning (Blustein, 2002).

Career adaptability is considered a focal point for contemporary career theory and practice (Savickas, 2011; van Vianen, De Pater, & Preenan, 2009). Proposed by Super and Knasel (1981) as an alternative to career maturity, career adaptability has been defined as "a psychosocial construct that denotes an individual's readiness and resources for coping with current and imminent vocational development tasks, occupational transitions, and personal traumas" (Savickas, 2005, p. 51). Rottinghaus and his colleagues (Rottinghaus, Buelow, Matyja, Schnieider, 2011; Rottinghaus, Day, & Borgen, 2005) have developed a well-validated measure

of career adaptability, the Career Futures Inventory. The Career Futures Inventory-Revised (CFI-R; Rottinghaus et al., 2012) inventory contains five subscales: career agency, occupational awareness, support, work-life balance, and negative career outlook.

Savickas and Porfeli (2011) have developed the Career Maturity Inventory (CMI) Form C. The CMI Form C assesses three career adaptability dimensions: concern, curiosity, and confidence. Scores from these three dimensions are combined to form a global career choice readiness score. Although the CMI Form C produces scale scores for only three career adaptability dimensions, items relating to a fourth dimension, control, also contribute toward the global career choice readiness score. A fifth scale score, Consultation, assesses the degree to which individuals consult others for career decision-making assistance. The validation sample for the CMI Form C was comprised of students enrolled in grades 9-12, making the instrument useful to high school interventions and research.

Educational aspirations are associated with career adaptability (Rottinghaus, Day, & Borgen, 2005) and affiliated features, such as self-efficacy, interests, and personality (Rottinghaus et al., 2002). McWhirter, Larson, and Daniels (1996) found that educational aspirations of minority adolescents were correlated with parents' educational level, an important indicator of SES. Further, Diemer and Hsieh (2008) explored the importance of sociopolitical development for the development of vocational expectations in a low SES sample of adolescents of color. These authors noted that a vocational aspiration-expectation gap has been observed in low SES adolescents but not in higher SES adolescents. In other words, though low SES adolescents have similar aspirations to their higher SES counterparts, they are less likely to expect to achieve these goals.

The current study attempted to build upon previous research by using quantitative measures to assess the strength of SES and perceived social class as predictors of career adaptability in high school students. Assessing both SES and perceived social class with respect to career adaptability represented a novel approach that made a significant contribution to understanding the relationships of these constructs. Additionally, educational aspirations were assessed because of the critical importance of education to employability and adaptability (Fugate, Kinicki, & Ashforth, 2004). Blustein (2011b) has argued that if vocational psychologists hope to understand and assist all working people and not simply middle-class individuals with relatively high levels of vocational volition, the research base of the field must expand to encompass populations that have been largely overlooked in the past. The current study represented an attempt to build this knowledge base in a small way by shedding light on some of the potential relationships between SES and perceived social class, and career adaptability, educational aspirations, and educational expectations. Understanding these relationships moves researchers and practitioners one step closer to developing and providing effective, empirically grounded services that take these variables into greater account.

#### CHAPTER 2

#### LITERATURE REVIEW

This literature review will begin with a discussion of the constructs of socioeconomic status (SES) and social class. Distinctions between these related constructs will be examined, followed by theoretical and operational definitions of SES and social class, and the importance of these variables to vocational psychology. This will be followed by a discussion of the history of career adaptability, its current status in vocational psychology, and some measures of the construct. Finally, educational aspirations and expectations will be reviewed, followed by the rationale for the current study.

#### Socioeconomic Status and Social Class

Although SES remains one of the most widely researched constructs within the social sciences, researchers continue to discuss what, specifically, the construct represents (Bradley & Corwyn, 2002; Liu et al., 2004; Oakes & Rossi, 2003). Bradley and Corwyn (2002) noted a "tugof-war between proponents of SES as representing social class (or economic position) and proponents of SES as representing social status (or prestige)" (p. 372). Further, there is an ongoing debate about whether prestige and status should be considered components of SES or entirely distinct constructs (Krieger, Williams, & Moss, 1997; Liu et al., 2004). Liu et al. (2004) observed that, because these discussions have yet to be resolved, terms such as *SES, social class*, or *economic background* are often conflated and used interchangeably (e.g. Blustein, 2002; Conger, Conger, & Martin, 2010). Oakes and Rossi (2003) argued the absence of clear definitions stems from a "lack of conceptual clarity regarding the essential nature of social stratification" (p. 771). This lack of clarity results in confusion, both in research and in the theoretical literature (Liu et al., 2004). Despite this confusion, it is generally agreed that an essential component of SES is access to resources, or capital. Coleman (1988) described three forms of capital: physical capital, human capital, and social capital. Physical capital is wholly tangible and relates to tools, productive equipment, and other material resources (Coleman, 1988). Human capital relates to nonmaterial resources, such as skills and abilities that are acquired through education. The final form of capital, social capital, relates to resources that derive from social relations or connections. Conceptualizing these three categories of capital is advantageous in that they clarify the important contribution of social relationships to SES. Bradley and Corwyn (2002) argue that this notion of capital is perhaps the most prevalent conceptualization of SES espoused by psychologists, probably in part because they have relatively direct implications for well-being. Moreover, social and human capital are considered crucial dimensions of employability (Fugate et al., 2004).

Although scholars generally agree upon the importance of resources to SES, there is disagreement about the role of prestige and status, and some have made a distinction between SES and social class. Liu et al. (2004), for example, argued that even though both SES and social class relate to power, prestige, and access to resources, a primary distinction between the two involves group awareness. Specifically, they observed that social class implies a collective consciousness of a group's relative position within society, whereas SES implies no such group awareness of individuals in similar economic standing. Consequently, classism enters the picture only with respect to social class, not SES, because classism derives from collective consciousness of relative economic standing (Liu et al., 2004).

Adler, Epel, Castellazzo, and Ickovics (2000) found that subjective (or perceived) social status was associated with a variety of biological functions (e.g., heart rate, body fat distribution,

and cortisol habituation to repeated stress), as well as psychological functioning (e.g., pessimism, control over life, and active coping), even after controlling for objective social status. This suggests that perceived social class contributes to health and psychological outcomes at least as significantly as do more traditional, objective conceptualizations of social standing. Fouad and Brown (2000) also argued for a greater emphasis on the ways in which contextual variables such as race and social class are internalized. They proposed differential status identity (DSI) as a conceptual framework for understanding the psychological impact of these variables. DSI also suggests that individuals who are members of nonordinant groups are likely to experience a greater psychological impact of their social status than members of ordinant groups or statuses (Fouad & Brown, 2000).

The vigorous debate surrounding these constructs is likely due to their significance, both theoretically and practically. One need not look far to see the influence of these variables in everyday life, and there is a preponderance of evidence linking various facets of SES to health and well-being (e.g., Crimmins, Hayward, & Saito, 1996; Krieger, Williams, & Moss, 1997; Saegert et al., 2007; Seeman et al., 2004). Saegert et al. (2007) noted four distinct pathways through which SES impacts health: differential access to health care, differential exposure to environmental hazards, health behaviors, and differential exposure to stress. These pathways ultimately result in poorer outcomes for lower SES individuals on a variety of variables (Saegert et al., 2007). Lower SES is associated with higher morbidity and mortality (Adler et al., 1994; Seeman et al., 2004), and it appears that this mortality differential is growing at older ages (Crimmins, Hayward, & Saito, 1996; Seeman et al., 2004). Further, Saegert et al. (2007) highlighted the growing evidence that poverty contributes to psychopathology, and not the reverse. Evidence also suggests that lower-SES children suffer poorer health, academic,

cognitive, and emotional or behavioral outcomes (Bradley & Corwyn, 2002; Brooks-Gunn & Duncan, 1997).

Given these adverse correlates of SES, incorporating it meaningfully into research will be important. This is especially true in vocational research, which has historically focused on individuals with relatively high levels of choice (Blustein, 2011b). To remedy this, researchers must develop a better understanding of the influence of SES and social class upon key vocational constructs. Doing so represents a pivotal step toward integrating these variables into vocational theory and practice.

#### **Measuring SES and Social Class**

Just as there is much debate about the precise definition of SES, so too do scholars disagree on the best way to measure SES and social class. SES is most commonly operationalized as a composite measure including educational attainment, income, and occupation (Adler et al., 1994; Bradley & Corwyn, 2002; Saegert et al., 2007). These three measures are thought to capture essential components of social stratification, and each of these components is associated with valuable resources that foster development and serve as buffers for stress (Adler et al., 1994; Saegert et al., 2007). Although a composite of these components is often used to assess SES, some have argued that composite measures should be avoided and that effects of each component should be evaluated separately (Saegert et al., 2007).

Education, for example, provides individuals with increased skills and knowledge and is positively correlated with a variety of positive outcomes (Ross & Wu, 1995; Saegert et al., 2007). Ross and Wu argued that education not only improves health due to increased cognitive skills, but also indirectly by improving "work and economic conditions, social-psychological resources, and health lifestyle" (1995, p. 738). Further, Elo and Preston (1996) found significant educational differences in mortality even after controlling for income, marital status, and place of residence. Interestingly, they also discovered that those who attended some college, but did not graduate, did not exhibit significant mortality differentials, except for women aged 65-89 (Elo & Preston, 1996). This suggests that years of education alone may not be as important as the degree earned. This also suggests that important social relationships develop in college (i.e., social capital) that may help to predict mortality. Indeed, Backlund, Sorlie, and Johnson (1999) found educational mortality differentials fit a trichotomy between those with less than a high school degree, a high school degree but no college degree, or a college degree or higher.

Income is also commonly assessed in an effort to measure SES, although it is a more controversial measure of SES than is education. Like education, greater income alleviates a variety of stressors in individuals' lives. For instance, income provides individuals with greater access to goods and services, including health care (Saegert et al., 2007). Unlike education, however, income is subject to fluctuations due to job loss, promotions, and the like. Hauser (1994) has suggested that income is a volatile measure of SES that is difficult to interpret adequately. In particular, Hauser (1994) recommends caution when using income to measure SES in children and adolescents, and he urges researchers to assess educational attainment and occupation instead (or, if income must be assessed, in addition). Given the volatility of income, some have suggested wealth as a more stable, and indeed more telling indicator of SES (Kingston & Smith, 1997; Saegert et al., 2007). Measuring wealth, which Saegert et al. (2007) defined as private assets minus debts, not only accounts for the accumulation of assets over time, but it also may serve as a buffer for income volatility

Finally, occupation is often assessed in an effort to measure SES. Although efforts to demonstrate the benefits of employment are complicated by a possible selection bias, where the

fittest workers are those that obtain and retain employment (Murphy & Athanasou, 1999; Saegert et al., 2007), the health benefits of employment are well documented. Unemployed individuals report higher levels of depression (Bolton & Oatley, 1987) and anxiety (McKee-Ryan, Song, Wanberg, & Kinicki, 2005), and diminished physical health (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Saegert et al., 2007). Additionally, gaining employment offers individuals valuable social contact, expanded social networks, and a source of identity (Hoare & Machin, 2010; Saegert et al., 2007). The health benefits conferred by employment are, however, differentially distributed, and lower SES occupations are associated with higher morbidity and cardiovascular risk (Ferrie, Shipley, Smith, Stansfeld, & Marmot, 2002; Marmot et al., 1991). Lower SES jobs tend to pay less, involve less autonomy, choice, variety, and skill development, and are generally more hazardous (Marmot et al., 1991; Saegert et al., 2007).

Although these objective measures are helpful in assessing SES, some have suggested the importance of subjective components of SES and class (Liu et al., 2004). Liu et al. (2004) offer a helpful distinction between SES as an objective index of economic position and social class as an awareness of one's social and economic position. Consequently, different measures might be helpful in capturing these distinct constructs. Specifically, although objective measures are often used to assess SES, subjective measures have been helpful in assessing perceived social class, which inherently involves individuals' perceptions (Adler, Epel, Castellazo, & Ickovics, 2000; Liu et al., 2004). One common and parsimonious measure of perceived social class is the MacArthur Scale of Subjective Social Status—Youth Version (Goodman, Adler, Kawachi, Frazier, Huang, & Colditz, 2001). This approach asks participants to rank their relative social position on one of ten rungs of a ladder, where each rung up the ladder represents a slightly higher level of social status. Using this measure, Adler et al. (2000) found that subjective social

class was significantly related to both physical and psychological variables above and beyond objective measures of SES. Hence it seems worthwhile to assess the distinct contributions of both objective SES and subjective social class on these variables.

#### SES and Social Class in Vocational Psychology

Scholars (Blustein, 2011b; Blustein, McWhirter, & Perry, 2005; Savickas, 1999) have noted that much early research in vocational psychology studied poor or working class populations. For instance, Super and Wright (1941) examined the school to work transition during the Great Depression. They found that youths who graduated during the height of the Great Depression exhibited lower occupational ambitions, delays in establishing vocational ambitions, and slower expected career advancement. Additionally, graduates during the Great Depression delayed their plans of pursuing advanced education. Moreover, parental socioeconomic status (SES) was shown to be an important factor in obtaining and maintaining employment.

Walter and Rothney's (1938) report examined the academic, economic, and social backgrounds of unemployed youth. This study, which found few significant differences between employed and unemployed youths, was used to provide evidence that the unemployed were not to be blamed for their circumstances. Significant differences between employed and unemployed youths were found for ethnic origins, the methods of attaining employment, working while in school, and attendance at post-secondary educational institutions.

Although these early studies provided much data about working class and unemployed individuals, Blustein (2011b) argued that the focus of vocational psychology underwent a gradual narrowing, eventually becoming circumscribed by a largely middle class agenda. In other words, the concerns of vocational psychology theory came to mirror those of a relatively

empowered subset of the populace that enjoys a high degree of access to educational opportunity and career choice. Nevertheless, through the years there have been dissenting voices that have argued for a more robust incorporation of SES, social class, and related variables into vocational psychology theories and practice.

For instance, Gottfredson (1973) argued that, although SES is often acknowledged by theorists as important, it is nevertheless peripheral in most vocational development models. She proposed a model of occupational choice in which social class figures prominently. In this model, social class perceptions inform the developmental process of circumscription, whereby individuals choose occupational aspirations that are in line with their social class self-concept (as well as other important variables). Gottfredson argued that, at a fairly young age, individuals will begin to rule out careers that are incongruent with their social class self-concept. In Gottfredson's model, social class and social class perceptions are one of a handful of principal influences upon the circumscription of occupational aspirations. Importantly, Gottfredson also included the notion of compromise in her developmental model. She argued that, when they are necessary, compromises will first be made in relation to peripheral aspects of the self-concept, such as interests, and later to more central aspects, such as job sex-type. Given the disempowerment of lower SES individuals, a robust understanding of the processes of compromise is important to fully comprehend the vocational development of these populations.

Warnath (1975) claimed that dominant vocational theories were largely irrelevant for an increasing proportion of American workers. He noted that numerous occupations are not developmental in nature and are unlikely to provide satisfaction or fulfillment to incumbents. Additionally, Warnath observed that concepts like calling failed to reflect the powerlessness and lack of meaning that many American workers experience in their occupations. Many jobs,

Warnath argued, are not inherently satisfying and cannot be made so. Quite strikingly, he claimed that "the connection between work and the confirmation of one's worth as a human being has been severed for the great majority of our population" (p. 428). Thus, he concluded, vocational theory must expand to address the alternate means by which individuals can express themselves and regain a sense of control.

Richardson (1993) noted a general lack of attention to issues of classism and social structure. In this article Richardson explored the notion of career as a subcategory of work. She suggested that the term *career* carries with it connotations of a developmental progression that only applies to empowered populations able to access certain occupations. As a solution, Richardson proposed replacing the study of *career* with a focus on the broader *work*, which she argued is more inclusive of class, gender, and developmental trajectories of work over the life course. Further, Richardson argued in favor of a social constructionist epistemological perspective within vocational psychology, which would enable theorists to examine and incorporate the multiple lived realities of disparate groups (e.g., groups of different SES and social classes) into vocational theory and practice. Such a perspective, Richardson continued, would allow for more a more robust incorporation of the contexts in which work is embedded and interwoven.

Blustein, McWhirter, and Perry (2005) proposed integrating Prilleltensky's (1997) emancipatory communitarian approach into vocational psychology theory. They argued that the social and economic problems of the 21<sup>st</sup> century translate into human suffering in a variety of domains, most obviously work. Further, they contended that power inequities and social injustices are plainly manifested in the world of work. Like other scholars, they argued that prevailing vocational theories are relevant for only a subset of people: specifically, "young, ablebodied, middle-class White [men] in the United States" (p. 143). To correct this imbalance, they argued in favor of Goodman et al.'s (2004) dual objectives to (1) incorporate systems and structures and (2) improve the impact of these structures upon vocational outcomes. They further argued for the emancipatory communitarian (EC) approach as a suitable alternative to current vocational models. This approach "defines the self primarily from an interpersonal and sociopolitical frame of reference" (p. 150). Consequently, interventions from the EC approach will emphasize both the individual as well as social systems. The approach is "communitarian" in its emphases on "compassion, social obligation, and mutual determination" (p. 150). The EC approach is "emancipatory" in that it seeks liberation for individuals held captive by social injustices. The authors argued that social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994) might be felicitously blended with an EC approach in ways that benefit both theories. For instance, a practitioner who incorporates insights from both SCCT and EC perspectives would not only work toward internal change within the client (such as increasing self-efficacy beliefs), but also toward external change of oppressive environments, policies, systems, etc.

Liu and Ali (2005) expanded this application of the emancipatory communitarian approach to vocational psychology theory. They incorporated a social class and classism framework to this application in order to expose potential classist biases within vocational psychology. Specifically, they argued that vocational psychology has often implicitly embraced a classist bias towards upward mobility. For instance, they noted that, in the vocational literature, "good jobs" are often implicitly conflated with higher-prestige jobs, and these good jobs are often implicitly associated with the good life. Further, Liu and Ali argued that the vocational literature often ignores negative aspects of higher-prestige jobs, as well as some positives associated with lower-prestige jobs typically held by the working class. Incorporating these class-related issues into the EC approach and into vocational theory will, they argued, expand the applicability and relevance of vocational theories.

Blustein (2011b) argued that the initial task facing researchers pursuing SES-related research is to "document the impact of unemployment and poverty for individuals, communities, and nations" (p. 320). One such study by Blustein et al. (2002) assessed the role of social class in the school-to-work transition. This exploratory qualitative study produced rich data regarding the influence social class and SES have upon vocational development. Twenty participants employed in working-class occupations were grouped into high SES (HSES) or low SES (LSES) groups based upon their family's socioeconomic background. These participants were interviewed in an effort to more fully understand the role of socioeconomic background upon their school-to-work (STW) transition. Because only participants employed in working-class occupations were interviewed, the study enabled the researchers to explore the STW transition of individuals who experienced similar transitions into the working world despite varying socioeconomic origins. These interviews revealed numerous differences between the HSES and LSES groups.

For instance, HSES individuals tended to express a variety of reasons they might work, such as the pursuit of personal satisfaction. LSES individuals, on the other hand, tended to conceptualize work in terms of economic survival. Moreover, in contrast to HSES individuals, LSES individuals reported an inability to implement their self-concepts within their work. HSES individuals were also more likely to be involved in activities related to attaining their vocational goals (such as education or training programs). Although both the HSES and LSES participants reported similar levels of internal resources and internal educational barriers, HSES participants reported more external resources and fewer external barriers than did LSES participants. HSES participants also reported more parental and social support related to vocational pursuits than did LSES participants. Finally, the career adaptability (specifically career exploration and planfulness) of HSES participants tended to be greater than that of LSES participants. Overall, these data reveal the significant influence of SES over a variety of dimensions related to vocational pursuits.

Similarly, Diemer and Blustein (2006) found that critical consciousness (and in particular sociopolitical control) was related to progress of career development in a sample of 220 urban adolescents. They suggested that critical consciousness might serve as an "antidote" to structural oppression and might be conceptualized as an internal resource. Importantly, the authors found effect sizes large enough to suggest that "critical consciousness contributes a meaningful 'piece of the puzzle' to … how urban adolescents remain connected to aspects of their life-span and life-space of career development" (p. 229). These findings offer directions for further research as well as for targeted interventions.

Although these results are illustrative, further research is needed to examine the influences of SES upon psychological (Saegert et al., 2007), and specifically vocational psychology (Blustein, 2011b) constructs. Vocational psychology theories should incorporate SES and social class more robustly (Blustein, 2011b; Blustein, McWhirter, & Perry, 2005; Liu & Ali, 2005) and should also seek both individual and sociostructural change (Blustein, McWhirter, & Perry, 2005). As Blustein (2011b) argued, the continued vitality of vocational psychology depends upon developing theories and research programs that address the vocational concerns not merely of middle-class individuals, but of all members of society.

#### **Career Adaptability**

#### **Roots in Career Maturity**

*Career adaptability* was initially proposed as an alternative to *career maturity*, a term that Super and Knasel (1981) argued carried too many assumptions regarding the nature of career development. Introduced by Super (1955) as a model for adolescent career development, career maturity posits a normative vocational developmental trajectory. Although this developmental trajectory has been subdivided in various ways, it commonly includes the "career processes of growth, exploration, establishment, maintenance, and decline" (Super, 1983, p. 557). As individuals progress through these subdivisions of the developmental continuum, they are said to exhibit increasingly mature vocational behaviors (Crites, 1961).

After its introduction, numerous researchers examined the construct, and it became one of the most common outcome measures in career counseling (Naidoo, 1998). Despite its prevalence in the literature, scholars have questioned the career maturity metaphor, particularly its relevance to adult career development (Super & Knasel, 1981). One undesirable assumption of career maturity, Super and Knasel (1981) argued, is that the term *maturity* implies a somewhat predictable series of career tasks. In other words, by invoking a growth process through a biological metaphor, maturity also implies that there are certain developmental milestones that are fairly standard (as is the case with biological development). Super and Knasel (1981) argued that, once workers reach adulthood, career development pathways are diverse and unpredictable, and clear developmental milestones are largely absent. Hence the maturity metaphor is incongruous with adult career development patterns.

A second assumption of career maturity, they argued, is that as individuals mature, so too do the attitudes and competencies that allow them to progress developmentally (Super & Knasel, 1981). This assumption is dubious because, in many cases, the same attitudes and competencies that will benefit a 25-year-old worker will also benefit a 40-year-old worker. Consequently, it is inaccurate to posit that different attitudes and competencies are needed during different ages. Super and Knasel (1981) concluded that, although career maturity may describe career development in adolescence with some accuracy, the heterogeneity of adult career development resists the maturity metaphor. Moreover, they noted that the maturity metaphor makes unnecessary assumptions, implying a normative growth process that, without further empirical evidence, should not be assumed. Other scholars have questioned the cultural validity of career maturity. Hardin, Leong, and Osipow (2001) found that Asian Americans, because of their more interdependent self-construals, exhibited less mature career choice attitudes than European Americans.

Super and Knasel (1981) suggest *adaptability* as a more appropriate term to describe vocational development in adulthood. Rather than a linear trend toward maturity, adaptability suggests continual change in a vocational context that is constantly in flux. This is especially advantageous given the somewhat turbulent nature of current labor markets. Super and Knasel (1981) noted that, unlike maturity, adaptability "concentrates attention on the interaction between the individual and the environment" (p. 198). Moreover, they argued that career adaptability more heavily emphasizes the competencies and attitudes of individuals, alleviating the need to assume a given ontogentic process of vocational development (Super & Knasel, 1981).

#### **Conceptualizing Career Adaptability**

Super (1983), appropriating the dimensions of career maturity, described five dimensions of career adaptability: planfulness, exploration, information, decision making, and reality

orientation. The first, planfulness, is further subdivided into three components: autonomy, time perspective, and self-esteem. Autonomy can best be understood as an individual's locus of control; individuals are unlikely to be planful in their careers unless they believe they have some degree of control over their vocational course. The second component of planfulness, time perspective, involves reflecting on past experiences and anticipating the future (Super, 1983). Self-esteem, the final component of planfulness, is necessary for individuals to experience autonomy and positive anticipation of the future.

Super's (1983) second dimension of career adaptability, exploration, describes the extent to which individuals inquire about and understand themselves in terms of their life-career roles, their institutional affiliations, and their awareness and use of their resources. The third dimension of career adaptability, information, is a cognitive factor that relates to the numerous types of information relevant to career development (such as information about coping strategies, information about preferred occupations, etc.). Decision making, the fourth dimension of career adaptability identified by Super (1983), relates to knowledge about and commitment to decision making strategies. Super (1983) argued that the ability to implement these strategies is crucial to solving difficult career decisions. The final dimension of career adaptability identified by Super (1983) is reality orientation, which "consists of self-knowledge, realism of self and situational assessment, consistency of career-role preferences, crystallization of self-concepts and of career goals, and of stabilization in major life roles" (p. 558).

Although Super and Knasel (1981) suggested that adaptability better describes vocational development in adulthood, Savickas (1997) argued that adaptability should entirely replace the construct of career maturity, both in adult and adolescent career development. He defined career adaptability as "the readiness to cope with the predictable 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, p. 254). In this conceptualization, the core features of adaptability are planful attitudes, self-exploration, environmental exploration, and informed decision making (Savickas, 1997). He contended that replacing career maturity with adaptability would simplify life-span, life-space theory by providing a single central construct for career development in adolescence and adulthood. Moreover, he believed that adaptability more appropriately emphasizes the continuously fluctuating contexts in which career decisions must be made (Savickas, 1997).

More recently, Savickas (2005) has defined career adaptability as "a psychosocial construct that denotes an individual's readiness and resources for coping with current and imminent vocational development tasks, occupational transitions, and personal traumas" (p. 51). Career adaptability has become a key construct within Savickas' (2005, 2011) career construction theory. Within career construction theory, career adaptability "emphasizes the coping processes through which individuals connect to their communities and construct their careers" (Savickas, 2005, p. 48). In this conceptualization, there are four dimensions of adaptability: *concern, control, curiosity*, and *confidence*.

The first, concern, relates to an individual's future orientation. The more career concern an individual evinces, the more forward-looking, planful, and optimistic that individual will be. Individuals who lack career concern are said to exhibit career indifference, which is characterized by apathy and pessimism about the future (Savickas, 2005). The second dimension, control, describes the extent to which individuals feel responsible for the construction of their own careers (Savickas, 2005). Individuals who lack career control exhibit career indecision. Savickas' third dimension of career adaptability, career curiosity, relates to interest in and exploration of how the self and the work world fit. Naiveté, unrealism, and inaccurate selfunderstanding often result from a lack of career curiosity. *Career confidence*, the fourth dimension of career adaptability, relates to the anticipation of success in solving the complex problems inherent in career choices and vocational development (Savickas, 2005). Without career confidence, individuals are likely to experience career inhibition, which compromises goal progress and thwarts actualizing roles (Savickas, 2005).

Building upon this model of career adaptability, Savickas and Porfeli (2011) developed the Career Maturity Inventory Form C (CMI-Form C). This measure produces scores for three of the four C's: concern, curiosity, and confidence. From these three scores, an overall career choice readiness score is produced, which denotes an individual's career adaptability and readiness to make career decisions. The CMI-Form C also produces a consultation score, which describes an individual's relational style and the extent to which individuals solicit assistance from others in making career-related decisions. High school students were used to validate the measure, making it useful measure for assessing adaptability in this important population.

Rottinghaus, Day, and Borgen (2005) developed the Career Futures Inventory, a general measure of career adaptability, which they defined as "a tendency affecting the way an individual views his or her capacity to plan and adjust to changing career plans and work responsibilities, especially in the face of unforeseen events" (p. 5). Rottinghaus et al. (2012) later revised this measure, the Career Futures Inventory-Revised (CFI-R), to assess five dimensions of career adaptability: career agency, negative career outlook, occupational awareness, support, and work-life balance. These subscales incorporate aspects of Savickas' (2005) "four C's" model of career adaptability (Rottinghaus et al., 2012). For instance, Savickas' *confidence* and *control* relate to the CFI-R's inclusion of measures of self-efficacy, which is most directly assessed by

the career agency subscale. Further, Savickas' *concern* about future work life is reflected in the very title of the CFI-R, the *Career Futures Inventory-Revised*.

The career agency scale "offers an important perspective for viewing clients' perception of their own influence on their own career development process" (Rottinghaus et al., 2012, p. 134). This dimension parallels Bandura's (2006) theory of agency in that it represents a composite of control, confidence, optimism, and self-awareness (Rottinghaus et al., 2012).Through the support and work-life balance subscales, the CFI-R incorporates vital relational aspects of vocational development (Rottinghaus et al., 2012). This is particularly advantageous given recent calls to conceptualize work as inherently relational (Blustein, 2011a) and to integrate relational perspectives more centrally into career theory and practice (Blustein, Medvide, & Kozan, 2012; Richardson, 2012). Table 1 provides an overview of the adaptability components measured by the CFI-R and the CMI Form C as well as reliability estimates for the scales included in these measures.

Career adaptability continues to receive much attention and theoretical refinement. Hartung, Porfeli, and Vondracek (2008) described career adaptability as "an essential characteristic of workers in the modern world" (p. 64). Moreover, they argued that career adaptability should be conceptualized not only in terms of degree of development but also in terms of rate of development (Hartung et al., 2008). Testing a self-regulatory model of career adaptability, Creed, Fallon, and Hood (2009) found evidence to support four dimensions of career adaptability: exploration of environment, exploration of self, career planning, and decision-making.

The importance of career adaptability is underscored by the volatile nature of current labor markets. Indeed, almost two decades ago, Goodman (1994) emphasized the usefulness of the construct in an increasingly transitory vocational landscape. Morrison and Hall (2002) noted that, as traditional, stable careers become less common, adaptability will be an important quality that will aid workers in navigating dynamic career circumstances. Savickas (2011) argued that career adaptability is one of two metacompetencies used in career construction. In short, career adaptability is considered a focal point for contemporary career theory and practice (Savickas, 2011; van Vianen, De Pater, & Preenan, 2009).

In light of the importance of career adaptability, it is essential to gain further knowledge of the construct through continued empirical inquiry. Understanding the workings of career adaptability in adolescents, who are just beginning to construct their careers, represents a key step toward developing more precise theories and targeted interventions for this important population. Research suggests that SES is associated with both the exploration and planfulness components of career adaptability (Blustein et al., 2002). This is evidence that SES might be related to the concern and curiosity scales of the CMI-Form C, as well as the occupational awareness dimension of the CFI-R. Additionally, given the power of environmental influences to affect human agency (Lent, 2005), it is likely that SES might be related to the confidence scale of the CMI-Form C as well as to the career agency dimension of the CFI-R.

#### **Educational and Vocational Aspirations and Expectations**

It perhaps goes without saying that education is a valuable commodity in today's vocational landscape. Indeed, as a component of human capital, education is considered a key dimension of employability (Fugate, Kinicki, & Ashforth, 2004). Education equips individuals with increased skills and knowledge, and greater levels of education are also associated with greater income and better health outcomes (Elo & Preston, 1996; Ross & Wu, 1995; Saegert et al., 2007). Greater educational attainment is also positively correlated with greater income

(Saegert et al., 2007; U.S. Census Bureau, 2009), underscoring the importance of obtaining postsecondary education. Moreover, educational aspirations are closely related to career aspirations (Rottinghaus, Lindley, Green, & Borgen, 2002). Given the importance of education to these diverse outcome variables, gaining a greater understanding of the correlates and contributors to educational aspirations is crucial.

Researchers have found mixed results when studying the contribution of SES and social class to vocational and educational aspirations and expectations. Berman and Haug (1975), for instance, found that social class did not influence aspirations or discrepancies between aspirations and expectations in an urban undergraduate sample. Conversely, Hanson (1994) found that lower-SES individuals were more likely to experience "lost talent." In other words, these individuals, in comparison to high-SES individuals, were more likely to 1) set educational expectations lower than their aspirations, 2) experience lowered educational expectations, and 3) fail to achieve their educational expectations. Hanson concluded that the differential access to resources between upper- and lower-SES individuals accounted for the educational aspiration-expectation differential in these groups.

More recently, Diemer and Hsieh (2008) explored the importance of sociopolitical development (defined as an awareness of and motivation to change sociopolitical inequalities) to the development of vocational expectations in a low SES sample of adolescents of color. These authors noted that a vocational aspiration-expectation gap has been observed in low SES adolescents but not in higher SES adolescents. In other words, though low SES adolescents have similar aspirations to their higher SES counterparts, they are less likely to expect to achieve these goals. They found that, in a nationally representative sample of low SES students of color, higher sociopolitical development was associated with higher vocational expectations. Boxer,

Goldstein, DeLorenzo, Savoy, and Mercado (2011) found that early adolescents from lowresource neighborhoods were more likely to exhibit an educational aspiration-expectation gap. Howard et al. (2011) found significant, though fairly small effects of SES and race/ethnicity upon career aspirations. Given the small effect size, however, the findings of this study conform to other research results that suggest that SES does not strongly influence the career aspirations of adolescents.

Educational aspirations are also associated with career adaptability (Rottinghaus, Day, & Borgen, 2005) and affiliated features, such as self-efficacy (Rottinghaus, Lindley, Green, & Borgen, 2002). These results conform to the predictions of Social Cognitive Career Theory (SCCT) (Lent, Brown, & Hackett, 1994), which incorporates both personal and environmental influences upon career development.

#### **The Present Study**

Although qualitative research has suggested a positive relationship between SES and career adaptability, research on career adaptability has been generally stunted due to disagreement on operational definitions of the construct (Rottinghaus et al., 2012). Recently, however, researchers have developed psychometrically sound instruments that assess various dimensions of career adaptability (Rottinghaus et al., 2012; Savickas & Porfeli, 2011). These instruments provide new avenues for systematic research of career adaptability. The current study attempted to build upon previous research by using these quantitative measures to assess the strength of SES and perceived social class as predictors of career adaptability and educational aspirations in high school students. Assessing both SES and perceived social class with respect to career adaptability represents a novel approach that makes a significant contribution to understanding the relationships of these constructs. Moreover, in addition to replicating previous

studies that implicate SES in the gap between vocational and educational expectations and aspirations, the current study also attempted to examine the contribution of career adaptability components to this gap.

#### **Research Hypotheses**

Qualitative research has suggested that lower SES individuals report lower levels of career adaptability (specifically exploration and planfulness) (Blustein et al., 2002). Lower SES has also been associated with diminished vocational expectations (Diemer and Hsieh 2008), which are intertwined with educational aspirations (Rottinghaus et al., 2002). This finding suggests that SES might be correlated with negative career outlook, a dimension of career adaptability (Rottinghaus et al., 2012). Adler et al. (2000) found that objective measures of SES and subjective social class made distinct contributions to a variety of health-related factors as well as to psychological functioning. It was expected that these objective and subjective measures would make distinct contributions to other psychological variables, such as career adaptability. Moreover, educational aspirations are associated with career adaptability (Rottinghaus, Day, & Borgen, 2005) and affiliated features, such as self-efficacy for various domains of vocational activity (Rottinghaus et al., 2002). It was hypothesized that:

- SES and social class would each make independent positive contributions to scores on the agency subscale of the CFI-R.
- 2. SES and social class would each make independent negative contributions to scores on the negative career outlook subscale of the CFI-R.
- 3. SES and social class would each make independent positive contributions to scores on the occupational awareness subscale of the CFI-R.

- 4. SES and social class would each make independent positive contributions to scores on the career choice readiness scale of the Career Maturity Inventory (CMI) Form C.
- SES, perceived social class, and career adaptability (career agency, negative career outlook, and support) would each make independent positive contributions to participants' educational aspirations.
- SES, perceived social class, and career adaptability (career agency, negative career outlook, and support) would each make independent positive contributions to participants' educational expectations.

### **Exploratory Hypotheses**

- The confidence scale of the CMI-Form C and the career agency scale of the CFI-R would be positively correlated.
- SES and perceived social class would be positively correlated with the WLB subscale of the CFI-R.
- 3. SES and perceived social class would be positively correlated with the support subscale of the CFI-R.

#### CHAPTER 3

#### METHOD

#### **Participants**

Participants consisted of 100 high school students (ages 14-19) selected from three high schools in Southern Illinois. These high schools reside in rural, relatively low-income (median household incomes ranging from \$26,919 - 30,182) communities. Of participants who identified their ethnicity, 76.3% identified as European-American/White, 15.2% as two or more races, 3.4% as Native American, 3.4% as Hispanic-American/Latino(a), and 1.7% as African-American/Black. Thirty-seven (37%) of participants identified as male and 63 (63%) as female. These high schools were selected as participant pools based upon the demographics of the surrounding communities. They reside in communities with relatively low academic attainment and household income, two contributors to low SES and social class (Saegert et al., 2007). In an effort to enable greater generalizability, the researcher attempted to gather data from a fourth high school that resides in a community with low household income (though this is skewed by the large university student population in this community) but high academic attainment. This would have enabled a greater range in important participant characteristics, such as parents' educational attainment and occupation. Unfortunately, the researcher was unable to obtain the consent of school administrators, so no data were collected from this site.

Three sites were chosen to ensure an adequate sample size. An a priori power analysis was conducted and, using multiple regression with six predictors, it was determined that a sample size of 177 participants was required (Statistics Calculators [version 3.0 beta]). This power analysis assumed an effect size of .08, which was chosen as a conservative estimate, a desired power level of .80, and an alpha level of .05. Data collection in three schools yielded

only 100 participants, and the implications of this small sample size are discussed in Chapter 5. In exchange for their participation participants were eligible to attend a career workshop that provided career-related resources. Participants were also entered into a drawing for one of several \$15 gift cards.

#### Measures

#### **Demographic and Career Planning Questionnaire**

A questionnaire assessed participants' age, gender, class, cumulative GPA, race/ethnicity, educational aspirations and expectations (high school or less, associate's degree, bachelor's degree, master's degree, doctoral/medical/law degree), and specific career aspirations (see Appendix A).

#### **Socioeconomic Status**

Although SES is a notoriously challenging construct to assess (Saegert et al., 2007), additional challenges arise when assessing it in adolescent populations (Hauser, 1994). The three most commonly used objective measures of SES are primary caregiver occupation, education, and income (Adler et al., 2000; Merola, 2005), but some have suggested that income is too unreliable to usefully assess SES (Hauser, 1994; Saegert et al., 2007). Consequently, following Hauser's (1994) recommendation, participants' primary caregivers' occupation and education were be assessed. Occupations were coded using the Socioeconomic Index, which "has been shown to be a preferred description of the socioeconomic hierarchy of occupations" (Nakao & Treas, 1992, p. 3). This index produces a score from 1 - 100 for a given occupation (the index includes scores for a total of 503 occupational categories), with higher scores representing higher SES occupations. Scores on this index are computed using a composite of incumbents' income and attained education level, as well as prestige ratings produced by respondents. Primary caregiver education was coded as (1) less than a high school degree, (2) high school degree, (3) some college, technical degree, or associate's degree, (4) bachelor's degree, (5) master's degree, and (6) law degree, medical degree, or doctorate degree.

### **Perceived Social Class**

Perceived social class was assessed using the MacArthur Scale of Subjective Social

Status—Youth Version (see Appendix B; Goodman et al., 2001). This instrument asks

participants to rank their relative social position on one of ten rungs of a ladder, where each rung

up the ladder represents a slightly higher level of social status. The instrument consists of two

pictures of a ladder with ten rungs and the following two sets of instructions:

Imagine that this ladder represents American society. At the top of the ladder are the people who are best off—they have the most money, the highest level of education, and the best jobs. At the bottom of the ladder are the people who are the worst off—they have the least money, the lowest level of education, no job or jobs that no one wants or respects. Now think about your family. Please tell us where you think your family would be on this ladder. Fill in the circle that best represents where your family would be on this ladder.

Now assume that the ladder is a way of picturing your school. At the top of the ladder are the people in your school with the most respect, the highest grades, and the highest standing. At the bottom are the people who no one respects, no one wants to hang around with, and have the worst grades. Where would you place yourself on this ladder? Fill in the circle that best represents where you would be on this ladder.

In a sample of 115 adolescents, two-month test-retest reliability for the measure was .73 for the

societal ladder and .79 for the community ladder.

### **Career Adaptability**

The Career Futures Inventory-Revised. Developed by Rottinghaus et al. (2012), the

CFI-R contains five subscales: career agency, negative career outlook, occupational awareness,

support, and work-life balance (see Appendix C). These subscales are moderately correlated and

internally consistent, with Cronbach's alphas ranging from .78 to.90 (Rottinghaus et al., 2012).

The career agency subscale assesses the degree to which individuals "take charge of their own career development by intentionally pursuing relevant educational goals and adapting to changing skill requirements and life role demands" (Rottinghaus et al., 2012, p. 135). A higher score on this subscale indicates a higher degree of career agency. The second subscale, negative career outlook, examines the degree of optimism individuals hold regarding their career outlook; higher scores on this subscale relate to increasingly negative career outlook. Occupational awareness, the third subscale, examines individuals' "views about their knowledge of occupations, education, training, and overall economic trends" (Rottinghaus et al., 2012, p. 125). Higher scores on this subscale indicate greater occupational awareness. Support, the fourth subscale, addresses the amount of social support that individuals enjoy; higher scores on this subscale represent greater amounts of social support. The fifth and final subscale, work-life balance, examines the degree of harmony between the various life roles (both career and noncareer roles) a person occupies. A higher score on this subscale indicates a greater degree of work-life balance. Examples of items from these subscales include: "I can perform a successful job search" (career agency subscale); I doubt my career will turn out well in the future" (negative career outlook subscale); "I am good at understanding job market trends" (occupational awareness subscale); "My family is there to help me through career challenges" (support subscale); and "I am good at balancing multiple life roles such as worker, family member, or friend" (work-life balance subscale) (Rottinghaus et al., 2012). The means, standard deviations, and internal consistency estimates of these subscales are presented in Table 2.

Twenty-eight items are included in the measure; participants are asked to rate their agreement with each statement using a five-point Likert scale (1= *strongly disagree*, 5= *strongly agree*) (Rottinghaus et al., 2012). The CFI-R was validated on a sample of 348 undergraduates

from two Midwestern universities. The validation sample was consisted of 178 (51.1%) women and 170 (48.9%) men and was ethnically diverse (Rottinghaus et al., 2012). Correlations between CFI-R subscales and various validation measures are presented in Table 3.

In order to make CFI-R items appropriate for use with adolescents, the wording of several items was changed slightly. The list below details these changes:

-"Balancing work and family responsibilities is manageable" was changed to "Balancing *school*, work, and family responsibilities is manageable."

-"I keep up with trends in careers of interest to me" was changed to "I keep up with trends *in at least one occupation or industry* of interest to me."

-I am very strategic when it comes to balancing my work and personal lives" was changed to "I am very strategic when it comes to balancing my *school*, work, and personal lives."

-"Friends are available to offer support in my career" was changed to "Friends are available to offer support *as I plan my career transition.*"

-"I am good at balancing multiple life roles such as worker, family member, or friend" was changed to "I am good at balancing multiple life roles such as *student*, worker, family member, or friend."

-"I will successfully manage my present career transition process" was changed to "I will successfully manage my career transition process *after high school.*"

The Career Maturity Inventory Form C. Savickas and Porfeli (2011) developed the Career Maturity Inventory Form C (CMI-Form C) to reestablish the measures usefulness as a measure of career choice readiness (See Appendix D). This measure produces scores for three of the four C's of Savickas' (2005) model of career adaptability: concern, curiosity, and confidence. Higher scores on these scales indicate more advanced development. From these three scores, an overall career choice readiness score is produced, which denotes an individual's career adaptability and readiness to make career decisions. Higher scores on this scale indicate a higher degree of career choice readiness. The CMI-Form C also produces a consultation score, which describes an individual's relational style and the extent to which individuals solicit assistance from others in making career-related decisions. The consultation scale represents a continuum of consultation styles, with lower scores representing family career conversations of higher involvement ("do as we advise"), and higher scores representing family career conversations of lower involvement ("it is up to you") (Savickas & Porfeli, 2011, p. 364). The CMI-Form C contains 24 total items, with 6 items allocated for each of the four subscales: concern, curiosity, confidence, and consultation. The response format is a forced choice, with respondents marking either "agree" or "disagree" to each item. Examples of these items include: "There is no point in deciding on a job when the future is so uncertain" (concern); "I know very little about the requirements of jobs" (curiosity); "I keep changing my occupational choice" (confidence); and "Choosing a job is something that you do on your own" (consultation).

The validation sample consisted of 453 high school students from a Midwestern urban high school. Of these participants, 216 were female (9th grade = 73; 10th grade = 74, 11th grade =26, and 12th grade = 43) and 237 were male (9th grade = 173, 10th grade = 138, 11th grade = 61, and 12th grade = 81). The cultural and ethnic backgrounds of these participants are not known. A hierarchical confirmatory factor analysis revealed a higher-order factor of career choice readiness. The magnitude of the loadings of the first-order factors on this second-order factor follow this order: concern = .51, curiosity = .83, and confidence = .95. The control factor correlated .28 to the factor of readiness but was left out due to cultural validity concerns. Specifically, the authors cite that control, by emphasizing independence in career choice, may not be as relevant an indicator of career choice readiness or maturity in cultures emphasizing interdependence.

### Procedure

### Site 1 Recruitment

At the first site, the study was announced during the school's morning announcements. This announcement stated, "There is an opportunity to participate in a study about work and career. The study will take approximately thirty minutes. If you are interested you will be able to attend a free career workshop, which will provide you with career-related information and resources. You will also be entered into a drawing for one of three \$15 gift cards to Walmart." Interested students obtained a parental consent letter and form and signed up for the study using sign-up sheets that were distributed by classroom teachers. These sheets listed available times, dates, and locations of the study. On the day of data collection, a morning announcement reminded participants of the time and location of the study. All participants were required to hand in signed parental consent forms on the day of the study. Those who did not were not allowed to participate.

### Site 2 Recruitment

At the second site, the school principal announced the study during morning announcements, stating, "There is an opportunity to participate in a study about work and career. The study will take approximately thirty minutes. If you are interested you will be able to attend a free career workshop, which will provide you with career-related information and resources. You will also be entered into a drawing for one of three \$15 gift cards to Walmart." Interested individuals obtained a parental consent letter and form and signed up for one of the available study times. The sign-up sheet listed the available times, dates, and locations for the study, which occurred during normal school hours. The sign-up sheet also included instructions directing participants to arrive at the specified location approximately five minutes before the official start time. The morning of the study, a school administrator made a reminder announcement for participants to attend the study at the specified time and location. All participants were required to hand in signed parental consent forms on the day of the study. Those who did not were not allowed to participate.

### Site 3 Recruitment

At the third site, the school social worker discussed the study with classroom teachers, who announced the study to their students during morning announcements, stating, "There is an opportunity to participate in a study about work and career. The study will take approximately thirty minutes. If you are interested you will be able to attend a free career workshop, which will provide you with career-related information and resources. You will also be entered into a drawing for one of three \$15 gift cards to Walmart." Interested individuals obtained a parental consent letter and form and signed up for one of the available study times. The sign-up sheet listed the available times, dates, and locations for the study, which occurred during normal school hours. The morning of the study, a school administrator made a reminder announcement for participants to attend the study at the specified time and location. All participants were required to hand in signed parental consent forms on the day of the study. Those who did not were not allowed to participate.

### **Data Collection**

When participants arrived on the day of the study, the primary researcher briefly introduced the study, stating that "The study is about work and career. You will be asked to fill

out some questionnaires and respond to some items that relate to work and career. All of your responses will be anonymous, so please do not put your name on any of the questionnaires. Your responses will not be connected to your name in any way." The researcher then provided the informed consent form (See Appendix E). Once this form was completed, the researcher distributed a packet containing the demographic questionnaire, the CFI-R, the CMI Form C, and the MacArthur Scale of Subjective Social Status—Youth Version. The order of the materials within the packet was randomized to eliminate any potential order effects. The researcher gave participants these instructions: "Please proceed through the materials in this packet in order. Respond to each item carefully, and let me know when you have completed all of the materials." As participants finished the materials, the researcher debriefed each individual (See Appendix F). At this time, participants were given details regarding the career workshop. They also had the opportunity to enter their name into a drawing for a \$15 gift card to Walmart.

#### **Data Analysis**

Before the data from disparate sites are merged, a series of ANOVAs was performed to assess whether differences between the three samples existed for any of the variables. In the event that differences had been observed between the samples, the samples would not have been merged and the following analyses would have been performed separately for each sample. Hierarchical regressions were used to test each hypothesis. To test the first hypothesis, blocks of SES and perceived social class were entered into a hierarchical regression predicting career agency scale scores of the CFI-R. To test the second hypothesis, blocks of SES and perceived social class were entered into a hierarchical regression predicting negative career outlook scale scores of the CFI-R. To test the third hypothesis, blocks of SES and perceived social class were entered into a hierarchical regression predicting negative social class were R. To test the fourth, blocks of SES and perceived social class were entered into a hierarchical regression predicting career readiness scale scores of the CMI Form C. To test the fifth, sequentially, blocks of SES, perceived social class, career agency, negative career outlook, and support were entered into a hierarchical regression predicting educational aspirations. To test the sixth, sequentially, blocks of SES, perceived social class, career agency, negative career outlook, and support were entered into a hierarchical regression predicting educational aspirations. To test the sixth, sequentially, blocks of SES, perceived social class, career agency, negative career outlook, and support were entered into a hierarchical regression predicting educational expectations. Given that SES and perceived social class are closely related constructs, it was possible that multicollinearity would be problematic for these hierarchical regressions. Had that been the case, these variables would have been centered in an attempt to reduce multicollinearity.

#### **CHAPTER 4**

#### RESULTS

#### **Descriptive Statistics**

The final sample consisted of 100 participants. Before the data from different sites were merged, a series of ANOVAs was performed to examine any significant differences between variables. Due to the number of comparisons conducted, a Šídák-Bonferroni correction was performed, resulting in a new alpha level ( $\alpha = .003$ ). No significant differences were found between the samples on any variable, so the samples were merged. A summary of educational aspirations and expectations appears in Table 4, and a summary of occupational aspirations and expectations is presented in Table 5. Means, standard deviations, and reliability estimates for the CFI-R and CMI Form C appear in Table 6. Cronbach's alpha coefficients for the CFI-R scales were as follows: Career Agency (.80), Occupational Awareness (.70), Negative Career Outlook (.47), Support (.78), and Work-Life Balance (.79). Cronbach's alpha coefficients for the CMI Form C were as follows: Concern (.47), Curiosity (.67), Confidence (.80), Consultation (.52), and Readiness (.82). Of these reliability estimates, those for Negative Career Outlook, Concern, and Consultation were unacceptably low and suggest that results derived from these scales should be interpreted with extreme caution. Analyses indicated that it wasn't possible to improve the reliability by removing items. Several noteworthy correlations are presented below, and a summary of intercorrelations between all variables appears in Table 7. Perceived social class within the community was significantly correlated with educational aspirations, r(93) = .41, p < ....001, and educational expectations, r(88) = .41, p < .001, but perceived social class within society was not significantly correlated with either of these variables. Career agency was

significantly correlated with occupational expectations, r(89) = .22, p < .05, but not with occupational aspirations.

Of participants who identified their ethnicity, 44 (76.3%) identified as European-American/White, 9 (15.2%) as two or more races, 2 (3.4%) as Native American, 2 (3.4%) as Hispanic-American/Latino(a), and 1 (1.7%) as African-American/Black. Thirty-seven (37%) of participants identified as male and 63 (63%) as female. The average GPA (on a 4.0 scale) for the sample was above average (M = 3.5, SD = .59), although only 61 participants noted their GPAs. SES as measured by caregivers' occupation ranged from 27 to 96 (out of a possible range of 1-100), with a mean of 57.23 (SD = 19.45). On this same 100-point scale, participants' average occupational aspirations were 60.72 (SD = 24.48), and their occupational expectations were 59.71 (SD = 22.10). Examples of common professions on this 100-point scale include a coal miner (38.51), engineer (87.90), and secondary school teacher (62.49). Out of a possible range from 1-6, SES as measured by caregivers' educational attainment was average (M = 3.36, SD =1.32). On this same scale, participants' average educational aspirations were 4.38 (SD = 1.45), while their average educational expectations were 4.48 (SD = 1.35). On a scale from 1 - 10, participants' average perceived social class within American society was 5.83 (SD = 1.63), while their perceived social class within their community was substantially higher, (M = 7.52, SD =1.83).

Participants also responded to open-ended prompts regarding their educational and occupational aspirations and expectations. These qualitative responses helped to shed light on participants' thoughts and feelings regarding the future of their education and occupations, and certain themes appeared throughout these responses. In general, participants' aspirations seemed to be shaped by their interests (e.g., "I love cooking"), by their families (e.g., "I wanted to study

medicine because of family members who have), by financial motives (e.g., being a physical therapist "makes good pay"), or by their perceived strengths (e.g., "I found out I could cut hair really well"). Many participants also stated that they didn't know what they wanted to be or why they wanted to pursue a given career, indicating a dearth of insight into both occupational and educational aspirations. The qualitative responses relating to expectations tended to relate more to participants' perceived strengths or their interests (e.g., "I love the outdoors," "I have interest in biology," "I'm determined," and "I'm really good at [drawing characters]"). The emphasis of these responses on personal characteristics may indicate that self-perception plays a relatively greater role in shaping expectations than aspirations.

After descriptive analyses, a series of hierarchical regression analyses was conducted to test hypotheses 1-6. To measure the impact of multicollinearity in these hierarchical regressions, the variance inflation factor (VIF) was calculated for all analyses. The highest VIF value was 2.01, well below the recommended cutoff value of 5, indicating that a very low level of multicollinearity was present for these analyses. These analyses were followed by several exploratory analyses, the results of which are discussed below.

#### Hypothesis 1

SES (caregivers' educational attainment and occupation) and perceived social class (within society and the community) were entered in separate blocks to assess the incremental influence of each variable in explaining career agency (Table 8). The first block, SES, did not explain a significant amount of variance (1.9%), F(2, 84) = .82, p = .44. The addition of perceived social class did not result in a significant increase in the proportion of variance explained (4.5%), F(2, 82) = 1.96, p = .15.

### Hypothesis 2

SES (caregivers' educational attainment and occupation) and perceived social class (within society and the community) were entered in separate blocks to assess the incremental influence of each variable in explaining negative career outlook (Table 9). The first block, SES, did not explain a significant amount of variance (0.5%), F(2, 84) = .22, p = .80. The addition of perceived social class resulted in a significant increase in the proportion of variance explained (7.6%), F(2, 82) = 3.39, p = .04. Within this second block, perceived social class within the community was a significant predictor and made a negative contribution to negative career outlook, t(80) = -2.37, p = .02. This relationship was in the expected direction.

#### Hypothesis 3

SES (caregivers' educational attainment and occupation) and perceived social class (within society and the community) were entered in separate blocks to assess the incremental influence of each variable in explaining occupational awareness (Table 10). The first block, SES, did not explain a significant amount of variance (4.1%), F(2, 84) = 1.78, p = .18. The addition of perceived social class did not result in a significant increase in the proportion of variance explained (1.1%), F(2, 82) = 0.49, p = .62.

#### Hypothesis 4

SES (caregivers' educational attainment and occupation) and perceived social class (within society and the community) were entered in separate blocks to assess the incremental influence of each variable in explaining career choice readiness (Table 11). The first block, SES, did not explain a significant amount of variance (3.2%), F(2, 81) = 1.32, p = .27. The addition of perceived social class did not result in a significant increase in the proportion of variance explained (3.1%), F(2, 79) = 1.32, p = .27.

#### **Hypothesis 5**

SES (caregivers' educational attainment and occupation), perceived social class (within society and the community), and career adaptability (career agency, negative career outlook, and support) were entered in separate blocks to assess the incremental influence of each variable in explaining educational aspirations (Table 12). SES, as a measure of objective factors, was entered first to examine the variance explained by these objective factors. The incremental variance explained by psychological factors could then be assessed. Subjective social class was entered second because of its close conceptual relationship to the first block. This way the incremental variance explained by career adaptability above and beyond these factors could be examined.

The first block, SES, explained a significant amount of variance (9.6%), F(2, 84) = 4.46, p = .01. The addition of the second block, perceived social class, resulted in a significant increase (17.2%) in the proportion of variance explained in the expected direction, F(2, 82) = 9.65, p < .001. The first two blocks accounted for 26.8% of the variance of educational aspirations. The third block, career adaptability, did not result in a significant increase (3.1%) in the percentage of variance explained, F(3,79) = 1.16, p = .33.

#### Hypothesis 6

SES (caregivers' educational attainment and occupation), perceived social class (within society and the community), and career adaptability (career agency, negative career outlook, and support) were entered in separate blocks to assess the incremental influence of each variable in explaining educational expectations (Table 13). SES, as a measure of objective factors, was entered first to examine the variance explained by these objective factors. The incremental variance explained by psychological factors could then be assessed. Subjective social class was entered second because of its close conceptual relationship to the first block. Then the

incremental variance explained by career adaptability above and beyond these factors could be examined.

The first block, SES, did not explain a significant amount of variance (6.1%), F(2, 81) = 2.61, p = .08. The addition of the second block, perceived social class, resulted in a significant increase (14.2%), in the proportion of variance explained, F(2, 79) = 7.05, p < .01. Within this second block, perceived social class within the community made a significant contribution to educational expectations, t(79) = 3.60, p < .001. These relationships were in the expected direction The first two blocks accounted for 20.3% of the variance of educational expectations. The third block, career adaptability, did not result in a significant increase (1.7%) in the percentage of variance explained, F(3,76) = .56, p = .64.

### **Exploratory Analyses**

Because educational aspirations and expectations are related to the constructs of occupational aspirations and expectations, the data were explored to ascertain whether similar relationships existed between these variables. Specifically, SES (caregivers' educational attainment and occupation), perceived social class (within society and the community), and career adaptability (career agency, negative career outlook, and support) were entered in separate blocks to assess the incremental influence of each variable in explaining occupational aspirations (Table 14) and expectations (Table 15). For occupational aspirations, the first block, SES, explained a significant amount of variance in the expected direction (20.6%), F(2, 77) = 10.00, p < .001. In this block, caregivers' educational attainment made a significant contribution to occupational aspirations, t(75) = 2.26, p = .03. The addition of the second block, perceived social class, did not result in a significant increase (4.4%), in the proportion of variance explained, F(3, 75) = 2.26, p = .03.

(6.5%) = 2.20, p = .11. The third block, career adaptability, did not result in a significant increase (6.5%) in the percentage of variance explained, F(3,72) = 2.07, p = .11.

For occupational expectations, the first block, SES, explained a significant amount of variance (23.2%), F(2, 76) = 11.46, p < .001. In this first block, caregivers' occupational attainment made a significant contribution to occupational expectations, t(76) = 2.66, p < .01. This relationship was in the expected direction. The addition of the second block, perceived social class, did not result in a significant increase (1.9%), in the proportion of variance explained, F(2, 74) = .93, p = .40. The third block, career adaptability, did not result in a significant increase (5.5%) in the percentage of variance explained, F(3,71) = 1.88, p = .14.

Several correlational analyses were also run to explore relationships between meaningful variables and to assess the convergent validity of the CFI-R and the CMI Form C. Scores on the career agency subscale of the CFI-R were positively correlated with scores on the confidence subscale of the CMI Form C, r(96) = .40, p < .01. Career agency was also positively correlated with scores from the career choice readiness subscale of the CMI Form C, r(94) = .45, p < .001. The negative career outlook subscale of the CFI-R was negatively correlated with career choice readiness, r(94) = -.44, p < .001. This relationship should, however, be interpreted with caution given the low reliability estimate for the negative career outlook scale.

The expected relationships between SES and the work-life balance (WLB) and support subscales of the CFI-R were not found. SES as measured by caregiver educational attainment was not correlated with WLB, r(91) = .17, p = .09. Likewise, SES as measured by caregivers' occupation was not correlated with WLB, r(90) = -.01, p = .91. SES as measured by caregiver educational attainment was not correlated with support, r(91) = .15, p = .13. Likewise, SES as measured by caregivers' occupation was not correlated with support, r(90) = .01, p = .93. Although SES did not predict these variables, perceived social class did. Perceived social class within society was positively correlated with support, r(94) = .22, p = .03; but not WLB r(90) = .13, p = .22. Perceived social class within the community was positively correlated with both support, r(94) = .30, p = < .01; and WLB, r(94) = .32, p < .01.

#### CHAPTER 5

#### DISCUSSION

It is generally agreed that both SES and social class merit significant research attention. Blustein (2011b), for instance, noted that vocational psychology has tended to focus on individuals from middle-class populations who enjoy above-average levels of occupational choice. Liu and Ali (2005) argued that vocational psychology has too often implicitly embraced a classist bias towards upward mobility. These and other scholars (Gottfredson, 1981; Richardson, 1993) have called for vocational psychology to broaden its focus to address issues facing underserved populations such as the poor and the unemployed, and this body of literature is beginning to grow. Liu and Ali (2005) and Blustein, McWhirter, and Perry (2005) have elucidated an emancipatory communitarian (EC) approach to vocational psychology that seeks liberation for individuals held captive by social injustices. In a qualitative study, Blustein et al. (2002) gathered significant data on the influence SES has upon a number of key career-related constructs and found evidence that SES may be linked to career adaptability. As this literature base develops, so too does the understanding that SES and social class are complex, multilayered constructs. Problematically, SES and social class are often erroneously conflated (Liu et al., 2004), and more research is needed to understand how these distinct constructs make unique contributions to vocational behavior and important vocational constructs. The current study aimed to develop a better understanding of how SES and social class help to explain career adaptability, as well as educational and occupational aspirations and expectations.

This chapter examines the implications of the results presented in Chapter 4. First, the primary and exploratory analyses are discussed in an effort to provide potential explanations for the findings. A discussion of the practical and theoretical implications of these findings will

follow. The chapter concludes with a discussion of the limitations of the study and suggestions for future directions of research.

Contrary to expectations and to the findings of qualitative research by Blustein et al. (2002), SES and social class did not independently predict various facets of career adaptability (Hypotheses 1-4), with one exception. Independent of SES, perceived social class made a contribution to the prediction of negative career outlook. As noted above, however, the reliability estimate for the negative career outlook scale of the CFI-R was unacceptably low. This severely limits the conclusions that can be drawn from this finding.

Conversely, exploratory analyses provided support for the exploratory hypotheses that SES and perceived social class would be significantly and positively correlated to two important facets of career adaptability measured by the CFI-R: support and WLB. Perceived social class within society was positively correlated with only WLB, while perceived social class within the community was positively correlated with WLB and support. This suggests that, for the current high school student sample, perceived status within the community or school may be more salient than their perceived status within society as a whole. The findings also conform to previous work (e.g., Goodman et al., 2001) that indicates that perceived status within the community is distinct from perceived status within society at large. As a whole, these results provide a mixed view of the relationship between career adaptability and SES and social class, although there appears to be some evidence that SES and perceived social class are related to some facets of career adaptability. Career adaptability, SES, and perceived social class are complex, multifaceted constructs, so building an understanding of the relationships between them will require much additional work. Previous studies have documented the connection between SES and educational aspirations and expectations (e.g., Boxer et al., 2011; Diemer & Hsieh, 2008; Hanson, 1994), and the results of this study support this previous work (Hypotheses 5 and 6). SES made a substantial independent contribution to educational aspirations in the expected direction. It is not surprising that caregivers' educational attainment and occupations help to predict educational aspirations. Children observe their caregivers and are greatly influenced by them in myriad ways, so it stands to reason that, when they consider education in their own lives, they will be influenced by the education and occupation of their caregivers.

Much less work has examined the independent influence of perceived social class upon educational aspirations and expectations, although theory suggests that the two constructs should operate distinctly (Liu et al., 2004). The results of the current study indicate that perceived social class makes an independent and substantial contribution to explaining both educational aspirations and expectations. Perceived social class within the community was a consistently significant predictor, underscoring the salience of adolescents' position within their immediate community. Contrary to expectations, various facets of career adaptability (i.e., career agency, negative career outlook, and support) did not contribute significantly to explaining educational aspirations and expectations above and beyond SES and social class. This was a surprising result given the influence that facets of career adaptability (e.g., career agency) would be expected to have upon students' thoughts about their education. It is possible that career adaptability, which is focused more directly on occupational choices than on the educational tracks necessary to obtain them, relates more to occupations than to education.

SES also made a significant and substantial contribution to explaining occupational aspirations and expectations in the expected direction. This is consistent with the above finding

that SES makes a similar independent contribution to explaining educational aspirations and underscores the importance of SES. Interestingly, perceived social class did not make an independent contribution toward predicting occupational aspirations and expectations. This is an unexpected result that suggests perceived social class is related to how students think about education but not about occupations. One explanation could be that, when assessing their perceived social class, students were asked to consider their relative position in their school. It is natural that their perceived status within an educational environment relates to their thoughts about education more strongly than toward their thoughts about occupations.

The current study also provides some evidence for the convergent validity of the CFI-R and the CMI Form C. The central constructs of the two measures, career agency and career choice readiness, were moderately correlated in the expected direction. Career agency was also moderately correlated in the expected direction with the related CMI Form C construct of confidence. Moreover, negative career outlook was negatively correlated with career choice readiness. As has been noted previously, however, the reliability estimate of the negative career outlook scale was unacceptably low and could not be improved by removing items. Taken together, these results provide some initial evidence for the convergent validity of these related measures.

The CFI-R was modified into an adolescent version for this study, and results provide some evidence for the use of this modified version with adolescents. Given that the CMI Form C was designed for adolescents, the convergent validity evidence noted above also provides support for the use of the CFI-R with adolescents. Reliability estimates were good for four of the five scales (career agency, occupational awareness, support and work-life balance). More work is needed to understand why the fifth scale, negative career outlook, did not demonstrate acceptable reliability with this sample. One possibility is that the scale is relatively short; a future version could test additional items to lengthen the scale. Future research could also examine how this measure functions in larger, more diverse samples. This work could explore whether the original factor structure of the CFI-R is consistent in adolescent samples, and items and scales could be modified accordingly to produce more reliable and valid results.

#### Implications

Scholars have called for increased incorporation of SES and social class into theoretical models. Results from this study support the importance of both SES and social class in predicting a number of important career variables, such as educational and occupational aspirations and expectations. Moreover, the current study lends substantial support to Liu et al.'s (2004) assertion that SES and perceived social class are distinct constructs that should be assessed separately. Perceived social class within the community proved to be a particularly consistent predictor of educational aspirations and expectations, which suggests that, for adolescents, status within the community is especially important. Future research could explore whether the trend is unique to adolescents or whether similar patterns hold for adults. The fact that perceived social class did not independently predict occupational aspirations or expectations was surprising and suggests that different factors may be important in educational versus occupational striving. More work is necessary to better understand how and under what circumstances the distinct constructs of SES and perceived social class are related to other important vocational constructs.

Previous research has indicated that SES and career adaptability may be linked (Blustein et al., 2002), but the current study provides only mixed support for this relationship. The hierarchical regression analyses that were performed provided almost no support for such a relationship, but several hypothesized correlations were found between SES and perceived social

class and several facets of career adaptability. Because career adaptability is a multifaceted construct, it is possible that SES and perceived social class only predict certain facets of adaptability, such as WLB or support. Additional research is needed to understand more precisely how these important constructs are related.

SES has long been acknowledged as an important construct, and vocational psychology has made significant strides in incorporating it into theory and practice. SES, as it is understood in the current study, relates to the objective factors of caregivers' educational attainment and current occupation. Understood in this way, SES is not particularly amenable to intervention how could clinicians alter these aspects of an adolescent's life? Although it is vital to continue to explore the important role that SES plays in clients' lives, it is less obvious how career interventions can be structured to alter SES in any meaningful way. On the other hand, perceived social class, as a subjective construct, may be more amenable to treatment. Diemer and Blustein (2006) have suggested that developing "critical consciousness" could be an antidote to structural oppression, and they argued that the construct is best conceptualized as an internal resource. As an internal resource, critical consciousness may help to alter how an individual perceives themselves within the social hierarchy, either within their immediate community or within the broader society. Future work could explore how effective critical consciousness is in altering perceived social class.

Career agency made an independent contribution toward predicting occupational expectations. Boxer et al. (2011) noted that students who expect to achieve less than they aspire to show a variety of academic and social risks. Moreover, they asserted that cognitive beliefs (i.e., occupational expectations) reliably predict related behaviors. This suggests that occupational expectations may be an excellent target for changing adolescents' behavior related to occupational striving. If causal links could be demonstrated between occupational expectations and career agency, either construct might be a suitable target for intervention. Because career agency is related to self-efficacy (Rottinghaus et al., 2012), self-efficacy interventions might be modified appropriately to help clients increase their sense of career agency. Bandura (1997) noted that self-efficacy beliefs are informed by four primary sources: 1) personal performance accomplishments, 2) vicarious learning, 3) social persuasion, and 4) physiological and affective states. The first three of these sources might be particularly good targets for potential interventions, and future work could examine how these can inform the development of programs and other resources for adolescent populations.

#### Limitations

Although the current study has implications for both research and practice, it also has limitations that should be considered. The methodology of the study constrains the conclusions that can be derived from its results. Because the study is non-experimental, its internal validity is reduced and causal relationships cannot be established. An experimental, quasi-experimental, or longitudinal analysis would be better suited to provide evidence for such causal relationships. The study was also cross-sectional, which makes it impossible to determine causal direction. It may be impractical to manipulate SES, perceived social class, or career agency, but a longitudinal study might be a design that could establish temporal precedence.

Lacking these causal links, treatment implications drawn from the study are limited. Without causal knowledge, it is difficult to identify targets for intervention. Even if theory dictates a certain model of causality, interventions should ideally be informed by experimental research that provides evidence for a clear sequence of causality. Once one identifies this causal chain, interventions can be tailored to enact a positive outcome by altering this existing causal sequence.

The sample size of the current study was also relatively small. This diminishes statistical power and increases the likelihood of Type II errors. Further, participants were all drawn from rural, Midwestern communities, which limits the external validity of the study. The sample was relatively homogeneous racially and ethnically, which detracts from cultural validity. Hence it is possible that the results of the current study reflect cultural phenomena and would not generalize to broader populations. Replication with other populations would help to bolster external validity.

SES and perceived social class are difficult constructs to assess, which represents another limitation of the current study. Although previous studies have operationalized adolescents' SES using caregivers' occupation and educational attainment, these may not represent the best operational definitions of the construct. Future researchers could consider other ways to operationalize the construct, or other dimensions of the construct that may be important to assess. The measure used to assess perceived social class, the Macarthur Scale of Subjective Social Status—Youth Version (Goodman et al., 2001), consists of two single-item scales. This instrument has demonstrated reasonable test-retest reliability and has been used successfully with adolescents, but single-item scales have limited content validity and tend to be less reliable. Developing other instruments with additional items would help to alleviate some of these issues.

#### **Future Directions**

The above discussion has highlighted some possible areas for future research. It was surprising that SES and perceived social class did not independently predict career adaptability. These results contradict some of the limited prior research on this area, so future studies should seek to identify what connections do exist between these variables. This future research is justified because some expected correlations were observed between SES and perceived social class and facets of career adaptability. It is possible that only certain facets of these complex constructs are related, so it will be important to operationalize these constructs as comprehensively as possible.

Prior literature suggests that SES and perceived social class are distinct constructs, and the findings of this study conform to this prior work. Indeed, these constructs operated differently in the analyses in this study. Future work could explore the different impacts that SES and perceived social class have upon various vocational constructs. Results from the current study also suggest that perceived social class within the community may be particularly salient for adolescents. It would be interesting to explore whether this is also true for adults (or in what circumstances it is true for adults). Given that perceived social class seems to be a more appropriate target for intervention than does SES, it will be important to explore the efficacy of various interventions have in altering perceived social class. It would also be important to explore what effects result from altering perceived social class.

Future research could improve upon methodological drawbacks of the current study. A larger, more diverse sample would increase statistical power as well as external and cultural validity, respectively. Longitudinal designs could be used to better understand how these phenomena manifest over time. For instance, a longitudinal study could examine the development of aspirations and expectations, as well as how these diverge or converge over time. The stability of career adaptability and perceived social class could also be addressed by such a design.

#### **Summary and Conclusion**

This study provides some evidence supporting the relationships between career adaptability and SES and perceived social class, although this evidence is mixed. Hierarchical regressions provided very little support for this relationship, but some expected correlations were observed. Specifically, perceived social class was positively correlated with support and WLB, both facets of career adaptability measured by the CFI-R. Results from the study provide strong support for Liu et al.'s (2004) conceptualization of SES and social class as distinct constructs. Perceived social class within the community appears to be particularly salient for adolescents, perhaps because the school environment is a microcosm of the immediate community. SES and perceived social class proved to be potent predictors of educational aspirations and expectations. SES was also a robust predictor of occupational aspirations and expectations. Career agency independently contributed to the prediction of occupational expectations. The study also provided evidence supporting the convergent validity of the CFI-R and the CMI Form C, two prominent instruments assessing various facets of career adaptability. The current study builds the knowledge base in a small way by shedding light on some of the relationships between SES and perceived social class and career adaptability, educational aspirations, and educational expectations. Results from this study provide some insight and direction for future research that could pave the way to developing effective, empirically grounded interventions that take these crucial variables into account.

Table 1

Component	<b>Component Description</b>	<b>Related Adaptability</b>	# of	α
		Components	Items	
CFI-R				
Career Agency	Self-perception of influence	Confidence, Career	10	.90
	over one's career path	Choice Readiness		
Occupational	Perceived knowledge of job	Curiosity, Career Choice	6	.80
Awareness	market and trends	Readiness		
Negative	Anticipation of unfavorable	Confidence, Career	4	.89
Career Outlook	work outcomes	Choice Readiness		
Support	Degree of perceived career	Consultation	4	.81
	support from others			
Work Life	Ability to manage multiple		4	.78
Balance	life roles			
CMI Form C				
Concern	Career planfulness,	Negative Career Outlook	6	.62
	optimism			
Curiosity	Degree of career interest	Occupational Awareness	6	.74
	and exploration			
Confidence	Degree to which career	Career Agency, Negative	6	.78
	success is anticipated	Career Outlook		
Consultation	Extent to which others are	Support	6	.69
	sought for counsel			
Career Choice	Readiness for career choice	Career Agency,	18	.84
Readiness	decisions	Occupational Awareness,		
		Negative Career Outlook		

Summary of Career Adaptability Components Measured by CFI-R and CMI Form C

Note. CFI-R = Career Futures Inventory-Revised. CMI = Career Maturity Inventory. CFI-R data obtained from development sample, N = 250. CMI Form C data obtained from validation sample, N = 453.

# Means, Standard Deviations, and Internal Consistency Estimates of the CFI-R across Three

# Samples

	Development Sample (N = 250)			S	lidatio ample = 348	; ;	Clinic Sample (N = 332)		
Measure	М	SD	α	М	SD	α	М	SD	α
Career Agency	3.92	.64	.90	3.94	.61	.88	3.67	.60	.83
Occupational Awareness	3.45	.71	.80	3.31	.77	.80	2.94	.74	.81
Neg. Career Outlook	2.34	1.12	.89	2.06	.85	.77	2.26	.73	.68
Support	3.98	.75	.81	4.01	.73	.77	3.86	.75	.82
Work-Life Balance	3.80	.71	.78	3.75	.73	.75	3.63	.72	.77

Measure	CA	NCO	OA	Support	WLB
CDSE	.58	55	.42	.39	.50
CDDQ	50	.58	30	31	41
Problem-Focused	.28	21	.10	.26	.24
Emotion-Focused	.21	16	.08	.16	.13
Avoidant-Focused	30	.41	18	23	32
Decidedness	.38	41	.19	.23	.22
Comfort	.46	48	.34	.28	.34
Reasons	47	.56	39	28	40
LOT-R	.33	37	.18	.22	.33

Correlations between CFI-R Subscales and Validation Measures

N = 345-348. CDSE = Career Decision Self-Efficacy Scale; CDDQ = Career Decision-Making Difficulties Questionnaire; LOT-R = Life Orientation Test- Revised; CA = Career Agency; NCO = Negative Career Outlook; OA = Occupational Awareness; WLB = Work-Life Balance.

# Summary of Educational Aspirations and Expectations

Variable	N	% of Total N
Educational Aspirations		
Less than High School	1	1.0
High School	9	9.0
Some College/Associate's	23	23.0
Bachelor's	19	19.0
Master's	12	12.0
Doctorate	35	35.0
Educational Expectations		
Less than High School	0	0.0
High School	7	7.0
Some College/Associate's	20	20.0
Bachelor's	21	21.0
Master's	14	14.0
Doctorate	33	33.0

# Summary of Occupational Aspirations and Expectations and Perceived Social Class

Variable	М	SD
Occupational Aspirations	60.72	21.48
Occupational Expectations	57.71	22.10
Macarthur Scale of Subjective Social Status—Yo	outh Version	
Society	5.83	1.63
Community	7.52	1.83

*Note.* N = 100. Occupational Aspirations and Expectations range from 1-100. Subjective Social Status ranges from 1-10.

Scale	M	SD	Cronbach's Alpha
Career Futures Inventory-Revised-Adoles	cent		
Career Agency	4.14	0.52	.80
Occupational Awareness	3.59	0.67	.70
Negative Career Outlook	1.87	1.87	.47
Support	4.20	0.79	.78
Work-Life Balance	3.97	0.80	.79
Career Maturity Inventory Form C			
Concern	5.00	1.13	.47
Curiosity	3.85	1.74	.67
Confidence	3.56	2.02	.80
Consultation	3.91	1.51	.52
Readiness	12.36	3.94	.82

Means, Standard Deviations, and Reliability Estimates for the Total Sample

*Note.* N = 100. Career Futures Inventory-Adolescent scales range from 1-5. Career Maturity Inventory Form C (CMI-C) scales Concern, Curiosity, Confidence, and Consultation range from 0-6. CMI-C scale Readiness ranges from 0-18.

Variable 1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 Educ. Aspirations 1	-	.89***	.56***	.55***	.30**	.29**	.27**	.11	.10	03	.17	.11	<b>.</b> 41 <sup>***</sup>	.22*	.11	24*	.21*	.14
2 Educ. Expectations		1	.51***	.53***	.24*	.24*	.18	.13	.05	.02	.12	.20	.41***	.25*	.17	14	.24*	.24*
3 Occupational Aspirations	•		1	.90***	.28*	.38***	.17	.08	.05	.03	.09	.04	.21	.19	.09	23*	.08	.15
4 Occupational Expectation	ıs			1	.29**	.45***	.08	.08	.02	04	.05	.07	.19	.22*	02	17	.09	.16
5 SES Education					1	.64***	.14	.08	02	.03	.07	.31*	.16	.02	13	.01	.15	.17
6 SES Occupation						1	03	03	18	.00	10	.26*	.24*	06	20	.08	.01	01
7 CMI Concern							1	.38***	.52***	02	.73***	01	.17	.21*	.24*	43***	.21*	.16
8 CMI Curiosity								1	.46***	13	.78 <sup>***</sup>	.16	.19	.42***	.29**	24*	.13	.29**
9 CMI Confidence									1	<b>-</b> .31 <sup>**</sup>	.86***	18	.01	.40**	.34**	42***	.09	.27**
10 CMI Consultation										1	22*	.24*	.17	.12	.09	03	.22*	.20
11 CMI Readiness											1	01	.13	.46***	.37***	44***	.15	.30**
12 PSS Society												1	.47***	.03	06	.16	.22*	.13
13 PSS Community													1	.16	.05	12	.30**	.32**
14 CFI-R Career Agency														1	.57***	50***	.39***	.68***
15 CFI-R Occupational Awa	rene	ess													1	35***	.26**	.39***
16 CFI-R Negative Career O	utlo	ok														1	22*	48***
17 CFI-R Support																	1	.33**
18 CFI-R WLB																		1

Summary of Intercorrelations between CFI-R, CMI Form C, PSS, SES, and Educational and Occupational Aspirations and Expectation

*Note.* N = 100. \* = p < 0.05 level (2-tailed). \*\* = p < 0.01 level (2-tailed). \*\*\* = p < 0.001 level (2-tailed).

Summary of Hierarchical Regression to Test for Incremental Variance in Career Agency from SES and Perceived Social Class

Variable	$R^2$	$\Delta R^2$	β	В	t	
Step 1	.019	.019				
SES Education	1		.141	.055	1.005	
SES Occupation	on		176	005	-1.253	
Step 2	.064	.045				
Perceived Soci	ociety	060	020	481		
Perceived Soci	ial Class C	ommunity	.236	.067	1.943	

Note. N = 87. \* = p < .05; \*\* = p < .01; \*\*\* = p < .001.

Summary of Hierarchical Regression to Test for Incremental Variance in Negative Career Outlook from SES and Perceived Social Class

Variable	<b>R</b> <sup>2</sup>	$\Delta R^2$	β	В	t	
Step 1	.005	.005				
SES Education			054	027	.382	
SES Occupatio	n		.094	.003	.664	
Step 2	.081	.076*				
Perceived Soci	ociety	.247	.104	1.993		
Perceived Soci	al Class C	ommunity	285	104	-2.368*	

Note. N = 87. \* = p < .05; \*\* = p < .01; \*\*\* = p < .001.

Summary of Hierarchical Regression to Test for Incremental Variance in Occupational Awareness from SES and Perceived Social Class

Variable	<b>R</b> <sup>2</sup>	$\Delta R^2$	β	В	t	
Step 1	.041	.041				
SES Education			009	005	068	
SES Occupatio	n		195	007	-1.403	
Step 2	.052	.011				
Perceived Soci	ociety	060	026	479		
Perceived Soci	al Class C	ommunity	.120	.044	.983	

Note. N = 87. \* = p < .05; \*\* = p < .01; \*\*\* = p < .001.

Summary of Hierarchical Regression to Test for Incremental Variance in Career Choice Readiness from SES and Perceived Social Class

Variable	<b>R</b> <sup>2</sup>	$\Delta R^2$	β	В	t	
Step 1	.032	.032				
SES Education			.192	.541	1.314	
SES Occupatio	n		232	045	-1.586	
Step 2	.063	.031				
Perceived Socia	al Class S	ociety	069	162	843	
Perceived Socia	al Class C	ommunity	.200	.406	1.617	

*Note.* N = 84. \* = p < .05; \*\* = p < .01; \*\*\* = p < .001.

Summary of Hierarchical Regression to Test for Incremental Variance in Educational Aspirations from SES, Perceived Social Class, Career Agency, Negative Career Outlook, and Support

Variable	<b>R</b> <sup>2</sup>	$\Delta R^2$	β	В	t
Step 1	.096*	.096*			
SES Education			.205	.218	1.516
SES Occupation			.136	.010	1.006
Step 2	.268***	.172***			
Perceived Social	Class So	ciety	169	151	-1.525
Perceived Social	Class Co	mmunity	.471	.364	4.376***
Step 3	.299***	.031			
Career Agency			013	036	113
Negative Career	Outlook		191	406	-1.635
Support			002	003	015

*Note.* N = 87. \* = p < .05; \*\* = p < .01; \*\*\* = p < .001.

Summary of Hierarchical Regression to Test for Incremental Variance in Educational Expectations from SES, Perceived Social Class, Career Agency, Negative Career Outlook, and Support

Variable	<b>R</b> <sup>2</sup>	$\Delta R^2$	β	В	t
Step 1	.061	.061			
SES Education	on		.160	.155	1.093
SES Occupat	ion		.108	.007	.739
Step 2	.203**	.142**			
Perceived So	cial Class So	ciety	058	049	488
Perceived So	cial Class Co	mmunity	.405	.287	3.596***
Step 3	.220**	.017			
Career Agence	су		.068	.171	.546
Negative Car	eer Outlook		096	201	757
Support			017	029	144

*Note.* N = 84. \* = p < .05; \*\* = p < .01; \*\*\* = p < .001.

Summary of Hierarchical Regression to Test for Incremental Variance in Occupational Aspirations from SES, Perceived Social Class, Career Agency, Negative Career Outlook, and Support

Variable	<b>R</b> <sup>2</sup>	$\Delta R^2$	β	В	t
Step 1	.206***	.206**			
SES Education			.299	4.739	2.258*
SES Occupation	1		.199	.221	1.503
Step 2	.250***	.044			
Perceived Social	l Class Soc	eiety	203	-2.722	-1.698
Perceived Social	l Class Coi	nmunity	.219	2.677	1.888
Step 3	.310***	.059			
Career Agency			.106	4.481	.862
Negative Career	Outlook		201	-6.451	-1.670
Support			107	-2.940	955

*Note.* N = 80. \* = p < .05; \*\* = p < .01; \*\*\* = p < .001.

Summary of Hierarchical Regression to Test for Incremental Variance in Occupational Expectations from SES, Perceived Social Class, Career Agency, Negative Career Outlook, and Support

Variable	<b>R</b> <sup>2</sup>	$\Delta R^2$	β	В	t	
Step 1	.232***	.232***				
SES Education			.181	3.005	1.393	
SES Occupation	1		.346	.397	2.655**	
Step 2	.251***	.019				
Perceived Socia	ll Class So	ociety	119	-1.658	-1.016	
Perceived Socia	ll Class Co	ommunity	.144	1.723	1.259	
Step 3	.306***	.055				
Career Agency			.202	8.735	1.662	
Negative Career	r Outlook		099	-3.563	814	
Support			075	-2.115	650	

*Note.* N = 79. \* = p < .05; \*\* = p < .01; \*\*\* = p < .001.

#### REFERENCES

- Adler, N. E., Boyce, T., Chesney, M. A., Cohen, S., Folkman, S., Kahn, R. L., & Syme, S. L. (1994). Socioeconomic status and health: The challenge of the gradient. *American Psychologist*, 49(1), 15-24. doi:10.1037/0003-066X.49.1.15
- Adler, N. E., Epel, E. S., Castellazzo, G., & Ickovics, J. R. (2000). Relationship of subjective and objective social status with psychological and physiological functioning: Preliminary data in healthy, White women. *Health Psychology*, *19*(6), 586-592. doi:10.1037/0278-6133.19.6.586
- Ali, S., & Saunders, J. L. (2009). The career aspirations of rural Appalachian high school students. *Journal of Career Assessment*, *17*(2), 172-188.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, *1*(2), 164-180. doi:10.1111/j.1745-6916.2006.00011.x
- Berman, G. S., & Haug, M. R. (1975). Occupational and educational goals and expectations: The effects of race and sex. *Social Problems*, *23*(2), 166-181.
- Blustein, D. L. (2006). *The psychology of working: A new perspective for career development, counseling, and public policy*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Blustein, D. L. (2011a). A relational theory of working. *Journal of Vocational Behavior*, 79(1), 1-17. doi:10.1016/j.jvb.2010.10.004
- Blustein, D. L. (2011b). Vocational psychology at the fork in the road: Staying the course or taking the road less traveled. *Journal of Career Assessment*, 19(3), 316-322. doi:10.1177/1069072710395537

- Blustein, D. L., Chaves, A. P., Diemer, M. A., Gallagher, L. A., Marshall, K. G., Sirin, S., &
  Bhati, K. S. (2002). Voices of the forgotten half: The role of social class in the school-to-work transition. *Journal of Counseling Psychology*, 49(3), 311-323. doi:10.1037/0022-0167.49.3.311
- Blustein, D. L., McWhirter, E., & Perry, J. C. (2005). An emancipatory communitarian approach to vocational development theory, research, and practice. *The Counseling Psychologist*, 33(2), 141-179. doi:10.1177/0011000004272268
- Blustein, D. L., Medvide, M. B., & Kozan, S. (2012). A tour of a new paradigm: Relationships and work. *The Counseling Psychologist*, 40(2), 243-254. doi:10.1177/0011000011429032
- Bolton, W., & Oatley, K. (1987). A longitudinal study of social support and depression in unemployed men. *Psychological Medicine*, 17(2), 453-460. doi: 10.1017/S0033291700025010
- Boxer, P., Goldstein, S. E., DeLorenzo, T., Savoy, S., & Mercado, I. (2011). Educational aspiration–expectation discrepancies: Relation to socioeconomic and academic riskrelated factors. *Journal of Adolescence*, *34*, 609-617. doi:10.1016/j.adolescence.2010.10.002
- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, *53*, 371-399. doi:10.1146/annurev.psych.53.100901.135233
- Brooks-Gunn, J., & Duncan, G. J. (1997). The effects of poverty on children. *The Future of Children*, 7(2), 55-71.
- Brown, S. D., & Lent, R. W. (Eds.). (2005). *Career development and counseling: Putting theory and research to work*. Hoboken, NJ: John Wiley & Sons.

- Brown, S. D., & Lent, R. W. (Eds.). (2008). *Handbook of counseling psychology* (4th ed.).Hoboken, NJ: John Wiley & Sons.
- Carbondale, Illinois (n.d.). In *City-data.com*. Retrieved November 16, 2011, from http://www.city-data.com/city/Carbondale-Illinois.html
- Chaves, A. P., Diemer, M. A., Blustein, D. L., Gallagher, L. A., DeVoy, J. E., Casares, M. T., & Perry, J. C. (2004). Conceptions of work: The view from urban youth. *Journal of Counseling Psychology*, 51(3), 275-286. doi:10.1037/0022-0167.51.3.275
- Cirino, P. T., Chin, C. E., Sevcik, R. A., Wolf, M., Lovett, M., & Morris, R. D. (2002).
   Measuring socioeconomic status: Reliability and preliminary validity for different approaches. *Assessment*, 9(2), 145-155. doi:10.1177/10791102009002005
- Coleman, J. S. (1988). Social capital in the creation of human capital [Electronic version]. *American Journal of Sociology*, *94*, S120-S95.
- Conger, R. D., Conger, K. J., & Martin, M. J. (2010). Socioeconomic status, family processes, and individual development. *Journal of Marriage and Family*, 72(3), 685-704. doi:10.1111/j.1741-3737.2010.00725.x
- Creed, P. A., Fallon, T., & Hood, M. (2009). The relationship between career adaptability, person and situation variables, and career concerns in young adults. *Journal of Vocational Behavior*, 74(2), 219-229. doi:10.1016/j.jvb.2008.12.004
- Crimmins, E. M., Hayward, M. D., & Saito, Y. (1996). Differentials in active life expectancy in the older population of the United States. *Journal of Gerontology*, *51B*(3), S111-S120. doi:10.1093/geronb/51B.3.S111
- Crites, J. O. (1961). A model for the measurement of vocational maturity. *Journal of Counseling Psychology*, 8(3), 255-259. doi:10.1037/h0048519

- Dearborn, W. F., & Rothney, J. W. (1938). Scholastic, economic, and social backgrounds of unemployed youth. Cambridge, MA: Cambridge.
- Diemer, M. A., & Blustein, D. L. (2006). Critical consciousness and career development among urban youth. *Journal of Vocational Behavior*, 68(2), 220-232.
  doi:10.1016/j.jvb.2005.07.001
- Diemer, M. A., & Hsieh, C. (2008). Sociopolitical development and vocational expectations among lower socioeconomic status adolescents of color. *The Career Development Quarterly*, 56(3), 257-267.
- Duffy, R. D. (2010). Sense of control and career adaptability among undergraduate students. *Journal of Career Assessment*, *18*(4), 420-430. doi:10.1177/1069072710374587
- Duffy, R. D., & Dik, B. J. (2009). Beyond the self: External influences in the career development process. *The Career Development Quarterly*, 58(1), 29-43.
- Fouad, N. A., & Brown, M. T. (2000). The role of race and class in development: Implications for counseling psychology. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (3rd ed., pp. 379-408). New York: John Wiley
- Fugate, M., Kinicki, A. J., & Ashforth, B. E. (2004). Employability: A psycho-social construct, its dimensions, and applications. *Journal of Vocational Behavior*, 65(1), 14-38. doi:10.1016/j.jvb.2003.10.005
- Galatia, Illinois (n.d.). In *City-data.com*. Retrieved November 16, 2011, from http://www.citydata.com/city/Galatia-Illinois.html
- Goodman, E., Adler, N. E., Kawachi, I., Frazier, A. L., Huang, B., & Colditz, G. A. (2001).
   Adolescents' perceptions of social status: Development and evaluation of a new indicator.
   *Pediatrics*, 108(2), e31. doi:10.1542/peds.108.2.e31

- Goodman, J. (1994). Career adaptability in adults: A construct whose time has come. *Career Development Quarterly*, *43*(1), 74-84. doi:10.1002/j.2161-0045.1994.tb00848.x
- Goodman, L. A., Liang, B., Helms, J. E., Latta, R. E., Sparks, E., & Weintraub, S. R. (2004).
  Training counseling psychologists as social justice agents: Feminist and multicultural perspectives in action. *The Counseling Psychologist*, *32*(6), 793-836.
  doi:10.1177/0011000004268802
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28(6), 545-579.
   doi:10.1037/0022-0167.28.6.545
- Griffiths, J. (2007). Academic self-efficacy, career self-efficacy, and psychosocial identity development: A comparison of female college students from differing socioeconomic status groups. *Dissertation Abstracts International: Section A*, 67.
- Hanson, S. L. (1994). Lost talent: Unrealized educational aspirations and expectations amongU.S. youths. *Sociology of Education*, 67(3), 159-183.
- Hardin, E. E., Leong, F. T. L., & Osipow, S. H. (2001). Cultural relativity in the conceptualization of career maturity. *Journal of Vocational Behavior*, 58(1), 36-52. doi:10.1006/jvbe.2000.1762
- Hartung, P. J., Porfeli, E. J., & Vondracek, F. W. (2008). Career adaptability in childhood. *The Career Development Quarterly*, 57(1), 63-74.
- Hauser, R. M. (1994). Measuring socioeconomic status in studies of child development. *Child Development*, 65(6), 1541-1545. doi:10.1111/j.1467-8624.1994.tb00834.x

Hirschi, A. (2010). Swiss adolescents' career aspirations: Influence of context, age, and career adaptability. *Journal of Career Development*, 36(3), 228-245. doi:10.1177/0894845309345844

- Howard, K. A., Carlstrom, A. H., Katz, A. D., Chew, A. Y., Ray, G. C., Laine, L., & Caulum, D.
  (2011). Career aspirations of youth: Untangling race/ethnicity, SES, and gender. *Journal* of Vocational Behavior, 79(1), 98-109. doi:10.1016/j.jvb.2010.12.002
- Karvonen, S., & Rahkonen, O. (2011). Subjective social status and health in young people. Sociology of Health & Illness, 33(3), 372-383. doi:10.1111/j.1467-9566.2010.01285.x
- Krieger, N., Williams, D. R., & Moss, N. E. (1997). Measuring social class in US public health research: Concepts, methodologies, and guidelines. *Annual Review of Public Health*, 18, 341-378. doi:10.1146/annurev.publhealth.18.1.341
- Lent, R. W. (2005). A social cognitive view of career development and counseling. In S. D. Brown, R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42-70). Hoboken, NJ: John Wiley & Sons Inc.
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79-122. doi:10.1006/jvbe.1994.1027
- Liu, W., & Ali, S. (2005). Addressing social class and classism in vocational theory and practice: extending the emancipatory communitarian approach: Comment. *The Counseling Psychologist*, 33(2), 189-196. doi:10.1177/0011000004272269
- Liu, W., Ali, S., Soleck, G., Hopps, J., Dunston, K., & Pickett, T. R. (2004). Using social class in counseling psychology research. *Journal of Counseling Psychology*, 51(1), 3-18. doi:10.1037/0022-0167.51.1.3

- Markle, R. (2010). Examining the bricks and mortar of socioeconomic status: An empirical comparison of measurement methods. *Dissertation Abstracts International: Section A*, 71.
- Marmot, M. G., Smith, G. D., Stansfeld, S., Patel, C., North, F., Head, J., ... Feeney, A. (1991).
  Health inequalities among British civil servants: The Whitehall II study. *The Lancet*, 337(8754), 1387-1393.
- McWhirter, E. H., Larson, L. M., & Daniels, J. A. (1996). Predictors of educational aspirations among adolescent gifted students of color. *Journal of Career Development*, 23(2), 97-109.
- Merola, S. S. (2005, August). The problem of measuring SES on educational assessments. Paper presented at 100<sup>th</sup> Annual Meeting of the American Sociological Association, Philadelphia, PA.
- Morrison, R. F., & Hall, D. T. (2002). Career adaptability. In D. T. Hall (Ed.), *Careers in and out of organizations* (pp. 205-234). Thousand Oaks, CA: Sage.
- Nakao, K., & Treas, J. (1992). The 1989 Socioeconomic Index of Occupations: Construction from the 1989 occupational prestige scores. General Social Survey Methodological Report No. 74. Chicago: National Opinion Research Center.
- Oakes, J. M., & Rossi, P. H. (2003). The measurement of SES in health research: Current practice and steps toward a new approach. *Social Science & Medicine*, *56*(4), 769-784. doi:10.1016/S0277-9536(02)00073-4
- Prilleltensky, I. (1997). Values, assumptions, and practices: Assessing the moral implications of psychological discourse and action. *American Psychologist*, 52(5), 517-535. doi:10.1037/0003-066X.52.5.517

Richardson, M. S. (1993). Work in people's lives: A location for counseling psychologists. *Journal of Counseling Psychology*, 40(4), 425-433. doi:10.1037/0022-0167.40.4.425

- Richardson, M. S. (2012). Counseling for work and relationship. *The Counseling Psychologist*, 40(2), 190-242. doi:10.1177/0011000011406452
- Rottinghaus, P. J., Buelow, K. L., Matyja, A., & Schneider, M. R. (2012). The career futures inventory-revised: Measuring dimensions of career adaptability. *Journal of Career Assessment*, 20(2), 123-129. doi:10.1177/1069072711420849
- Rottinghaus, P. J., Day, S. X., & Borgen, F. H. (2005). The career futures inventory: A measure of career-related adaptability and optimism. *Journal of Career Assessment*, 13(1), 3-24. doi:10.1177/1069072704270271
- Rottinghaus, P. J., Lindley, L. D., Green, M. A., & Borgen, F. H. (2002). Educational aspirations: The contribution of personality, self-efficacy, and interests. *Journal of Vocational Behavior*, 61(1), 1-19. doi:10.1006/jvbe.2001.1843
- Saegert, S. C., Adler, N. E., Bullock, H. E., Cauce, A. M., Liu, W. M., & Wyche, K. F. American Psychological Association Task Force on Socioeconomic Status. (2007).
   *Report of the APA Task Force on Socioeconomic Status*. Washington, DC: American Psychological Association.
- Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *Career Development Quarterly*, 45, 247–259.
- Savickas, M. L. (1999). The transition from school to work: A developmental perspective. *Career Development Quarterly*, 47(4), 326-336.
- Savickas, M. L. (2002a). Career construction: A developmental theory of vocational

behavior. In D. Brown (Ed.), *Career choice and development* (4th ed., pp. 149-205), San Francisco: Jossey-Bass.

- Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown, R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 42-70). Hoboken, NJ: John Wiley & Sons Inc.
- Savickas, M. L. (2011). *Career counseling*. Washington, DC: American Psychological Association.
- Savickas, M. L., & Porfeli, E. J. (2011). Revision of the career maturity inventory: The adaptability form. *Journal of Career Assessment*, 19(4), 355-374. doi:10.1177/1069072711409342
- Seeman, T. E., Crimmins, E., Huang, M., Singer, B., Bucur, A., Gruenewald, T., ... Reuben, D.
  B. (2004). Cumulative biological riskand socio-economic differences in mortality: MacArthur Studies of Successful Aging. *Social Science & Medicine*, *58*(10), 1985-1997. doi:10.1016/S0277-9536(03)00402-7
- Spencer, B., & Castano, E. (2007, November 7). Social class is dead. Long live social class! Stereotype threat among low socioeconomic status individuals. In *Social Just Research*. Retrieved November 6, 2011 (DOI 10.1007/s11211-007-0047-7).

Statistics Calculators (Version 3.0 beta) [Computer software]. DanielSoper.com

- Super, D. E. (1955). Dimensions and measurement of vocational maturity. Teachers College Record, 57, 152-163.
- Super, D. E. (1983). Assessment in career guidance: Toward truly developmental counseling. *Personnel & Guidance Journal*, 61(9), 555-562. doi:10.1111/j.2164-4918.1983.tb00099.x

- Super, D. E., & Knasel, E. G. (1981). Career development in adulthood: Some theoretical problems and a possible solution. *British Journal of Guidance & Counseling*, 9(2), 194-201. doi:10.1080/03069888100760211
- Super, D. E., & Wright, R. D. (1941). From school to work in the depression years. I. *The School Review*, 49(1), 17-26.
- Super, D. E., & Wright, R. D. (1941). From school to work in the depression years. II. *The School Review*, 49(1), 123-130.
- U.S. Census Bureau. (2009). Educational attainment—people 18 years old and over, by total money earnings in 2008, work experience in 2008 age, race, hispanic origin, and sex.
  Retrieved March 13, 2012, from http://www.census.gov/hhes/www/cpstables/032009/ perinc/new04\_010.htm
- van Vianen, E. M. A., De Pater, I. E., & Preenan, P. T. Y. (2009, June). Adaptable careers: Maximizing less and exploring more. *Career Development Quarterly*, 57(4), 298-309.
   Retrieved November 16, 2011, from

http://associationdatabase.com/aws/NCDA/pt/sp/cdquarterly

Warnath, C. F. (1975). Vocational theories: Direction to nowhere. *Personnel & Guidance Journal*, *53*(6), 422-428.

APPENDICES

## Appendix A

## Demographic and Career Planning Questionnaire

Age\_\_\_\_\_

Grade level (circle one): freshman sophomore junior senior

Gender (circle one): male female

Cumulative GPA\_\_\_\_\_

## 1. How far in school would you most like to go? Please select one:

Less than high school diploma High school diploma Some college Technical degree or certificate Associate's Degree Bachelor's Degree Law Degree (JD) Medical Degree (e.g., MD, DDS, DVM) Doctorate (e.g., PhD, EdD) Other

2. In the space below, please briefly describe how and when you decided you wanted to go that far in school.

3. What kind of work would you most like to do?\_\_\_\_\_

4. In the space below, please briefly describe how and when you decided you wanted to do this type of work.

5. Which race/ethnicity do you most identify with? (choose all that apply):

\_\_\_\_\_African-American/ Black

\_\_\_\_Asian-American/ Asian / Pacific Islander

- \_\_\_\_European-American/ White
- \_\_\_\_Hispanic-American/Latino(a)

\_\_\_\_Native American

Other:\_\_\_\_\_

6. In the table below, please:

- A. List the adult(s) you live with, your caregiver(s), or your legal guardian(s). *Do not write their names, only their relation to you* (e.g., father, mother, aunt, foster parent, etc.).
- **B.** List their occupation(s).

• C. Circle the highest degree that person has earned.

Adult/caregiver/guardian: Occupation: Degree earned: (Please do not list names)

1.	Less than high school diploma High school diploma Some college Technical degree or certificate Associate's Degree Bachelor's Degree
	Master's Degree
	Law Degree (JD)
	Medical Degree (e.g., MD, DDS, DVM)
	Doctorate (e.g., PhD, EdD)
	Other
2.	Less than high school diploma
	High school diploma
	Some college
	Technical degree or certificate
	Associate's Degree
	Bachelor's Degree
	Master's Degree
	Law Degree (JD)
	Medical Degree (e.g., MD, DDS, DVM)
	Doctorate (e.g., PhD, EdD)
	Other
3.	Less than high school diploma
	High school diploma
	Some college
	Technical degree or certificate
	Associate's Degree
	Bachelor's Degree
	Master's Degree
	Law Degree (JD) Medical Degree (a.g. MD, DDS, DVM)
	Medical Degree (e.g., MD, DDS, DVM)
	Doctorate (e.g., PhD, EdD)
	Other

Less than high school diploma
High school diploma
Some college
Technical degree or certificate
Associate's Degree
Bachelor's Degree
Master's Degree
Law Degree (JD)
Medical Degree (e.g., MD, DDS, DVM)
Doctorate (e.g., PhD, EdD)
Other

7. If any of the individuals above have recently lost their job or retired, please briefly describe the situation in the space below.

### 8. How far in school do you think you will probably go? Please select one:

Less than high school diploma High school diploma Some college Technical degree or certificate Associate's Degree Bachelor's Degree Law Degree (JD) Medical Degree (e.g., MD, DDS, DVM) Doctorate (e.g., PhD, EdD) Other\_\_\_\_\_

4.

9. In the space below, please briefly describe why you think you will go that far in school.

10. What kind of work do you think you will probably do?\_\_\_\_\_

11. In the space below, please briefly describe why you think you will do this type of work.

#### Appendix B

1a. Imagine that this ladder pictures how American society is set up.

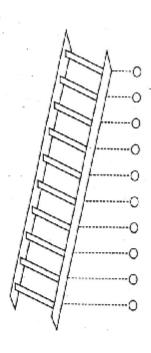
- At the top of the ladder are the people who are the best off--they have the most money, the highest amount of schooling, and the jobs
   that bring the most respect.
- At the bottom are people who are the worst off--they have the least money, little or no education, no job or jobs that no one wants or respects.

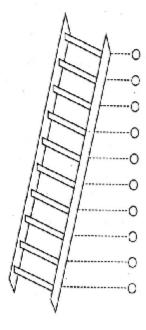
Now think about your family. Please tell us where you think your family would be on this ladder. Fill in the circle that best represents where your family would be on this ladder.

1b. Now assume that the ladder is a way of picturing your school.

- At the top of the ladder are the people in your school with the most respect, the highest grades, and the highest standing.
- At the bottom are the people who no one respects, no one wants to hang around with, and have the worst grades.

Where would you place yourself on this ladder? Fill in the circle that best represents where you would be on this ladder.





## Appendix C

## **Career Futures Inventory-Revised-Adolescent**

© 2000, 2011 Patrick J. Rottinghaus, Ph.D.

This questionnaire assesses critical factors for people considering career transitions. You will be asked a series of questions regarding your current thoughts and feelings about how you plan your career. Please answer the following items as honestly as you can. There are no right or wrong answers. Read each statement carefully, then use the following scale to indicate how strongly you agree or disagree with each statement:

### 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

- \_\_\_\_\_1. I can perform a successful job search
- \_\_\_\_\_2. I doubt my career will turn out well in the future
- \_\_\_\_\_ 3. I can establish a plan for my future career
- \_\_\_\_\_4. Others in my life are very supportive of my career
- 5. I understand how economic trends affect career opportunities available to me
- \_\_\_\_\_6. I am aware of priorities in my life
- \_\_\_\_\_7. I am good at understanding job market trends
- \_\_\_\_\_ 8. Thinking about my career frustrates me
- 9. I can easily manage my needs and those of other important people in my life
- \_\_\_\_\_ 10. I can overcome potential barriers that may exist in my career
- \_\_\_\_\_11. I lack the energy to pursue my career goals
- 12. Balancing work and family responsibilities is manageable
- \_\_\_\_\_13. My family is there to help me through career challenges
- \_\_\_\_\_ 14. I can adapt to change in the world of work
- \_\_\_\_\_15. I do not understand job market trends
- \_\_\_\_\_16. I am aware of my strengths
- \_\_\_\_\_17. I keep up with trends in at least one occupation or industry of interest to me
- 18. I receive encouragement from others to meet my career goals
- \_\_\_\_\_19. I understand my work-related interests
- \_\_\_\_\_ 20. I am very strategic when it comes to balancing my work and personal lives
- \_\_\_\_\_21. I keep current with job market trends
- \_\_\_\_\_ 22. I understand my work-related values
  - \_\_\_\_\_23. Friends are available to offer support in my career transition
- \_\_\_\_\_ 24. I am good at balancing multiple life roles such as worker, family member, or friend

- \_\_\_\_\_ 25. It is unlikely that good things will happen in my career
- 26. I will successfully manage my present career transition process
- \_\_\_\_\_ 27. I keep current with changes in technology
- \_\_\_\_\_ 28. I am in control of my career

# Appendix D

# Career Maturity Inventory—Counseling Form C

# John O. Crites and Mark L. Savickas

1. There is no point in deciding on a job when the future is so uncertain.	Agree	Disagree
2. I know very little about the requirements of jobs.	Agree	Disagree
3. I have so many interests that it is hard to choose just one occupation.	Agree	Disagree
4. Choosing a job is something that you do on your own.	Agree	Disagree
5. I can't seem to become very concerned about my future occupation.	Agree	Disagree
6. I don't know how to go about getting into the kind of work I want to do.	Agree	Disagree
7. Everyone seems to tell me something different; as a result I don't know what kind of work to choose.	Agree	Disagree
8. If you have doubts about what you want to do, ask your parents or friends for advice.	Agree	Disagree
9. I seldom think about the job that I want to enter.	Agree	Disagree
10. I am having difficulty in preparing myself for the work that I want to do.	Agree	Disagree
11. I keep changing my occupational choice.	Agree	Disagree
12. When it comes to choosing a career, I will ask other people to help me.	Agree	Disagree
13. I'm not going to worry about choosing an occupation until I am out of school.	Agree	Disagree
14. I don't know what courses I should take in school.	Agree	Disagree
15. I often daydream about what I want to be, but I really have not chosen an occupation yet.	Agree	Disagree
16. I will choose my career without paying attention to the feelings of other people.	Agree	Disagree

17. As far as choosing an occupation is concerned, something will come along sooner or later.	Agree	Disagree
18. I don't know whether my occupational plans are realistic.	Agree	Disagree
19. There are so many things to consider in choosing an occupation, it is hard to make a decision.	Agree	Disagree
20. It is important to consult close friends and get their ideas before making an occupational choice.	Agree	Disagree
21. I really can't find any work that has much appeal to me.	Agree	Disagree
22. I keep wondering how I can reconcile the kind of person I am with the kind of person I want to be in my occupation.	Agree	Disagree
23. I can't understand how some people can be so certain about what they want to do.	Agree	Disagree
24. In making career choices, one should pay attention to the thoughts and feelings of family members.	Agree	Disagree

#### Appendix E

#### Informed Consent Statement

This study is designed to gather information about socioeconomic status (SES), social class, career adaptability, and educational and career aspirations and expectations. You will be asked to respond to a set of questionnaires that assess this type of information. Results from this investigation will help inform our understanding of the roles that SES and social class play in explaining career adaptability, as well as educational and career aspirations and expectations. This information will also help inform career counseling and related career interventions.

Your participation in this research is completely voluntary and you may withdraw at any time without penalty. Those participating will be eligible to receive a gift card and to attend the career workshop regardless of whether they withdraw or not. The time required to participate in this study will be approximately 30 minutes.

You will be asked to complete a demographic sheet and questionnaires assessing your educational and career aspirations and expectations, some information about your parents'/caregivers' occupation and education, and your thoughts and feelings about career decisions. There are no known risks to you, and all of your responses will be anonymous. The inventories you complete will be linked through the use of an identification number; your name will never be associated with your responses. Your name will not be connected with any part of the information resulting from this research. Summaries of the responses and potential publication of the research will report group data only.

If questions arise about any of the materials presented, ask the experimenter for clarification. Alec Eshelman of the Southern Illinois University Carbondale, Psychology Department is the primary researcher responsible for this investigation and is supervised by Dr. Patrick Rottinghaus. Alec Eshelman can be reached by email: alec.eshelman@siu.edu or by phone at (618) 536-2301. Dr. Rottinghaus can be reached by email: rpatrick@siu.edu or by phone at (618) 435-3573.

### I HAVE READ AND UNDERSTAND THE ABOVE INFORMATION. I UNDERSTAND THAT, BY COMPLETING THE ATTACHED QUESTIONNAIRES, I AM PROVIDING MY CONSENT TO PARTICIPATE IN THIS RESEARCH PROJECT.

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Sponsored Projects Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu

### Appendix F

Explanation of the Study: "SES, Career Adaptability, and Educational Aspirations"

Thank you for participating in this investigation. The purpose of this study is to examine the relationship between socioeconomic status (SES), career adaptability, and educational aspirations and expectations. More specifically, we are interested in learning more about the ways in which a person's parents/primary caregivers' education and occupation influence their career development. Career adaptability is important because it can affect the career decisions that people make. This information will be useful in enhancing career counseling and related career interventions.

As stated by the researcher, all information gathered in this study will be anonymous and will be used solely for research purposes. Your name will not be connected to your data in any way.

If you have any questions or concerns regarding this research project, please feel free to contact the primary investigators:

Alec Eshelman, B.A. Department of Psychology Life Science II – Room 229F Southern Illinois University at Carbondale Carbondale , IL 62901 Phone: (618) 536-2301 Email: alec.eshelman@siu.edu Patrick J. Rottinghaus, Ph.D. Department of Psychology Life Science II- Room 222C Southern Illinois University at Carbondale Carbondale, IL 62901 Phone: (618) 453-3573 Email: rpatrick@siu.edu

Thank you once again for helping us in our research efforts.

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Sponsored Projects Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu

## Graduate School Southern Illinois University

Alec J. Eshelman

alec.eshelman@siu.edu

Calvin College, Grand Rapids, Michigan Bachelor of Arts, Philosophy & English, May 2008

Southern Illinois University Carbondale Master of Arts, Psychology, August 2013

Thesis Title:

Socioeconomic Status and Social Class as Predictors of Career Adaptability and Educational Aspirations in High School Students

Major Professor: Patrick J. Rottinghaus, Ph.D.