TheRole of Caregiver Work Experience and Social Class in the Development of Young Adults' Vocational Expectations:

Author: Alice Connors-Kellgren

Boston College
Lynch School of Education

Department of Counseling, Developmental, and Educational Psychology

Counseling Psychology

THE ROLE OF CAREGIVER WORK EXPERIENCE AND SOCIAL CLASS IN THE DEVELOPMENT OF YOUNG ADULTS' VOCATIONAL EXPECTATIONS

Dissertation

by

ALICE CONNORS-KELLGREN, M.A.

Submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

May 2017

Abstract

This study sought to better understand the complex relationship between family, social class, and career development. Social class, which is largely influenced by family of origin, contributes to work opportunities and work, in turn, can determine social class (Diemer & Ali, 2009). As such, work has the potential to promote social mobility among individuals from low-income backgrounds (Blustein, 2006; Matthys, 2012). For young people who have not yet entered the workforce, career expectations, which have been shown to lead to positive outcomes in work and overall wellbeing (Koen et al., 2012; Perry, 2008; Taber & Blankenmeyer, 2015; Zacher, 2014), provide a promising entry point for understanding and influencing the relationship between social class, career development, and social mobility (Perry & Wallace, 2013). Previous research has shown that family, a crucible for the development of social class identity (Brown, 2004), is also a significant predictor of career expectations (Whiston & Keller, 2004). Given the intergenerational nature of social class (Wagmiller & Adelman, 2009), the current study postulates that family, social class identity, and career expectations interact to perpetuate social inequality.

The purpose of the present study was to tease apart these interactions through the lens of Social Cognitive Career Theory (Lent, Brown & Hackett, 2002). Broadly, it was hypothesized that one of the ways in which family influences both social class identity and career development is through vicarious learning; children integrate information about class and the world of work through observing their parents' work experience. This relationship was examined by surveying 298 young adults online and in person. Individuals responded to a survey asking about their caregivers' work experiences, as well as their own social class identity, parent support, mentoring experiences, and career expectations. Data were analyzed using structural equation modeling and findings revealed that, overall, the hypothesized model describing social class as partially mediating the relationship between caregiver work experiences and work expectations was an excellent fit to the data. Results of the model also suggested that the quality of caregiver work experiences and work expectations is more important to overall work experience than actual occupation. Gender differences were found in the overall fit of the model, as well as the influence of specific variables, such as mentoring. The results are discussed in the context of their contribution to existing literature on intergenerational social mobility and career development. Theoretical and practical implications, as well as limitations of the study, are considered.

Acknowledgments

Working towards a PhD in Counseling Psychology and completing a dissertation is a long and arduous road. There are many people I would like to thank for supporting me in this journey. First, I would like to thank my advisor, dissertation chair, and mentor, Dr. David Blustein. I consider myself incredibly lucky to have had the opportunity to work with him for the past five years. He has provided me with guidance and unwavering support throughout my time at Boston College that has helped shape me into the researcher, scholar, and social justice advocate I am today. For that, I will forever be grateful. I would also like to thank my committee members, Dr. Eric Dearing and Dr. Belle Liang. Dr. Dearing has been instrumental in helping me to wade through the complexities of structural equation modeling and understand the finer points of my results. In addition to providing insight about the various fields my dissertation touches upon, Dr. Liang has been a kind and inspiring support and mentor throughout the various challenges completing a PhD has presented.

I would also like to express my gratitude to those who have helped me to collect and analyze data, a process that proved to be much more challenging than I originally anticipated. Dr. Mike Barnett, who has been generous to me throughout my doctoral studies, shared his community college connections with me. Shamsi Moussavi and all of the faculty at Massachusetts Bay Community College who not only invited me into their classes to pitch my study and collect data from their students, but expressed enthusiasm and encouragement at a time when I really needed it. Finally, I would like to thank the incredibly helpful people at Boston College's Research Services, especially Sarah Dow-Fleisner, who provided statistical refreshers and helped me to troubleshoot problems I encountered with the structural equation modeling software on more than one occasion.

Most importantly, I would like to thank my friends and family for their support, encouragement, and tolerance of me throughout this entire journey. My parents, Nancy Connors and Jeff Kellgren, inspired me to pursue a helping profession and have had faith in this decision and me even when mine has wavered. My brother, Jack, has been an amazing person to talk to throughout the ups and downs and I am honored by his pride in me. I am incredibly grateful to the friends I have made throughout my graduate studies. Each and every one of them has contributed to this dissertation, whether in the form of frantic phone calls about statistical analyses, or through forcing me to take a break from writing for a good meal. Their interest, encouragement, and patience have kept me going.

Table of Contents

Chapter 1

Introduction

Work has the potential to provide a means of survival, self-determination, and connection to others and society writ large (Blustein, 2006). Work positively contributes to overall wellbeing and is fundamental to social mobility for those from low-income or marginalized backgrounds (Matthys, 2012). Given the growing income inequality and instability of work in the United States (Krugman, 2012; Stiglitz, 2012), it is imperative to focus research on promoting social mobility. Understanding career development trajectories and their antecedents can help psychologists create effective individual, community, and systemic interventions that promote social and economic mobility. This study seeks to understand how low-income young adults' perceptions of their caregivers' work experiences affect their aspirations and expectations for their own work lives. For the purposes of this study, the definition of career expectations outlined in Social Cognitive Career Theory (SCCT; Lent, Brown, & Hackett, 1994; Lent & Brown, 2013), which encompasses both outcome (e.g. career choice) and process (e.g. adaptability) components of expectations, will be used. Further, young adults' perceptions of their primary caregivers' work experiences, rather than their parents' work experiences, will be examined in order to be inclusive of nontraditional family structures.

Work and social class are inherently intertwined; social class determines available opportunities for work and work, in turn, helps to determine one's social class (Diemer & Ali, 2009). Historically, the fields of vocational psychology and career counseling have paid little attention to the career development and work experiences of people from poor or working-class backgrounds (Brown, Fukanaga, Umemoto, & Wicker, 1996), although this has recently begun to change (Blustein, 2006; Perry & Wallace, 2013). Thus, little is known

about the career development of people from low-income backgrounds. Given the important contribution of work to social status, social mobility, and inequality, the dearth of knowledge in this area is disconcerting.

The minimal research on social class and work has found that social class contributes to career expectations, which, in turn, predict a variety of important career outcomes (Perry & Wallace, 2013). The gap between adolescents' aspirations and expectations for their future careers is greater for those from low-income backgrounds than for their middle class peers (Metz, Fouad, & Ihle-Helley, 2009). Even young children from low-income backgrounds hold lower expectations for their future careers than do wealthier children (Hartung, Porfeli, & Vondracek, 2005). Holding low career expectations can be detrimental to adolescents and young adults entering the workforce (Perry & Wallace, 2013). Conversely, high career expectations may constitute a source of resilience for low-income youth (Howard, Budge, et al., 2010). High career expectations can significantly promote school engagement (Perry, 2008; Perry, Liu, & Pabian, 2010), life satisfaction, and a sense of power among youth (Hirschi, 2009). It also positively predicts career satisfaction and self-rated performance (Zacher, 2014), as well as career planning, proactive skill development, and proactive networking (Taber & Blankenmeyer, 2015). Finally, high career expectations can improve the ease of the school-to-work transition and help young adults to find qualitatively good jobs (Koen et al., 2012). Thus, high career expectations among low-income youth can act as a protective factor in work attainment and satisfaction, promoting social mobility and general wellbeing.

Current research is beginning to examine the antecedents of career expectations. For example, theory has predicted that multiple factors, including gender, socioeconomic status, perceived support, ethnicity, ability attributions, intrinsic values, personality characteristics, encouragement from significant others, and availability of role models all

contribute to career expectations to varying degrees (Farmer, 1987; Lent & Brown, 2013). Empirical studies are beginning to support these predictions (Paa & McWhiter, 2000; Whiston & Keller, 2004). Several promising findings, which, given the intergenerational cycle of poverty, seem particularly relevant to the questions of social class and career expectations, involve the influence of parents on career expectations (Whiston & Keller, 2004).

Poverty tends to be cyclical, occurring across generations; if an individual's parents are poor, she/he is more likely than not to continue living in poverty as an adult (Wagmiller & Adelman, 2009). Given the influence that family systems, particularly parents, have on individuals' career development (Whiston & Keller, 2004; Paa & McWhirter, 2000; Thompson Nitzarim, Her, & Dahling, 2013), it is likely that low-income young adults' low career expectations may be influenced by their parents' experiences with low-paying, unstable work. Furthermore, family systems are "one means by which the sociopolitical salience of race and class are translated into individual career trajectories," (Brown, 2004, p. 587). Thus, family influences and social class are inherently intertwined in the process of career development. Investigations of this relationship have been minimal (Brown, 2004; Duck et al., 2013), despite the strong possibility of its importance, as well as the potential for this knowledge to significantly inform intervention strategies.

The purpose of this study is to contribute to the modest existing literature on the antecedents of career expectations among low-income young adults. This study will examine how young adults' perceptions of their caregivers' work experiences (including job satisfaction, work-life balance, unemployment and job loss, and work volition) affect their aspirations and expectations for their own work lives. It is hoped that the results of this study will contribute to the body of knowledge informing efforts to increase social mobility through education, counseling, and work-based interventions.

The literature, both theoretical and empirical, on career expectations has identified multiple antecedents of expectations across the lifespan. Farmer's (1987) model of career expectations identified antecedents in the broad categories of background, personal, and environmental characteristics, which she hypothesized to interact with one another in the development of career expectations. Paa and McWhirter (2000) conducted an exploratory study of Farmer's (1987) model of career expectations and found empirical evidence to support the salience of role models, interests, personality and values as influences on adolescents' career expectations. As an extension of SCCT, Lent and Brown (2013) have developed a process model to reflect the ongoing adaptations workers now must make as a function of the changing context of work (e.g. globalization, increasing technology, economic uncertainty). Their new model has particular relevance for people from low-income backgrounds who are more likely to negotiate work instability throughout their lives. In the process model, Lent and Brown have identified person inputs (e.g. ability, gender, predispositions), background contextual affordances, learning experiences, and self-efficacy as antecedents of career expectations.

Other studies have looked at more specific factors contributing to the development of career expectations, including family characteristics and social factors. In a study of Canadian adolescents, Wall, Covell, and MacIntyre (1999) found that family support predicted occupational expectations through the pathway of perceptions of opportunities and educational expectations. Other studies have found that parental expectations of adolescents, particularly those of the same sex parent, are the greatest predictor of the adolescent's career expectations (Paa & McWhirter, 2000; Poole, Langan-Fox, Ciavarella, & Omodei, 1991). A 2013 study by Metheny and McWhirter found that family socioeconomic status and parental support are both associated with undergraduates' career expectations,

as mediated by subjective social status and career decision self-efficacy, suggesting the dual importance of family of origin and social class.

Research suggests that families influence the values, beliefs, and thoughts about work held by youth. Yet, as of recently, there has been minimal investigation of class as a variable in studies examining the influence of family on career development (Heppner & Scott, 2004). Few studies, in fact, examine both family-level and systems-level variables, although there has been some research showing the varying quality of family influence on career among different racial and ethnic groups (Brown, 2004). Perhaps this is in part because psychology has an inadequate conceptualization, limited understanding of the function of, and few measures of social class (Brown et al., 1996; Diemer & Ali, 2009; Perry & Wallace, 2013). Brown (2004; referencing the work of Fouad & Brown, 2000) has argued that it is "best to think of race and class as sociopolitical features of an integrated framework indicating one's standing in society with respect to economic resources, social prestige, and access to political and legal power" (p. 591). From this argument, and in reaction to growing criticism of objective measures of social class, they developed the construct of differential status identity (DSI), a subjective understanding of one's social status based on one's experienced social class (Fouad & Brown, 2000).

Recently, vocational psychologists have begun integrating DSI into their research on career development. Thompson and Dahling (2012) investigated the role of DSI as an antecedent of career development within an SCCT framework. They found that DSI influences the type of learning experiences individuals are exposed to, in terms of Holland's (1997) RIASEC (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional) categories, which describe characteristics of individuals and occupations from a person-environment fit model. These learning experiences are then related to individuals' self-efficacy and outcome expectations. The RIASEC-type learning experiences that people were

exposed to varied in their prestige as a function of DSI (i.e. people with greater DSI – indicating high status – were exposed to learning experiences related to higher-prestige careers). Given the importance of learning experiences in the development of self-efficacy and outcome expectations, DSI may play a powerful role in career development.

Metz, Fouad, and Ihle-Helley (2009) sought to understand the discrepancy between college students' career aspirations and expectations through the lens of DSI. They found that there were significant differences in terms of RIASEC code congruence and complexity between careers students aspired to pursue and those they expected to pursue. Further, DSI was found to be significantly related to this discrepancy in that students with higher DSI had lower aspiration-expectation discrepancies. In another study, Thompson and Dahling (2010) found that DSI, as mediated by value for status in work, is positively correlated with career aspirations. Thus, individuals with more social status tend to value status in work more highly and aspire to more prestigious careers, which carry more status and greater financial rewards.

A few authors have examined both social status – conceptualized as DSI as well as other constructs – and family-level factors. In relation to career aspirations, Trice and Knapp (1992) found that the status of their parents' occupations was positively correlated with the aspirations of children and adolescents. Further, Johnson et al. (1983) extended this finding in their conclusion that parental occupational status is associated with the occupational attainment of adults. Taken together, these studies suggest that DSI and parental occupation are likely correlated and influence both career aspirations and attainment.

Parental occupational status is not the only family-level variable that has been examined in relation to DSI and career development. Metheny and McWhirter (2013) looked at the relationships between family socioeconomic status (SES), family support, DSI,

career-decision making self-efficacy (CDSE), and outcome expectations among undergraduates. They found that both DSI and family support are associated positively with career decision-making self-efficacy and outcome expectations. Their study showed that not only is DSI influenced by family factors (in this case, family SES and perceived family support), but DSI is then associated with CDSE and outcome expectations.

One explanation for the connection between DSI and low outcome expectations is the subjective experience of scarcity and the negative effects it can have on the neurocognitive development, decision-making, and perception of people living in poverty (Gennetian & Shafir, 2015; Noble et al., 2013). Scarcity of resources, such as financial instability or lack of employment opportunities, forces individuals to focus on proximal problems, directing their thoughts and energy away from more long-term problems or goals (Shah, Mullainathan, & Shafir, 2012). In career development, this phenomenon may manifest as a focus on jobs that require less education or training or that offer the most proximal reward, at the expense of jobs that require a longer delay of gratification but provide greater financial and social return.

The existing literature has established that both family-level factors and social class are important contributors to individuals' career development. These studies have paved the way for an emerging literature, of which the current study hopes to be a part, examining the interaction between family and systems-level variables. Given that the family often acts as a conduit for contextual characteristics to be translated into individual experiences (Brown, 2004), understanding the interaction between systemic and familial variables is integral to the field's increasingly nuanced understanding of career development. What follows is an in-depth review of the literature surrounding family, career development, and social class, culminating in the research questions and hypotheses for the current study.

Chapter 2

Literature Review

"If one were permitted only a single variable with which to predict an individual's occupational status, it would surely be the socioeconomic status of the individual's family"

- *Schulenberg, Vondracek, & Crouter, 1984, p. 477)*

As income inequality and its consequences move to the forefront of our political and social discussions, strategies to promote social mobility have taken on growing importance. Work is a natural approach to increasing social mobility because of its ability to provide increased income, social capital, and prestige (Blustein, 2006; 2013). However, one's access to and opportunity for work is deeply connected to one's socioeconomic background. Those who come from low-income backgrounds typically have less access to the opportunity structure provided by work and, consequently, cannot benefit from the opportunities for social mobility provided by the world of work. The family of origin is a major source of information about both social class and work for adolescents and young adults laying the groundwork for careers or entering the world of work. Understanding how parents' communication of information about social class and work influences young adults' views of their own social identity and how that relates to their expectations about work can contribute essential knowledge and provide the foundation for interventions that seek to promote social mobility. This study hopes to build on the existing literature about the intersection of social class and work, career expectations, the role of family in career outcomes, and other facets of career development in an effort to further knowledge and action towards increasing social mobility for those from poor and working class backgrounds.

A Note on Language

Throughout this paper, the words "work" and "career" will be used interchangeably. Following the work of other scholars (e.g. Blustein, 2006; 2013; Lent & Brown, 2013), this approach is taken in an effort to destabilize the existing discourse around the notion of career and the elitist connotations it has come to carry. Traditionally, vocational psychology focused on "the grand career narrative," an outdated description of long-term jobs and work typically held by individuals with socioeconomic (and, inherently racially and gender) privilege (Blustein, 2006). Many of the constructs discussed here have arisen from this tradition and are typically found in the literature with the prefix "career." Here, they are given the prefixes of "work" and "career" interchangeably in an effort to be more inclusive of marginalized individuals who have less opportunity and access to traditional career arcs.

Social Class and Career Development

Historically, social class has been largely ignored in career development theory, research, and practice (Perry & Wallace, 2013), although this topic has recently begun to receive more attention as more inclusive approaches to career development emerge (Blustein, 2006; Brown et al., 1996; Perry & Wallace, 2013). Although vocational psychologists understand from macro-level observations that social class is a significant determinant of career trajectories, our understanding of how individuals perceive or make meaning of work as a function of social class is extremely limited (Perry & Wallace, 2013). Often in psychology, social class is understood as a description of economic or instrumental resources. However, the effects of social class are not limited to the availability of resources for career choice, but extend to attitudes, customs, and expectations that weave together the social psychological context of vocational development (Brown et al., 1996; de Graaf &

Kalmijn, 2001). These include the encouraging and discouraging messages individuals receive from teachers, parents, or the media, as well as the academic and work-related experiences to which they are exposed and the reactions of others to them across these experiences (Brown et al., 1996). Here, social class is defined as the subjective experience of access to instrumental, material, and social capital, as well as social value (Brown et al., 1996). Like other psychosocial constructs, social class may include a sense of belonging to a group, such as the "middle class" or "the working poor". It is understood to be separate, but closely related to more objective constructs, such as socioeconomic status (Perry & Wallace, 2013); thus, research examining socioeconomic status, income, and other indicators of standard of living and capacity for social mobility are considered a valuable part of the relevant literature. Despite the murkiness of the field's collective knowledge on the specific ways in which social class affects individuals' career trajectories, recent studies have contributed to a sturdy foundational understanding of the relationship between social class and career development, writ large.

Studies across countries and age groups have found that there is a significant positive relationship between social class and career expectations, which, in many instances, supersedes the relationship between race/ethnicity and career aspirations (Brown et al., 1996). Social class has been found to correlate directly with beliefs about control and ability in the work setting, as well as with the prestige levels of one's occupational considerations, preferences, and aspirations (Brown et al., 1996). Additionally, prestige has been found to be of greater importance to individuals from higher socioeconomic backgrounds than to those from lower social class backgrounds (Hesketh, Elmslie, & Kaldor, 1990). Social class has also been shown to be strongly positively related to educational attainment, which then appears to mediate a positive relationship between social class and occupational attainment (Brown et al., 1996). These studies support the

role of social class in career development as strongly influencing the access individuals have to the opportunity structure, as well as a determinant of the social psychological context in which they collect experiences and ideas that eventually create the foundation on which they make career decisions.

Social class continues to influence individuals' work lives once they have embarked upon jobs or career paths. Work has been found to be more central to the identity of people in higher social classes and, relatedly, higher-level organizational positions (Fouad & Brown, 2000). Further, people in higher-level positions tend to be less closely supervised, to engage in complex activities at work, and to be intricately organized (Kohn, 1977). Their positions involve high levels of autonomy, influence, and responsibility. Moreover, people in higher-level positions have a tendency to pass on the values they have at work to their children (Argyle, 1994). Conversely, individuals from low social classes tend to hold jobs that are not as financially, psychologically, or physically rewarding as those held by individuals from higher social classes (Brown et al., 1996). Moreover, people from lower and working class backgrounds have reported less meaning in their work than their middle and upper class peers (Allan, Autin, & Duffy, 2014). Limited findings suggest that social class background, in addition to current social class, affects the attainment of more rewarding occupations (Brown et al., 1996; Diemer & Ali, 2009), indicating that social class is both a predictor and an outcome of career development.

Perhaps because people from lower classes occupy positions that are less rewarding, studies have shown that blue-collar workers have higher rates of absenteeism, less healthy lifestyles, lower organizational commitment, and higher turnover rates than their white collar peers (Brown et al., 1996). Further, working class people exhibit more absenteeism and lower job satisfaction than their middle and upper class peers (Fouad & Brown, 2000). Given the negative implications of each of these factors for wellbeing and life

satisfaction, it becomes clear that work trends for lower class individuals can be impeding at best and damaging at worst.

From a theoretical perspective, social class has traditionally been treated as a background or contextual variable (Blustein, 2006; Perry & Wallace, 2013), rather than as a pervasive influence on career interest, choice, and functioning. Social Cognitive Career Theory (SCCT; Lent, Brown, & Hackett, 1996), perhaps the most widely used career development theory, counts social class among background contextual affordances that have a distal influence on career development, such as early academic experiences (Lent, Brown, & Hackett, 2000). Social class, then, is seen as a factor that influences an individual's learning experiences, which then affects one's self-efficacy and outcome expectations in certain work-related activities contributing to the development of interests, followed by goals and actions (Lent, Brown, & Hackett, 1996). SCCT outlines the opportunities that contextual influences have to directly affect interests, goals, and actions, but these proximal influences are conceptualized as being more discrete experiences, such as personal involvement in a classist encounter (Lent, Brown, & Hackett, 2000). Although the current study uses SCCT as a framework for understanding career development, it takes Perry and Wallace's (2013) view that "social class has a broader and more meaningful impact on people's working lives than that of a background variable or contextual affordance" (p. 84). The perspective taken here, and supported by the previously described literature, is that social class, writ large, affects each step in the SCCT process of career development both directly and indirectly, rather than primarily having an indirect influence. Social class will thus be considered in the critical examination of each piece of the SCCT model and each variable included in this study.

Social Cognitive Career Theory

As noted above, this study uses the framework of SCCT to understand career development. SCCT is a widely researched and empirically supported model of career development that has informed the research questions, model, and design of this study (Brown & Lent, 2005). However, the research questions and hypothesized model do not map exactly on to any of the five SCCT models (interest, choice, performance and persistence, satisfaction/wellbeing, or self-management [Lent & Brown, 2013]). For example, this study does not examine self-efficacy, which is a central construct in SCCT. Instead, it is assumed based on the abundant literature supporting SCCT and the role of self-efficacy, that any predictors of self-efficacy will also influence its successor in the model, outcome expectations (defined here as career expectations). Further, it is understood that vicarious learning (a construct that will be described in depth later in this chapter) is not only influenced by contextual variables, but also serves to communicate them, an assumption not directly addressed by SCCT.

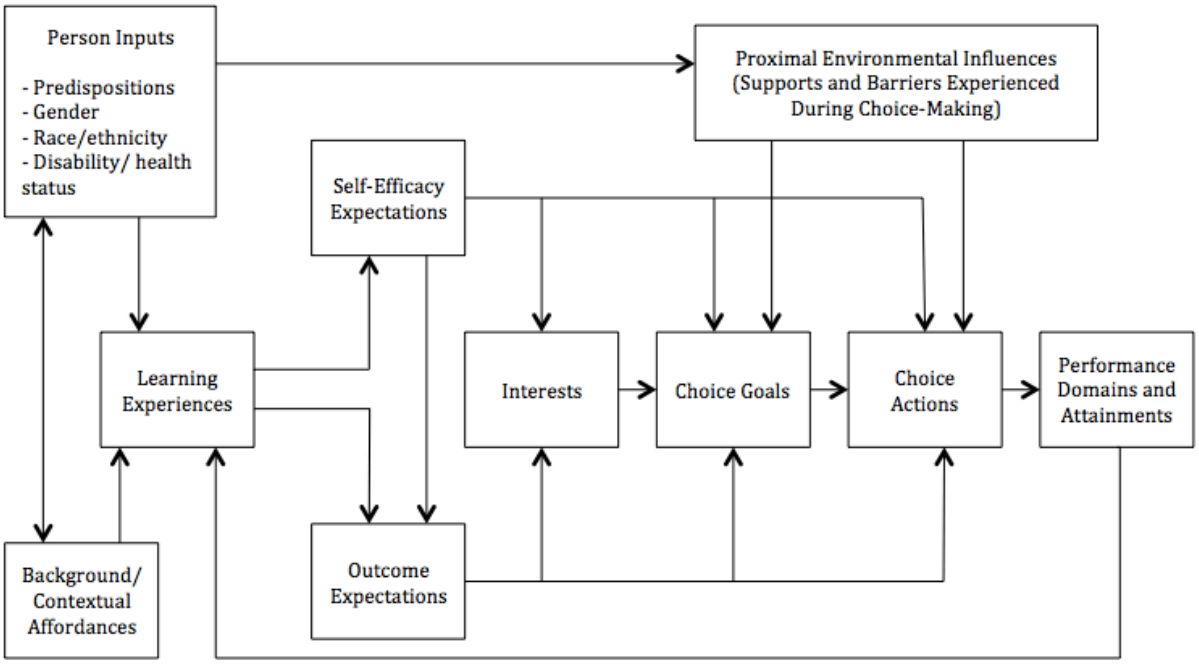


Figure 1. Social Cognitive Career Theory Model of Career Choice (Lent, Brown & Hackett, 1996)

SCCT provides multiple models to describe different aspects of career development: interest, choice, performance and persistence, satisfaction/wellbeing and self-management (Lent, Brown, & Hackett, 1994; Lent & Brown, 2013). Each of these models considers distal and proximal environmental and individual factors that affect the development of self-efficacy, outcome expectations, and, eventually, goals and actions (Lent, Brown, & Hackett, 1994). The current study specifically examines one source of self-efficacy – vicarious learning – and how it interacts with social class, a contextual variable that some scholars (e.g. Diemer & Ali, 2009; Perry & Wallace, 2013) argue should be considered a person-level social construction, to inform individuals' outcome expectations (which will henceforth be referred to as career expectations) for their relationship with the world of work. What

ensues is a review of the relevant literature in which the current study is situated, generally following the SCCT framework.

Career Expectations

"Career expectations" is a construct that has been defined and measured in several different ways across a variety of studies. Some researchers have examined the specific educational level and occupation participants hope to achieve, while others have taken a more complex view. This study will take a two-pronged approach to defining and measuring career expectations: content and process. Content will be assessed by specific occupational expectations (for example, "What do you expect your job to be in 10 years?"). Process will be assessed by the Career Futures Inventory, a measure of career adaptability that includes positive career planning attitudes, general outcome expectations, optimism, and perceived knowledge of the world of work. These two constructs – occupational expectations and career adaptability – are closely intertwined (Lent & Brown, 2013; Taber & Blankenmeyer, 2015). For example, Taber and Blankenmeyer (2015) found that occupational expectations predicted career planning, a facet of career adaptability, and proactive career behaviors in a sample of college students. Further, they observed that career confidence and career curiosity – facets of career adaptability – mediated the relationship between occupational expectations and proactive career behaviors (e.g. career planning, networking, and skill development). Due to the strong association between the two constructs, it is appropriate to examine them as two facets of career expectations rather than as discrete constructs. What follows is an overview of the literature on occupational expectations, followed by an overview of the literature on career adaptability, and, finally, an explanation of the antecedents of both types of career expectations grounded in SCCT.

Occupational Expectations

The research on occupational expectations has largely focused on their effects, with few studies examining the antecedents. Research has mostly sampled adolescents and young adults who have not yet entered the workforce. A typical measure of occupational expectations is "Taking into account reality factors, what occupation or job do you expect to have in 10 years [or "as you're your lifetime career"]?" (Metz, Fouad, & Ihle-Helley, 2009). Participants' responses to this question are then coded by prestige of the occupation using one of numerous prestige scales. Across studies, it is clear that high career expectations (e.g. expectations of entering a high prestige career) lead to a number of positive career-related outcomes.

In adolescence, high occupational expectations have been associated with greater school engagement (Perry 2008; Perry, Liu & Pabian, 2010) and an increased sense of power among (Hirschi, 2009). Among young adults, high occupational expectations are related to engagement in career planning, practice skill development, and networking (Strauss, Griffin, & Parker, 2012; Taber & Blankenmeyer, 2015); improved school-to-work transition and attainment of qualitatively good jobs (Koen et al., 2012). In adults, studies have shown a connection between career satisfaction and higher self-rated performance (Zacher, 2014); income, employment, achievement, and social status above and beyond the influences of family background and general cognitive ability (Ashby & Schoon, 2010; Farmer, 1987; Schoon & Polek, 2011); and job satisfaction and subjective wellbeing (Ashby & Schoon, 2012). To the contrary, uncertain occupational expectations have been associated with negative educational outcomes (Gutman & Schoon, 2012) and occupational expectations that are misaligned with ambitions can lead to low long-term achievement, unemployment, and socioeconomic consequences (Sabates, Harris, & Staff, 2011).

In summary, having high career expectations in adolescence builds a strong positive foundation for educational and career attainment in young adulthood and adulthood. Creating high career expectations helps individuals to set goals, encourages perseverance in work towards those goals, and helps to build a solid work identity, contributing to a stronger sense of self. Further, career expectations are directly linked to employment status, occupational prestige, and socioeconomic outcomes, all of which contribute to overall wellbeing and life satisfaction. High career expectations are clearly an important construct to pay attention to and foster in adolescence and emerging adulthood.

Career Adaptability

Career adaptability is a construct that is gaining increasing popularity as the world of work becomes more unpredictable and demands greater flexibility and adaptability from its members. It replaced the controversial construct of career maturity, which was described possessing the attitudinal and cognitive readiness to make educational and vocational choices, but was criticized for neglecting to take into consideration the experiences of workers with less volition (Hartung, Porfeli, & Vondracek, 2008). Career adaptability is defined as "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). Theoretically and empirically, career adaptability predicts the quality of one's job, which then leads to a sense of wellbeing, life satisfaction, and psychological health (Savickas, 1997).

Career adaptability evolves across the lifespan, beginning in childhood and developing as one grows older (Hartung, Porfeli & Vondracek, 2008). Children, who are most influenced by their family environments and parental relationships, must establish a foundation of concern about the future, control over their lives, curiosity about occupational careers, and confidence to construct a future and overcome career barriers (Hartung,

Porfeli & Vondracek, 2008). In adolescence, career adaptability is a sign of thriving: it has been shown to prevent problem behavior, promote wellbeing, and decrease stress among high school students (Hirschi, 2009). Specifically, an increase in career adaptability among Swiss adolescents over the course of the academic year predicted an increase in sense of power and experience of life satisfaction (Hirschi, 2009).

In adults, career adaptability was found to positively predict career satisfaction and self-rated career performance above and beyond the Big Five personality traits and core self-evaluations (empirically-supported predictors of job satisfaction) among a large, diverse sample of Australian employed adults (Zacher, 2014). In other samples, career adaptability positively predicted teamwork skills (de Guzman & Ok, 2013), job search self-efficacy (Guan et al., 2013), tenacious goal pursuit, flexible goal adjustment, and career satisfaction and promotability (Tolentino, Garcia, Restubog, Bordia, & Tang, 2013). The construct has also positively predicted workers' breadth of interests, orientations to happiness, general and professional wellbeing and quality of life, and has negatively predicted perceived career barriers and work stress (Johnston, Luciano, Maggiori, Ruch & Rossier, 2013; Maggiori, Johnston, Krings, Massoudi & Roussier, 2013; Soresi, Nota & Ferrari, 2012).

Career adaptability is not an individual attribute, but, rather, is influenced by individual and environmental factors (Lent & Brown, 2013). For example, from an SCCT perspective, the construct is related to career decision self-efficacy, which is strongly positively correlated with peer support and vocational outcome expectations and weakly negatively related to career barriers (Lent & Brown, 2013). Because career adaptability can be influenced by environmental factors, it is malleable (Savickas & Porfeli, 2012) and, therefore, may constitute a valuable career counseling intervention. Koen, Klehe & Van Vianen (2012) created a career adaptability intervention for recent college graduates. The

group of graduates that received the training reported higher employment quality than those who had not received the intervention, although there was no difference in the rate of employment between the two groups. Although this particular career adaptability training did not result in differences in employment status, it did have a significant effect on the subjective quality of participants' employment.

A variety of other environmental and individual factors have been identified as predictors of career adaptability among culturally diverse adolescents and young adults. Positive emotional disposition, goal decidedness, capability beliefs, and social context beliefs were found to be significant predictors of career adaptability in a sample of Swiss adolescents (Hirschi, 2009). In a study of Israeli young adults, a "vague" pattern of work adaptability – characterized by lack of a coherent plan for one's occupational lives – was predicted by low parental support and led to a tendency to be unemployed for extended periods of time (Schulman et al., 2014). Although the literature on career adaptability has only just begun to emerge, it has produced some significant evidence that is forming a clear construct influenced by both contextual and personal factors and that can predict noteworthy outcomes.

Within the SCCT framework, career expectations are a kind of outcome expectation, writ large. Following the model, career expectations are likely to be influenced by self-efficacy, learning experiences, background and contextual affordances, and person inputs. The literature described above supports the predictive value of multiple environmental and individual-level variables that span the SCCT model. Working backwards in the SCCT choice framework, self-efficacy is the most proximal predictor of career expectations.

Self-efficacy

Self-efficacy is defined as one's beliefs about one's ability to accomplish a given task (Lent, Brown, & Hackett, 1994). Within the SCCT model, it is one of the primary informants

of outcome expectations. Self-efficacy in work, writ large, therefore, will be a primary source of outcome expectations for one's future relationship with the world of work. Self-efficacy is a well-studied construct and there are numerous studies connecting it to various predictors and outcomes. Different types of self-efficacy have emerged, such as self-efficacy expectations (one's expectations about one's beliefs in one's ability to accomplish a given task) and job search self-efficacy (one's belief in one's ability to search for jobs). These derivatives have also been studies exhaustively. For example, self-efficacy is related to career indecision and decision-making, as well as academic performance in first year college students (Anderson & Betz, 2001). Low job search self-efficacy, as a function of personal experiences with financial strain, was related to low job search outcome expectations among unemployed adults (Dahling, Melloy & Thompson, 2013). From the abundant literature, it is clear that self-efficacy is a pivotal construct in career development. Given how well studied it is, the current study will confidently rely on strong previous findings about the role of self-efficacy and will focus on less studied variables within the SCCT model.

One of those variables is vicarious learning, a source of self-efficacy. SCCT outlines four sources of self-efficacy: past performance accomplishments, social persuasion, physical and affective states, and vicarious learning (Lent, Brown, & Hackett, 1994). These constructs are very important to career counselors because they can be manipulated and, thus, form the theoretical foundations of counseling interventions (Anderson & Betz, 2011). Further, quantitative and qualitative access to the different learning experiences varies among individuals and groups. For example, social persuasion – encouragement or discouragement from individuals or society at large – surrounding different careers varies depending on a person's identities and "acceptable careers" for someone with that identity (Hackett & Betz, 1981). Vicarious learning, the source of self-efficacy of most interest to the

current study, also varies depending on the career models to which an individual is exposed. For example, an individual from a low-income community may largely be exposed to career models who works at low-paying, unskilled jobs and may build self-efficacy around tasks related to those types of jobs rather than skilled careers that offer greater pay and social mobility. An individual's personal background and context strongly influence the type of learning experiences he or she may have.

Background/Contextual Affordances and Person-Level Factors

Personal attributes, such as natural proclivities and personality characteristics, as well as social identities like gender and race, have an effect on one's career choice, both proximally and distally (Lent, Brown, & Hackett, 2000). Within the SCCT model, background variables are considered distal and contextual affordances are considered proximal supports and barriers that influence an individual's career choices (Lent, Brown & Hackett, 1994; Lent, Brown & Hackett, 2000). It is important to note that these constructs are heavily influenced by person-level factors, particularly those that are social constructions, such as gender, race/ethnicity, and class (Diemer & Ali, 2009). Person-level, background, and contextual factors interact with one another and influence other constructs within the SCCT model. Of particular interest in this study is how these variables, specifically class, affect sources of self-efficacy. For example, perceived social status has been found to be significantly related to the types of learning experiences college students are exposed to, mediating the relationship between perceived social status and self-efficacy and outcome expectations in RIASEC areas (Thompson & Dahling, 2012). This study seeks to expand on this growing body of literature by closely examining the effect that social class has on vicarious learning and, subsequently, outcome expectations. What follows is a more in-depth examination of the influence of background variables of interest (gender, race/ethnicity, and class) on career expectations within an SCCT framework.

Influence of Background Variables on Career Expectations

Gender

Gender is a significant determinant of career development at all points in the SCCT model. For example, college women and men have different perceptions of their self-efficacy and interest in traditionally gender divided occupations, regardless of their actual ability (Betz & Hackett, 1981). When individuals' interest and self-efficacy varies along gender lines, their career expectations will be heavily influenced by gender, as well. In another study, clear gender preferences were found among 22,000 8th and 10th graders for 16 of the 20 most popular occupational aspirations. Girls aspired to career requiring more education, but both girls and boys aspired to gender traditional careers (Howard et al., 2011). Given the significant predictive ability of career expectations for a variety of career and socioeconomic outcomes, as well as the fact that traditionally female careers tend to have lower pay, lower prestige, and lower power (Betz & Hackett, 1981), this trend puts girls at a significant disadvantage relative to their male peers.

Race/Ethnicity

The research on the influence of race and ethnicity on career expectations is more mixed. This is likely due to the fact that some studies use phenotypic definitions of race while others use socially constructed definitions. For example, Abrahamson and Drange (2015), using a phenotypic definition of race, found that college students of color tend to have the same career aspirations by lower career expectations than their White counterparts. Conversely, Tovar-Murray and colleagues (2010) used racism-related stress and racial identity development, both psychosocial constructs, in their study of race and career development. They found that as racism-related stress increases in the context of low racial identity development, career aspirations decrease. However, as perceived racism increases in the context of high racial identity development, career aspirations increase.

Like social class, it appears that viewing race as a social construct rather than a demographic variable results in different and more valuable findings.

Social Class

There is mounting evidence that social class is a predictor of career expectations and outcomes above and beyond its role as a background or contextual variable (Diemer & Ali, 2009; Perry & Wallace, 2013; Thompson & Dahling, 2012). Beginning at a young age, children's social class awareness influences their comprehension of the world of work such that they develop beliefs about appropriate jobs for themselves as being those that match their perceived social status (Hartung, Porfeli, & Vondracek, 2005). Additionally, children who live in poverty perceive fewer future job opportunities for themselves than for children who are not poor (Harutng, Porfeli, & Vondracek, 2005). Further, the relative social status of mothers' and fathers' occupations appears to affect the occupational aspirations of their children (Trice & Knapp, 1992). In adolescence, parents' social status continues to show a positive relationship to adolescent occupational aspirations (Marjoribanks, 1984). In adulthood, mothers' and fathers' educational background was positively related to the occupational attainment of adult children (Johnson et al., 1983).

High social class has also been associated with achievement motivation in adolescence and the likelihood of being placed in or choosing a college preparatory curriculum (independent of ability), as well as being tracked toward college, vocational exploration and planfulness, greater work salience and valuing of work, and higher expectations for one's occupational attainment (Diemer & Ali, 2009). These findings are likely explained by greater access to resources facilitative of career development afforded by higher class, as well as the perceptions of important adults (e.g. teachers) that children and adolescents from more socioeconomically privileged backgrounds are more likely to be successful. For example, adolescents from middle and upper class backgrounds have

greater access to occupational role models, meaningful part-time work and internships, and instrumental and emotional support from parents (Diemer & Ali, 2009).

Social class does not simply exert a direct influence on the discrete variables within the SCCT model, but leads to differing constellations of barriers and resources, including both instrumental factors and social constructions (e.g. classism; Diemer & Ali, 2009). Socioeconomic status influences both the independent and dependent variables related to family of origin and career development (Brown, 2004), from determining the school an individual attends to circumscribing one's perceived career options based on classism. Peer and sibling support was a strong predictor of educational and career self-efficacy and, consequently, expectations for low-income students, but not for their higher-income peers (Ali, McWhirter, & Chronister, 2005). Additionally, low-income students understand that society has a negative view of them based on their class background, but are unsure how their background will subsequently influence their future success (Blustein et al., 2010). Differences in career aspirations between racial/ethnic groups and socioeconomic groups were significant for boys, but not for girls in a study of 22,000 8th and 10th graders (Howard et al., 2011). Socioeconomic status and social class related to particular types of learning experiences, such as verbal encouragement and support from others and past performance accomplishments (Ali, McWhirter & Chronister, 2005; Ali & Saunders, 2006). Each of these studies shows that social class has the ability to change the way in which other variables within career development influence one another, as well as having a direct effect on discrete aspects of career development.

Social class also has a strong influence on the development of attitudes about work in general. The way low-income, urban youth perceive work varies, but in general, they tend to see it as a means of survival/earning money rather than a means of self-concept implementation or interest expression (Blustein et al., 2002; Chaves et al., 2004). Relational

and instrumental support appear to be particularly important contributing factors to low-income youth's expectations about work in general, serving to nurture their emotional connection to career and work. For example, relational support from parents and instrumental support from school may help poor youth of color to attain higher-prestige and higher-paying occupations (Diemer, 2007). Most participants in a qualitative study of low-income urban youth listed support from significant others as a factor that shaped their career aspirations (Howard et al., 2010). These findings suggest that social support may be more important for youth with significant barriers than it is for more privileged youth. Given the importance of relationships in the career development of low-income youth, family-based learning experiences about class and career may carry more influence for these young people than for their upper class peers.

Family Influences on Career Development

Family is major influence on career development, both directly and indirectly (Blustein, 2004; Brown, 2004; Schulenberg, Vondracek, & Crouter, 1984; Whiston & Keller, 2004). Family provides the original set of relationships that shape the social contexts through which we construct our lives, including work (Richardson, 2012). The research tends to define family as family of origin or the household in which an individual spent his/her formative years, which most often appears to be the nuclear family. This paper proposes a more inclusive definition of family to encompass grandparents, aunts, uncles, cousins, nonbiological caregivers, and nonbiological sibling figures that may form an individual's family of origin and have influenced his or her career development. Research has found that the impact of family on work occurs throughout the lifespan and across the myriad aspects of career development. Beginning in childhood, parents have an unrivaled effect on vocational preferences and choices (Hartung, Porfeli, & Vondracek, 2005). For

example, Trice (1991) found that 47% of 8-year-olds and 16% of 11-year-olds aspired to the same occupation held by one of their parents. These children were more likely to have stable career aspirations than their peers, suggesting that family has a positive and long-term influence on career aspiration and choice.

Despite the growing influence of peers in adolescence, the strong effects of family on vocational development continue into the teenage years. In a study of high school seniors, sixty-nine percent of participants reported that their mothers influenced their career decision-making process, while 59% named their fathers as an influence, 45% identified a grandparent, aunt, uncle, or other relative, and 38% named a sibling (Kotrlik & Harrison, 1989). The specific ways in which parents have influenced their children's career development has been further investigated. In a survey of high school juniors, most respondents state that their career goals and choices were similar to what their parents wanted for them and that they discussed their occupational plans with a parent (usually their mothers) (Otto, 2000). This finding indicates that parents influence career goals through communicating expectations and engaging in conversations about the adolescent's career plans. In a qualitative study of adolescents, a majority of participants felt that their mothers, fathers, and siblings had played a positive role in their career exploration by indirect means, such as providing emotional and informational support, as well as more concrete means, such as providing educational materials about careers (Shultheiss et al., 2001). A study of young adults entering the information technology field noted that parents' messages about work in general during childhood directly affected their later view of career (Messersmith, Garrett, Davis-Kean, Malanchuk, & Eccles, 2008). Taken together, these studies suggest that parents' influence on their children's career development occurs through a variety of means.

The types of family and parental influence, as well as the importance of it, may vary by individual and parental characteristics. For example, fathers appear to have a particularly salient effect on young working men, suggesting that gender plays an important role in the relationship between family and career development. In a study of the work experiences of young men from families without college degrees, participants shared that fathers imbued lessons about the value of hard work that permeated their overall perspective on work, including their work ethic, relationships with colleagues, leadership skills, and overall feelings about the work they do (Woodside et al., 2012). Working mothers have also been shown to have a stronger effect on the career development of girls than they do on boys or than fathers have on girls (Whiston & Keller, 2004). It appears that gender – especially the gender alignment of parent and child – moderates the influence of parents on their children's career development.

The research on the role of race and ethnicity in the development of adolescent career aspirations is limited. However, one study revealed that parental aspirations significantly influenced the occupational aspirations of African American and Puerto Rican adolescents and did not appear to be a significant influence for Anglo participants (Dillard & Campbell, 1981). These limited findings may point to a greater influence of family on career development in social groups that value family and collectivism more highly. The effects of gender and race/ethnicity likely intersect, as well. For example, African American and Latino female college students were twice as likely as their male counterparts of any race to identify parental support (defined in this study as encouragement, availability, guidance and advice, acceptance of career choice, and supporting autonomy) as influential in their career development (Fisher & Padmawidjaja, 1999). Girls and women may experience greater family influence in their career development because women tend to be more relationally-oriented than men and may value the input of significant others more highly.

Currently, research on racial/ethnic, gender, or class differences in the impact of family on career development is minimal, but the small body of existing research suggests that it is a worthwhile area of exploration. Given the findings of the existing research, it is expected that further studies on race/ethnicity, gender, and class and family influence would find that family is an even greater influence on career development for girls and women, adolescents from marginalized racial/ethnic groups, those from collectivist oriented groups, and young people from lower class backgrounds. As these variables intersect, the influence of family would likely increase.

Learning Experiences within the Family

Various aspects of the family environment, including attachment, family structure, maternal employment, parent support, and parental occupation, have been demonstrated to be linked to multiple facets of career development, such as career aspirations and expectations, career maturity, career decidedness, and career choice (Whiston & Keller, 2004). Learning experiences, specifically vicarious learning, or the lessons one receives about work through the actions of proximal adults, provided by the family environment, appear to be a primary conduit for the influence of family on career development (Vondracek, Lerner, & Schulenberg, 1986). Much of the research on this effect has come from the literature on working mothers and gender stereotypes within work.

Maternal employment has a significant influence on the career development of their children. If mothers are employed in nontraditional careers, their children (both male and female) tend to have less gender stereotypical vocational interests, independent of parents' attitudes toward women, parental employment status, and paternal occupation (Barak, Feldman, & Noy, 1991). A study in which the employment and educational factors of participants' mothers at the beginning of sixth grade significantly influenced participants' career trajectories at the end of sixth grade suggests a causal relationship between maternal

employment and adolescent career development (Castellino et al., 1998). Mothers who are more satisfied with their employment situation are more likely to transmit positive attitudes about employment to their children (Lerner, 1994) and mother's attitudes about gender were more strongly associated with their children's occupational aspirations and efficacy than their reported behaviors (Fulcher, 2011). Both of these studies indicate that attitudes about work are frequently and soundly communicated from mothers to their children.

Research examining the influence of family on career development outside the context of gender has supported the power of work attitude transmission from parents to children, as well. Abramovitch and Johnson (1992) found that children as young as 3rd and 4th grade are aware of their parents' occupations and job satisfaction. This perception is important for career development because children are more likely to aspire to their parents' occupations if they perceive their parents to be satisfied with their jobs (Trice & Tillapaugh, 1991). Further, perceptions of their parents' work satisfaction can have an effect on young people's attitudes about work. Among undergraduates, participants who perceived their parents as having little job insecurity tended to have minimal humanistic work beliefs, which then predicted negative work-based attitudes (Barling, Dupre, & Hepburn, 1998). In a study by Thompson et al. (2013), undergraduate students with a parent who has experienced unemployment reported that their parent's experience impacted their views of work. Unlike the participants from the previously described study, they felt they had an increased awareness of finances and job market because of their parents' ordeals and were confident that they could create a life free from the challenges confronted by their families (Thompson et al., 2013).

Indeed, work ethic and other values are modeled and taught to children by their parents as part of an overall social perspective (Woodside et al., 2012). Thus, parents from

lower socioeconomic strata and lower educational backgrounds who are likely to be in lower prestige positions are more likely to present a strong belief that all work is important, which is subsequently passed along to their children (ter Bogt, Maaijmakers, & van Well, 2005). Following this line of research, it is hypothesized in this study that young adults will have expectations about work that positively align with what they perceive their parents' attitudes about work to be.

Family and Social Class

Because family constitutes people's first social context and acts as a vessel for the development of a social perspective, family is a primary mode of transmission for ideas about social class and its role in an individual's identity (Fouad & Brown, 2000). Individuals often choose occupations that their parents had and, because social class and work are so intertwined, this choice is both permeated by social class values and serves to perpetuate the social class membership of the individual (Perry & Wallace, 2013). Further, the careers an individual perceives as options are often circumscribed by social class, an effect that may be reinforced or challenged by the family (Heppner & Scott, 2004). Career options can be limited by social class expectations (often communicated through classism), as well as access to social and economic opportunities, both of which are entwined with the family.

There is mounting evidence that family social class, as measured by family education, family income, and occupational status, directly and indirectly influences youths' school achievement, college, attendance, choice of college, college achievement, and eventual occupational choice (Alessandri, 1992; Coleman et al., 1966; Jencks, 1972; Kalmijn, 1994). The social status of parents appears to directly affect the career interests, goals, and choices of their offspring. Although this is reflected more in the children of white-collar parents having higher prestige occupational preferences, the effect exists across socioeconomic strata (Fouad & Brown, 2000). Parent socioeconomic status and educational

expectations for their children directly influenced later career paths in men (Schoon, Martin, & Ross, 2007). High school freshmen with parents in unskilled occupations tended to have more narrowed vocational interests than students whose parents had professional or skilled occupations (Mullis, Mullis, & Gerwels, 1998). Income loss, a measure of reduced social class, was associated with more pessimistic outlooks for mothers and fathers, which then had an influence on lowering daughters' expectations of job success (Galambos & Silbereisen, 1987). Parental job insecurity, which is related to lower class, was positively associated with youths' money anxiety, which in turn predicted negative motives for making money, such as overcoming feelings of inadequacy and self-doubt (Lim & Sng, 2006). Fathers' salary and work hours, significantly and positively predicted the salary and work-hour expectations of male and female business students (Hoffman, Goldsmith, & Hofacker, 1992). Further, sons often chose occupations similar to their fathers and those that did not chose occupations with similar levels of autonomy, reward structure, and work activities, reflecting the values their father had passed on to them (Kohn, 1969; 1977; Mortimer, 1974; 1976). It is well-supported that family social class – measured as parent occupation, education, socioeconomic status, or other class-related facet of work – has a dramatic impact, whether directly or indirectly, on young people's career development. In the current study, it is hypothesized that messages about social class are embedded in and closely related to what parents communicate to their children about work. These messages about social class are internalized and contribute to the formation of expectations about work as children grow older. Thus, social class, measured by differential status identity, partially mediates the relationship between caregiver work experience and career expectations.

Differential Status Identity

The current study views social class as a social construction that is defined for children in large part by the family context, which shapes the way individuals conceive of and integrate experiences into their understanding of themselves and the world. Thus, social class will be measured in this study using a subjective social class construct called differential status identity. Diemer and Ali (2009) recommend that social class be viewed as a social construction (e.g. classism) and studied as such. Following this recommendation, Thompson and Dahling (2012) have suggested perceived social status as a mechanism for examining how individuals understand and internalize environmental experiences of social location, primarily class. Fouad and Brown (2000) introduced the concept of differential status identity (DSI) as a construct to understand and predict the psychological effects of social location, primarily race and social class, which operate through social stratification. To this end, DSI examines the psychological consequences of social stratification through the lens of individuals across the spectrum of privilege and oppression.

DSI has several inherent assumptions that have been supported by research. First, people with more ordinate standings (e.g. more privileged social identities) are more likely to be oriented toward independence and individualism, whereas people with more subordinate standings tend to be oriented more toward interdependence and collectivism (Fouad & Brown, 2000). Expanding this assumption to a career development context, it is likely that people from lower social strata will experience greater influence from their families and communities in their career choice and expectations. This finding complicates the relationship between family of origin and DSI, because it identifies DSI as both a moderator of family influence on career development, as well as a mediator. In this study, DSI will be examined as a mediator because the focus on this work is an exploration of the mechanisms of family of origin influence on career development. Second, those from lower

social standings have shown greater conformist orientations and less independence and autonomy, while higher status has been associated with greater locus of control, internality, and self-efficacy for a variety of tasks, including educational financial management, and social and political capital (Fouad & Brown, 2000). Again, applying this tenet to the work context, individuals from lower social classes experience less autonomy in their career choice and may be more likely to enter an occupation that conforms to their internalized class-based expectations.

DSI has been enthusiastically adopted by several researchers as a measure of subjective social class in vocational psychology (Thompson & Dahling, 2012; Thompson & Subich, 2008; Thompson & Subich, 2011; Metheny & McWhirter, 2012), although as a relatively new construct, it has not amassed a large body of literature. DSI has been shown to provide a unique contribution to vocational outcome variables beyond traditional measures of social status (Metheny & McWhirter, 2012). Among undergraduate students, DSI has been found to be significantly and positively related to valuing status in work, which then predicts aspirations for advancement and leadership in one's career (Thompson & Dahling, 2010). Thus, any class effects on career aspirations may be due to class differences in the value of work-related status. DSI was also significantly and positively related to learning experiences in the Investigative, Enterprising, and Conventional Holland types, a finding that highlights the importance of DSI as a predictor of exposure to different types of career related learning experiences (Thompson & Dahling, 2012). Learning experiences subsequently shape students' self-efficacy, outcome expectations, and interests in particular RIASEC areas, suggesting that the learning experiences afforded by different social statuses may influence class differences in career interests.

DSI is composed of three factors: access to economic resources, social prestige, and social power. Each of these components has been shown to be significantly and positively

associated with career decision-making self-efficacy (a measure of an individual's perceived confidence in his/her ability to make career decisions), although there is enough collinearity between the factors that they did not contribute incrementally to this relationship (Thompson & Subich, 2011). In this same study, career decision-making self-efficacy then predicted career choice certainty, indicating a mediated relationship between DSI and an additional positive career outcome. Another study replicated the findings in regard to the relationship between DSI and career decision self-efficacy and showed an indirect, but significant relationship between DSI and outcome expectations (through career decision self-efficacy) (Metheny & McWhirter, 2012). Further research has shown that DSI is predicted by race/ethnicity and class, but not necessarily personal experiences of racism or classism, as well as positive support from primary caregivers (Thompson & Subich, 2011). Although these are the only antecedents and outcomes related to DSI identified by the small body of literature on the construct, research on social class and career development indicates further variables that may affect the relationship between family, DSI and career expectations.

Gender

Gender has primarily been researched as a demographic variable related to career development. Given the gender socialization related to different skills and careers, however, gender is considered a social construct with important implications for career development. For example, girls' career expectations tend to be influenced by context and environmental variables more than those of boys (Li & Kerpelman, 2007). Given this finding, it is reasonable to expect that social class differences in career expectations may be more significant for girls than they are for boys. Further studies have shown that girls are more greatly influenced by the family environment; girls are more susceptible to parents'

opinions and are somewhat reluctant to express their own views about their future careers (Tang, Pan, & Newmeyer, 2008). In another study, parent support and attachment were found to be significant indirect predictors (via self-efficacy) of career aspirations in young women (Novakov & Fouad, 2012). However, other variables, such as age, academic self-efficacy, and "personal variables" also uniquely contributed to girls' career expectations (assessed here for traditionality) and development in terms of the integration of family and work commitments (Novakov & Fouad, 2012).

Maternal employment has been studied extensively as a family-level predictor of girls' career development. The influence of mothers on the career development process ranks high among girls, outranking fathers, friends, and teachers, but contributing less than interests, personalities and values (Paa & McWhirter, 2000). One way in which mothers influence their daughters is through their own employment, which has been found to affect boys' and girls' career expectations differently. Young women with employed mothers expected to spend less time per week with their families than women with nonemployed mothers, whereas men with employed mothers expected to spend more time with their families than men with nonemployed mothers (Riggio & Desrochers, 2006). Given the significant influence of the environment on girls, it fits that the girls of working mothers in this study possessed more positive beliefs about their overall competence and ability to reach desired goals, as well as their ability to be effective workers and parents than do young men (Riggio & Desrochers, 2006).

When considering the intersection of multiple identities, African American girls, in particular, were more influenced by emotional support from parents whereas their male counterparts were more influenced by career related modeling. For these boys, career modeling positively predicted their confidence to engage in career planning and exploration, confidence to transition from school to work, career decision self-efficacy,

positive career decision-making expectations, and confidence to know themselves and others (Alliman-Brissett, Turner, & Skovholt, 2004). Among low-income middle school aged adolescents, boys tended to experience more congruence in terms of gender identification between the occupations of the working male adults in their homes and their career aspirations than did girls (Schuette, Ponton, & Charlton, 2012). In general, children from poor and working class families tend to hold more conservative or traditional attitudes about the types of work men and women can do and report less knowledge about occupations (Perry & Wallace, 2013). Thus, these children may be more likely to identify with and eventually follow in the occupational footsteps of their same gendered parent. Gender is a significant sculptor of career development and its salience is strongly affected by gender roles and values within the family, as well as within racial/ethnic and class groups.

In the current study, in an effort to capture the intersection of gender and class, it is hypothesized that gender will moderate the influence of family on career expectations. Across socioeconomic levels, relationships, particularly those within the family, tend to be primary for girls and women and more secondary for men. Following this reasoning and supported by the conclusions of the research described above, it is predicted that girls will report a stronger influence of family on career expectations, independent of DSI.

Parent Support

Parent support is a major contributor to the career development of adolescents and young adults (Whiston & Keller, 2004). Overall, the literature has revealed many positive career-related outcomes associated with parent support in the career development process. The construct has been linked to career decision-making self-efficacy (Kush & Cochran, 1993; Raque-Bogdan et al., 2012), math-related interest, performance, and outcome

expectations (Alliman-Brissett & Turner, 2010; Raque-Bogdan et al., 2012), career interests (Raque-Bogdan et al., 2012), career certainty (Kush & Cochran, 1993), and career self-efficacy across Holland type careers (Turner & Lapan, 2002) in adolescents (Raque-Bogdan et al., 2012). Among urban high school students, higher perceived parent support was associated with more positive attitudes about the value of school, sense of fit in the school environment, completion of homework, school attendance, attention, a view of work as important to their lives, aspiration to leadership in their fields, and expectations that career planning will lead to success and satisfaction in their future work (Kenny et al., 2003). Parental career support was also positively associated with school engagement and career preparation among urban middle school students (Perry, Liu, & Pabian, 2010). Notably, adolescents with high parental support perceive themselves to have greater access to opportunity for both educational and occupational advancement as compared to their peers with less parental support (Wall, Covell, & McIntyre, 1999).

Parent support spans multiple domains: instrumental assistance, career modeling, verbal encouragement, and emotional support (Turner et al., 2003) and may include educational expectations, critical events, and work identity (Fisher & Padmawidjaja, 1999). Each of the four dimensions was significantly and positively related to perceptions of career and educational barriers, as well as with coping efficacy for barriers among first year college students (Raque-Bogdan et al., 2012). Encouragement, specifically, has been tied to effective educational and career decision-making in African American and Mexican American college students, while parent expectations have been associated with high educational and career expectations among these students (Fisher & Padmawidjaja, 1999). Across racial/ethnic and class groups, increased parental expectations have been found to be positively associated with adolescent educational expectations (Schmitt-Wilson, 2013). In retrospective interviews, African American and Latino undergraduate students

additionally identified the most important facets of parental career-related support as reinforcing the desire to learn, providing opportunities for career interests to develop, maintaining high expectations, and demonstrating that anything is achievable (Fisher & Griggs, 1995). Parental support is instrumental in the development of positive vocational outcomes, although some facets, specifically encouragement and expectations, may be more influential in the development of high career expectations than others.

Similar to the gender-based differences in the role of family on career development, gender differences exist in the effects of parent support in general, as well as the salient types of parent support. For example, incoming college women perceived significantly more parent support than did men in one study (Raque-Bogdan et al., 2012). The authors hypothesized that the parents of young women may have offered more emotional support to their daughters because they anticipated more significant barriers in their educational and occupational pursuits. Another study supports this finding, reporting that female students consistently reported higher levels of support, which was related to higher perceptions of opportunity and higher educational and occupational expectations. Their male peers not only reported less parent support, but their perception of opportunity was less influenced by relational support in general (Wall, Covell, & McIntyre, 1999). Among African American adolescents, girls have been found to be more responsive to emotional support and boys are more responsive to career-related modeling. When girls receive emotional support, they develop career decision-making self-efficacy and positive career expectations (Alliman-Brissett, Turner, & Skovholt, 2004). Thus, women tend to perceive greater parental support and their career development appears to be more influenced by the relational aspects of support than their male counterparts.

Parental support may act as a moderating factor for negative main effects between social class and educational and career expectations (Diemer, 2007; Schmitt-Wilson, 2013).

Primary caregiver support has been demonstrated to act as a buffer for educational failure for individuals from low-income backgrounds and to potentially reduce the perception of career barriers for low-income ethnically diverse adolescents (Hill, Ramirez, & Dumka, 2003; Schoon, Parsons, & Sacker, 2004). Further, parent support may have a greater impact on students with less volition than on their more privileged peers. For example, rural African American and Native American 10th graders indicated that their parents' occupational expectations for them had a greater impact on their career intentions than those of their White peers (Lee, 1984). Indeed, greater perception of parent support can shape an individual's understanding of his/her social status; adolescents who perceived their parents as being more supportive were higher in DSI, suggesting that parental support may act as a protective factor for individuals who grow up with limited access to other types of resources (Metheny & McWhirter, 2012).

Despite the impressive evidence in favor of parental support as a protective factor in the career development of individuals with less privilege, it is important to understand that social class and racial/ethnic background have an influence on parenting style and how parents support their children. Parents of higher status tend to read more stories, sing more songs, and express more positive affection with their children, as well as exhibit more child-centeredness, father involvement in child care, and effort at stimulating a child's intellectual development (Fouad and Brown, 2000). Further, upper class parents set higher aspirations and expectations for their children and are more likely to value independence and autonomy in their children (Fouad & Brown, 2000). This is an effect that Lareau (2002) labeled "concerted cultivation," a term she used to describe the culture of childrearing held by middle and upper class parents that includes enrolling children in numerous age-specific organized activities that dominate family life. Lareau (2002) compares concerted cultivation to "accomplishment of natural growth," the childrearing strategy used by

working class and poor parents that reflects the belief that as long as they provide food, love, and safety, their children will grow and thrive. Such class-based differences in parenting can determine the quality and quantity of learning experiences children are exposed to, which subsequently influence self-efficacy and career expectations. Additionally, it may influence the type of career-related parent support adolescents receive; adolescents from low-socioeconomic strata may receive more verbal encouragement and emotional support, whereas adolescents from higher socioeconomic strata may receive more instrumental support in the form of exposure to growth-promoting activities.

Like many family variables, parental support is ubiquitous in the career development process, exerting its influence across stages of development and multiple variables. For the purposes of this study, it will be examined in two ways. First, it is hypothesized that parental support will moderate the relationship between DSI and career expectations in that young adults with higher levels of parent support will experience a more tempered influence of low DSI on their career expectations, perhaps even reversing the relationship. Additionally, given the literature on the different types of parenting associated with different classes, it is hypothesized that DSI will have an influence on parent support with lower DSI predicting greater emotional support (a subset of parent support) and higher DSI predicting greater instrumental support. While the hypothesized model cannot capture this relationship, it will be considered in interpretation of the results.

Mentoring

Parents and primary caregivers are not the only sources of support and modeling for adolescents and young adults. Engaging in a natural mentoring relationship is a normal part of healthy adolescent development (Beam, Chen, & Greenberger, 2002) and can provide positive benefits for career development (Borman & Colson, 1984). The literature

on mentoring and positive youth development defines a mentor as an adult who acts as a combination between a parent and a peer; someone more experienced who provides guidance to the less experienced adolescent (Borman & Colson, 1984; DuBois et al., 2002). The mentoring relationship may include opportunities for direct observation (e.g. career modeling), shadowing, and a chance to learn about a career field (Borman & Colson, 1984). These relationships provide a combination of positive adult qualities and peer-like relations.

Mentoring relationships with nonfamilial adults has been linked to multiple positive outcomes (Eby et al., 2008), including high school completion (DuBois & Silverthorn, 2005), academic achievement (Bayer, Grossman, & DuBois, 2015), and physical health (DuBois & Silverthorn, 2005). However, these outcomes depend on various aspects of the mentoring relationship, most notably its quality (DuBois & Silverthorn, 2005). One "active ingredient" that has been identified in formal mentoring relationships between adults and underserved adolescents is the quality of the relationship, which has been shown to have the greatest association with academic achievement (Bayer, Grossman, & DuBois; DuBois et al., 2002; DuBois & Silverthorn, 2005). College students with high perceived support from identified mentors scored higher on Trait Hope subscales of agency and pathways, suggesting a greater sense of career-related volition and a stronger idea of how to reach their goals (Fruiht, 2015). Further, the quality of these relationships has been directly and positively associated with the quality of adolescent-parent relationships (Beam, Chen, & Greenberger, 2002). The quality of the relationship may be influenced by characteristics of the mentors. For example, mentors whom mentees respect and admire, and who have a positive view of their mentees, can help to build self-efficacy in their mentees (Lent & Lopez, 2002). Similarly, mentors with educational or helping professional backgrounds may be additionally effective at promoting outcomes such as college attendance and decreased risk

for drug use and smoking (DuBois & Silverthorn, 2005), perhaps because they have more experience creating quality relationships with youth.

Although many of the positive outcomes of mentoring studied have been related to academic achievement and other career-relevant variables, there is limited literature on the relationship between mentoring and career expectations. However, some evidence suggests that there is a positive association between mentoring in adolescence and later career outcomes (DuBois et al., 2002). For example, Flores and Obasi (2005) found that among a sample of Mexican-American adolescents, participants reported that their natural mentors were helpful in career planning, particularly through vicarious learning and modeling, but also through verbal encouragement and availability for support. It is important to note that in this study, most students identified a parent as their primary mentor, so the effects of mentoring on career development may be confounded with the effects of parent support.

Other studies, however, have drawn strong associations between youth mentoring and later employment outcomes. In one study, youth with non-work mentors during adolescence were significantly more likely than those without mentors to be employed during early adulthood, even after controlling for self-esteem, educational attainment, and prior work experience (McDonald et al., 2007). Full employment in young adulthood can promote labor force attachment by providing positive experiences and access to work-related mentors (McDonald et al., 2007). In a follow up study, McDonald and Lambert (2014) parsed apart the specific effects of youth mentoring on early employment outcomes. They found that mentoring does not appear to protect workers from early career employment insecurity, but it does appear to affect the quality of their jobs, primarily in terms of intrinsic rewards. These findings and others indicate that mentoring relationships have a stronger influence on attitudes than on behaviors or psychosocial variables (Eby et

al., 2008). Therefore, the strongest effects of mentoring are likely to be found in attitudinal aspects of career development, such as career expectations. In this study, mentoring is hypothesized to act as a moderating variable in the relationship between DSI and career expectations. It is predicted that young adults who had an influential mentor will experience a more tempered relationship between DSI and career expectations in that young adults with low DSI who had a mentor will experience greater career expectations than their peers who did not have a mentor.

Work Volition

Work volition is a salient factor in the consideration of social class and career development. It is "broadly defined as the perception of choice in one's career despite external barriers and consists of three components: (a) volition, (b) financial constraints, and (c) structural constraints" (Allan, Autin, & Duffy, 2014, p. 546). The volition facet of work volition is the perceived capacity to make occupational choices in accordance with free will rather than out of pressure or force. Financial constraints describe the perceived impact of financial factors on one's ability to make occupational choices. Structural constraints are the perceived impact of external factors on one's ability to make occupational choices (Allan, Autin, & Duffy, 2014). The overall concept of work volition can be thought of as the extent to which one believes his/her working life falls within his/her control, but focuses more on the idea of how the experience of being able to choose a job is inhibited by factors outside of one's control (Perry & Wallace, 2013). People in lower social classes have less volition in work than people in higher social classes due to the existence of more and greater external barriers in the lives of lower and working class individuals (Perry & Wallace, 2013).

Work volition can be conceptualized as a mediating or moderating factor that might operate differently based on an individual's subjective experience of social class (Jadidian & Duffy 2012). To this end, work volition can be treated as a component of career adaptability; for individuals from lower social classes, a greater perception of barriers can be viewed as reflecting critical awareness about how societal inequities operate, as well as awareness of financial impediments on faces in achieving career goals (Perry & Wallace, 2013). Work volition also serves as a method of examining subjective perceptions of different types of external barriers and resources from the SCCT framework, although few studies have used work volition as a variable within an SCCT model (Duffy & Dik, 2009). Given the dynamic nature of work volition as a variable in understanding the intersection of family social class and career development, it is gaining growing attention in the vocational psychology literature.

Social class, family variables, and work volition are deeply intertwined in career decision-making across the lifespan (Duffy & Dik, 2009). As previously noted, there is a positive relationship between social class and work volition with individuals from higher social classes perceiving greater volition in their career decisions (Perry & Wallace, 2013). Even young children from lower class background sense limitations in their volition; children from poor social class backgrounds perceive fewer career opportunities than children who are not poor (Hartung, Porfeli, & Vondracek, 2005). Work volition is negatively related to other subjective measures of systemic oppression, including experiences of gender discrimination, racial discrimination, and overall career barriers (Duffy, Diemer, Perry et al., 2012).

The implications of the negative relationship between social class and work volition are substantial, particularly given the important role that work volition appears to play in career development. Within the SCCT model, work volition has been used as both an

outcome expectation and background/contextual factor. In one study of unemployed adults, work volition was assessed as an outcome expectancy in the job search process. In this context, work volition was a significant predictor of life satisfaction within a model that also included job search self-efficacy, job search support, and optimism (Duffy, Bott, Allan, & Torrey, 2013), a finding that underscores the implications of work volition for wellbeing, given its unique contributions. In another study, work volition was assessed as background/contextual affordance and was found to be a positive predictor of self-efficacy, outcome expectations, interests, and goals among undergraduate science majors. Additionally, it acted as a significant moderator in the relationship between self-efficacy and outcome expectations, though not in the model as a whole, suggesting that the direction and strength of the relationships between variables within the entire SCCT model should remain the same regardless of individuals' levels of volition (Duffy, Bott, Allan, & Autin, 2014). Yet another study examined work volition as a predictor within SCCT, but this time they conceptualized work volition as a function of race. The researchers found that White undergraduate students perceived greater work volition than students of color, which is consistent with existing literature on perceived barriers. Work volition then was found to be significantly and positively related to both career decision self-efficacy and academic satisfaction, suggesting that any racial differences in career decision self-efficacy or academic satisfaction may be due in part to differences in work volition (Jadidian & Duffy, 2012).

In addition to the omnipresence of work volition in the SCCT model, there are a host of distal career and wellbeing outcomes associated with work volition. The volition and financial facets of work volition, described at the beginning of this section, in particular, have been found to mediate the relationship between social class and work meaning in that people from lower and working class groups reported lower volition, higher financial

constraints, and experiencing less meaning in their work (Allan, Autin, & Duffy, 2014). Work volition has also been strongly linked to job satisfaction, organizational commitment, and life meaning, and moderately related to life satisfaction (Allan, Autin, & Duffy, 2014; Lent, 2004). Further, work volition was found to partially mediate the relationship between social class and "living a calling" (what the authors call actively engaging in work one feels summoned to) (Duffy & Autin, 2013). This finding was particularly notable given that there were no social class differences in perceiving a calling, but there were significant differences in living a calling, supporting the existing path from social class, to work volition, to work meaning. Work volition allows individuals the freedom to choose a career based on interests and preferences rather than perceived constraints (Duffy, Autin, & Bott, 2015), leading to greater work meaning, work satisfaction, and overall wellbeing. Given the well-demonstrated relationship between social class and work volition, the role of work volition provides psychologists with an understanding of the unsatisfactory career experiences many people from low-income backgrounds experience.

Work Satisfaction

Work satisfaction (also referred to as job satisfaction) is generally defined as the extent to which people like their jobs and includes work enjoyment, happiness, and wellbeing (Lent & Brown, 2013). The importance of work satisfaction varies across people in that it is more likely to be meaningful for those who view work as playing a central role in their lives (Lent & Brown, 2013). Across individuals, though, job satisfaction is related to job success, both formally and informally. The influence of job satisfaction extends beyond the office, affecting family relationships, psychological, and physical wellbeing (Lent & Brown, 2013). Overall, workers in the United States report high job satisfaction with 48% of individuals reporting complete satisfaction and 42% reporting that they are somewhat

satisfied, although responses vary depending on who is being asked and which aspect of work they are being asked about. Older, higher paid and better educated, White workers report the highest rates of satisfaction (90% versus 83% for other groups), suggesting that there are racial/ethnic and class differences in work satisfaction.

These differences may be due to variables associated with different social locations. For example, people from different groups may experience different levels of social support, role stressors, social climate at work, whether work fulfills their values, perceived organizational supports, role ambiguity, conflict, overload, incivility, and harassment, all of which are empirically supported antecedents of work satisfaction (Lent & Brown, 2013). Individuals from lower class backgrounds may be more likely to experience some of these predictors of low job satisfaction due to their limited work volition, increased stressors, and work climates with less control and autonomy. In addition to environmental predictors of job satisfaction, personal variables, such as reflection of personality, valence with which one typically experiences the work, emotional stability, conscientiousness, and extraversion have been empirically associated with the construct. These individual-level variables will vary between individuals (rather than between groups) but may be influenced by the same environmental variables that affect groups differentially.

A major individual-level predictor of work satisfaction is work adaptability. Greater adaptability leads to increased job satisfaction because it involves being flexible in order to meet the fluctuating demands of the workforce, as well as changing work expectations (Lent & Brown, 2013; Savickas, 2005; Hirschi, 2009). As stated above, role stress and role ambiguity are predictors of low job satisfaction. Thus, it follows that flexibility within one's role would lead to higher job satisfaction. In this study, work adaptability functions primarily as an outcome variable with the understanding that high adaptability predicts future work satisfaction among young adults entering the work force. Conceptually,

however, it is important to understand how work adaptability is modeled and taught within families and the connections adolescents and young adults make between adaptive behaviors and work satisfaction.

Summary

Career development is a complex process influenced by a myriad of variables at all levels of human ecology. Pervading this process are social class and family background, two deeply interwoven constructs that are ubiquitous in career development. Although both of these integral factors have been connected to a host of career outcomes in the literature, this study is most interested in how vicarious learning about the world of work that happens within the family contributes to subjective social class and how both variables (together and individually) influence career expectations. It is well established in the previously reviewed literature that family of origin is a significant predictor of career expectations. The primary way in which families influence career expectations is through vicarious learning. Vicarious learning is also one way in which families transmit messages about social class from one generation to another. Because social class is an unequivocal predictor of career expectations, the current study is interested in the extent to which social class mediates the relationship between family-based vicarious learning and career expectations. The latent variable designed to capture vicarious learning messages, called "Caregiver Work Experience" here is an amalgamation of career variables that are also closely related to social class. Specifically, caregiver work experience is made up of work volition, work satisfaction, and occupation (assessed through prestige), all of which are hypothesized to contribute positively to caregiver work experience (e.g. greater volition, greater satisfaction, and higher occupational prestige create a better work experience). As demonstrated previously, each of these variables is closely intertwined with social class

and, thus, all are predicted to act as vehicles for the communication of messages about social class within families, as well as messages about work.

According to the SCCT model of career choice development, vicarious learning (caregiver work experience here) is not the sole predictor of outcome expectancies (career expectations). Person inputs, self-efficacy expectations, and background/contextual affordances, and other learning experiences also influence outcome expectancies and neglecting them in a model of career development may lead to inaccurate conclusions. The literature on social class, career expectations, and family influences suggests that parent support, gender, and mentoring are three variables that are likely to have the most significant influence on the mediation relationship. All three variables have been shown to moderate expected courses of career development and are hypothesized to moderate the proposed relationships in the current study.

The specific research questions and respective hypotheses examined by this study are as follows:

1. To what extent do young adults' perceptions of their caregivers' work experiences predict their own work expectations?

   Hypothesis 1: Young adults' perceptions of their caregivers' work experiences will positively predict their own work expectations. (Path A)

   a. How is this relationship different for men and women?

      Hypothesis 1a: The relationship between young adults' perceptions of their caregivers' work experiences and their career expectations will be stronger for women because women tend to be more influenced by their family environments.

   b. How is this relationship impacted by role-model similarity (e.g. female participants having female caregivers)

Hypothesis 1b: The relationship between young adults' perceptions of their caregivers' work experiences and their career expectations will be stronger for young adults experiencing role model similarity (e.g. female young adults who have female caregivers) than for those experiencing role-model dissimilarity (e.g. female young adults who have male caregivers) because young adults tend to identify more with their caregiver of the same gender.

2. To what extent do young adults' perceptions of their caregivers' work experiences predict their differential status identity?

   Hypothesis 2: Young adults' perceptions of their caregivers' work experiences will positively predict their differential status identity. (Path B)

3. To what extent do young adults' differential status identities predict their work expectations?

   Hypothesis 3: Young adults' differential status identities will positively predict their work expectations. (Path C)

   a. How is this relationship affected by parental support?

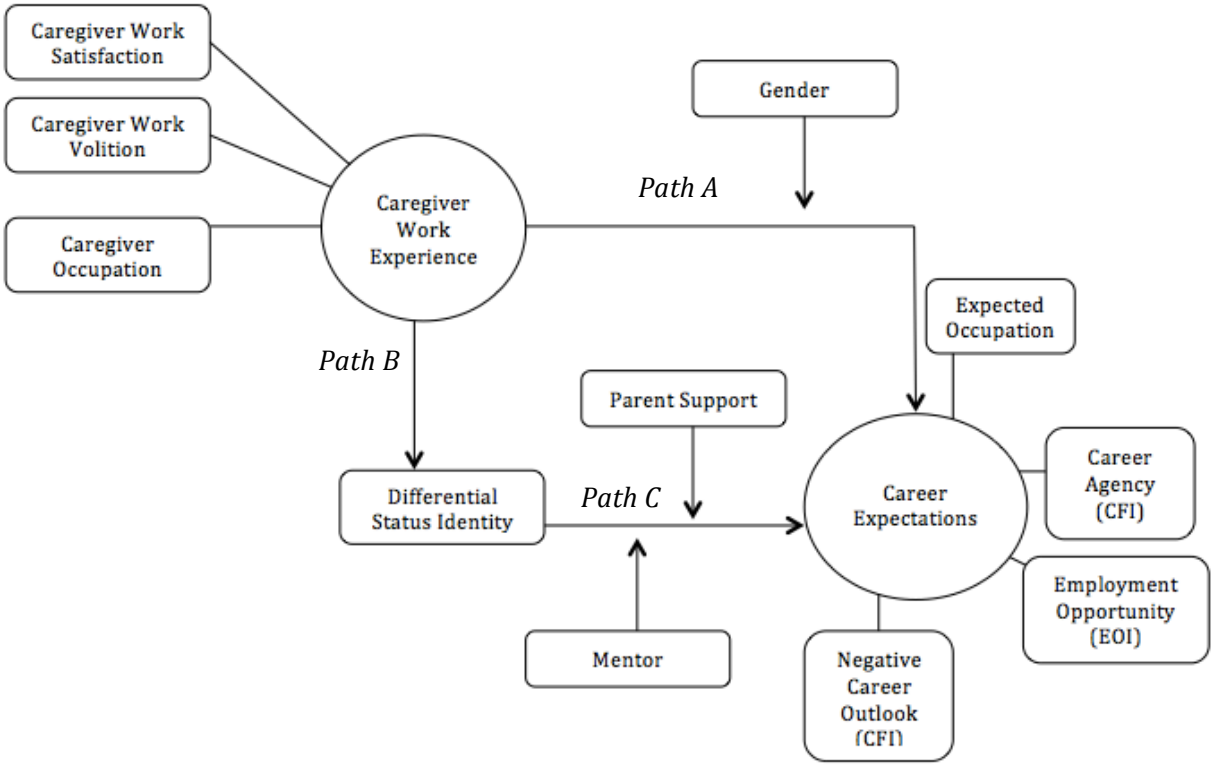
      Hypothesis 3a: Greater parental support will moderate the relationship between young adults' differential status identity and their career expectations in that young adults who have lower differential status identities, but who have high parental support, will also have higher work expectations.

   b. How is this relationship different for those who had a mentor?

      Hypothesis 3b: Having a mentor will moderate the relationship between differential status identity and work expectations in that students with low differential status identity who had a mentor will have higher work expectations.

In addition to the above specific research questions, the following model based on the literature will be tested for fit. The research questions above provide hypotheses for the paths, as labeled.

Figure 2. Hypothesized Model



Chapter 3

Methods

Design

The current study relied on a descriptive survey-based quantitative design primarily employing structural equation modeling (SEM) analyses. SEM was chosen for this study because of its utility for examining the relationships between latent variables and because it is the preferred method to test complex mediation and moderation models (Baron & Kenny, 1986; Fassinger, 1987; Martens, 2005). To test the previously described research questions, SEM was used to examine the relationships among six variables: two latent variables (caregiver work experiences and young adult work expectations) and four measured variables (gender, parent support, differential identity status, and mentorship). Caregiver work experience and young adult work expectations are both multiple indicator variables, while the remaining variables are based on single indicators. Caregiver work experience was defined by caregiver work satisfaction, caregiver work volition, and caregiver occupation. Young adult work expectations was defined as expected occupation, career agency, occupational awareness, and negative career outlook.

Participants

This study included two samples: a primary sample using Amazon's Mechanical Turk recruiting program and a complementary community college sample, which were eventually combined. The primary sample was recruited using Mechanical Turk and is a general population sample. Mechanical Turk is an online service hosted by Amazon through which adults can be compensated for completing surveys. As Mechanical Turk grows in popularity, researchers have devoted attention to concerns about the validity, generalizability, and quality of the data collected through the service. The overall findings

of research devoted to these questions are that Mechanical Turk samples are more representative of the general population than undergraduate samples and are at least as reliable and diverse as samples from the community (Buhrmester, Kwag & Gosling, 2011; Goodman, Cryder, & Cheema, 2013). Further, researchers who use sample restriction criteria through Mechanical Turk report good fidelity (e.g. Duffy, Autin, & Bott, 2015). The recommendations of MacCullum Browne, and Sugawara (1996) for determining a sample size to achieve power of 0.80 based on degrees of freedom was followed to establish a minimum sample size for the primary sample.

A complementary sample was made up of community college students because this population is comprised mostly of young adults who are anticipating entering the workforce in the coming years, are more likely to be from low-income backgrounds than their four-year college peers, and are often first generation college students (American Association of Community Colleges, 2015). Thus, they are likely to have caregivers who have experienced work instability, stress, and inequality, all of which are of interest to the current research.

For both samples, but especially the Mechanical Turk sample because the service draws a huge diversity of participants from around the world, participants had to meet inclusion and exclusion criteria. Due to the unique sociocultural environment surrounding class in the United States, participants must have lived in the U.S. between the ages of 5 and 18. Further, because of the format of the surveys and limitations involved in adapting them, participants must have been fluent in English. Finally, participants must have been able to identify a primary caregiver that was present for over half of their upbringing (between ages 5 and 18). This caregiver could be a parent, older sibling, grandparent, aunt, uncle, other blood relative, or adoptive/foster parent.

The Mechanical Turk sample consisted of 255 participants. Three hundred participants initially completed the study, but 45 cases were removed due to the IP address of the participant being outside of the U.S. or the age difference between the participant and the caregiver being less than 16 years (indicating that the participant likely did not understand the meaning of "caregiver" and that, consequently, their responses would be invalid). The demographics of the Mechanical Turk participants can be found in Table 1. The sample was composed of 133 males (52.2%) and 122 females (47.8%). The racial and ethnic distribution of the sample was 72.2% White, 6.3% Black, 7.5% Latino, 7.8% Asian, and 6.2% Other (primarily biracial and multiracial). Participants ranged in age from 18 to 46 with a mean age of 24.85 and a standard deviation of 3.899, indicating that most participants clustered around the mean age. Most participants (96.8%) were born in the U.S., but 3.2% had immigrated from another country. Most participants were working full time when data was collected (64.7%), 20% were working part-time, 14.5% were full-time students, 4.3% were part-time students, and 7.8% were unemployed. About half of participants indicated that their highest level of education was a Bachelor's degree (50.2%) while 22.7% reported a high school degree or GED, 16.1% had an associates degree or certificate, 10.2% held a graduate degree, and 0.8% had completed less than a high school education.

Table 1

Demographic Characteristics of the Mechanical Turk Sample (n=255)

Participant Characteristics		*n*	Percentage
Gender			
	Male	133	52.2
	Female	122	47.8
Race			
	White	184	72.2
	Black	16	6.3
	Latino	19	7.5
	Asian	20	7.8
	Other	16	6.2
Country of Origin			
	U.S.	245	96.1
	Other	8	3.1
Employment Status			
	Unemployed	20	7.8
	Working Full-Time	165	64.7
	Working Part-Time	51	20.0
	Full-Time Student	37	14.5
	Part-Time Student	11	4.3
Highest Level of Education			
	Less Than High School	2	.8
	High School or GED	58	22.7
	Associates Degree or Certificate	41	16.1
	Bachelor's Degree	128	50.2
	Graduate Degree	26	10.2

The community college sample consisted of 43 participants. No cases needed to be removed from the original sample. The demographic characteristics of the community college sample can be found in Table 2. The sample was composed of 23 males (53.5%) and 20 females (46.5%). The racial and ethnic distribution was 53.5% White, 18.6% Black, 14.0% Latino, 0% Asian, and 13.9% Other. Participants ranged in age from 18 years to 54 years with a mean age of 22.7. Most participants were born in the United States (83.7%) but a notable number hailed from outside the U. S. (16.3%). Most students were working

while attending school. Further, most students (79.1%) had received their High School Diploma or GED, but several already had an Associates Degree or Bachelor's Degree.

Table 2

Demographic Characteristics for Community College Sample (n=43)

Participant Variables		*n*	Percentage
Gender			
	Male	23	53.5
	Female	20	46.5
Race			
	White	23	53.5
	Black	8	18.6
	Latino	6	14.0
	Asian		0
	Other	6	13.9
Country of Origin			
	U.S.	36	83.7
	Other	6	16.3
Employment Status			
	Unemployed	5	11.6
	Working Full-Time	5	11.6
	Working Part-Time	27	62.8
	Full-Time Student	27	62.8
	Part-Time Student	9	20.9
Highest Level of Education			
	Less Than High School	0	0
	High School or GED	34	79.1
	Associates Degree or Certificate	7	16.3
	Bachelor's Degree	2	4.7
	Graduate Degree	0	0

The demographic characteristics for the final combined sample can be found in Table 3.

Table 3

Demographic Characteristics for Combined Sample (n=298)

Participant Variables		n	Percentage
Gender			
	Male	156	52.3
	Female	142	47.7
Race			
	White	207	69.5
	Black	24	8.1
	Latino	25	8.4
	Asian	23	7.8
	Other	19	6.2
Country of Origin			
	U.S.	283	94.9
	Other	15	5.1
Employment Status			
	Unemployed	25	8.4
	Working Full-Time	170	57.0
	Working Part-Time	78	26.2
	Full-Time Student	64	21.5
	Part-Time Student	20	6.7
Highest Level of Education			
	Less Than High School	2	.7
	High School or GED	92	30.9
	Associates Degree or Certificate	48	16.1
	Bachelor's Degree	130	43.6
	Graduate Degree	26	8.7

Procedure

A web-based survey containing all of the measures described below was created. It was distributed to the community college sample through Massachusetts Bay Community College's class e-mail lists, class websites, and in-person by the primary researcher. The survey was distributed both electronically and on paper. For the Mechanical Turk sample, the survey was posted to the website in electronic form. Mechanical Turk participants were

offered $1.00 as compensation for completing the survey and community college students were given the opportunity to enter a drawing for one of five $20 Amazon gift certificates as compensation for their time.

Measures

The following measures were compiled into a computer-based survey. Any measures that were adapted were checked for understanding using colleagues and validated using the Mechanical Turk sample. The measures, as used in the survey, can be found in Appendix A.

Caregiver Work Volition. Caregiver work volition was assessed using the Work Volition Survey (WVS; Duffy et al., 2012), a 14-item scale that assesses an individual's perceived capacity to make work-based decisions despite contextual constraints. The items of the scale load onto three theoretically based factors: volition, financial constraints, and structural constraints. Participants are asked to rate items on a 7-point Likert scale, ranging from *strongly disagree* to *strongly agree*. The financial constraint and structural constraint subscales are reverse coded so that when the scores on all three subscales are added higher scores relate to greater feelings of volition and lower scores relate to lower feelings of volition.

Reliability and validity evidence for the scale is strong across diverse populations and as compared to multiple related constructs. Internal consistency of the scale has been found to range between .84 and .86 (Duffy et al., 2012). Strong evidence of construct has been found for WVS through expert panels, confirmatory factor analysis of the subscales, and comparison to related constructs (e.g. personality facets, work satisfaction, and career barriers) (Duffy et al., 2012). Cronbach's alpha for the current study was .918.

This measure was adapted to reflect participants' perceptions of their caregivers' work volition. For brevity and clarity, the scale was introduced with the phrase, "Think

about your primary caregiver [a term that will be defined at the start of the survey] when responding to the following questions." Then, items that were originally written in the first person were presented in the third person. For example, "I've been able to choose the jobs I have wanted" was rewritten as, "He/she has been able to choose jobs he/she wanted."

Caregiver Occupation. Caregiver occupation was assessed with a simple question asking the participant to write-in their caregiver's primary occupation. For example, "What occupation did your primary caregiver have for the longest time during your life?" This occupation was then coded according to Nakao and Treas' (1994) standardized coding schema for occupational prestige, as recommended by Diemer et al. (2013). Nakao and Treas' (1994) numerical index of occupational prestige ranging from 1 (very low prestige) to 100 (very high prestige) is based on laypersons' subjective perceptions of the prestige of over 1,000 occupations. Although the data on which this index is based was collected in 1989 and the occupations were based on the 1980 census data, its time of development is consistent or more recent than other measures and it continues to be recommended by social class researchers (e.g., Diemer et al., 2013).

Because categorical variables do not lend themselves to SEM analyses, once the data were coded according to Nakao and Treas' (1994) index, they were transformed into dummy variables reflecting the quartile in which the prestige score falls in the general population. Thus, one dummy variable represented the first quartile of occupational prestige, one represented the second quartile and so on. Each data point then received a 0 for the dummy variables representing the quartiles it did not belong to and a 1 for the dummy variable representing the quartile it fell into. For example, an occupation with a prestige score in the second quartile was coded as 0 for the first quartile dummy variable, a 1 for the second quartile dummy variable, a 0 for the third quartile dummy variable, and a 0 for the fourth quartile dummy variable. Although there are limitations to this method (e.g.

occupations with prestige scores only one point apart may have received different scores because they fall into different quartiles), it seemed to be the most nuanced and data-driven method for coding occupational prestige for SEM analyses.

Caregiver Work Satisfaction. Caregiver work satisfaction was assessed using the Minnesota Satisfaction Questionnaire (MSQ) – Short Form (Weiss, Dawis, England & Lofquist, 1977), a 20-item Likert-style facet measure of work satisfaction. Each item describes one aspect of a job and asks respondents to choose from one of five options ranging from *very dissatisfied* to *very satisfied*. The Short Form is a briefer version of the original 100-item MSQ (Weiss, Dawis, England, & Lofquist, 1967). Each item on the Short Form corresponds to one of the 20 subscales on the original version. The Short Form does not differ significantly from the original MSQ in terms of reliability and validity (Hirschfield, 2000). The MSQ is based on Dawis et al.'s theory of work adjustment, which has been well established by research (Dawis & Lofquist, 1984; Tinsley, 1993). Authors of the widely used scale report internal consistency between .77 and .92, test-retest reliability of .83 after one week and .61 after one year, and "good validity" across studies (Weiss, Dawis, England, & Lofquist, 1967). Cronbach's alpha for the current study was .918.

The MSQ was adapted to reflect participants' perceptions of their caregivers' work satisfaction. Like the Caregiver Work Volition Scale, the MSQ was part of a section that was preceded by a definition of primary caregiver. The instructions for the MSQ included the phrase, "For the items below, please respond with how satisfied your primary caregiver seemed with this aspect of his/her job. For the job he/she held for the longest time, this is how he/she felt about…" The items that were originally written in the first person were presented in the third person. For example, "The chance to do something that makes use of my abilities" was rewritten as, "The chance to do something that made use of his/her abilities."

Parent Support. Parent support was assessed using the Career-Related Parent Support Scale (CRPSS; Turner et al. 2003), a 27-item Likert scale that assesses participants' perceptions of the ways their parents provided career-related education and support. Participants were asked to rate statements about how their parents interact with them on a 5-point scale ranging from *strongly disagree* to *strongly agree*. Items include such statements as, "My parents help me do my homework" and "My parents know I am sometimes scared about my future career." The CRPSS consists of four sub-scales: Instrumental Assistance (7 items), Career-Related Modeling (7 items), Verbal Encouragement (6 items), and Emotional Support (7 items) that can be combined into a total score. These subscales align with Bandura's (1977, 1997) sources of self-efficacy information, which are reflected in the SCCT model. Instrumental assistance maps onto past performance accomplishments, career-related modeling aligns with vicarious learning, verbal encouragement parallels social persuasion, and emotional support lines up with physical and affective states. Thus, the CRPSS provides valuable information both as a complete scale and as four different subscales.

The CRPSS has been used across various ages, settings, and racial/ethnic populations, including internationally (Garcia et al., 2015; Ginevra, Nota, & Ferrari, 2015; Zhang, Yuen, & Chen, 2015). Across multiple studies, the reliability for the CRPSS has ranged from .58 to .92, with most estimates falling between .72 and .88 (Blackmon & Thomas, 2014; Turner et al., 2003;). The wide range of reliability is not indicative of a poor measure, but rather reflect the variation inherent to "state" constructs. Parent support is a state, as opposed to a trait, in that it is susceptible to environmental influences and, thus is likely to fluctuate across time and settings (Fuligni et al., 2013). The CRPSS has been found to correlate with conceptually related measures of career development, such as career planning self-efficacy, self-knowledge, career decision-making self-efficacy, and outcome

expectations (Turner et al., 2003). For the current study, Cronbach's alpha for the CRPSS was .937.

The items of the CRPSS were modified from present tense to past tense. The scale was initially developed for middle school aged youth who would likely be continually receiving support from their parents. This study relies on a young adult sample who may be more independent from their families and, thus, not experiencing as much parental support at present. "My parents encourage me to get good grades," for example, was modified to read, "My parents encouraged me to get good grades."

Demographics. The demographic questionnaire included open-ended questions about the participants' age, gender, race/ethnicity, current employment status, highest educational level achieved, marital status, country of origin, and GPA as well as the same information about their caregivers (excluding GPA).

Expected Occupation. Expected occupation was assessed using an open-ended question, consistent with Metz, Fouad, and Ihle-Helley (2009): "Taking into account reality factors, what occupation or job do you expect to have as your lifetime career?" The qualitative response was coded by prestige of the occupation using the same method (Nakao & Treas, 1994) that was used to code the primary caregiver's occupation. Please see the explanation under "caregiver occupation" for more details.

Career Agency and Negative Career Outlook. Career agency (CA) and negative career outlook (NCO) were assessed using the corresponding subscales of the Career Futures Inventory (CFI; Rottinghaus et al., 2012), a 28-item measure that assesses career adaptability, including attitudes and expectations about future work life. Two of the five subscales were used in this study: career agency and negative career outlook. This study did not employ remaining subscales – occupational awareness, support, and work-life balance. Occupational awareness and support were assessed using a more detailed

measure focusing on perceptions of employment opportunities rather than one's own ability to perceive employment opportunities and parent support, respectively. Work-life balance was not relevant to the research questions posed here. The 14 items of the CFI that were used here are presented as statements which respondents are asked to rate on a 5-point Likert scale ranging from *strongly disagree* to *strongly agree*. Items on the NCO are reverse coded so that higher overall scores indicator greater levels of career adaptability and more positive expectations for one's future career.

Reliability and validity evidence for the CFI as a whole and the two subscales is strong. Cronbach's alpha reliabilities for these two subscales are .90 (CA) and .80 (NCO) (Rottinghaus et al., 2012). Construct validity for the CFI and for the three subscales of interest has been established through correlations with conceptually-related constructs, including career development self-efficacy, career decision-making difficulty, career decidedness, declaration of major, career choice status, personality traits, and life orientation (Rottinghaus et al., 2012). Reliability for the current study was high for CA (Cronbach's alpha = .906) and moderate for NCO (Cronbach's alpha = .728).

Perceived Employment Opportunities. The employment opportunities the young adults perceive as being available to them was assessed using select questions from the Employment Opportunity Index (EOI; Griffeth, Steel, Allen, & Bryan, 2005). The EOI was designed to assess job market cognitions in employed adults. The identified factors on the scale include ease of movement from one job to another, desirability of movement, networking, crystallization of alternative jobs, and mobility. The factors of interest for this study are ease of movement and networking, which reflect an individual's perceptions of the availability of suitable jobs and his/her social connection to those jobs. Thus, these two subscales were used to assess participants' perceptions of scarcity in the job market and their connection to the current job market.

These two factors are comprised of 6 items each on a 5-point Likert scale ranging from *strongly disagree* to *strongly agree*. Research suggests stable factor loadings for the items on these two subscales, as well as reasonable reliability levels (.76 for Ease of Movement and .75 for Networking) (Griffeth, Steel, Allen, & Bryan, 2005). Both scales have also been found to have satisfactory construct and criterion-related validity when compared to related measures (Griffeth, Steel, Allen, & Bryan, 2005). The internal consistency for a composite of the two measures in the current study was .825.

Influence of Mentor. The influence of a mentor on career expectations was measured using several subscales from the Mentor Role Instrument (MRI; Ragins & McFarlin, 1990). The MRI assesses different roles that a mentor can play, including perceptions of career development and psychosocial mentor roles, as well as parent and social roles. Due to their similarity to subscales of the CRPSS, the items in the Coach (instrumental assistance), Role Model (career-related modeling), Friendship (emotional support), and Counselor (verbal encouragement) role subscales, a total of 12 items, were used to assess influence of mentor. Participants were asked to respond to each item on a 7-point Likert scale ranging from *strongly disagree* to *strongly agree*. Some example items include, "Suggests specific strategies for achieving career aspirations" and, "Is someone I can confide in." A mentor was defined in the instructions as "an adult other than your primary caregiver who has made an important positive difference in your life." Participants were then asked to answer the items with that person in mind.

The scale as a whole is valid and reliable, and the specific subscales have reliability statistics of .81, .84, .82, and .83, respectively (Ragins & McFarlin, 1990). It is important to note that the MRI was developed to assess workplace mentoring relationships among adults and, therefore, reliability and validity may be different for a younger sample reporting on mentoring relationships occurring more informally. Further, some of the items were

adjusted to reflect the experiences of young adults rather than employees in a workplace. The internal consistency for the composite of the four subscales used in the current study was .925.

Differential Status Identity. Differential status identity was assessed using the Differential Status Identity Scale (DSIS; Brown et al., 2002). The DSIS is a 60-item Likert-response measure of subjective social status. Participants were asked to rate themselves relative to "the average U.S. citizen" on three subscales representing three facets of social status: economic resources, social power, and social prestige. Response options range from -2 (*much below average* for the economic resources and social power subscales and *much less* for the social prestige subscale) to +2 (*very much above average* or *much more*). Scores of 0 represent perceived levels of social prestige, social power, and economic resources equal to that of the "average U. S. citizen," whereas lower scores reflect lower levels and higher scores reflect a greater perceived level of social prestige, social power, or economic resources. The items were used as written.

DSIS is a relatively new measure that, while it has been gaining in popularity recently, has limited evidence supporting its validity and reliability. The existing evidence, though, indicates that this measure has a stable factor structure, high internal consistency, and convergent validity with more traditional measures of social status, such as income, SES, and race (Thompson & Subich, 2007). The internal consistency for the current study was .975, which is comparable to the reliability found in previous studies using the scale (Thompson & Subich, 2007).

Statistical Analyses

The following analyses were performed on both the Mechanical Turk and Community College samples. Data analysis followed a systematic progression from descriptive to parsimonious models to the most complex models proposed.

Preliminary Analyses. After the data were collected and entered, correlations and descriptive statistics were produced for each of the variables. Missing data was assumed to be missing at random (MAR) and multiple imputation (data pooled from the original data set and five imputations), which is generally considered a best practice for handling missing data (Allison, 2003) was used to account for missing values. Given that missing data was extremely minimal (<2% across variables), the use of multiple imputation should not have led to different results than using the original data or using a different missing data technique. Descriptive statistics did not reveal any significant outliers. Normality was also assessed for each variable using descriptive statistics. Maximum likelihood (ML) estimation, the SEM analysis used in this study, requires multivariate normality in order to produce accurate results (McDonald & Ho, 2002). While ML is robust to some levels of skewness and kurtosis, extreme skewness creates the potential for biased standard errors, inaccurate test statistics, and inflated Type I error rates (Martens, 2005).

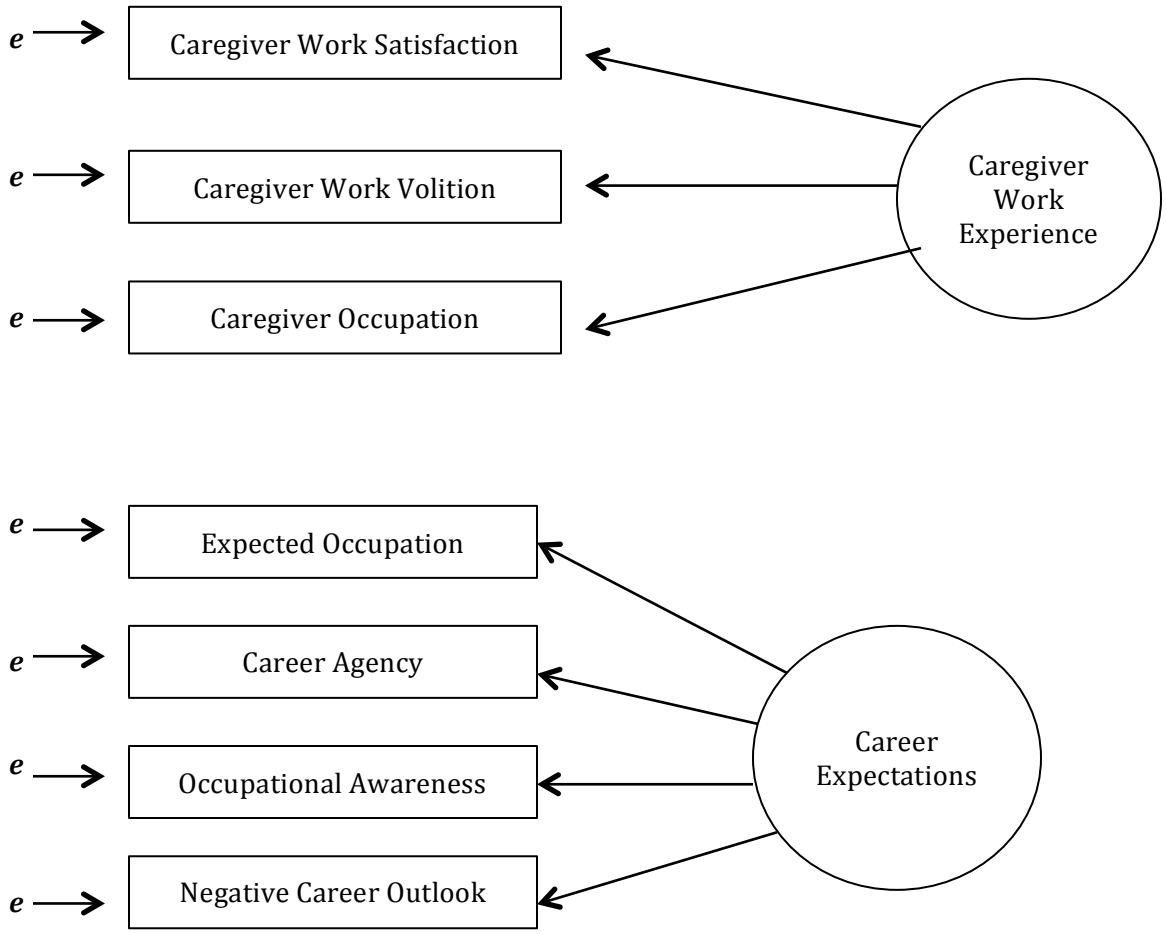
In addition to assessing the data for potential threats to the integrity of the analyses, correlation matrices, covariance matrices, and regressions were performed to understand the relationships between the various variables and to explore mediated and moderated variables with factors that make up each of the latent variables. Of note, frequencies, descriptive statistics, and some preliminary analyses were performed on the samples separately to allow comparisons between the different groups. Further analyses (e.g. regressions) were performed using the combined sample. Additionally, the measures included several variables of interest that are not included in the model, such as

race/ethnicity and immigration status. These variables were included in the preliminary analyses, which provided a deeper understanding of the data and assisted in the explanation of SEM findings.

Measurement Models. Due to the high number of items on the survey, the structural analysis required the use of scale totals, rather than individual items. To ensure that scale totals were an appropriate and accurate measure of the underlying construct, confirmatory factor analyses (CFAs) were run for each of the scales. The results of the CFAs suggested the removal of several items on the Caregiver Work Volition scale, the Minnesota Satisfaction Questionnaire, and the Career Related Parent Support Scale due to low factor loadings (<.20) and high error variance (> 1.00). Removal of the items resulted in each of scale reaching an acceptable fit. A more detailed explanation of the scale CFAs is included in Appendix B. These items were removed from the data before any further analyses were completed.

Because the fit of the full model can be affected by poorly fitting measurement models (Martens, 2005), the first step in an SEM analysis is to estimate measurement models for the multi-indicator latent variables: caregiver work experience and career expectations. A measurement model was estimated for each of the latent variables (see Figure 3) to ensure that the latent variables represented the factor accounting for the maximum amount of variance among the indicators for each of the two multiple indicator variables. The overall fit for each measurement model was assessed.

Figure 3. Measurement Models

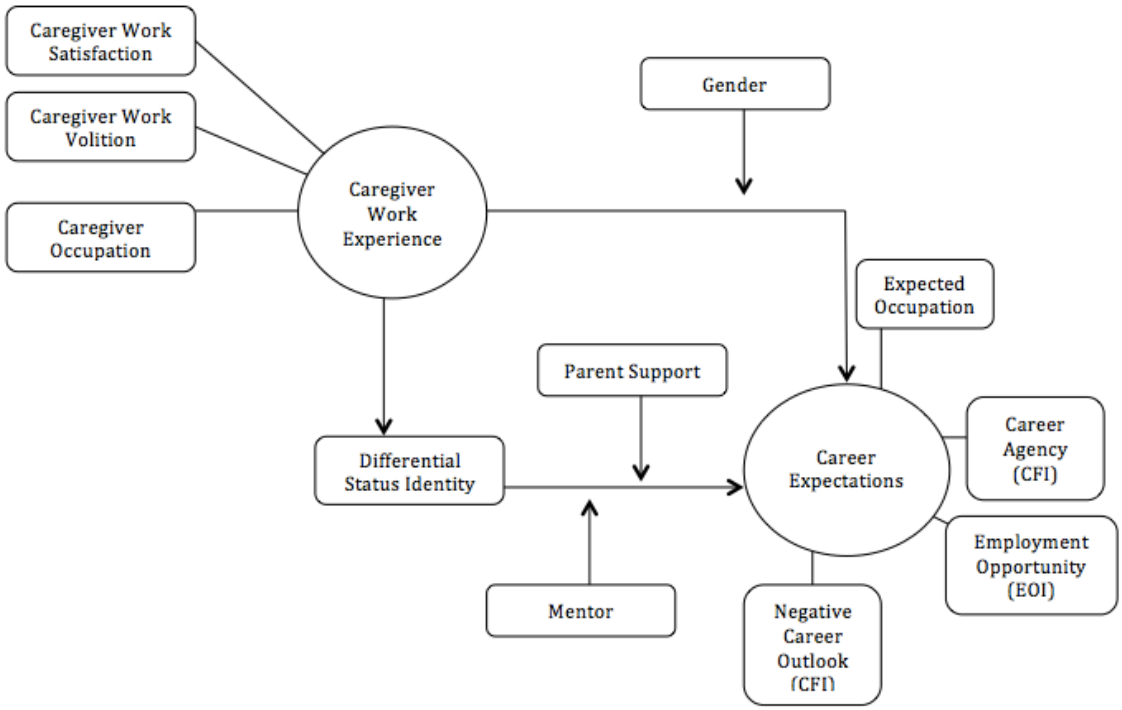


Full Model. Next, a series of structural models examining direct and indirect pathways between caregivers' work experiences, differential status identity, and career expectations were estimated. Analyses began with the hypothesized model (Figure 4), which was then compared to alternative models providing conceptually or empirically guided alternatives to the hypothesized model. Testing multiple models protects against confirmation bias and ensures that the study identifies the model with the best fit (Martens, 2005). For example, alternative models testing the moderating effects of parent support and mentorship on the different pathways were tested to understand where in the process these experiences most influence young adults' career development.

As discussed previously, ML estimation was used to assess the structural models. ML, which is the most commonly used and most recommended method for SEM research, provides parameter estimates that are most likely to represent population values and is recommended by many psychological researchers (Martens, 2005).

Fit of the hypothesized model and alternative models was assessed using two goodness-of-fit statistics. First, chi-square was used. Chi-square is the most commonly used goodness-of-fit statistic because it is the most stringent and exact fit measure. Chi-square assesses the magnitude of the discrepancy between the proposed model and the covariance matrix of the variables in question (Martens, 2005). However, the chi-square statistic may yield poor fit despite the model being a good fit when samples reach large sizes. Thus, Martens (2005) recommends using an additional measure of fit, particularly when samples become large. The second goodness-of-fit statistic that was used in the current study is root mean square error of approximation (RMSEA). MacCullum and Austin (2000) recommend the use of RMSEA because it is adequately sensitive to model misspecification, yields appropriate conclusions about model quality, and provides confidence intervals. The chi-squared and RMSEA statistics of the hypothesized and alternative models were compared to determine which model provides the best fit to the data.

Figure 4. Hypothesized Model



Chapter 4

Results

Overview of Analyses

This chapter presents the results of the data analyses outlined in the previous chapter. It begins with a review of the preliminary analyses, including the way in which data were screened, the distributions and descriptive statistics of measured variables, and linear regressions examining the relationships between variables of interest. Next, measurement models for the proposed latent variables are discussed, including the factor loadings of indicator variables, correlations between latent variables, and fit indices for each measurement model. Then, the path coefficients and overall fit of the structural model are presented. Finally, the results of the structural equation modeling are discussed in terms of the hypotheses of the current study, followed by a brief summary of the overall results.

Preliminary Analyses

Data Screening. As discussed in the methods section, data were collected from two different samples: an Amazon Mechanical Turk sample representing the general population and a community college sample. Because Mechanical Turk is an internet-based service that can be accessed from anywhere in the world, it was important to ensure that participants met the inclusion criteria of being fluent in English and living in the United States. Participants' IP addresses and locations were automatically collected by the Qualtrics software, which allowed the researcher to remove any cases for which the IP address was outside the United States. Inclusion criteria were further assessed by creating a variable representing the difference between the participant's reported age and his/her caregiver's reported age. Any cases in which this variable was less than 16 (a conservative estimate for the age difference between an individual and the person who raised him or

her) were removed. The rationale behind this strategy was that individuals not fluent in English may have misunderstood the word caregiver and, consequently, their responses would not be valid. Forty-five cases were removed using these strategies, resulting in a total of 255 cases for the Mechanical Turk sample.

Participants for the community college sample were recruited in person, so English fluency could be confirmed by the researcher. One individual expressed that she had spent her childhood and adolescence in foster care and largely outside the United States, so her responses were disregarded in the analyses. The total community college sample was 43. A visual check of the responses provided by participants in both samples was performed and it was determined that there were no participants who left entire measures blank. Therefore, of the 298 participants in the combined sample, all responses were included in the analyses.

Missing data analyses revealed that only .008% of the data points (of measured variables) were missing, and these data were missing at random. Missing data were filled in for the preliminary analyses using multiple imputation and for the structural equation modeling using full-information maximum likelihood (FMIL). Given the small amount of missing data, these methods should not produce significantly different results from one another (Allison, 2003; Widaman, 2006).

Distribution of variables. The mean, standard deviation, skewness, and kurtosis for the measured variables are presented in the following table. All statistics are based on a sample size of 298. The standard error for skewness for this sample size is .141 and the standard error for kurtosis for this sample size is .281. Typically, skewness and kurtosis values greater than +/- 3 standard deviations away from 0 are considered significantly non-normal. The skewness and kurtosis statistics for most of the variables fell well within the

normal range, suggesting a normal distribution for each of these variables. The skewness and kurtosis for CRPSS and MRI, however, fell more than three standard deviations below zero, suggesting that these variables are significantly negatively skewed.

Table 4
Descriptive Statistics of Measured Variables

Variable	Mean	SD	Skewness	Kurtosis
CGWV	57.05	11.615	.017	-.508
JSAT	69.80	12.470	-.388	.628
CRPSS	100.83	17.972	-.857	1.190
CA	39.51	6.244	-.277	-.087
NCO	14.03	3.422	-.111	-.529
EOI	19.38	4.880	-.230	-.068
MRI	32.18	19.135	-.828	-.849
DSIS	174.53	38.707	-.137	.112

Note: N=298. CGWV = Caregiver Work Volition; JSAT = Caregiver Job Satisfaction; CRPSS = Career-Relation Parent Support Scale; CA = Career Agency; NCO = Negative Career Outlook; EOI = Employment Opportunity Index; MRI = Mentoring Role Index; DSIS = Differential Status Identity Scale.

A visual examination of the histograms for these variables (Appendix B) reveals that the skew and kurtosis in each of these variables do not appear to be problematic, as the distributions of the variables appear close to normal, if negatively skewed. One possible reason for the kurtosis value associated with MRI, as can be seen in the histogram, is that participants were given the choice to complete the measure, depending on whether they had a mentor, and those who did not complete the measure were given scores of 0. Indeed, when cases with a value of 0 for MRI were removed, the kurtosis statistic changed to .766 with a standard error of .320, suggesting that for those participants who did have a mentor, the distribution of the MRI is normal. Regression analyses are robust to moderate levels of non-normality (Mertler & Vannatta, 2005), thus analyses proceeded without transformations to either CRPSS or MRI. However, it is important to note that the outcomes

of regressions may be weakened due to the violation of the normality assumption (Mertler & Vannatta, 2005).

Table 5
Correlation Matrix of Measured Variables

Measure	1	2	3	4	5	6	7	8
1. CGWV	-							
2. JSAT	.385**	-						
3. CRPSS	.182**	.316**	-					
4. CA	.151**	.290**	.336**	-				
5. NCO	.210**	.116**	.195**	.663**	-			
6. EOI	.076**	.237**	.242**	.561**	.472**	-		
7. MRI	-.015	.125**	.268**	.169**	.128**	.256**	-	
8. DSIS	.182**	.316**	.226**	.270**	.189**	.429**	.252**	-

Note: ** $p < .01$. N=298. CGWV = Caregiver Work Volition; JSAT = Caregiver Job Satisfaction; CRPSS = Career-Relation Parent Support Scale; CA = Career Agency; NCO = Negative Career Outlook; EOI = Employment Opportunity Index; MRI = Mentoring Role Index; DSIS = Differential Status Identity Scale.

Correlations between measured variables. Although most variables were modestly related to one another, it is of note that several of the variables, such as EOI and CA, CA and NCO, and EOI and NCO, correlate particularly highly with one another because they are measuring very similar constructs and are hypothesized to contribute to the same latent variable. All measured variables were significantly correlated with one another, with one exception; not surprisingly, MRI and CGWV were not correlated, because the work volition of a participant's caregiver and the participant's experience of having a mentor are not logically or theoretically related. That being said, it is somewhat surprising that there is a correlation between a participant's assessment of his/her caregiver's job satisfaction and the participant's experience of having a mentor.

Relationships between measured variables and demographic variables of interest. The relationships between the measured variables and individual-level variables of interest, including gender, race/ethnicity, and immigration status were analyzed using correlations and multiple analysis of variance (MANOVA). The individual-level variables were chosen because they are all social identities and, because these analyses focus on social class, a group identity, it is important to consider the intersectionality of various group identities. The results of the MANOVA are shown in table 6.

Table 6
MANOVA of Gender, Race/Ethnicity, and Immigration Status on Measured Variables

Variable		Sum of Squares	df	Mean Square	F	Significance
Gender	CGWV	16.994	1	16.994	.147	.702
	JSAT	60.639	1	60.639	.406	.524
	CRPSS	7736.672	1	7736.672	26.619	.000**
	CA	73.982	1	73.982	2.116	.146
	NCO	3.383	1	3.383	.304	.581
	EOI	268.121	1	268.121	11.762	.001**
	MRI	22.064	1	22.064	.065	.799
	DSIS	221.017	1	221.017	.165	.685
White	CGWV	381.096	1	381.096	3.291	.070
	JSAT	223.210	1	223.210	1.494	.222
	CRPSS	309.511	1	309.511	1.065	.302
	CA	38.967	1	38.967	1.115	.291
	NCO	.059	1	.059	.005	.942
	EOI	169.681	1	169.681	7.444	.006**
	MRI	4.087	1	4.087	.012	.913
	DSIS	59.034	1	59.034	.044	.834
Black	CGWV	256.526	1	256.526	2.215	.137
	JSAT	38.649	1	38.649	.259	.611
	CRPSS	21.675	1	21.675	.075	.785
	CA	109.324	1	109.324	3.127	.077
	NCO	15.025	1	15.025	1.352	.245
	EOI	2.782	1	2.782	.122	.727
	MRI	3554.534	1	3554.534	10.400	.001**
	DSIS	105.991	1	105.991	.079	.778
Latino	CGWV	513.334	1	513.334	4.433	.035*
	JSAT	455.511	1	455.511	3.050	.081
	CRPSS	1519.130	1	1519.130	5.227	.022*

	CA	28.307	1	28.307	.810	.368
	NCO	2.842	1	2.842	.256	.613
	EOI	562.670	1	562.670	24.684	.000**
	MRI	4811.879	1	4811.879	14.079	.000**
	DSIS	45753.915	1	45753.915	34.179	.000**
Asian	CGWV	1990.088	1	1990.088	17.186	.000**
	JSAT	1.278	1	1.278	.009	.926
	CRPSS	2651.551	1	2651.551	9.123	.003**
	CA	278.911	1	278.911	7.978	.005**
	NCO	180.735	1	180.735	16.264	.000**
	EOI	300.125	1	300.125	13.166	.000**
	MRI	86.761	1	86.761	.254	.614
	DSIS	10234.120	1	10234.120	7.645	.006**
First	CGWV	108.646	1	108.646	.938	.333
Generation	JSAT	411.891	1	411.891	2.758	.097
	CRPSS	1402.632	1	1402.632	4.826	.028*
	CA	113.453	1	113.453	3.245	.072
	NCO	12.813	1	12.813	1.153	.283
	EOI	258.754	1	258.754	11.351	.001**
	MRI	3655.745	1	3655.745	10.696	.001**
	DSIS	16769.424	1	16769.424	12.527	.000**
Second	CGWV	1875.007	1	1875.007	16.192	.000**
Generation	JSAT	2309.397	1	2309.297	15.462	.000**
	CRPSS	18.290	1	18.290	.063	.802
	CA	209.120	1	209.120	5.982	.015*
	NCO	1.258	1	1.258	.113	.737
	EOI	18.065	1	18.065	.792	.373
	MRI	4435.718	1	4435.718	12.979	.000**
	DSIS	2594.244	1	2594.244	1.938	.164

Note: * p < .05; ** *p* < .01. N=298. CGWV = Caregiver Work Volition; JSAT = Caregiver Job Satisfaction; CRPSS = Career-Relation Parent Support Scale; CA = Career Agency; NCO = Negative Career Outlook; EOI = Employment Opportunity Index; MRI = Mentoring Role Index; DSIS = Differential Status Identity Scale.

The MANOVA revealed multiple significant differences between groups and across measured variables. Gender differences existed in both career-related parent support and employment opportunity, with the means for both variables being higher for males than for females. White participants overall reported higher levels of perceived employment opportunity (greater mean score on EOI) than participants of color. Black participants were more likely to have a mentor and reported more positive relationships with their

mentors than participants of other racial backgrounds. As a group, Latino participants reported lower caregiver work volition, perceived employment opportunities, mentoring relationships, and differential status identity than other racial/ethnic groups. However, they reported greater career-related parent support than other groups. Asian participants, on average, reported lower caregiver work volition, career-related parent support, career agency, employment opportunities, and differential status identity as compared to participants of other races/ethnicities. They also reported greater negative career outlook.

Immigration status was also significantly related to several of the measured variables. Participants who were born outside of the United States (first generation immigrants) reported lower levels of career-related parent support, but greater employment opportunities, differential status identity, and mentoring experiences. Participants whose parents were born outside the country (which include both first generation immigrants and second generation immigrants) reported lower caregiver work volition, caregiver job satisfaction, mentoring experiences, and career agency than participants whose parents were born in the U.S.

Regressions of measured variables. Several linear regressions were run to examine the relationships between the variables of interest. The regression models were based on the hypothesized structural model so that the predicted relationships between the single indicator variables and individual indicators of latent variables were analyzed. Multiple significant models or parts of models resulted from these analyses, as presented in Tables 7 and 8.

First, the mediator and outcome variables were regressed on the predictor variables in the

hypothesized structural model (caregiver occupation, work volition, and job satisfaction, all of which make up the latent variable "caregiver work experience"). Predictor variables were entered in steps so that the unique variance accounted for by each variable could be examined. When differential status identity (the hypothesized mediator) was regressed on caregiver occupation, caregiver work volition, and caregiver job satisfaction, each of the predictor variables was found to make a significant unique contribution to the dependent variable (Table 7). Caregiver occupation explained 1% of the variance in differential status identity, caregiver work volition explained an additional 2.4% and caregiver job satisfaction explained 7.4% of the variance. Given how complex a variable differential status identity is, it is noteworthy that these three variables, which are hypothesized to comprise the latent variable "caregiver work experience" account for roughly 10% of the variance.

Next, caregiver occupation, work volition, and job satisfaction were regressed against career agency, one contributing variable to the hypothesized latent outcome variable of "career expectations." As in the previous model, each predictor contributed significantly to the variance of career agency (Table 7). Caregiver occupation explained 3% of the variance, work volition explained an addition 3.7% of the variance, and job satisfaction explained 6.5% of the variance. Together, these three variables, which are hypothesized to contribute to the latent predictor of "caregiver work experience," explain 12.8% of the variance in career agency.

Table 7
Regressions of Mediator and Outcome Variables on Predictors

		DSIS		Career Agency		Negative Career Outlook		Employment Opportunity Index	
Model		Adjusted R Square	R Square Change	Adjusted R Square	R Square Change	Adjusted R Square	R Square Change	Adjusted R Square	R Square Change
1									
	CGWork	.010	.013*	.028	.030*	.001	.003	.000	.002
2									
	CGWork CGWV	.034	.024*	.064	.037*	.047	.047*	.008	.009*
3									
	CGWork CGWV JSAT	.107	.074*	.128	.065*	.048	.002	.058	.050*

Note: * $p < .01$; CGWork = Caregiver Occupation; CGWV = Caregiver Work Volition; JSAT = Caregiver Job Satisfaction

Caregiver occupation, work volition, and job satisfaction were also regressed on negative career outlook, another variable hypothesized to comprise the latent outcome variable (Table 7). Only caregiver work volition explained a significant amount of variance in negative career outlook, accounting for 4.7% of the variance. Taken together, the three hypothesized predictors account for 4.8% of the variance in negative career outlook.

Finally, caregiver occupation, work volition, and job satisfaction were included as predictors in a regression on employment opportunity index, another outcome variable in the hypothesized structural model (Table 7). In this regression, caregiver work volition and job satisfaction contributed significantly to the outcome variable, accounting for 0.9% and 5% of the variance, respectively. Caregiver occupation was not found to contribute significantly. Together, these three variables explain 5.8% of the total variance in employment opportunity.

Table 8
Regression of Outcome Variables on Mediators

		Career Agency		Negative Career Outlook		Employment Opportunity Index	
Model		Adjusted R Square	R Square Change	Adjusted R Square	R Square Change	Adjusted R Square	R Square Change
1	CGWork, CGWV, JSAT	.128	.131*	.049	.052*	.057	.060*
2	DSIS	.167	.039*	.071	.023*	.201	.144*
3	DSIS CRPSS	.216	.049*	.089	.018*	.218	.017*
4	DSIS CRPSS MRI	.216	.001	.093	.005*	.231	.013*
5	DSIS CRPSS MRI Gender	.218	.002**	.094	.001	.232	.002*

Note: * p < .01, ** p< .05; DSIS = Differential Status Identity Scale; CRPSS = Career Related Parent Support Scale; MRI = Mentoring Role Instrument; Gender = Participant Gender

Next, the hypothesized outcome indicators were regressed on the mediating variables (differential status identity, career-related parent support, mentoring, and gender), while controlling for the predictor variables to understand how much variance the mediators explain after adjusting for the direct associations between the predictors and outcomes. The first outcome variable tested was career agency (Table 8). In this regression, only differential status identity and career-related parent support were significant. Differential status identity explained 3.9% of the variance in career agency and career-related parent support accounted for 4.9% of the variance, after controlling for the variables related to caregiver work experience, meaning that each variable predicts a significant amount of change in career agency. Mentoring did not explain a significant portion of the variance and, although gender did emerge as a significant predictor, it only accounted for 0.2% of the variance.

When the mediating variables were regressed against negative career outlook, again only differential status identity and career-related parent support contributed significantly to the variance in the outcome variable (Table 8). Differential status identity explained 2.3% of the variance while career-related parent support explained 1.8% of the variance. Mentoring accounted for a mere 0.5% of the variance in NCO. Gender did not explain a significant portion of the variance. Again, these variables are considered independently since they are hypothesized to interact with one another or independently predict the outcome variables, rather than make up a latent variable.

Lastly, the mediating variables were regressed against employment opportunity (Table 8). All of the mediators explained a significant amount of the variance in employment opportunity, exclusive of gender. Strikingly, differential status accounted

for 14.4% of employment opportunity, whereas career-related parent support and mentoring explained a modest 1.7% and 1.3%, respectively.

Measurement Models

Confirmatory factor analysis. Before the measurement models were tested, a confirmatory factor analysis (CFA) was performed to ensure that scale means, rather than individual items, could be used as indicators in the structural equation analysis. Individual items were used as indicators and a latent variable representing the scale was created. Covariance between items on the same subscales was allowed and items that did not load highly or that had a large amount of error variance were removed. The factor loadings for individual items onto each scale were adequate and can be found in Appendix B. The overall fit for the confirmatory models is presented in the table below.

Table 9
Confirmatory Factor Analysis Fit Indices

Measured Variable	Items Removed	Chi-Square	RMSEA
CGWV	1, 2, 3, 4	44.29, *df* = 22, p = .00	0.058
JSAT	10	411.68, *df* = 146, p = .00	0.079
CRPSS	21, 27	704.58, *df* = 264, p = .00	0.075
CA	-	59.30, *df* = 29, p=.00	0.059
NCO	-	0.89, *df* = 0, p = 1.00	0.000
EOI	-	4.16, *df* = 6, p = .65	0.000
MRI	-	62.23, *df* = 34, p = .00	0.053
DSIS	-	0.00, *df* = 0, p = 1.00	0.000

According to McDonald and Ho (2002), RMSEA is the preferred measure of fit with an RMSEA of .08 or lower indicated an acceptable fit and an RMSEA of .05 or lower

indicating a good fit. The CFAs for CGWV, JSAT, CRPSS, CA, and MRI all have acceptable fits with RMSEAs between .05 and .08. NCO, EOI, and DSIS, all of which have only a handful of items, produced excellent fit indices, as indicated by non-significant chi-square values and ideal RMSEAs. Overall, the CFAs suggested that it would be appropriate to use scale means rather than individual items as indicators when assessing the measurement and structural models. The items suggested for removal by the CFAs were removed when creating the mean scale scores for the measurement model and structural model analyses.

Testing the measurement models. Martens (2005) recommends testing the fit of the measurement models representing the latent variables before testing the structural model to ensure that the foundational elements of the structural model provide an adequate fit to the data. The hypothesized model includes two latent variables: caregiver work experience (CGWEXP) and work expectations (EXPECT). Each of these variables is comprised of multiple indicators. CGWEXP experience includes caregiver work volition, caregiver occupation, and caregiver job satisfaction. EXPECT includes expected occupation, career agency, negative career outlook, and perceived employment opportunity. As per the suggestion of Martens (2005), both of these measurement models were tested. See Figure 1 in Chapter 3 for a visual representation of the measurement models.

The overall fit of the measurement models is shown below in Table 10. Each of the measurement models was tested independently as well as simultaneously. When tested independently, the measurement model for CGWEXP yielded a non-significant

chi-square and a RMSEA indicating a good fit. The measurement model for EXPECT also yielded a non-significant chi-square and a RMSEA indicating a good fit. The fit indices for the latent and single indicator measurement models taken together indicated a moderate fit. Thus, the measurement models used in the structural model were found to have adequate global fit indices.

Table 10

Measurement Model Fit Indices

Measurement Model	Chi-Square	RMSEA
Caregiver Work Experience (CGWEXP)	3.54, *df* = 2, p = .17	0.051
Work Expectations (EXPECT)	16.52, *df* = 10, p = .09	0.047
Measurement Models Total	224.75, *df* = 113, p = .00	0.058

Structural Model

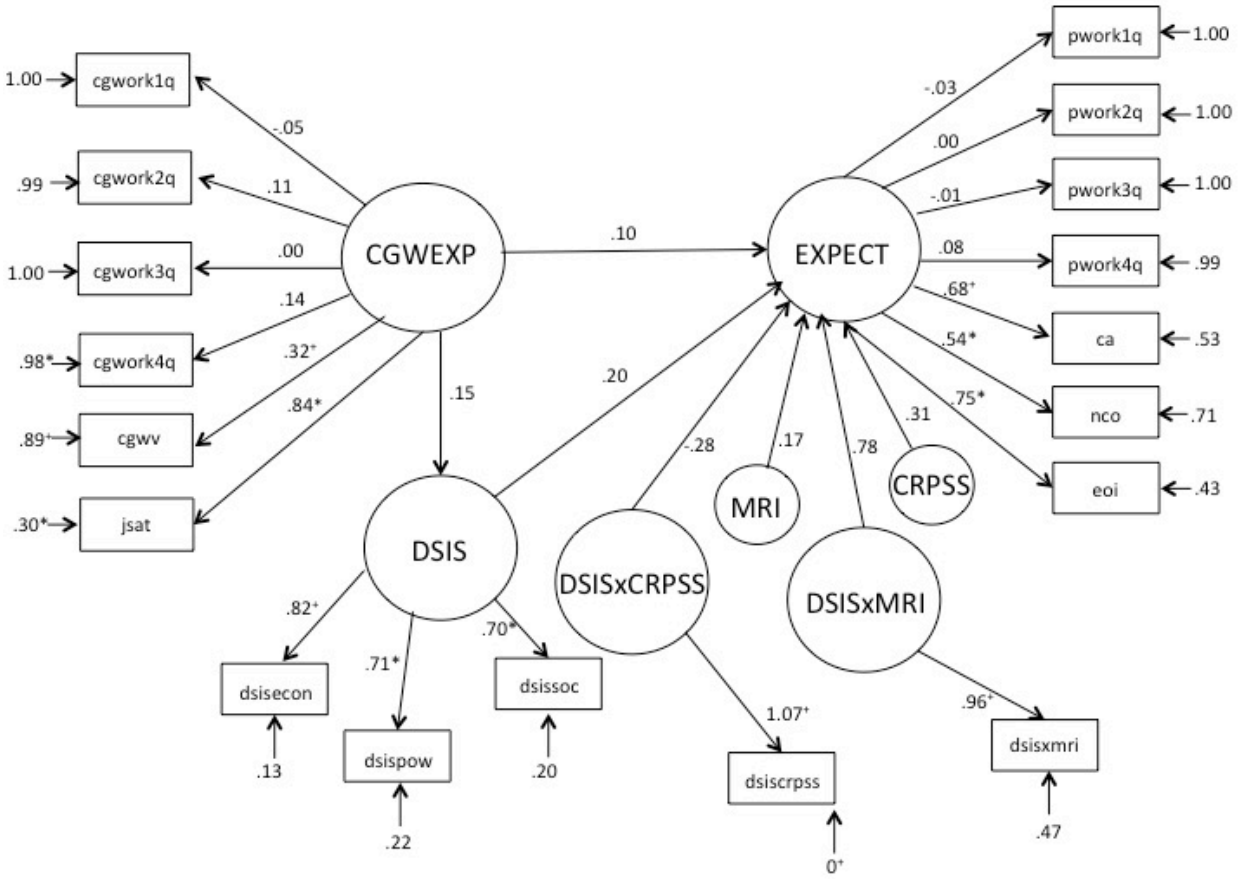
The hypothesized structural model and several alternative models were estimated for the sample as a whole, then for women and men separately, and then for participants of the same gender as their caregiver and those of a different gender than their caregiver separately, to test the moderating effects of gender and gender role similarity. Although moderation models can be estimated using interaction terms, the use of interaction terms can affect the assumption of multivariate normality and yield inaccurate or improper solutions, (Chen, Bollen, Paxton, & Curran, 2001; Cortina, Chen, & Dunlap, 2001). For categorical or dichotomous variables, such as gender, some authors suggest testing the model for multiple groups representing the different categories (e.g., Cortina, Chen, & Dunlap, 2001). That is the approach taken for both gender and gender role similarity in

this study. Ideally, group differences would be tested using a multiple group method that allows comparison of the pathways between variables within each group, in addition to the overall model fit. Because the question of gender differences was an exploratory one, this method was not employed in the current study. However, it is suggested that future research focusing on gender differences use multiple group modeling to gain a more detailed picture of the differences between males and females. The hypothesized moderation pathways for continuous variables (the effects of DSIS on EXPECT as moderated by CRPSS and MRI) are represented in the models as interaction terms (DSISxCRPSS and DSISxMRI) in addition to the main effects.

Hypothesized model. The full structural model (for both genders) with standardized coefficients along the hypothesized pathways is shown in Figure 5. The significance of the path coefficients was calculated using t-scores. Path coefficients with a p-value of less than .05 are marked in the figure with an asterisk. Despite the excellent fit of the model to the data, none of the structural pathways were found to be significant.

The fit of the model was assessed through chi-square and RMSEA statistics. Chi-square is vulnerable to the effects of sample size and may yield a poor fit despite the model being a good fit when sample sizes increases (Martens, 2005). The full hypothesized model yielded a chi-square statistic of -4.42 ($p = 1.0000$) and a RMSEA of 0.000, indicating an excellent fit to the data. Despite the excellent fit, none of the pathways between latent variables were significant. The fit indices for the hypothesized model are presented along with the fit indices for the male model, female model, and alternative models in Table 11.

Figure 5
Hypothesized Structural Model



Gender differences. The hypothesized model was tested for male and female participants separately and the fit of each model was compared to examine the moderating effects of gender. The full model for females yielded a significant chi-square and a RMSEA of 0.065, indicating an adequate fit, whereas the full model for males resulted in a significant chi square and a RMSEA of 0.062, also indicating an acceptable fit (Table 11). A comparison of the chi-square statistics of the two models indicated that

they are, indeed, significantly different, with the model providing a better fit to the data for males than to the data for females.

The structural model for females, including pathway coefficients, is presented in Figure 6 and the structural model for males, also including pathway coefficients, is presented in Figure 7. For females, the only significant pathway was that from CRPSS to EXPECT (r = .32). The model for males did not reveal any significant pathways.

Figure 6
Hypothesized Structural Model for Females

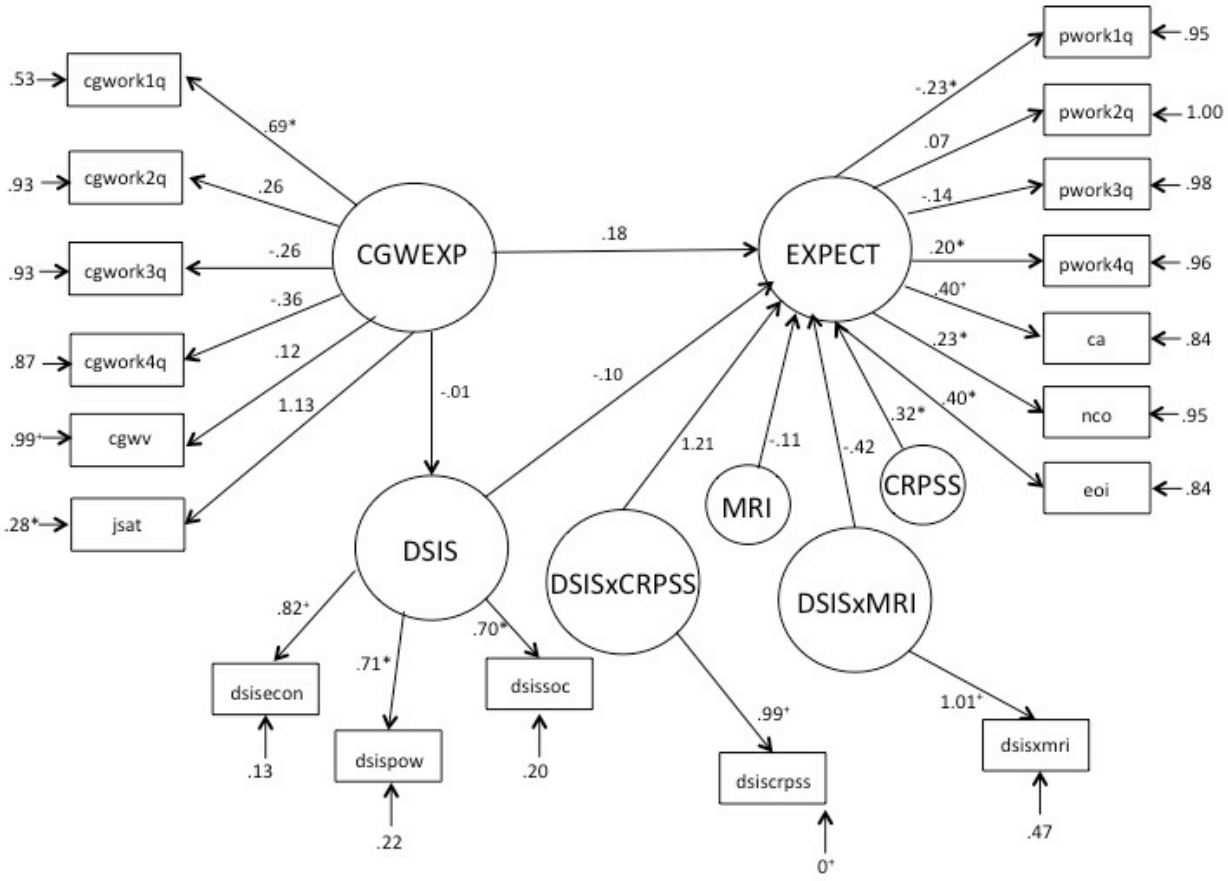
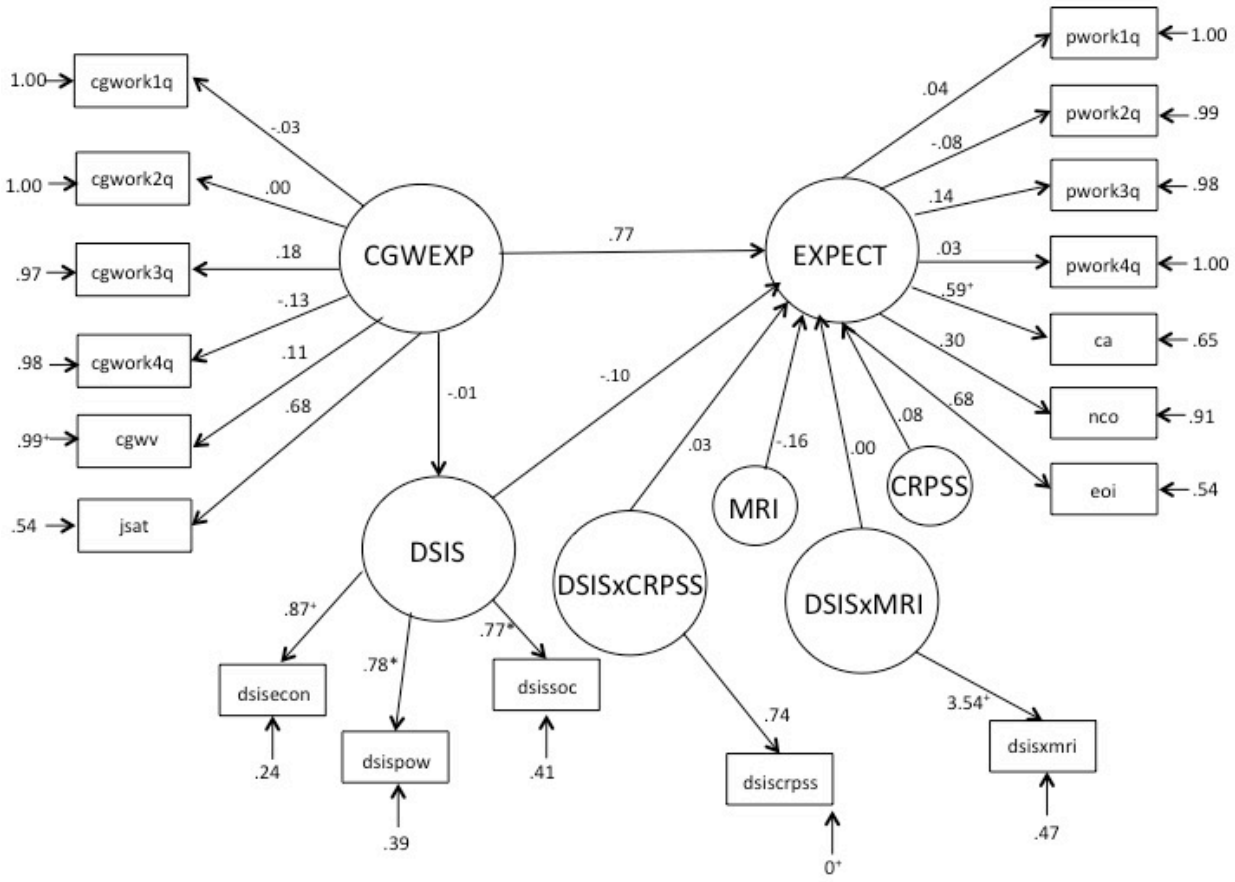


Figure 7
Hypothesized Structural Model for Males



Effects of gender role similarity. The hypothesized model was also tested separately for participants who identified a caregiver of the same gender as them and those who did not. This was done in order to examine the effects of gender role similarity on the model, specifically the pathway between CGWEXP and EXPECT. Although the model provided an acceptable fit for the gender similar group (RMSEA = 0.070), it provided an excellent fit for the gender different group (RMSEA = 0.000).

For participants who identified a caregiver of the same gender as themselves, only the pathway from DSISxCRPSS to EXPECT (r = .60) proved significant. For

participants who identified a caregiver of a different gender from themselves, none of the structural pathways proved significant.

Figure 8
Hypothesized Model for Gender Similarity

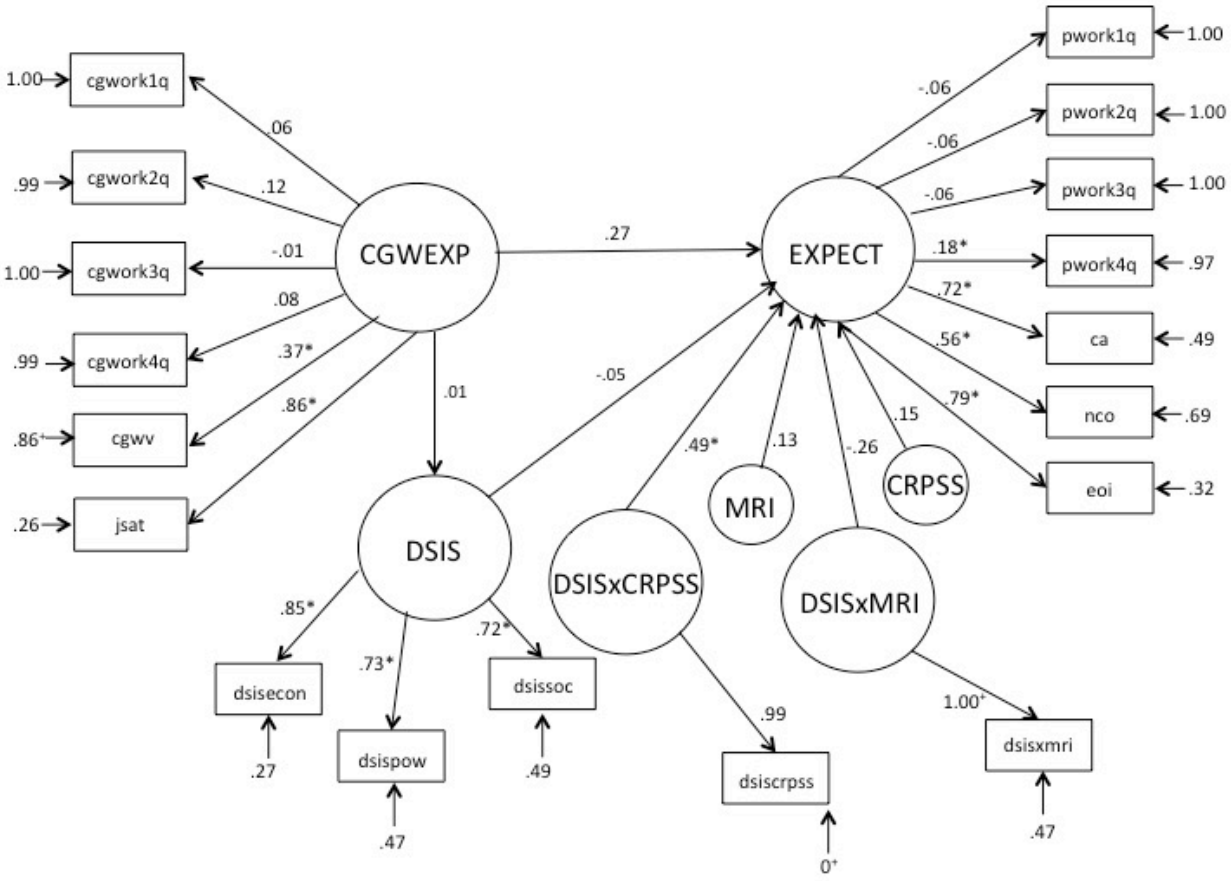
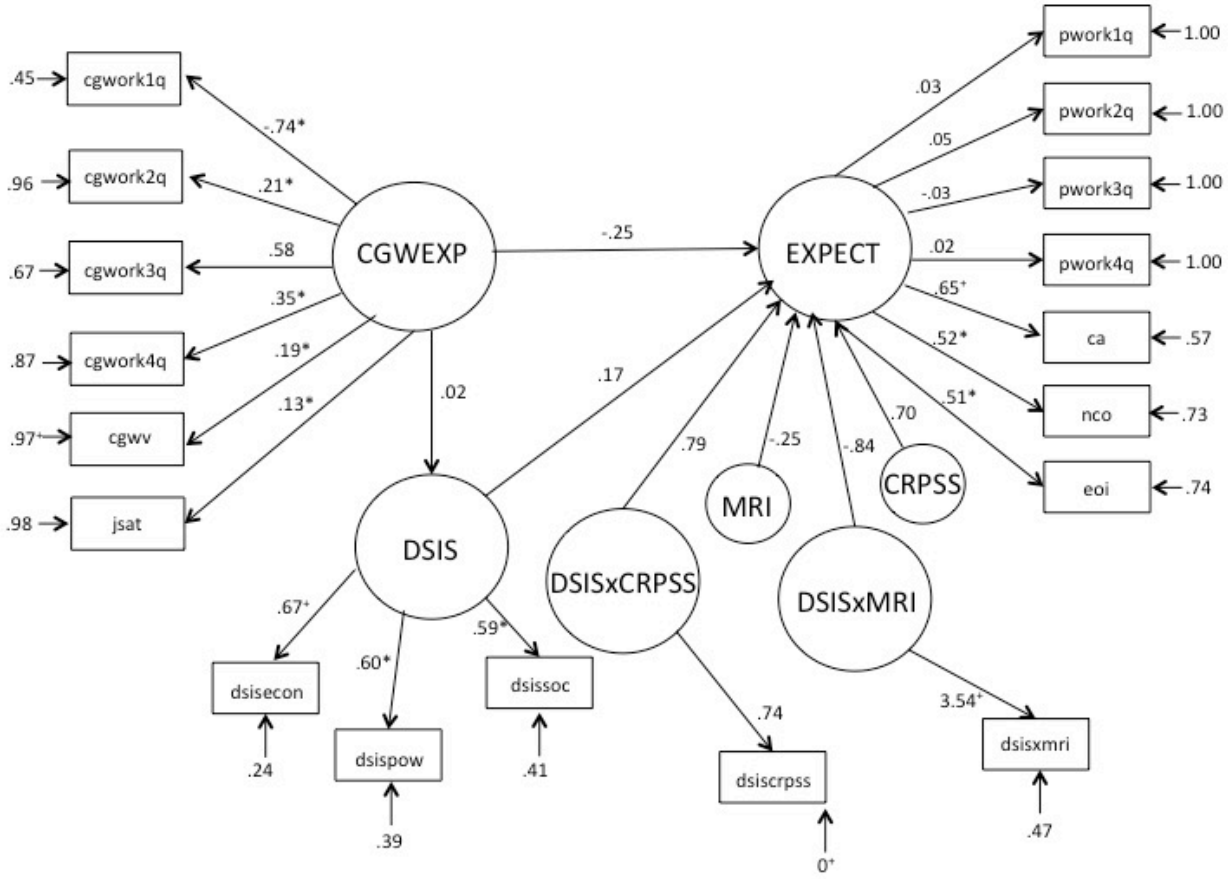


Figure 9
Hypothesized Model for Gender Difference



Alternative models. Several alternatives to the hypothesized structural model were tested to ensure that the hypothesized model provides the best fit to the data. Specifically, models in which CRPSS and MRI were predictors of EXPECT rather than moderators of the pathway between DSIS and EXPECT were tested, as well as models with certain variables removed. Alternative models can be found in Appendix B. The fit of the most noteworthy models are described in Table 11. Although the model without moderation provided a good fit for the total sample, the hypothesized model provided the best fit to the entire sample with a RMSEA of 0.000. However, a model in which CRPSS and MRI

were predictors rather than moderators provided a slightly better fit to the male sample with a RMSEA of 0.059 (as compared to 0.062 for the hypothesized model). This model is shown in Figure 10. In this alternative model, the pathway from CGWEXP to DSIS becomes significant (r = .77). Additionally, the pathway from MRI to EXPECT is significant (r = .22). As compared to the hypothesized model for males, the pathway from CGWEXP to EXPECT is no longer significant.

Figure 10
Alternative Model for Males

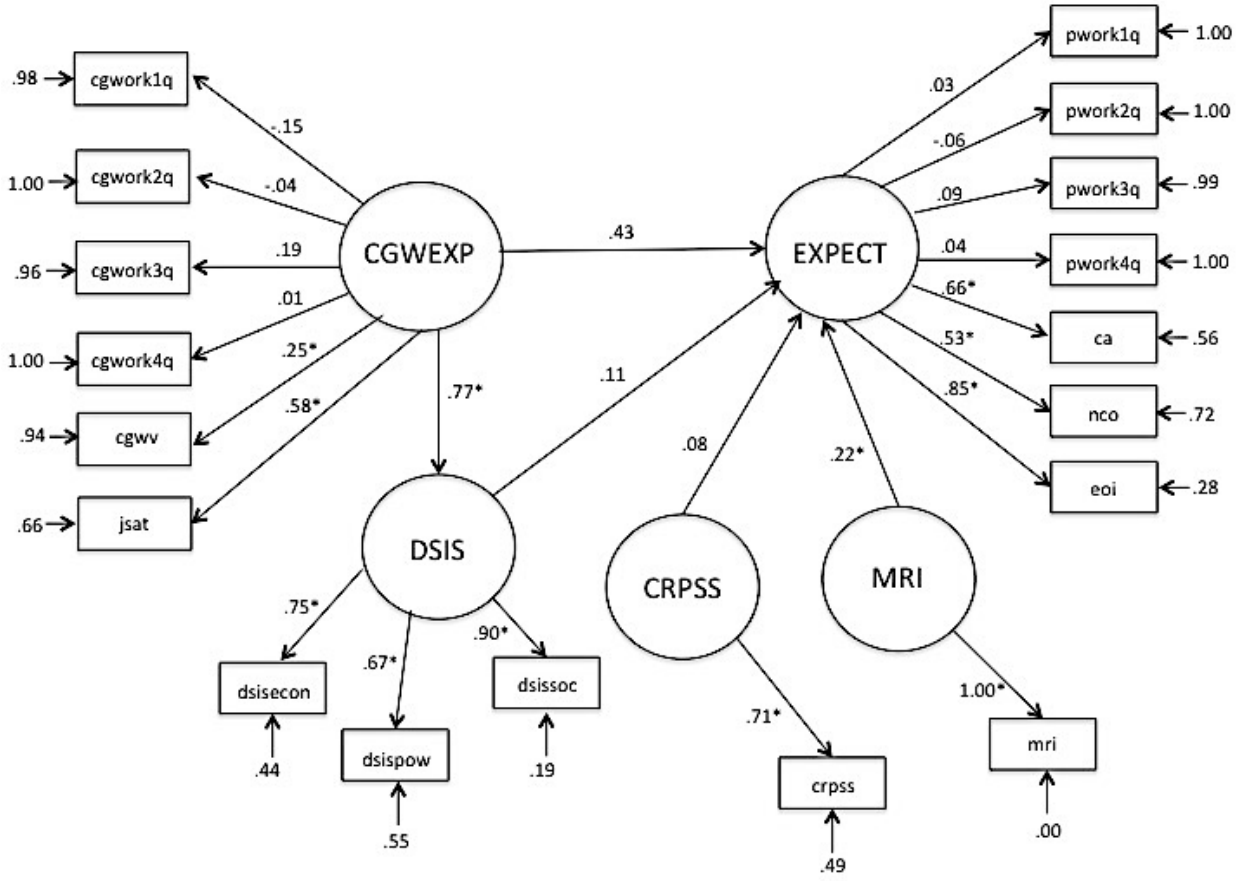


Table 11
Fit Indices for Hypothesized and Alternative Models

Model	Chi-Square	RMSEA
Hypothesized Model	-4.42, *df* = 139, p = 1.00	0.000
Hypothesized Model - Female	199.28, *df* = 124, p = .00	0.065
Hypothesized Model - Male	201.03, *df* = 126, p = .00	0.062
Hypothesized Model - Gender Role Similarity	248.48, *df* = 135, p = .00	0.070
Hypothesized Model - Gender Role Difference	80.71, *df* = 140, p = .99	0.000
No Moderation Model	347.41, *df* = 114, p = .00	0.034
No Moderation Model - Female	190.52, *df* = 112, p = .00	0.070
No Moderation Model - Male	176.46, *df* = 114, p = .00	0.059
No Moderation Model - Gender Role Similarity	202.74, *df* = 114, p = .00	0.068
No Moderation Model - Gender Role Difference	177.76, *df* = 115, p = .00	0.066

Results of Hypothesis Tests

This study initially sought to evaluate three major hypotheses in addition to exploring the overall hypothesized model. The hypotheses are reviewed below, along with their corresponding results.

1. To what extent do young adults' perceptions of their caregivers' work experiences influence their own work expectations?

   Hypothesis 1: Young adults' perceptions of their caregivers' work experiences will positively predict their own work expectations. (Path A)

The pathway between CGWEXP and EXPECT in the hypothesized model was positive, but not significant, suggesting that young adults' perceptions of their caregivers work experiences does not predict their own work expectations. Thus, hypothesis 1 is not supported by the data.

a. How is this relationship different for men and women?

   Hypothesis 1a: The relationship between young adults' perceptions of their caregivers' work experiences and their career expectations will be stronger for women because women tend to be more influenced by their family environments.

   This hypothesis was tested by analyzing the hypothesized model for men and women separately and then examining the pathway between CGWEXP and EXPECT. In the hypothesized model, neither the results for men nor women included a significant standard coefficient between CGWEXP and EXPECT. Thus, Hypothesis 1a was not supported by the data.

b. How is this relationship impacted by role-model similarity (e.g. female participants having female caregivers)

   Hypothesis 1b: The relationship between young adults' perceptions of their caregivers' work experiences and their career expectations will be stronger for young adults experiencing role model similarity (e.g. female young adults who have female caregivers) than for those experiencing role-model dissimilarity (e.g. female young adults who have male caregivers) because young adults tend to identify more with their caregiver of the same gender.

   When the hypothesized model was tested by participant-caregiver gender role similarity, the group that identified as a different gender from their caregiver produced a negative, nonsignificant standard pathway coefficient

from CGWEXP to EXPECT and the gender similar group produced a positive nonsignificant standard coefficient along this same pathway. These results suggest that although there is not a difference in the magnitude of the effect (the relationship for both groups did not reach significance), there is a difference in the directionality of this relationship between young adults of the same gender as their primary caregiver and those who identify differently. Thus, the data partially supported Hypothesis 1b.

2. To what extent do young adults' perceptions of their caregivers' work experiences predict their differential status identity?

   Hypothesis 2: Young adults' perceptions of their caregivers' work experiences will positively predict their differential status identity. (Path B)

   In the hypothesized model, the pathway between CGWEXP and DSIS was not significant. However, this pathway was significant in the alternative models in which CRPSS and MRI were included as predictors rather than moderators (r = .70 for the total sample). These results suggest that when CRPSS and MRI are included as interaction terms, the influence of CGWEXP on DSIS is overshadowed by other relationships. The significance of this pathway in the models without interaction terms, as well as the linear regression (Table 7) included in the preliminary analyses suggest that when examined on its own, caregiver work experience is a significant predictor of DSIS. However, when examined amidst other factors, caregiver work experience is no longer a significant predictor of DSIS.

3. To what extent do young adults' differential status identities predict their work expectations?

   Hypothesis 3: Young adults' differential status identities will positively predict their work expectations. (Path C)

Looking at the hypothesized model, DSIS was not a significant predictor of EXPECT. Because the inclusion of the interaction terms DSISxCRPSS and DSISxMRI may have diluted the relationship between DSIS and EXPECT, it is important to examine the alternative models, which can be found in the appendix, and the linear regressions performed in the preliminary analyses. The alternative model for the total sample that included CRPSS and MRI as predictors rather than moderators, produced a significant pathway between DSIS and EXPECT (r = .29 for the total sample). Additionally, each of the regressions in which DSIS was a predictor of the indicators comprising EXPECT showed DSIS to be a significant predictor (Table 8). Thus, when not considering moderation, DSIS is a significant predictor of EXPECT.

a. How is this relationship affected by parental support?

   Hypothesis 3a: Greater parental support will moderate the relationship between young adults' perceptions of their parents' work experiences and differential status identity in that young adults who perceive their parents as having low differential status identities, but who have high parental support, will also have higher work expectations.

   In the hypothesized model, the pathway from DSISxCRPSS was not significant. However, it was significant for participants who identified primary caregivers of the same gender as themselves. Therefore, hypothesis 3a was not supported for the entire sample, but was supported for participants of the same gender as their primary caregiver.

b. How is this relationship different for those who had a mentor?

   Hypothesis 3b: Having a mentor will moderate the relationship between differential status identity and work expectations in that students with low

differential status identity who had a mentor will have higher work expectations.

The pathway between DSISxMRI and EXPECT was not significant in any of the models. It can be concluded that having a mentor did not moderate the relationship between DSIS and career expectations for the sample or any group within the sample and that, consequently, hypothesis 3b was not supported.

4. The model

   The hypothesized model provided an excellent fit to the data. With an RMSEA of .000, it met the criteria (RMSEA ≤ 0.05) of being a good fit to the data.

Summary of Analyses

The hypothesized model provided a very good fit to the data. However, none of the predicted relationships proved significant. Given that the correlation matrix produced as part of the preliminary analyses indicated that most variables of interest were correlated with one another and the high number of significant regressions in the preliminary analyses, one possibility for the lack of significant pathways in a model with excellent fit is that multicollinearity prevented any of the unique contributions of predictors to outcomes from emerging. One piece of evidence to support this hypothesis is that when the interaction terms were removed from the model, CGWEXP significantly predicted DSIS and MRI became a significant predictor of EXPECT.

Few of the hypotheses were supported by the hypothesized model, although models representing specific groups within the sample and the preliminary analyses did support several of the hypotheses. One somewhat surprising finding was the role of DSIS in the overall model. Despite the preliminary analyses suggesting that DSIS would be a significant

mediator of the relationship between caregiver work experience and career expectations, neither the pathway from CGWEXP to DSIS nor the pathway from DSIS to EXPECT were significant in the final model. Early stages of the structural model that included just the partial mediation of CGWEXP and EXPECT by DSIS, as well as the significant pathway from CGWEXP to DSIS in the model without moderation suggest that the nonsignificant role played by DSIS in the hypothesized model may be due to high correlations between DSIS and other predictors, particularly DSISxMRI and DSISxCRPSS. The addition of highly correlated variables may have blunted the effect of DSIS by accounting for some of the variance in the outcome variables explained by DSIS and, consequently, decreasing its unique contributions to a nonsignificant level.

Further, gender role similarity was found to play a larger role in the model than was initially predicted. For example, the data for individuals who identified a primary caregiver of a different gender than themselves provided an excellent fit to the data, whereas those who identified a caregiver of the same gender provided only a moderate fit. However, the pathways between CRPSS and EXPECT was significant for gender similar individuals and none of the pathways proved significant in the model for gender different participants.

Finally, having had a mentor did not have as great an influence on career expectations as was hypothesized. Specifically, having a mentor did not have a significant moderating effect on the relationship between DSIS and career expectations. However, having had a mentor did have a significant effect on career expectations when considered as an independent predictor rather than a moderator ($r = .11$ for the total sample).

Chapter 5

Discussion

Through research and counseling, career development, a field that has traditionally focused on middle class individuals with volition (Blustein, 2006; Perry & Wallace, 2013), has the potential to offer a powerful lever in the social mobility of low-income and otherwise marginalized individuals. The current study has sought to understand how two crucibles for career development – the family context and social class – interact with one another to influence career expectations, an empirically supported predictor of later career attainment and wellbeing. This chapter will examine the results of the current study within the existing literature, with particular attention to their implications for promoting social mobility and wellbeing.

Summary of Findings

In summarizing the findings of any social science research, it is crucial to critically examine the results within the context of the research design and methodology. As such, the following summary of the major findings introduces possible statistical explanations for any unexpected results. A discussion of the theoretical explanations and implications will follow.

Caregiver Work Experience and Work Expectations. Based on the outcome of the hypothesized structural model, the study found that young adults' perceptions of their caregivers' work experiences did not significantly predict their expectations about work. Despite this surprising result from the overall model, there is evidence supporting the relationship between caregiver work experience and work expectations, including findings regarding the interplay between the indicator variables for caregiver work experience and work expectations that demonstrated significant factor loadings. In a correlation matrix,

caregiver work volition and caregiver job satisfaction were both found to be highly correlated with career agency, negative career outlook and employment opportunity index, the indicator variables contributing to work expectations. Further, the results of the multiple regressions suggest that work volition and job satisfaction each contribute a significant amount of unique variance to career agency and employment opportunity. Moreover, the model estimated predicted linear relationships between the variables and the relationship between caregiver work experience and work expectations may not be linear. Therefore, the relationship between caregiver work experience and work expectations cannot be discounted.

Rather, the data suggests that the relationship between these two constructs hinges on which variables are used to define them. None of the factor loadings for caregiver occupation were significant in the hypothesized model and caregiver work occupation only contributed significantly to the variance in career agency (but not to the other indicators of work expectations) in the multiple regressions. Therefore, the inclusion of caregiver occupation in the latent variable capturing caregiver work experience may have diluted any relationship between caregiver work experience and work expectations. There are two possible explanations for this finding. Theoretically, a caregiver's occupation may have less of an impact on young adults' career expectations than their work volition or job satisfaction and, if caregiver occupation were removed from the model, a significant relationship between caregiver work experience and work expectations would emerge. Methodologically, the way in which caregiver occupation (as well as expected occupation) was assessed could have introduced measurement error that distracted from the relationship between the two latent variables. This issue will be discussed at greater length in the "Limitations" section of this chapter.

The relationship between young adults' perceptions of their caregivers' work experiences and their own expectations about work did not reach significance when the sample was divided by gender or gender-role similarity. However, the direction of the relationship between caregiver work experience and work expectations differed between the gender similarity groups. For individuals who identified as a different gender than their primary caregiver, the relationship was negative, meaning that as caregiver work experience increased, work expectations decreased. For individuals who identified as the same gender as their primary caregiver, this relationship was positive. Although neither of the pathways reached significance, this interesting difference may become greater if adjustments were to be made to the measurement models of either caregiver work experience or work expectations.

Caregiver Work Experiences and Differential Status Identity. Young adults' perceptions of their parents' work experiences positively predicted their differential status identity, although only when interaction terms including differential status identity were not included in the model. Because the interaction terms include differential status identity, their addition may have introduced multicollinearity, an issue that can arise when interaction terms are included in a structural equation model and that can lead to spurious results and even improper solutions (Chen et al., 2001; Cortina, Chen, & Dunlap, 2001). In this case, multicollinearity may have caused a distribution of the effects of differential status identity such that it did not appear to contribute uniquely to the outcome variables at any point. Thus, it is valuable to note that when considered without the interaction terms, as young adults' perceptions of their parents' work experiences become more positive, their differential status increases.

Differential Status Identity and Work Expectations. In the absence of interaction terms, differential status identity was a significant predictor of work expectations, both

within a model excluding interaction terms and of individual outcome indicators in multiple regression analyses. As individuals' differential status identity increased, their work expectations did as well. When considered in conjunction with the positive and significant relationship between caregiver work experiences and differential status identity described above, the results suggest that differential status identity is a partial mediator of the relationship between caregiver work experiences and work expectations. As with the relationship between caregiver work experience and differential status identity, it is important to note that the inclusion of interaction terms could have introduced a level of multicollinearity (between differential status identity and the interaction terms) that diluted any unique effects of differential status identity. Multicollinearity would explain why there is a difference in the significance of differential status identity-work expectation relationship between the hypothesized model and the alternative model.

Parent support did not appear to moderate the relationship between differential status identity and work expectations, except for individuals who were of the same gender as their caregivers. For this group, parent support positively moderated the relationship, suggesting that individuals who receive support from a parent of the same gender will experience a greater increase in work expectations as differential status identity increases. Having had a mentor did not moderate the relationship between differential status identity and work expectations. However, it became a significant predictor of work expectations for men when considered independently. In practical terms, having a mentor does not impact how much of an increase in work expectations occurs with an increase in differential status identity. For men, however, having a mentor and the greater the quality of that relationship, the greater the work expectations are.

Additional Findings. In addition to answering the stated hypotheses, several significant gender and gender role similarity differences were found. Specifically, the model

as a whole better captures the experiences of individuals who are a different gender than their primary caregiver than it does individuals of the same gender. Despite the better fit for gender different participants, parent support was found to be a significant moderator for gender similar participants in that greater parent support increased the positive (though nonsignificant) impact of differential status identity on work expectations. Mentoring did not have an impact on the extent to which increases in differential status identity led to increases in work expectations. However, having a mentor appeared to be important for the work expectations of men when it was considered independent of differential status identity.

Theoretical Implications

Family Influences on Career Development

The more complex relationships between caregiver work experience and work expectations found in the current study may help to flesh out the theory and literature that has previously identified the strong influence of parents on career development (Whiston & Keller, 2004). Specifically, the findings provide evidence for the role of vicarious learning (e.g., learning about work in general by observing another's experiences) in the transmission of information about work from caregivers to children. Vicarious learning has been outlined by SCCT (Lent, Brown, & Hackett, 2002), though it has not received much attention in the literature thus far. The results of the current study suggest that some forms of vicarious learning may be more impactful than others; caregiver work volition and job satisfaction may be powerful forms of vicarious learning while actual occupation is not. The extent to which children, adolescents, and young adults perceive that their caregivers enjoy their jobs and the extent to which they believe their caregivers chose their jobs may inform their own beliefs and values about work more than their parents' actual occupations.

Thus, it appears that individuals learn more about the world of work from observing and learning from the quality of their caregivers' work experiences than the prestige or content.

Despite the limited literature on the role of vicarious learning (Thompson et al., 2013), the current findings fit into extant research examining the role of parents and families in informing aspects of individuals' career expectations (Alliman-Brissett, Turner, & Skovholt, 2010; Riggio & Desrochers, 2006; Thompson et al., 2013; Whiston & Keller, 2004, Woodside et al., 2012; Zhang, Yuen, & Chen, 2015). The current results describe a developmental outcome – work expectations – that may occur as a result of previous findings that adults transmit values about their work to their children (Argyle, 1994; Fouad & Brown, 2004). Literature examining the effect of working mothers on children's development has lent credit to the idea that work values are not only transmitted explicitly, but may be absorbed by children through observations about a mother's occupation and her attitudes towards her work (Barak et al., 1991; Lerner, 1994). The current study bridges these two findings by providing evidence that individuals develop work expectations, in part, by synthesizing work values based on their observations of their parents' attitudes toward work.

Although they provide support for the notion that individuals internalize their parents' values about work, results of the current study complicate findings from previous studies showing that many children and adolescents aspire to the same careers that their parents have (Hartung, Porfeli, & Vondracek, 2005; Trice, 1991). If the low factor loadings of caregiver occupation are due to the construct rather than measurement error, young adults' work expectations are likely not explicitly influenced by their parents' occupations. However, much of the research that found a direct correlation between parent occupation and an individual's desired occupation was done with children and adolescents who may have more simplistic views of their parents' work experiences (e.g. Abramovitch & Johnson,

1992; Fulcher, 2011; Hartung, Porfeli,& Vondracek, 2005; Schuette, Ponton, & Charlton, 2012; Trice & Knapp, 1992). Further, they did not unpack the other aspects of a parents' work experience that could influence one's attitudes about work or a particular occupation. Other research has delved into these findings and found that people's tendency to aspire to and pursue similar occupations to those of their parents is influenced by many factors, including their perception of how satisfying the occupation was to their parents (Trice & Tillapaugh, 1991) and the values their parents attributed to their occupations (Woodside et al., 2012).

A few studies have investigated the direct relationship between parent work experience and career expectations. For example, Thompson et al. (2013) found that college students whose parents had gone through periods of unemployment reported that it significantly affected their views and expectations about work in nuanced ways. Although the students interviewed for the study recognized the challenges and struggles their families endured due to unemployment, they also gained better financial and job market awareness, as well as a desire to pursue careers that would provide more than financial remuneration, such as the satisfaction of giving back to others. Witnessing a parent struggle with financial stress and job instability did not lead exclusively to negative outcomes, as previous studies had suggested (e.g. Galambos & Silberisen, 1987; Lim & Sng, 2006; Paulter & Lewko, 1987), but had both positive and negative psychological and vocational effects. Thus, the findings of the current study align with an emerging understanding that the role of caregiver work experience in young adults' work expectations is a complex one.

The Role of Social Class

As suggested in the literature, when considered independent of any moderating factors, caregiver work experiences were a significant predictor of differential status

identity, a subjective measure of class status. Family has been seen as a primary channel for the transmission of lessons about social class and how they fit into an individual's identity (Fouad & Brown, 2000; Perry & Wallace, 2013). The effects of family and other contextual social class experiences on differential status identity are more powerful than discrete experiences with racism and classism (Thompson & Subich, 2011). However, limited empirical evidence exists that supports this concept or its underlying mechanisms. Thus, the current finding advances our existing understanding of the effects of family on class identity beyond a diffuse correlation and towards specific mechanisms, specifically vicarious learning about work.

The importance of increased knowledge of how class identity and differential status identity develop is made clear by the current finding that differential status identity is a significant predictor of career expectations and, therefore, as suggested by the career development literature, later achievement and wellbeing (Ashby & Schoon, 2010; 2012; Koen et al., 2012; Schoon & Polek, 2011). Given the existing research and theory, this finding was expected. Broadly, social class both influences the access individuals have to the opportunity structure and contributes to the social psychological context in which they develop a sense of which careers are appropriate for them (Brown et al., 1996). Although the concept of career expectations reflects an individual's previous and perceived future access to work opportunities (e.g. previous exposure to various jobs and work-related activities, foreseen access to work-related opportunities, such as education; Diemer & Ali, 2009; Thompson & Dahling, 2012), it primarily represents an individual's sense of which careers fit his or her identity (Brown, 2004). Thus, the direct relationship between differential status identity and career expectations provides support for the idea that career development is strongly informed by one's subjective view of which careers fit with one's social location, as described by scholars such as Guichard (2005, 2009) and Gottfredson

(1981). In addition to circumscribing an individual's idea of appropriate careers for his or her identity, class may also influence how young adults view work in terms of what they expect it to provide (survival vs. self-determination) and values associated with work (Fouad & Brown, 2000; Thompson & Dahling, 2010).

While each of these relationships is interesting independent of one another, perhaps the most notable finding of the current study is the complex way in which family and social class are intertwined in their effect on career expectations. The findings tie together the literature surrounding family as a predictor of career expectations (Whiston & Keller, 2004) and the research that is beginning to explore the role of social class in career development (Perry & Wallace, 2013). Taken together, the findings provide additional information about the characteristics of caregiver work experiences that lend themselves to vicarious learning about career, notably work volition and job satisfaction but not actual occupation. In addition, the hypothesized model paints in broad strokes what has previously only been portrayed by discrete, more detailed findings. For example, by providing a good fit to the data, it describes more generally the findings that parental social status is directly related to one's occupational aspirations across the lifespan (Johnson et al., 1983; Marjoribanks, 1984; Trice & Knapp, 1992), the ripple effect that parental income loss has on the job expectations of daughters (Galambos & Silbereisen, 1987), and the direct relationship between parental job insecurity and negative work motivation in adolescents (Lim & Sng, 2006). As noted elsewhere in this chapter, because family and social class are so interconnected to one another and to career development, some effects may not have appeared in the linear, comprehensive statistical model presented here and should be further explored and unpacked in future research.

Gender Findings

Finally, although the influence of gender on career development has been well documented in the literature, the pervasiveness of the effects of caregiver-participant gender similarity was greater than expected. Based on the existing literature (Fisher & Padmawijaja, 1999; Li & Kerpelman, 2007; Paa & McWhirter, 2000; Whiston & Keller, 2004; Woodside et al., 2012), it was hypothesized that gender and gender similarity would moderate the relationship between caregiver work experience and career expectations. Although this hypothesis proved to be partially true (the hypothesized model was a significantly better fit for gender different participants), gender and gender similarity also had an impact on the role of parent support and mentoring.

Parent support positively influenced gender similar participants' career expectations, but not those of gender different participants. This result, in conjunction with the previously described finding, suggests that parents play an important role in career development when the parent is the same gender as the individual. This broad conclusion is supported by existing findings that parent support and attachment are significant predictors of girls' and women's career expectations (Alliment-Brisset, Turner & Skovholt, 2004; Novakov & Fouad, 2012; Tang, Pan, & Newmeyer, 2008). Given that 74% of participants identified a female primary caregiver and, therefore, it is more likely that a gender similar pairs were both female, this finding may also be explained by previous findings that women tend to perceive more support from their parents than men (Raque-Bogdan et al., 2012), which may be, in turn, related to higher perceptions of opportunity and high occupational expectations (Wall, Covell, & McIntyre, 1999).

Gender became important in one other unexpected relationship. The only condition under which mentoring was a significant predictor of career expectations was when it was an independent predictor for males. The literature on gender differences in mentoring

outcomes is sparse and inconclusive (Liang, Bogat, & Duffy, 2014). An examination of the data did not reveal any differences in male and female participants' responses to the Mentoring Role Inventory, suggesting that the gender difference in the effect of having a mentor was not due to differences in the quality of the mentoring relationship. This effect may have emerged because both males and females in the study were more likely to identify a female as their primary caregiver, so most male participants did not identify as the same gender as their primary caregiver. Thus, males who identified a female caregiver may have been more influenced by a male mentor (such as an uncle, grandfather, family friend, coach, or formal mentor) than by their female caregiver due to the previously demonstrated impact of gender similarity (Whiston & Keller, 2004; Woodside et al., 2012). Additionally, mentoring relationships may look different for young women and young men. Perhaps mentors of males talk about vocational development more, whereas mentors of females focus more on relational health, leading mentoring to have a greater effect on the career development of men than of women, a phenomenon that has been observed in the literature examining workplace mentoring (O'Brien, Biga, Kessler, & Allen, 2010).

Further, the mentoring literature does not provide an explanation for why mentoring was a significant independent predictor, but not a moderator of differential status identity. A statistical explanation, as with the differential status identity, is that the interaction term introduced multicollinearity, which may have led to violations of multivariate normality, and produced unreliable results (Cortina, Chen, & Dunlap, 2001). This difference may also be explained conceptually: mentoring may not be related to differential status identity and may not have an effect on the relationship between differential status identity and career expectations, but independently contributes to career expectations (Borman & Colson, 1984; Fruiht, 2015).

Overall, the current study contributes to and creates a bridge between two growing bodies of literature: the role of family in career development and the influence of social class on career development. Where there have previously been discrete findings pointing towards relationships between specific parts of the latent variables examined here, this study serves to draw broader connections between more general facets of career development. Many of the findings can be situated within existing literature, although a few, such as the pervasive impact of gender role similarity, were unexpected and can contribute novel knowledge to vocational psychology's understanding of the ubiquitous part social identities play in career development.

Future Research Directions

The results of the current study provide a compelling springboard for future research into the complex and multidirectional effects of family and social class on career development. This study explored latent variables representing the broad constructs of caregiver work experience and work expectations. While outside the scope of this study, future research may examine the specific facets contributing to these constructs in an effort to parse out the varying impacts of the more specific variables and to create a more accurate representation of "caregiver work experience." As noted earlier in the chapter, caregiver occupation, as it was measured, did not appear to contribute significantly to the latent variable of caregiver work experience. As such, a research question in this vein might ask, "What are the aspects of caregiver occupation that most impact work expectations?"

Given that social class, family, and career development are closely related and that the measure of caregiver occupation as an indicator of social class in this study appears to be flawed, the task of developing more valid methods to measure social class and occupation emerges as important. Although the Nakao and Treas (1994) scale of

occupational prestige has been recommended by scholars versed in assessing social class, it is outdated by more than 20 years and may not reflect current trends. A vital undertaking for researchers and scholars in the field is to develop updated and empirically supported measures of various aspects of social class, particularly occupation. As noted by Perry and Wallace (2013), social class is an understudied aspect of career development and, given the potential of career development to promote social mobility among economically and otherwise marginalized groups, social class, including methods to measure it, is an imperative area of future research.

Qualitative research in this area is paramount to better understand the career-related experiences of low-income and marginalized individuals across the lifespan. Counseling and vocational psychologists have been advocating for the greater use of qualitative research in the field (e.g. Blustein, Kenna, Murphy, DeVoy, & DeWine, 2005). Qualitative approaches can gather richer data and serve to empower the voices of and provide an experience-near perspective on the lives of historically marginalized individuals (Lieblich, Tuval-Mashiach, & Zilber, 1998). As demonstrated by the study conducted by Thompson et al. (2013), qualitative research can serve to highlight the nuances and intricacies inherent in career development, family, and social class. Therefore, qualitative research should factor heavily into future research on unpacking the complex relationships between social class and career development.

Beyond more closely examining the primary relationships determined by the results, future research can further unpack the interesting gender effects that emerged. For example, assessing the way that gender role identity (rather than a binary representation of gender) impacts the role of parents on career development may provide greater understanding of why gender role similarity has proven to be such a significant factor in the career development within the family context. Additionally, the current study explored the

role of gender and gender role similarity by producing models for each group, but did not compare them statistically. Future research may consider using state-of-the-art statistical analyses and employ multiple group modeling to understand the differences between specific pathways at a more statistically detailed level.

Given the focus in the existing literature on the career development of women, the field of vocational psychology (as well as men's psychology) would benefit from further exploration of how men experience the family as contributing to their career development. In the current study, men who had a mentoring relationship had higher work expectations than men who did not, but this was not true for women. Given the positive impact a mentoring relationship could have for men (especially those with female caregivers who do not benefit from the positive effect of having a gender similar parent), this phenomenon warrants further attention. An additional area of research that may emerge from this finding is more closely examining gender differences in mentoring experiences. This suggestion echoes the recommendations of Liang, Bogat, and Duffy (2014), who noted that the research on gender and mentoring has drawn limited useful conclusions for researchers and practitioners alike.

Although data were collected on race and ethnicity, immigration status and educational attainment, due to the limited scope of the study, this information was only considered in preliminary analyses and was not included in the overall model. Because differential status identity captures all social identities that may contribute to experiences of power and oppression (although it primarily taps into social class), future research should include these variables, as well. These variables may be treated similarly to how gender and gender role similarity were in the current study and the fit of the model can be compared across racial/ethnic identities or immigration statuses or they may be included as independent predictors, mediators, or specific moderators.

The current study focused on perceptions and attitudes rather than concrete outcomes, such as behaviors or attainment. Although existing research suggests that career expectations, the attitude assessed here, lead to behavioral outcomes (Ashby & Schoon, 2010; Farmer, 1987; Koen et al., 2012; Schoon & Polek, 2011; Strauss, Griffin, & Parker, 2012; Taber & Blankenmeyer, 2015; Zacher, 2014), this study did not verify those assertions in the context of the model and the participant population. Thus, future research can investigate the extent to which caregiver work experience and differential status identity predict behavioral outcome variables, such as career planning, career attainment, and educational attainment. If those relationships are significantly different than the ones found here between caregiver work experiences, differential status identity, and career expectations, it would be both interesting and prudent to research factors that may affect the relationship between career expectations and behavioral outcomes or whether career expectations are only a partial mediator between the predictor variables and behavioral outcomes.

Though not a major focus of the study, future research should be dedicated to collecting data from community college students. As discussed in the chapter on methodology, sampling community college students proved to be logistically difficult. Because community colleges are academic institutions whose faculty do not typically do research, the process for collecting data from these environments can be challenging. For example, most community colleges require research to be approved by an internal Institutional Review Board, but these boards meet infrequently and so the process can take a very long time. Simultaneously, community college students are a large population with unique psychological, vocational, and educational needs that could benefit tremendously from empirical exploration and evidence. Future research should develop partnerships between research universities and community colleges to streamline the implementation of

research agendas that could grow knowledge in the field and help to improve the development of the community college population.

Practice and Policy Implications

Aside from contributing to our knowledge about social class and career development and informing future research agendas, the current results can help to improve existing interventions and policies, as well as design new ones. The outcome variable used, work expectations, has been shown by previous research to have great importance for adolescents' and young adults' development. Taken as a whole, greater work expectations predict behaviors that lead to greater work achievement and overall wellbeing across the lifespan (Hirschi, 2009; Perry, 2008; Perry, Liu, & Pabian, 2010; Strauss, Griffin, & Parker, 2012; Taber & Blankenmeyer, 2015). The results of the study, therefore, can be used to improve interventions directed at increasing adolescents' and young adults' work expectations, which will, in turn, lead to positive behavioral and wellbeing outcomes.

As suggested by Perry and Wallace (2013), Brown (2004) and others, the results support training career counselors, as well as school counselors who may work with students on career development as they begin to explore careers, to integrate an understanding of social class and its effects on individuals and career development into career counseling. Additionally, the results support the importance of exploring a client's family of origin and the messages he or she received about work and career from his or her parents, either directly or indirectly. Existing interventions and theories that lend themselves well to these suggestions include Super's (1980) life-span, life-space approach, Savickas' (2012) life design theory, and Blustein's (2006) inclusive psychological practice, all of which take a comprehensive approach to career counseling.

Given the strong impact of parent support on participants of the same gender as their identified caregiver, providing parents with education about various careers and career development and encouragement to talk to their children and adolescents about careers could promote high work expectations among more young adults. This type of intervention may be especially helpful to low-income or otherwise marginalized parents who have not had as much exposure to economically and prestigiously diverse jobs or who may not have knowledge about the training required for different fields. Further, training may help parents to understand how their own work lives and attitudes about work affect their children's perceptions of work and help them to more intentionally curate the messages they transmit about work.

Because having a mentor proved to be important to the career development of male participants, an additional intervention could be to increase access to mentors for boys, particularly male mentors, given the greater impact of a same gender adult. Aside from the positive impact of mentoring demonstrated by the results of the current study, mentoring also predicts a multitude of other career-related outcomes, such as academic achievement (Bayer, Grossman, & DuBois, 2015), high school completion (DuBois & Silverthorn, 2005), work hope, and career agency (Fruiht, 2015). Mentors should also receive information about career development as part of their training to ensure that they are directly discussing and appropriately approaching this important topic with their mentees, regardless of gender.

From a broader perspective, the results of this study point to the impact that parental working conditions have on future workers and, subsequently, social mobility. Poor working conditions for the current generation of workers may serve to perpetuate the cycle of poverty by leading to low work expectations and potentially low work achievement in the next generation. A strong policy implication of the results, then, is that future

workers can be supported and encouraged by providing decent work for current workers. By improving working conditions in the present, we may be able to help adolescents and young adults develop high work expectations and attain better work and better well being in the future. The results of the current study support and provide evidence of the potential intergenerational implications of the decent work agenda that has recently begun gaining momentum among vocational and counseling psychologists internationally (Blustein, Olle, Connors-Kellgren, & Diamonti, 2016; Di Ruggerio, Cohen, Cole, & Forman, 2015; Heyman, McNeil, & Earle, 2013).

Limitations

As with most psychological studies, the current research has several limitations. Perhaps the greatest limitation of this study is its reliance on adapted measures for the parent-level variables. Unfortunately, this author is unaware of any existing measures that examine individuals' perceptions of others' experiences at work. Thus, it was necessary to adapt self-report measures to measure the constructs at hand in another person. Although this author has attempted to reduce the threat of this limitation to the validity of the data by ensuring fidelity to the original measures at the statistical level, it is important to consider the possibility that the measure will differ significantly in practice and understand that there are potential implications for the interpretation of the data. This limitation is most notable in the way caregiver occupation was measured. The most current measure of occupational status (or prestige) is based on census data and popular opinion from the 1980s (Nakao & Treas, 1994). Thus the status rankings used in this study do not reflect the current prestige of occupations. Further, caregiver occupation was converted to a dummy variable in a way that may have enhanced the differences in occupational prestige that have emerged over time. Specifically, occupational prestige scores were divided into quartiles

based on the normal distribution of the original data, which may have changed substantially over the past 20 years. Caregiver occupation, as well as expected occupation, may not have been measured as precisely as optimal and, therefore, the noted findings (e.g. occupation has less of an influence on work experience than satisfaction or volition) should be treated with caution.

There are some limitations associated with using a Mechanical Turk online sample. Although data collected using Mechanical Turk have been empirically supported as representative of the general population (Buhrmester, Kwag, & Gosling, 2011; Duffy, Autin, & Bott, 2015; Goodman, Cryder, & Cheema, 2013), there is the challenge in not being able to know whether anonymous online participants are responding truthfully. Steps were taken in the data cleaning process to remove responses from participants who appeared to not be replying to questions honestly and thoughtfully (such as screening for extremely short response times, location of the IP address, and an unreasonably small age difference between the respondent's reported age and that of his/her caregiver), but some participants whose responses pose a threat to the validity of the results may have remained in the data set.

Although the intention of the original research design was to compare the Mechanical Turk sample with the community college sample, collecting data from the community college students proved to be challenging and the community college sample was too small to compare to the Mechanical Turk sample on any meaningful dimensions. The preliminary analyses showed some demographic differences between the two samples that may have resulted in interesting differences in the results of the full model. Thus, combining the samples likely resulted in less rich results than the original design would have, particularly when considering the influence of race/ethnicity, social class, education level, and immigration status.

Finally, there were some logistical issues that may have affected the results. The survey was long and took many participants a significant amount of time to complete. There may have been exhaustion effects reflected in some of the data, especially the differential status identity scale because it consists of 60 items and was at the end of the survey. However, this scale (as well as all of the other scales) had high reliability statistics and performed well in a confirmatory factor analysis (see Chapter 4).

Conclusions

The results of the current study demonstrate the important, multifaceted relationships between social class, family, and career development, as well as the significant role gender plays in these interactions. The research was initiated with the intentions of adding to our limited understanding of how social class factors into career development, as well as contributing to the empirical groundwork for interventions that promote social mobility, particularly for young adults from low-income backgrounds. The compelling evidence that parent work experiences are a powerful influence on individuals' work expectations and the mediating effect of social class identity on this relationship, it is clear that work is an intergenerational phenomenon and that the cyclical nature of social class may be, in part, due to this characteristic. The increased understanding provided by these results can help to develop interventions that have the potential to disrupt adverse patterns associated with career development and foster social mobility.

References

Abrahamson, B., & Drange, I. (2015). Ethnic minority students' career expectations in prospective professions: Navigating between ambitions and discrimination. *Sociology, 49*(2), 252-269.

Abramovitch, R., & Johnson, L. C. (1992). Children's perceptions of parental work. *Canadian Journal of Behavioural Science, 24*(3), 319-332.

Alessandri, S. M. (1992). Effects of maternal work status in single-parent families on children's perception of self and family and school achievement. *Journal of Experimental Child Psychology, 54*, 417-433.

Ali, S. R., McWhirter, E. H., & Chronister, K. M. (2005). Self-efficacy and vocational outcome expectations for adolescents of lower socioeconomic status: A pilot study. *Journal of Career Assessment, 13*(1), 40-58.

Ali, S. R., & Saunders, J. L. (2006). College expectations of rural Appalachian youth: An exploration of Social Cognitive Career Theory factors. *The Career Development Quarterly, 55*, 38-51

Allan, B. A., Autin, K. L., & Duffy, R. D. (2014). Examining social class and work meaning within the psychology of working framework. *Journal of Career Assessment, 22*(4), 543-561.

Alliman-Brissett, A. E., & Turner, S. L. (2010). Racism, parent support, and math-based career interests, efficacy, and outcome expectations among African American adolescents. *Journal of Black Psychology, 36*(2), 197-225.

Alliman-Brisset, A. E., Turner, S. L., & Skovholt, T. M. (2004). Parent support and African American adolescents' career self-efficacy. *Professional School Counseling, 7*(3), 124-132.

Allison, P. D. (2003). Missing data techniques for structural equation modeling. *Journal of Abnormal Psychology, 112*(4), 545-557.

American Association of Community Colleges. (2015). *2015 Community College Fast Facts*. Retrieved from http://www.aacc.nche.edu/AboutCC/Pages/fastfactsfactsheet.aspx.

Anderson, S. L., & Betz, N. E. (2001). Sources of social self-efficacy expectations: Their measurement and relation to career development. *Journal of Vocational Behavior, 58*, 98-117.

Argyle, M. (1994). *The psychology of interpersonal behavior*. New York, NY: Penguin Adult.

Ashby, J. S., & Schoon, I. (2010). Career success: The role of teenage career aspirations, ambition values, and gender in predicting adult social status and earnings. *Journal of Vocational Behavior, 77*, 350-360.

Ashby, J. S., & Schoon, I. (2012). Living the dream? A qualitative retrospective study exploring the role of adolescent aspirations across the life span. *Developmental Psychology, 48*(6), 1694-1706.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Barak, A., Feldman, S., & Noy, A. (1991). Traditionality of children's interests as related to their parents' gender stereotypes and traditionality of occupations. *Sex Roles*, *24*, 511-524.

Barling, J., Dupre, K. E., & Hepburn, C. G. (1998). Effects of parents' job insecurity on children's work beliefs and attitudes. *Journal of Applied Psychology, 83*(1), 112-118.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

Bayer, A., Grossman, J. B., & DuBois, D. L. (2015). Using volunteer mentors to improve the academic outcomes of underserved students: The role of relationships. *Journal of Community Psychology, 43(*4), 408-419.

Beam, M. R., Chen, C., & Greenberger, E. (2002). The nature of adolescents' relationships with their "very important" nonparental adults. *American Journal of Community Psychology, 30*(2), 305-325.

Betz, N. E., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counseling Psychology, 28*(5), 399-410.

Blackmon, S. M., & Thomas, A. J. (2014). Linking contextual affordances: Examining racial–ethnic socialization and parental career support among African American college students. *Journal of Career Development, 41*(4), 301-320.

Blustein, D. L., Chaves, A. P., Diemer, M. A., Gallagher, L. A., Marshall, K. G., Sirin, S., & Bhati, K. S. (2002). The forgotten half: The role of social class in the school-to-work transition. Journal of Counseling Psychology, 49(3), 311-323.

Blustein, D. L. (2004). Moving from the inside out: Further explorations of the family of origin/career development linkage. *The Counseling Psychologist, 32*(4), 603-611.

Blustein, D. L., Kenna, A. C., Murphy, K. A., DeVoy, J. E., & DeWine, D. B. (2005). Qualitative research in career development: Exploring the center and margins of discourse about careers and working. *Journal of Career Assessment, 13*, 351-370.

Blustein, D. L. (2006). *The psychology of working*. New York, NY: Routledge.

Blustein, D. L., Murphy, K. A., Kenny, M. E., Jernigan, M., Perez-Gualdron, L., Castaneda, T., Koepke, M., Land, M., Urbano, A., & Davis, O. (2010). Exploring urban students' constructions about school, work, race, and ethnicity. *Journal of Counseling Psychology, 57*(2), 248-254.

Blustein, D. L. (Ed.). (2013). *The Oxford handbook of the psychology of working*. New York, NY: Oxford University Press.

Blustein, D. L., Olle, C., Connors-Kellgren, A., & Diamonti, A. J. (2016). Decent work: A psychological perspective. *Frontiers in Psychology, 7*(407), 1-10. doi: 10.3389/fpsyg.2016.00407

Borman, C., & Colson, S. (1984). Mentoring – An effective career guidance technique. *The Vocational Guidance Quarterly*. March, 192-197.

Brown, M. T. (2004). The career development influence of family of origin: Considerations of race/ethnic group membership and class. *The Counseling Psychologist, 32*(4), 587-595.

Brown, M. T., Fukunaga, C., Umemoto, D., & Wicker, L. (1996). Annual Review, 1990-1996: Social class, work, and retirement behavior. *Journal of Vocational Behavior, 49*, 159-189.

Brown, M. T., D'Agruma, H., Brown, A., Sia, A., Yamini-Diouf, Y., Porter, S., et al. (2002, August). *Differential status identity: Construct, measurement, and initial validation.* Symposium presented during the annual convention of the American Psychological Association, Chicago.

Brown, S. D., & Lent, R. W. (Eds.). (2005). *Career development and counseling: Putting theory and research to work*. Hoboken, NJ: John Wiley & Sons, Inc.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6,* 3–5.

Castellino, D. R., Lerner, J. V., Lerner, R. M., and von Eye, A. (1998). Maternal employment and education: Predictors of young adolescent career trajectories. *Applied Developmental Science, 2*(3), 114-126.

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.

Chen, F., Bollen, K. A., Paxton, P., Curran, P. & Kirby, J. (2001). Improper solutions in structural equation models: Causes, consequences, and strategies. *Sociological Methods & Research, 29*, 468-508.

Coleman, J. S., Campbell, E., Hobson, C., McPartland, J., Mood, A., Weinfeld, F., & York, R. (1966). *Equality of educational opportunity*. Washington, DC: U.S. Government Printing Office.

Cortina, J. M., Chen, G., & Dunlap, W. P. (2001). Testing interaction effects in LISREL: Examination and illustration of available procedures. *Organizational Research Methods, 4*(4), 324-360.

Dahling, J. J., Melloy, R., and Thompson, M. N. (2013). Financial strain and regional unemployment as barriers to job search self-efficacy: A test of Social Cognitive Career Theory. *Journal of Counseling Psychology, 60*(2), 210-218.

Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment: An individual-differences model and its applications*. University of Minnesota Press.

de Graaf, P. M., & Kalmijn, M. (2001). Trends in the intergenerational transmission of cultural and economic status. *ACTA Sociologica, 44*, 51-66.

de Guzman, A. B., & Ok, C. K. (2013). The relations of employability skills to career adaptability among technical school students. *Journal of Vocational Behavior. 82*(3), 199-207

Di Ruggerio, E., Cohen, J. E., Cole, D. C., & Forman, L. (2015). Competing conceptualizations of decent work at the intersection of health, social and economic discourses. *Social Science & Medicine*, 133, 120-127. doi: 10.1016/j.socscimed.2015.03.026

Diemer, M. A. (2007). Parental and school influences upon the career development of poor youth of color. *Journal of Vocational Behavior, 70,* 502-524.

Diemer, M. A., Mistry, R. S., Wadsworth, M. E., Lopez, I., Reimers, F. (2013). Best practices in conceptualizing and measuring social class in psychological research. *Analyses of Social Issues and Public Policy, 13*(1), 77-113.

Diemer, M. A., & Ali, S. R. (2009). Integrating social class into vocational psychology: Theory and practice implications. *Journal of Career Assessment, 17*, 247–265.

Dillard, J. M., & Campbell, N. J. (1981). Influences of Puerto Rican, Black, and Anglo parents' career behavior on their adolescent children's career development. *The Vocational Guidance Quarterly*, *30*, 139-148.

DuBois, D. L., Holloway, B. E., Valentine, J. C., & Cooper, H. (2002). Effectiveness of mentoring programs for youth: A meta-analytic review. *American Journal of Community Psychology, 30*(2), 157-197.

DuBois, D. L., & Silverthorn, N. (2005). Characteristics of natural mentoring relationships and adolescent adjustment: Evidence from a national study. *The Journal of Primary Prevention, 26*(2), 69-92.

Duck, T., Middleton, J., Simpson, D., Thibodeaux, J., McDaniel, J., & Buboltz, W. (2013). Family of origin and career development. *Psychology of counseling.* (pp. 125-169) Nova Biomedical Books, Hauppauge, NY.

Duffy, R. D., & Autin, K. L. (2013). Disentangling the link between perceiving a calling and living a calling. *Journal of Counseling Psychology, 60*(2), 219-277.

Duffy, R. D., Autin, K. L., & Bott, E. M. (2015). Work volition and job satisfaction: Examining the role of work meaning and person-environment fit. The Career Development Quarterly, 63, 126-140.

Duffy, R. D., Bott, E. M., Allan, B. A., & Autin, K. L. (2014). Exploring the role of work volition within social cognitive career theory. *Journal of Career Assessment, 22*(3), 465-478.

Duffy, R. D., Bott, E. M., Allan, B. A., & Torrey, C. L. (2013). Examining a model of life satisfaction among unemployed adults. *Journal of Counseling Psychology, 60*(1), 53-63.

Duffy, R. D., Bott, E. M., Torrey, C. L., & Webster, G. D. (2013). Work volition as a critical moderator in the prediction of job satisfaction. Journal of Career Assessment, 21, 20–31.

Duffy, R. D., Diemer, M. A., Perry, J. C., Laurenzi, C., & Torrey, C. L. (2012). The construction and initial validation of the Work Volition Scale. *Journal of Vocational Behavior, 80*, 400-411.

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.

Eby, L. T., Allen, T. D., Evans, S. C., Ng, T., & DuBois, D. L. (2008). Does mentoring matter? A multidisciplinary meta-analysis comparing mentored and non-mentored individuals. *Journal of Vocational Behavior, 72*, 254-267.

Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in structural equation models. *Structural Equation Modeling: A Multidisciplinary Journal, 8*, 430–457.

Farmer, H. S. (1987). A multivariate model for explaining gender differences in career and achievement motivation. *Educational Researcher, 16*, 5-9.

Fassinger, R. E. (1987). Use of structural equation modeling in counseling psychology research. *Journal of Counseling Psychology, 34*(4), 425-436.

Fisher, T. A., & Griggs, M. B. (1995). Factors that influence the career development of African- American and Latino youth. *The Journal of Vocational Education Research*, *20* (2), 57-74.

Fisher, T. A., & Padmawidjaja, I. (1999). Parental influences on career development perceived by African American and Mexican American college students. *Journal of Multicultural Counseling and Development, 27*(3), 136-152.

Flores, L. Y., & Obasi, E. M. (2005). Mentors' influence on Mexican American students' career and educational development. *Journal of Multicultural Counseling and Development, 33*(3), 146-164.

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: Wiley.

Fruiht, V. M. (2015). Supportive others in the lives of college students and their relevance to hope. *Journal of College Student Retention: Research, Theory, & Practice, 17*(1), 64-87.

Fuligni, A. S., Brady-Smith, C., Tamis-LeMonda, C. S., Bradley, R. H., Chazan-Cohen, R., Boyce, L, & Brooks-Gunn, J. (2013). Patterns of supportive mothering with 1-, 2-, and 3-year olds by ethnicity in Early Head Start. *Parenting: Science and Practice, 13*(1), 44-57.

Fulcher, M. (2011). Individual differences in children's occupational aspirations as a function of parental traditionality. *Sex Roles, 64*, 117-131.

Galambos, N. L., & Silbereisen, R. K. (1987). Income change, parental life outlook, and adolescent expectations for job success. *Journal of Marriage and the Family*, *49*, 141-149.

Ganzeboom, H. B. G. (1992). A standard international socio-economic index of occupational status. *Social Science Research, 21*(1), 1-56.

Garcia, P. R. J. M., Restubog, S. L. D., Bordia, P., Bordia, S., & Roxas, R. E. O. (2015). Career optimism: The roles of contextual support and career decision-making self-efficacy. *Journal of Vocational Behavior, 88*, 10-18.

Gennetian, L. A., & Shafir, E. (2015). The persistence of poverty in the context of financial instability: A behavioral perspective. *Journal of Policy Analysis, 34*(4), 904-936.

Ginevra, M. C., Nota, L., & Ferrari, L. (2015). Parental support in adolescents' career development: Parents' and children's perceptions. *The Career Development Quarterly, 63*(1), 2-15.

Goodman, J. K., Cryder, C. E., & Cheema, A. (2013). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making, 26,* 213–224.

Gottfredson, L. S. (1981). Circumscription and comprise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology, 28*(6), 545-579.

Griffeth, R. W., Steel, R. P., Allen, D. G., & Bryan, N. (2005). The development of a multidimensional measure of job market cognitions: The Employment Opportunity Index (EOI). *Journal of Applied Psychology, 90*(2), 335-349.

Guan, Y., Deng, H., Sun, J., Wang, Y., Cai, Z., Ye, L., et al. (2013). Career adaptability, job search self-efficacy and outcomes: A three-wave investigation among Chinese university graduates. *Journal of Vocational Behavior, 83*(3), 561–570.

Guichard, J. (2005). Life-long self-construction. *International Journal for Educational and Vocational Guidance, 5*, 111-124. DOI 10.1007/s10775-005-8789-y

Guichard, J. (2009). Self-constructing. *Journal of Vocational Behavior. 75*, 251-258.

doi:10.1016/j.jvb.2009.03.004

Gutman, L. M., & Schoon, I. (2012). Correlates and consequences of uncertainty in career aspirations: Gender differences among adolescents in England. *Journal of Vocational Behavior, 80*, 608-618.

Hackett, G., & Betz, N. E. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior, 18*, 326-339.

Hartung, P. J., Porfeli, E. J., & Vondracek, F. W. (2005). Child vocational development: A review and reconsideration. *Journal of Vocational Behavior, 66*, 385–419.

Helms-Erikson, H., Tanner, J. L., Crouter, A. C., & McHale, S. M. (2000). Do women's provider-role attitudes moderate the links between work and family? *Journal of Family Psychology*, *14*, 658-670.

Heppner, M. J., & Scott, A. B. (2004). From whence we came: The role of social class in our families of origin. *The Counseling Psychologist, 32*(4), 596-602.

Hesketh, B., Elmslie, S., & Kaldor, W. (1990). Career compromise: An alternative account to Gottfredson's theory. *Journal of Counseling Psychology, 37*(1), 49-56.

Heyman, J., McNeill, K., & Earle, A. (2013). Filling a critical gap: Measuring work policies that affect families globally. *Community, Work & Family, 16*(3), 239-260. doi: 10.1080/13668803.2013.820091

Hill, N. E., Ramirez, C., & Dumka, L. E. (2003). Early adolescents' career aspirations: A qualitative study of perceived barriers and family support among low-income ethnically diverse adolescents. *Journal of Family Issues*, *24*, 934-959.

Hirschfield, R. R. (2000). Does revising the intrinsic and extrinsic subscales of the Minnesota Satisfaction Questionnaire short form make a difference? *Educational and Psychological Measurement, 60*(2), 255-270.

Hirschi, A. (2009). Career adaptability development in adolescence: Multiple predictors and effect on sense of power and life satisfaction. *Journal of Vocational Behavior, 74*, 145–155.

Hoffman, J. J., Goldsmith, E. B., & Hofacker, C. F. (1992). The influence of parents on female business students' salary and work hour expectations. *Journal of Employment Counseling*, *29*, 79-83.

Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources.

Howard, A. S., Budge, S. L., Gutierrez, B., Owen, A. D., Lemke, N., Jones, J. E., & Higgins, K. (2010). Future plans of urban youth: Influences, perceived barriers, and coping strategies. *Journal of Career Development , 37,* 655–676.

Howard, K. A. S., Carlstrom, A. H., Katz, A. D., Chew, A. Y., Ray, C., Laine, L., & Caulum, D. (2011). Career aspirations of youth: Untangling race/ethnicity, SES, and gender. *Journal of Vocational Behavior, 79*, 98-109.

Jadidian, A., & Duffy, R. D. (2012). Work volition, career decision self-efficacy, and academic satisfaction: An examination of mediators and moderators. *Journal of Career Assessment, 20*(2), 154-165.

Jencks, C. (1972). *Inequality: A reassessment of the effect of family and schooling in America*. New York: Basic Books.

Johnson, R. C., Nagoshi, C. T., Ahern, F. M., Wilson, J. R., DeFries, J. C., McClearn, G. E., et al. (1983). Family background, cognitive ability, and personality as predictors of educational and occupational attainment. *Social Biology*, *30*, 86-100.

Johnston, C. S., Luciano, E. C., Maggiori, C., Ruch, W., & Rossier, J. (2013). Validation of the German version of the Career Adapt-Abilities Scale and its relation to orientations to happiness and work stress. *Journal of Vocational Behavior, 83*(3), 295–304.

Kalmijn. (1991). Assortative mating by cultural and economic occupational status. *American Journal of Sociology, 100*, 422-452.

Kenny, M. E., Blustein, D. L., Chaves, A., Grossman, J. M., & Gallagher, L. A. (2003). The role of perceived barriers and relational support in the educational and vocational lives of urban high school students. *Journal of Counseling Psychology, 50*(2), 142-155.

Koen, J., Klehe, U. C., & Van Vianen, A. E. M. (2012). Training career adaptability to facilitate a successful school-to-work transition. *Journal of Vocational Behavior, 81*, 395-408.

Kohn, M. L. (1969). *Class and conformity: A study in values*. Homewood, IL: Dorsey.

Kohn, M. L. (1977). *Class and conformity: A study in values* (2nd ed.). Homewood, IL: Dorsey.

Kotrlik, J. W., & Harrison, B. C. (1989). Career decision patterns of high school seniors in Louisiana. *Journal of Vocational Education*, *14*, 47-65.

Krugman, P. (2012). *End this depression now!* New York: WW Norton & Company.

Kush, K., & Cochran, L. (1993). Enhancing a sense of agency through career planning. *Journal of Counseling Psychology*, *40*, 434-439.

Lareau, A. (2002). Invisible inequality: Social class and childrearing in Black families and White families. *American Sociological Review, 67*(5), 747-776.

Lee, C. C. (1984). Predicting career choice attitudes of rural Black, White, and Native American high school students. *Vocational Guidance Quarterly, 32*(3), 177-184.

Lent, R. W., & Brown, S. D. (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the lifespan. *Journal of Counseling Psychology*, *60*(4), 557-568.

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*, 79-122.

Lent, R. W., Brown, S. D., & Hackett, G. (1996). Career development from a social cognitive perspective. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development* (3rd ed., pp. 373-421). San Francisco: Jossey-Bass.

Lent, R. W., Brown, S. D., & Hackett, G. (2000). Contextual supports and barriers to career choice: A social cognitive analysis. *Journal of Counseling Psychology, 47*(1), 36-49.

Lent, R. W., and Lopez, F. G. (2002). Cognitive ties that bind: A tripartite view of efficacy beliefs in growth-promoting relationships. Journal of Social and Clinical Psychology, 21(3), 256-286.

Lent, R. W. (2004). Toward a unifying theoretical and practical perspective on well being and psychosocial adjustment. *Journal of Counseling Psychology, 51,* 482–509. doi:10.1037/0022-0167.51.4.482

Lerner, J. V. (1994). *Working women and their families.* Thousand Oaks, CA: Sage.

Li, C., & Kerpelman, J. (2007). Parental influences on young women's certainty about their career aspirations. *Sex Roles, 56*, 105-115.

Liang, B., Bogat, A. G., & Duffy, N. (2014). Gender in mentoring relationships. In D. L. DuBois and M. J. Karcher (Eds.), *Handbook of youth mentoring*. (pp. 159-174). Thousand Oaks, CA: Sage Publications, Inc.

Lieblich, A., Tuval-Mashiach, R., & Zilber, T. (1998). *Narrative research: Reading, analysis, and interpretation*. Thousand Oaks, CA: Sage

Lim, V. K. G., & Sng, Q. S. (2006). Does parental job insecurity matter? Money anxiety, money motives, and work motivation. *Journal of Applied Psychology, 91*(5), 1078-1087.

MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology, 51*, 201-226.

MacCullum, R. C., Browne, M. W., and Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods, 1*(2), 130-149.

Maggiori, C., Johnston, C. S., Krings, F., Massoudi, K., & Rossier, J. (2013). The role of career adaptability and work conditions on general and professional well-being. *Journal of Vocational Behavior, 83(*3), 437–449.

Marjoribanks, K. (1984). Ethnicity, family environment, and adolescents' aspirations: A follow- up study. *Journal of Educational Research*, *77*, 166-171.

Martens, M. P. (2005). The use of structural equation modeling in counseling psychology

research. *The Counseling Psychologist, 33*(3), 296-298.

Matsui, T., Tsuzuki, Y., & Onglatco, M. (1999). Some motivational bases for work and home orientation among Japanese college women: A rewards/costs analysis. *Journal of Vocational Behavior*, *54*, 114-126.

Matthys, M. (2012). *Cultural capital, identity, and social mobility: The life course of working-class university graduates*. Abingdon: Routledge.

McDonald, S., Erickson, L., Johnson, M. K., & Elder, G. H. (2007). Informal mentoring and young adult employment. *Social Science Research, 36*, 1328-1347.

McDonald, R. P., & Ho, M. R. (2002). Principles and practice in reporting structural equation analyses. *Psychological Methods, 7*(1), 64-82.

McDonald, S., & Lambert, J. (2014). The long arm of mentoring: A counterfactual analysis of natural youth mentoring and employment outcomes in early careers. *American Journal of Community Psychology, 54*, 262-273.

Mertler, C. A., & Vannatta, R. A. (2005). *Advanced and multivariate statistical methods* (3rd edition). Glendale, CA: Pyrczak Publishing

Messersmith, E. E., Garrett, J. L., Davis-Kean, P. E., Malanchuk, O., & Eccles, J. S. (2008). Career development from adolescence through emerging adulthood: Insights from information technology occupations. *Journal of Adolescent Research, 23*, 206-228

Metheny, J., & McWhirter, E. H. (2013). Contributions of social status and family support to college students' career decision self-efficacy and outcome expectations. *Journal of Career Assessment, 21*(3), 378-394.

Metz, A. J., Fouad, N., & Ihle-Helledy, K. (2009). Career aspirations and expectations of college students: Demographic and labor market comparisons. *Journal of Career Assessment, 17*(2), 155-171.

Mortimer, J. T. (1974). Patterns of intergenerational occupational movement: A smallest-space analysis. *American Journal of Sociology*, *5*, 1278-1295.

Mortimer, J. T. (1976). Social class, work and family: Some implications of the father's occupation for family relationships and son's career decisions. *Journal of Marriage and Family*, *38*, 241-256.

Mullis, R. L., Mullis, A. K., & Gerwels, D. (1998). Stability of vocational interests among high school students. *Adolescence*, *33*, 699-707.

Nakao, K., & Treas, J. (1994). Updating occupational prestige and socioeconomic scores: How the new measures measure up. *Sociological Methodology, 24*, 1-72.

Noble, K. G., & Farah, M. J. (2013). Neurocognitive consequences of socioeconomic disparities: The intersection of cognitive neuroscience and public health. *Developmental Science, 16*(5), 639-640.

Novakovic, A., & Fouad, N. A. (2012). Background, personal, and environmental influences on the career planning of adolescent girls. *Journal of Career Development, 40*(3), 223-244.

O'Brien, K. E., Biga, A., Kessler, S. R., & Allen, T. D. (2010). A meta-analytic investigation of gender differences in mentoring. *Journal of Management, 36*(2), 537-554.

Otto, L. B. (2000). Youth perspectives on parental career influence. *Journal of Career Development, 27*(2), 111-118.

Paa, H. K., & McWhirter, E. H. (2000). Perceived influences on high school students' current career expectations. *The Career Development Quarterly, 49*, 29-44.

Perry, J. C. (2008). School engagement among urban youth of color: Criterion pattern effects of vocational exploration and racial identity. *Journal of Career Development, 34*, 397–422.

Perry, J. C., Liu, X., & Pabian, Y. (2010). School engagement as a mediator of academic performance among urban youth: The role of career preparation, parental career support, and teacher support. *The Counseling Psychologist, 38*, 269–295.

Perry, J. C., & Wallace, E. (2013). Career issues and social class. In W. M. Liu (Ed.) *The Oxford Handbook of Social Class in Counseling*. New York: Oxford University Press.

Poole, M. E., Langan-Fox, J., Ciavarella, M., & Omodei, M. (1991). A contextual model of professional attainment: Results of a longitudinal study of career paths of men and women. *The Counseling Psychologist*, *19*, 603-624.

Porfeli, E. J., & Savickas, M. L. (2012). Career Adapt-Abilities Scale—USA form: Psychometric properties and relation to vocational identity. *Journal of Vocational Behavior, 80*(3), 748–753.

Ragins, B. R., & McFarlin, D. B. (1990). Perceptions of mentor roles in cross-gender mentoring relationships. *Journal of Vocational Behavior, 37*, 321-339.

Raque-Bogdan, T. L., Klingman, E. A., Martin, H. M., & Lucas, M. S. (2012). Career-related parent support and career barriers: An investigation of contextual variables. *The Career Development Quarterly, 61*(4), 339-353.

Richardson, M. S. (2012). Counseling for work and relationship. *The Counseling Psychologist, 40*(2), 190-242.

Riggio, H. R., & Desrochers, S. J. (2006). Maternal employment: Relations with young adults' work and family expectations and self-efficacy. *American Behavioral Scientist, 49*, 1328-1353.

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), 123-239.

Rottinghaus, P. J., & Miller, A. D. (2013). Convergence of personality frameworks within vocational psychology. In W. B. Walsh, M. L. Savickas, & P. J. Hartung (Eds.), *Handbook of vocational psychology (4th ed.)* (pp. 105-132). New York: Routledge.

Savickas, M. L. (1997). Career adaptability: An integrative construct for life-span, life-space theory. *The Career Development Quarterly, 45*(3), 247-259.

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: Wiley.

Savickas, M. L. (2012). Life design: A paradigm for career intervention in the 21st century. *Journal of Counseling and Development, 90*(1), 13-19. doi: 10.1111/j.1556-6676.2012.00002.x

Savickas, M. L., & Porfeli, E. J. (2012). Career Adapt-Abilities Scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior, 80*(3), 661–673.

Sabates, R., Harris, A. L., & Staff, J. (2011). Ambition gone awry: The long-term socioeconomic consequences of misaligned and uncertain ambitions in adolescence. *Social Science Quarterly, 92*(4), 959-977.

Schmitt-Wilson, S. (2013). Social class and expectations of rural adolescents: The role of parental expectations. *The Career Development Quarterly, 61*(3), 226-239.

Schoon, I., Martin, P., & Ross, A. (2007). Career transitions in times of social change: His and her story. *Journal of Vocational Behavior, 70*, 78-96.

Schoon, I., Parsons, S., & Sacker, A. (2004). Socioeconomic adversity, educational resilience, and subsequent levels of adult adaptation. *Journal of Adolescent Research*, *19*, 383-404.

Schoon, I., & Polek, E. (2011). Teenage career aspirations and adult career attainment: The role of gender, social background, and general cognitive ability. *International Journal of Behavioral Development, 35*(3), 210-217.

Schuette, C. T., Ponton, M. K., & Charlton, M. L. (2012). Middle school children's career aspirations: Relationship to adult occupations and gender. *The Career Development Quarterly, 60*(1), 36-46.

Schulenberg, J. E., Vondracek, F. W., & Crouter, A. C. (1984). The influence of the family on vocational development. *Journal of Marriage and Family, 46*(1), 129-143.

Schulman, S. Vasalampi, K., Barr, T., Livine, Y., Nurmi, J. E., & Pratt, M. W. (2014). Typologies and precursors of career adaptability patterns among emerging adults: A seven year longitudinal study. *Journal of Adolescence, 37*, 1505-1515.

Schultheiss, D. E. P., Kress, H. M., Manzi, A. J., & Glasscock, J. M. J. (2001). Relational influences in career development: A qualitative inquiry. *The Counseling Psychologist*,

29, 214- 239.

Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. *Science, 338*, 682-685.

Soresi, S., Nota, L., & Ferrari, L. (2012). Career Adapt-Abilities Scale—Italian form: Psychometric properties and relationships to breadth of interests, quality of life, and perceived barriers. *Journal of Vocational Behavior, 80*(3), 705–711.

Stiglitz, J. E. (2012). *The price of inequality: How today's society endangers our future*. New York: W. W. Norton & Company.

Strauss, K., Griffin, M. A., & Parker, S. K. (2012). Future work selves: How salient hoped-for identities motivate proactive career behaviors. *Journal of Applied Psychology, 97*(3), 580-598.

Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior, 16*(3), 282-298.

Taber, B. J., & Blankenmeyer, M. (2015). Future work self and career adaptability in the prediction of proactive career behaviors. *Journal of Vocational Behavior, 86*, 20-27.

Tang, M., Pan, W., & Newmeyer, M. D. (2008). Factors influencing high school students' career aspirations. *Professional School Counseling, 11*(5), 285-295.

ter Bogt, T., Maaijmakers, Q., & van Well, F. (2005). Socialization and development of the work ethic among adolescents and young adults. *Journal of Vocational Behavior, 66*, 420-437.

Thompson, M. N., & Dahling, J. J. (2010). Image theory and career aspirations: Indirect and interactive effects of status-related variables. *Journal of Vocational Behavior, 77*, 21-29.

Thompson, M. N., & Dahling, J. J. (2012). Perceived social status and learning experiences in Social Cognitive Career Theory. *Journal of Vocational Behavior, 80*, 351-361.

Thompson, M. N., Nitzarim, R. S., Her, P., & Dahling, J. J. (2013). A grounded theory exploration of undergraduate experiences of vicarious unemployment. *Journal of Counseling Psychology, 60*(3), 421-431.

Thompson, M. N., & Subich, L. M. (2007). Exploration and validation of the Differential Status Identity Scale. Journal of Career Assessment, 15(2), 227-239.

Thompson, M. N., and Subich, L. M. (2008). The relation of social status to the career decision-making process. *Journal of Vocational Behavior, 69*, 289-301.

Thompson, M. N., and Subich, L. M. (2011). Social status identity: Antecedents and vocational outcomes. *The Counseling Psychologist, 39*(5), 735-763.

Tinsley, D. J. (1993). Extensions, elaborations, and construct validation of the theory of work

adjustment. *Journal of Vocational Behavior, 43*(1), 67-74.

Tolentino, L. R., Garcia, P. R. J. M., Restubog, S. L. D., Bordia, P., & Tang, R. L. (2013). Validation of the Career Adapt-Abilities Scale and an examination of a model of career adaptation in the Philippine context. *Journal of Vocational Behavior, 83*(3), 410–418.

Tovar-Murray, D., Jenifer, E. S., Andrusyk, J., D'Angelo, R., & King, T. (2010). Racism-related stress and ethnic identity as determinants of African American college students' career aspirations. *The Career Development Quarterly, 60*(3), 254-262.

Trice, A. D. (1991). Stability of children's career aspirations. *The Journal of Genetic Psychology: Research and Theory on Human Development, 152*(1), 137-139.

Trice, A. D., & Knapp, L. (1992). The relationship of children's career aspirations to parents' occupations. *Journal of Genetic Psychology*, *153*, 355-357.

Trice, A. D., & Tillapaugh, P. (1991). Children's estimates of their parents' job satisfaction. *Psychological Reports, 69*, 63–66.

Turner, S., & Lapan, R. T. (2002). Career self-efficacy and perceptions of parent support in adolescent career development. *The Career Development Quarterly, 51*(1), 44-55.

Turner, S. L., Alliman-Brissett, A., Lapa, R. T., Udipi, S., & Ergun, D. (2003). The career-related parent support scale. *Measurement and Evaluation in Counseling and Development, 36*, 83-94.

Vondracek, F. W., Lerner, R. M., & Schulenberg, J. E. (1986). *Career development: A life-span developmental approach*. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Wagmiller, R. L., & Adelman, R. M. (2009). Childhood and intergenerational poverty: The long-term consequences of growing up poor. National Center for Children in Poverty. Retrieved from http://hdl.handle.net/10022/AC:P:8870

Wall, J., Covell, K., & MacIntyre, P. (1999). Implications of social supports for adolescents' education and career aspirations. *Canadian Journal of Behavioral Science*, *31*, 63-71.

Watson, M., & McMahon, M. (2005). Children's career development: A research review from a learning perspective. *Journal of Vocational Behavior, 67*, 119-132.

Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Manual for the Minnesota Satisfaction Questionnaire*. St. Paul, MN: University of Minnesota.

Weiss, D. J., Dawis, R. V., England, G. W., & Lofquist, L. H. (1977). *Minnesota Satisfaction Questionnaire Short Form*. St. Paul, MN: University of Minnesota.

Whiston, S.C., & Keller, B.K. (2004). The influences of the family of origin on career development: A review and analysis. *The Counseling Psychologist, 32*(4), 493-568.

Widaman, K. F. (2006). Missing data: What to do with or without them. *Monographs for the*

Society for Research in Child Development, 71, 42-64.

Woodside, M., Gibbons, M. M., Davison, J., Hannon, C., & Sweeney, J. R. (2012). Work and career experiences of men from families without college experiences. *The Qualitative Report, 17*(53), 1-16.

Young, R. A., Valach, L., Ball, J., Paseluikho, M. A., Wong, Y. S., DeVries, R. J., McLean, H., & Turkel, H. (2001). Career development in adolescence as a family project. *Journal of Counseling Psychology, 48*(2), 190-202.

Zacher, H. (2014). Career adaptability predicts subjective career success above and beyond personality traits and core self-evaluations. *Journal of Vocational Behavior, 84*, 21-30.

Zhang, J., Yuen, M., & Chen, G. (2015). Career-related parental support for vocational school students in china. *International Journal for the Advancement of Counselling, 37*(4), 346-354.

Appendix A
Measures

Caregiver Work Volition
Adapted from Duffy et al. (2012)

Please think about your primary caregiver when answering the following questions.

	Strongly Disagree	*Disagree*	*Somewhat Disagree*	*Neutral*	*Somewhat Agree*	*Agree*	*Strongly Agree*
1. He/she has been able to choose the jobs he/she has wanted	**1**	**2**	**3**	**4**	**5**	**6**	**7**
2. He/she can do the kind of work he/she wants, despite external barriers	**1**	**2**	**3**	**4**	**5**	**6**	**7**
3. He/she seems to feel total control over his/her job choices	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4. He/she can change jobs if he/she wants to	**1**	**2**	**3**	**4**	**5**	**6**	**7**
5. Due to his/her financial situation, he/she needed to take any job he/she could find	**1**	**2**	**3**	**4**	**5**	**6**	**7**
6. When looking for work, he/she took whatever he/she could get	**1**	**2**	**3**	**4**	**5**	**6**	**7**
7. In order to provide for my family, he/she often had to take jobs he/she did not enjoy	**1**	**2**	**3**	**4**	**5**	**6**	**7**
8. He/she didn't like							

her job, but it was impossible for him/her to find a new one	**1**	**2**	**3**	**4**	**5**	**6**	**7**
9. The only thing that mattered in choosing a job was to make ends meet	**1**	**2**	**3**	**4**	**5**	**6**	**7**
10. It seemed that outside forced really limited his/her work and career options	**1**	**2**	**3**	**4**	**5**	**6**	**7**
11. The state of the economy prevented him/her from working the job he/she wanted	**1**	**2**	**3**	**4**	**5**	**6**	**7**
12. Negative factors outside his/her control had a large impact on his/her job choices	**1**	**2**	**3**	**4**	**5**	**6**	**7**
13. The jobs he/she really wanted didn't exist in our area	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Caregiver Work Satisfaction

When answering the following questions, please think about the experiences of your primary caregiver during your childhood and adolescence. How satisfied did your primary caregiver seem with each of the following aspects the job he/she had for the majority of your upbringing?

	Very Dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
1. Being able to keep busy all the time	1	2	3	4	5
2. The chance to work alone on the job	1	2	3	4	5
3. The chance to do different things from time to time	1	2	3	4	5
4. The chance to be "somebody" in the community	1	2	3	4	5
5. The way his/her boss handled his/her workers	1	2	3	4	5
6. The competence of his/her supervisor in making decisions	1	2	3	4	5
7. Being able to do things that didn't go against his/her conscience	1	2	3	4	5
8. The way the job provided for steady employment	1	2	3	4	5
9. The chance to do things for other people	1	2	3	4	5
10. The chance to tell people what to do	1	2	3	4	5
11. The chance to do something that made					

use of his/her abilities	**1**	**2**	**3**	**4**	**5**
12. The way company policies were put into practice	**1**	**2**	**3**	**4**	**5**
13. The pay and the amount of work	**1**	**2**	**3**	**4**	**5**
14. The chances of advancement in the job	**1**	**2**	**3**	**4**	**5**
15. The freedom to use his/her judgment	**1**	**2**	**3**	**4**	**5**
16. The chance to try his/her own methods of doing the job	**1**	**2**	**3**	**4**	**5**
17. The working conditions	**1**	**2**	**3**	**4**	**5**
18. The way co-workers got along with each other	**1**	**2**	**3**	**4**	**5**
19. The praise he/she got for doing a good job	**1**	**2**	**3**	**4**	**5**
20. The feeling of accomplishment he/she got from the job	**1**	**2**	**3**	**4**	**5**

Career-Related Parent Support Scale
Adapted from Turner, Alliman-Brisset, Lapan, Udipi, & Ergun (2003)

When answering the following questions, please think about the way you and your primary caregiver interacted when you were in middle school and high school.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. My caregiver rewarded me for doing my schoolwork well	**1**	**2**	**3**	**4**	**5**
2. My caregiver taught me things that I will someday be able to use at my job	**1**	**2**	**3**	**4**	**5**
3. My caregiver helped me pick out classes that will help me in my career	**1**	**2**	**3**	**4**	**5**
4. My caregiver gave me chores that taught me skills I can use in my future career	**1**	**2**	**3**	**4**	**5**
5. My caregiver helped me do my homework	**1**	**2**	**3**	**4**	**5**
6. My caregiver let me do activities outside of school that taught me future job-related skills	**1**	**2**	**3**	**4**	**5**
7. My caregiver talked to me about how what I was learning would someday be able to help me on the job	**1**	**2**	**3**	**4**	**5**
8. My caregiver helped me take pride in my work	**1**	**2**	**3**	**4**	**5**
9. My caregiver told me about his/her job(s)	**1**	**2**	**3**	**4**	**5**
10. My caregiver showed me					

the kind of things he/she did at work	**1**	**2**	**3**	**4**	**5**
11. My caregiver took me to his/her work	**1**	**2**	**3**	**4**	**5**
12. My caregiver had me meet someone he/she worked with	**1**	**2**	**3**	**4**	**5**
13. My caregiver showed me where he/she work	**1**	**2**	**3**	**4**	**5**
14. My caregiver told me about things that happened to him/her at work	**1**	**2**	**3**	**4**	**5**
15. My caregiver told me about the kind of work he/she did	**1**	**2**	**3**	**4**	**5**
16. My caregiver praised me when I learned job-related skills	**1**	**2**	**3**	**4**	**5**
17. My parents encourage me to learn as much as I can at school	**1**	**2**	**3**	**4**	**5**
18. My parents encourage me to make good grades	**1**	**2**	**3**	**4**	**5**
19. My caregiver encouraged me to go to a technical school or college or get a job after I graduated high school	**1**	**2**	**3**	**4**	**5**
20. My caregiver told me he/she expected me to finish school	**1**	**2**	**3**	**4**	**5**
21. My caregiver talked to me about what kind of job he/she would like me to have	**1**	**2**	**3**	**4**	**5**
22. My caregiver talked to me when I was worried					

about my future career	**1**	**2**	**3**	**4**	**5**
23. My caregiver said things that made me happy when I learned something I might use in a job sometime	**1**	**2**	**3**	**4**	**5**
24. My caregiver talked to me about what fun my future job could be	**1**	**2**	**3**	**4**	**5**
25. My caregiver told me he/she was proud of me when I did well in school	**1**	**2**	**3**	**4**	**5**
26. Sometimes my caregiver and I got excited when we talked about what a great job I might have someday	**1**	**2**	**3**	**4**	**5**
27. My caregiver knew I was sometimes scared about my future career	**1**	**2**	**3**	**4**	**5**

Demographic Form

Please complete the following information for ***yourself*.**

Age: _____

Gender: Male Female Other

Race/Ethnicity: _____

Current employment status (circle all that apply): Unemployed Working Full-Time

Working Part-Time Full-Time Student Part-Time Student

Highest educational level: Less Than High School High School

Associates' Degree or Certificate Bachelor's Degree Graduate Degree

Marital Status: Single Divorced Married Remarried

Partnered

Please complete the following information for the person you was your ***primary caregiver*** for the majority of your life.

Age: _____

Gender: Male Female Other

Race/Ethnicity: _____

Current employment status (circle all that apply): Unemployed

Working Full-Time Working Part-Time Full-Time Student

Part-Time Student Retired

Highest educational level: Less Than High School High School

Associates' Degree or Certificate Bachelor's Degree Graduate Degree

Marital Status: Single Divorced Married

Remarried Partnered Widowed

Career Agency, Occupational Awareness, and Negative Career Outlook
Subscales of "The Career Futures Inventory – Revised"
(Rottinghaus, Buelow, Matyja, & Schneider, 2012)

*This is not the order in which items will be presented to participants, but has been organized for clarity as to which items are related to a given subscale

Please indicate the extent to which you agree with each of the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Career Agency					
1. I can perform a successful job search	**1**	**2**	**3**	**4**	**5**
2. I can adapt to change in the world of work	**1**	**2**	**3**	**4**	**5**
3. I understand my work-related interests	**1**	**2**	**3**	**4**	**5**
4. I am aware of priorities in my life	**1**	**2**	**3**	**4**	**5**
5. I can establish a plan for my future career	**1**	**2**	**3**	**4**	**5**
6. I am aware of my strengths	**1**	**2**	**3**	**4**	**5**
7. I am in control of my career	**1**	**2**	**3**	**4**	**5**
8. I will successfully manage my present career transition process	**1**	**2**	**3**	**4**	**5**
9. I understand my work-related values	**1**	**2**	**3**	**4**	**5**
10. I can overcome potential barriers that may exist in my career	**1**	**2**	**3**	**4**	**5**
Negative Career Outlook					
11. I doubt my career will turn out well in the future	**1**	**2**	**3**	**4**	**5**
12. It is unlikely that good things will happen in my career	**1**	**2**	**3**	**4**	**5**
13. I lack the energy to pursue my					

career goals	**1**	**2**	**3**	**4**	**5**
14. Thinking about my career frustrates me	**1**	**2**	**3**	**4**	**5**
Occupational awareness					
15. I am good at understanding job market trends	**1**	**2**	**3**	**4**	**5**
16. I keep up with trends in at least one occupation or industry of interest to me	**1**	**2**	**3**	**4**	**5**
17. I keep current with job market trends	**1**	**2**	**3**	**4**	**5**
18. I keep current with changes in technology	**1**	**2**	**3**	**4**	**5**
19. I understand how economic trends affect career opportunities available to me	**1**	**2**	**3**	**4**	**5**
20. I do not understand job market trends	**1**	**2**	**3**	**4**	**5**

Mentor Role Instrument
Coach, Role Model, Friendship, and Counselor Subscales
Ragins and McFarlin (1990)

**Please note, this is not the order in which the items will be presented. They will be ordered randomly.

Did you have a mentor (an adult other than your primary caregiver who played an important role in your life) when you were an adolescent (ages 12-19)?

Yes No

If you answered "yes" to the previous question, please complete the questions below. If you answered "no," you may move on to the next section of the survey.

My mentor…

	Strongly Disagree	Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Agree	Strongly Agree
Suggested specific strategies for achieving career aspirations	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Helped me learn about different jobs	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Is someone I could confide in	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Provided support and encouragement	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Was someone I could trust	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Served as a role model for me	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Represented who I wanted to be	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Was someone I identified with	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Guided my personal development	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Served as a sounding board for me to develop and understand myself	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Guided my professional development	**1**	**2**	**3**	**4**	**5**	**6**	**7**

Differential Status Identity Scale

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

Very Much Below Average	Below Average	Equal	Above Average	Very Much Above Average
-2	-1	0	+1	+2

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

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

-2 -1 0 +1 +2

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

-2 -1 0 +1 +2

3. Ability to join a health club/fitness center

-2 -1 0 +1 +2

4. Ability to afford regular dental visits

-2 -1 0 +1 +2

5. Ability to afford dry cleaning services on a regular basis

-2 -1 0 +1 +2

6. Ability to travel recreationally

-2 -1 0 +1 +2

7. Ability to travel overseas for business and/or pleasure

-2 -1 0 +1 +2

8. Ability to shop comfortably in upscale department stores, such as Saks Fifth Avenue

-2 -1 0 +1 +2

9. Potential for receiving a large inheritance

-2 -1 0 +1 +2

10. Ability to secure loans with low interest rates

-2 -1 0 +1 +2

11. Ability to hire professional money managers

-2 -1 0 +1 +2

12. Ability to go to a doctor or hospital of your own choosing

-2 -1 0 +1 +2

13. Ability to hire others for domestic chores (e.g. cleaning, gardening, child care, etc.)

-2 -1 0 +1 +2

14. Ability to afford prescription medicine

-2 -1 0 +1 +2

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

-2 -1 0 +1 +2

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

Very Much Below Average	**Below Average**	**Equal**	**Above Average**	**Very Much Above Average**
-2	-1	0	+1	+2

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

1. Home(s) -2 -1 0 +1 +2
2. Land -2 -1 0 +1 +2
3. Stocks and Bonds -2 -1 0 +1 +2
4. Money -2 -1 0 +1 +2
5. Cars -2 -1 0 +1 +2

6.	Computers	-2	-1	0	+1	+2
7.	New Appliances (Washers, Dryers, Refrigerators, etc.)	-2	-1	0	+1	+2
8.	Amount of Education	-2	-1	0	+1	+2
9.	Quality of High School(s) Attended	-2	-1	0	+1	+2
10.	Life Insurance	-2	-1	0	+1	+2
11.	Quality of Health Insurance	-2	-1	0	+1	+2
12.	Savings	-2	-1	0	+1	+2
13.	Maids or Cooks	-2	-1	0	+1	+2
14.	Close Connections to the Rich and Powerful	-2	-1	0	+1	+2
15.	Quality of Health Care	-2	-1	0	+1	+2

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

Very Much Below Average	**Below Average**	**Equal**	**Above Average**	**Very Much Above Average**
-2	-1	0	+1	+2

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

1. Contact people in high places for a job or position.

   -2 -1 0 +1 +2

2. Contact people who can help you get out of legal problems.

   -2 -1 0 +1 +2

3. Start in a high-profile position of responsibility.

   -2 -1 0 +1 +2

4. Get information and services not available to the general public.

-2 -1 0 +1 +2

5. Control how your group is represented in history, media, and the public.

-2 -1 0 +1 +2

6. Receive a fair trial.

-2 -1 0 +1 +2

7. Become a millionaire by legal means.

-2 -1 0 +1 +2

8. Control the type and amount of work of others.

-2 -1 0 +1 +2

9. Control the salary and compensation of others.

-2 -1 0 +1 +2

10. Influence the laws and regulations of the your state or city/town.

-2 -1 0 +1 +2

11. Influence state or federal educational policies.

-2 -1 0 +1 +2

12. Influence the policies of a corporation.

-2 -1 0 +1 +2

13. Influence where and when stores are built and operated.

-2 -1 0 +1 +2

14. Influence where and when waste treatment facilities are built and operated.

-2 -1 0 +1 +2

15. Influence the decision-making of foundations, charities, hospitals, museums, etc.

-2 -1 0 +1 +2

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

	Much Less -2	**Less** -1	**Equal** 0	**More** +1	**Much More** +2
1.	Ethnic/racial group		-2 -1	0 +1	+2
2.	Socioeconomic group		-2 -1	0 +1	+2
3.	Nationality		-2 -1	0 +1	+2

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

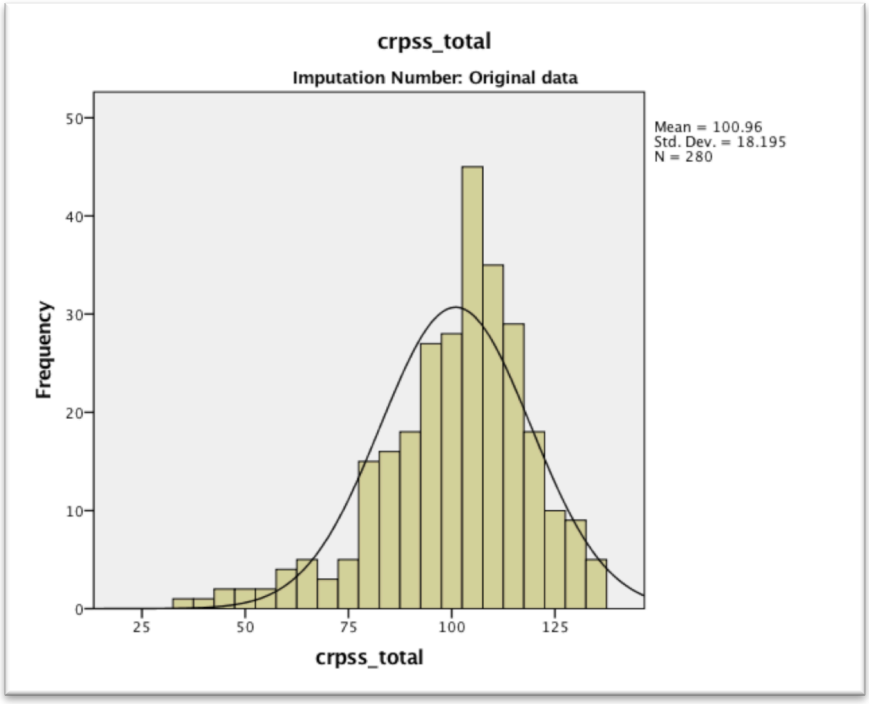
	Much Less -2	**Less** -1	**Equal** 0	**More** +1	**Much More** +2
1.	Neighborhood in which you live		-2 -1	0 +1	+2
2.	Type of home you live in		-2 -1	0 +1	+2
3.	Places where you shop		-2 -1	0 +1	+2
4.	Places where you relax and have fun		-2 -1	0 +1	+2
5.	Type and amount of education you have		-2 -1	0 +1	+2
4.	Type of car you drive		-2 -1	0 +1	+2
5.	Position you hold in society		-2 -1	0 +1	+2

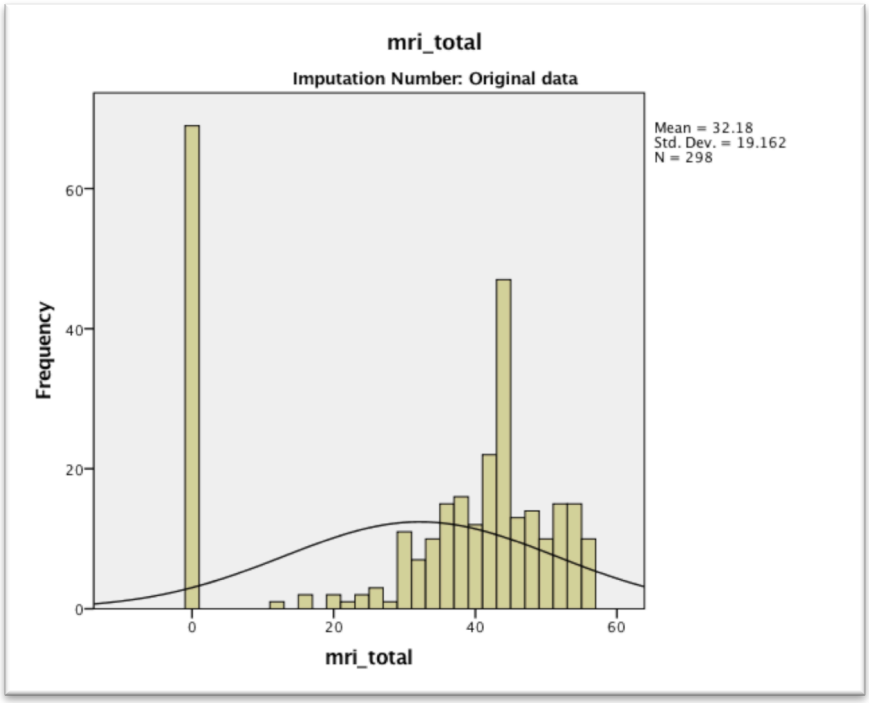
Compared to how society values or appreciates the average U.S. citizen, how does society value or appreciate your . . .?

	Much Less -2	**Less** -1	**Equal** 0	**More** +1	**Much More** +2
1.	Physical appearance		-2 -1	0 +1	+2
2.	Occupational success		-2 -1	0 +1	+2
3.	Financial success		-2 -1	0 +1	+2
4.	Physical abilities		-2 -1	0 +1	+2
5.	Economic background		-2 -1	0 +1	+2

Appendix B
Tables and Figures

Histograms for CRPSS and MRI





Confirmatory Factor Analysis of Scales

Items Removed

Scale	Item	Item Content
CGWV*	1	He/she has been able to choose the jobs he/she has wanted
	2	He/she can do the kind of work he/she wants
	3	He/she seems to feel total control over his/her job choices
	4	He/she can change jobs if he/she wants to
MSQ	10	The chance to tell people what to do
CRPSS	21	My caregiver talked to me about what kind of job he/she would like me to have
	27	My caregiver knew I was sometimes scared about my future career

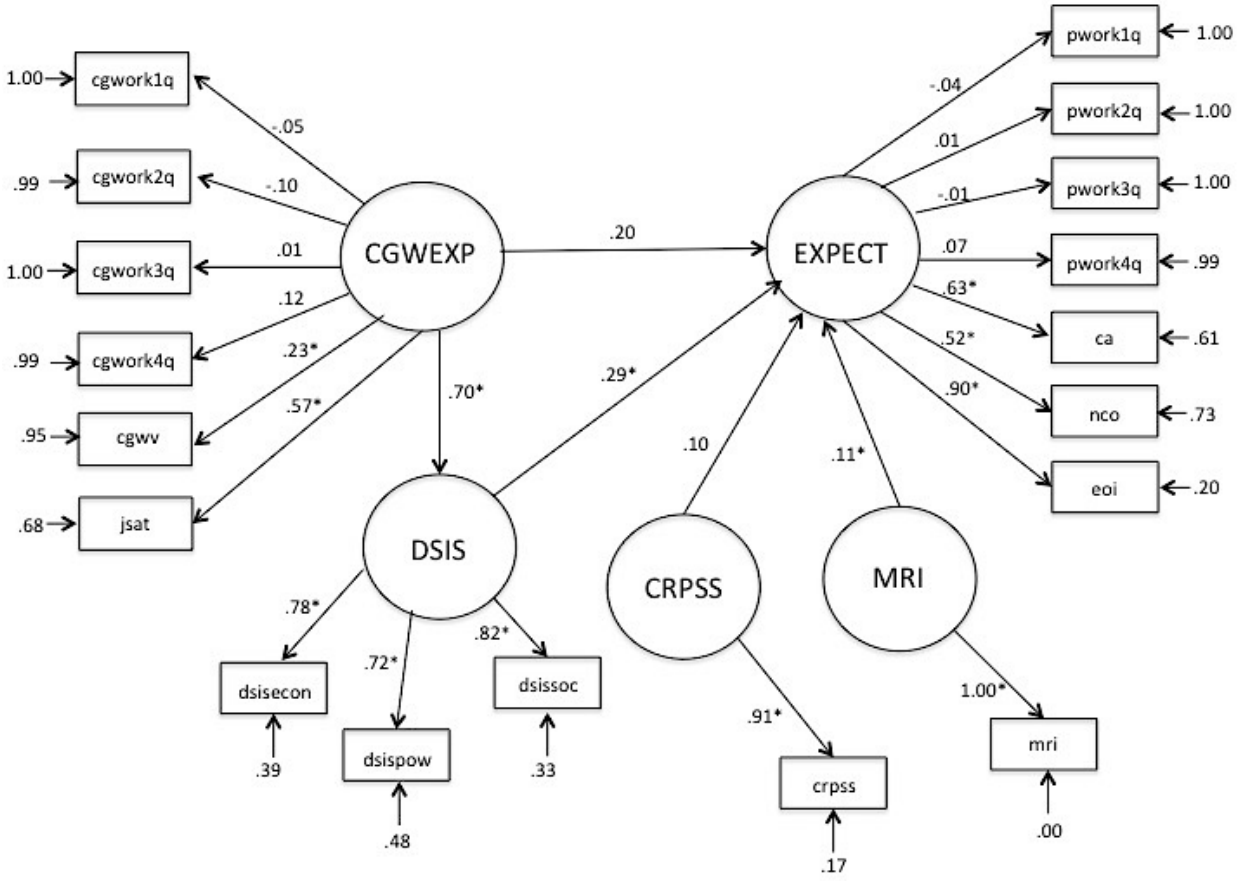
*Items removed comprised the volition subscale of the measure

Scale Fit

Scale	Chi-Square	RMSEA
CGWV	44.29, *df* = 22, p = .00	0.058
JSAT	411.68, *df* = 146, p = .00	0.078
CRPSS	704.58, *df* = 264, p = .00	0.075
CA	59.30, *df* = 29, p = .00	0.059
NCO	0.89, *df* = 0, p = 1.00	0.00
EOI	4.16, *df* = 6, p = .65	0.00
MRI	62.23, *df* = 34, p = .00	0.053

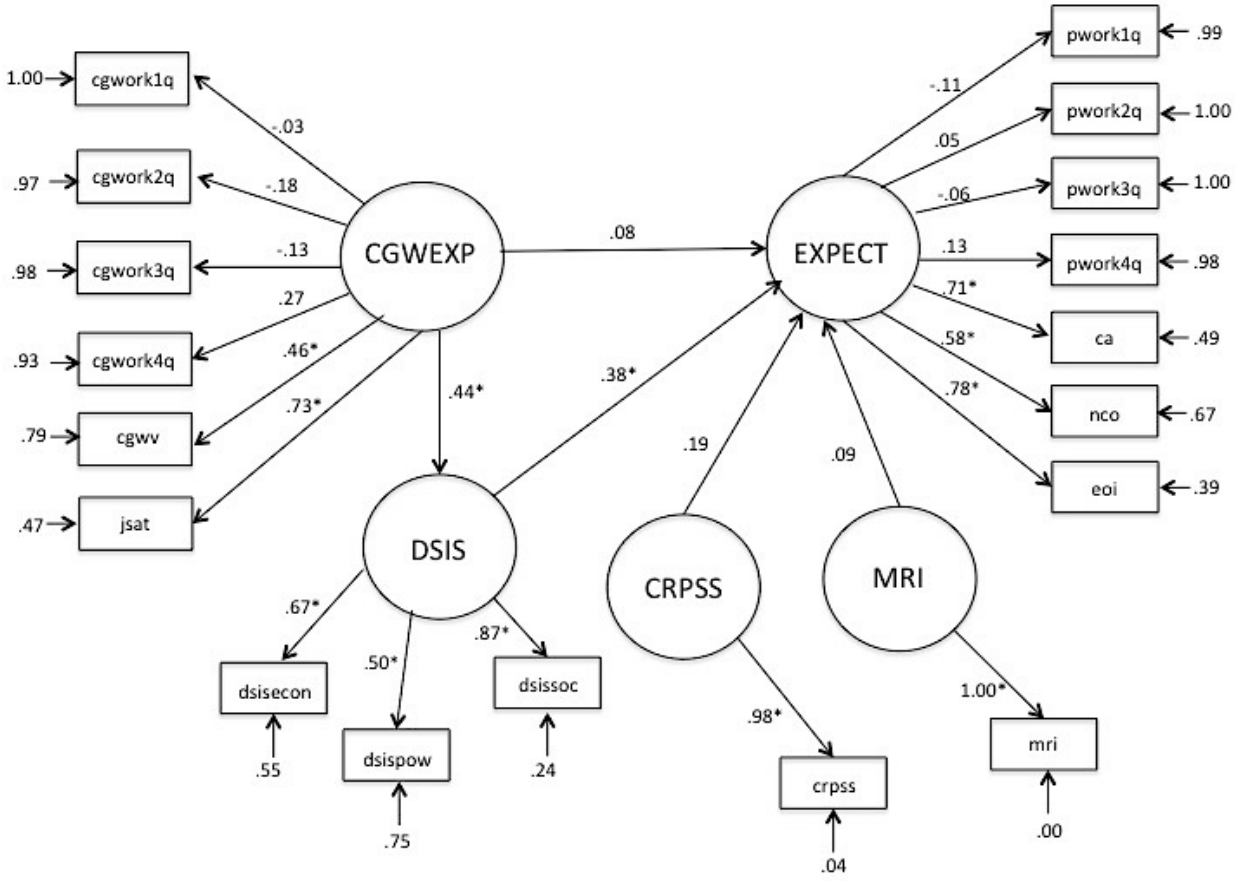
Alternative Models

Alternative Model 1
No Moderation, Total Sample



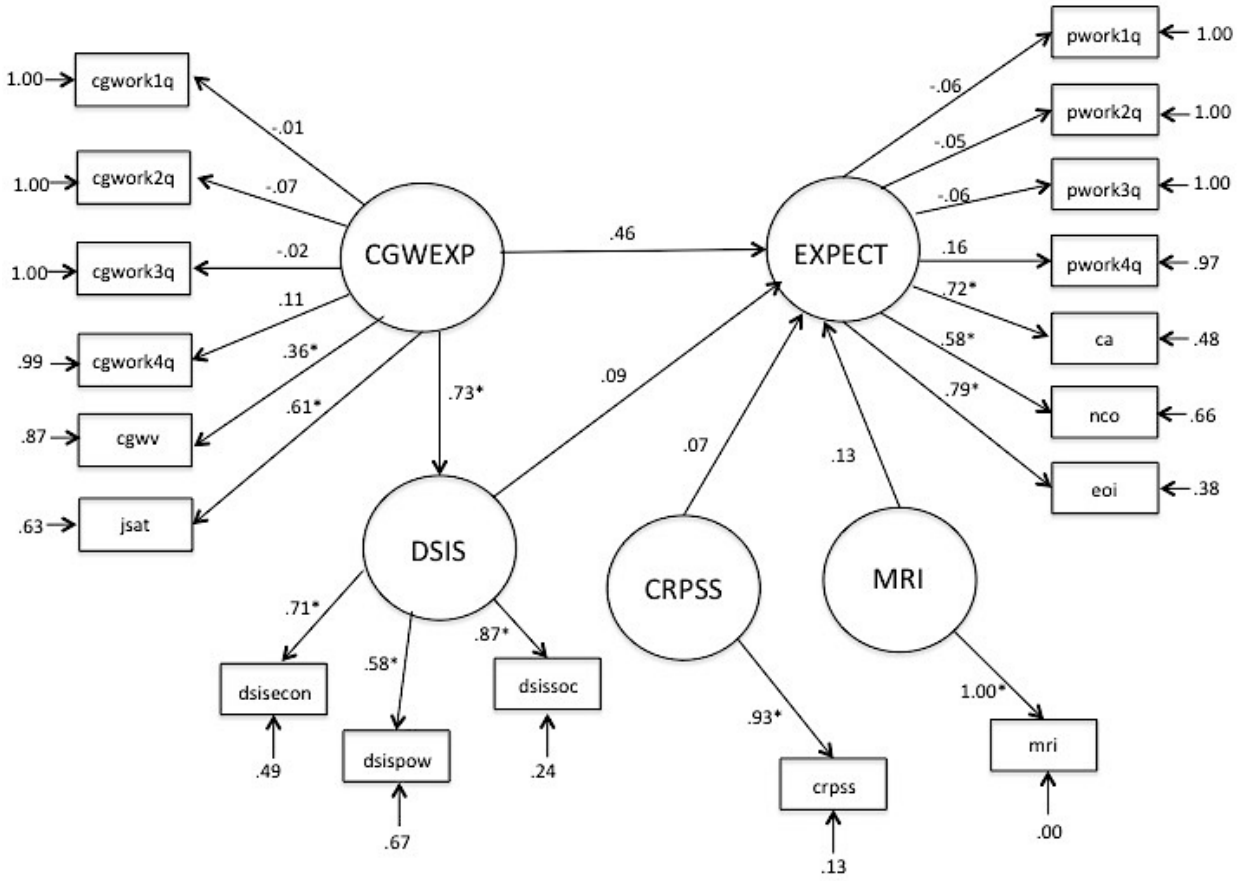
Chi-Square = 374.41, df = 114, p-value = .00, RMSEA = 0.034

Alternative Model 2
No Moderation, Females Only



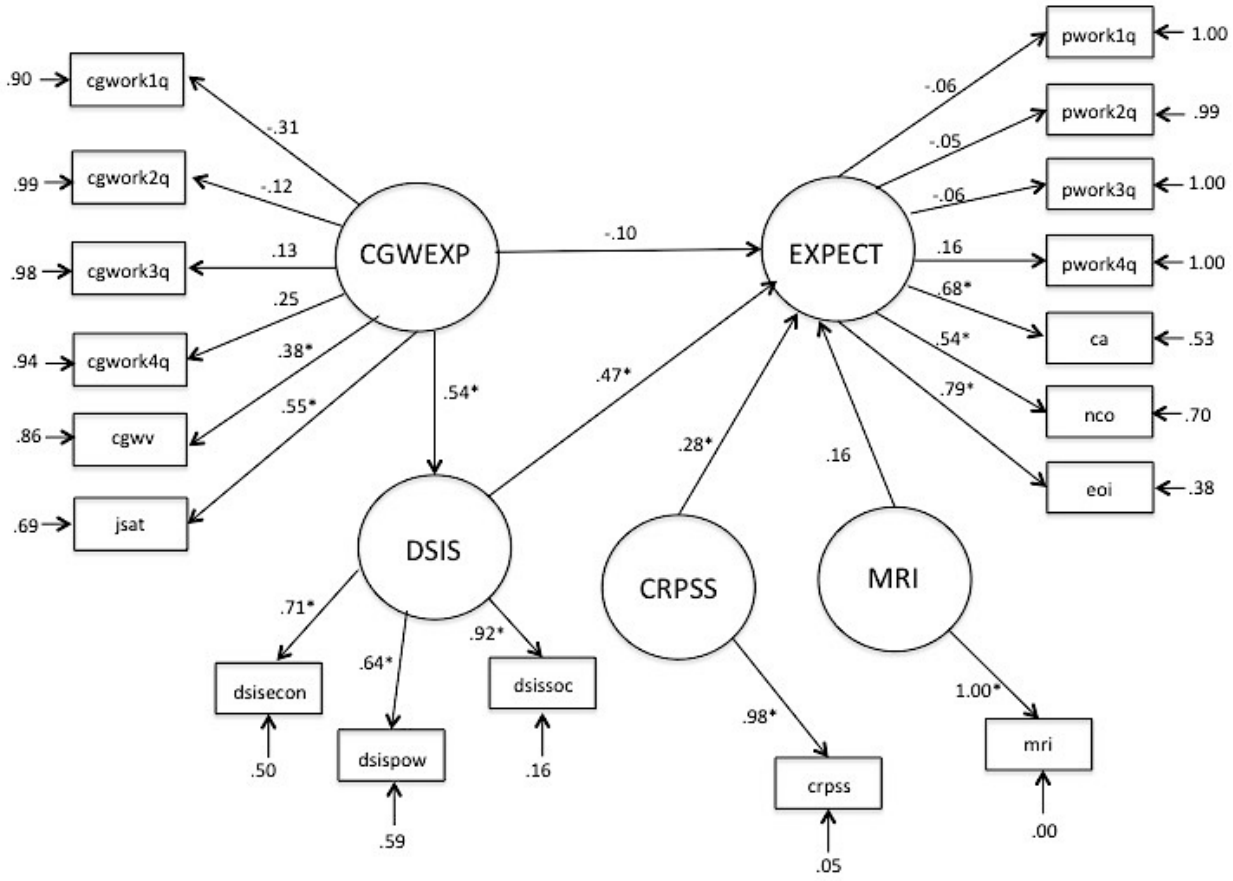
Chi-Square = 190.52, df = 112, p-value = .00, RMSEA = 0.070

Alternative Model 3
No Moderation, Gender Similar



Chi-Square = 202.74, df = 114, p-value = .00, RMSEA = 0.068

Alternative Model 4
No Moderation, Gender Different



Chi-Square = 177.76, df = 115, p-value = .00, RMSEA = 0.066