FAMILY OF ORIGIN INFLUENCES ON THE CAREER DEVELOPMENT OF YOUNG ADULTS: THE RELATIVE CONTRIBUTIONS OF SOCIAL STATUS AND FAMILY SUPPORT

by

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The family of origin plays a pivotal role in the career development process. The purpose of this study was to better understand the role of both family social status and family process (e.g., parenting behaviors) in the career development of young adults. Social status was measured using both a traditional, objective index (Socioeconomic Index) and a more recently developed subjective measure (Differential Status Identity Scale). Family process was examined using the variables of perceived and enacted family support. A model capturing the relationship among these variables was proposed based upon Social Cognitive Career Theory, with career decision-making self-efficacy and career-related outcome expectations serving as the social-cognitive outcome variables. A path analysis was conducted to explore the fit of the model and the relative contributions of the status and process variables to the career development outcomes. Participants were 279 male and female undergraduate students, aged 18 to 22 years, from 2- or 4-year community colleges, colleges, and universities. The sample was randomly split into a calibration sample and a validation sample. The hypothesized model was modified based on results with the calibration sample, and a multiple group analysis was used to test for model invariance across the two groups for the revised model. The results of this study suggest that both family of origin social status and family support influence career development outcomes. Specifically, results indicated that the influence of family status, enacted family support, and perceived family support on outcomes was primarily indirect; these variables operated through subjective status. Results also indicated a moderate, direct relationship between subjective social status and career decision-making self-efficacy. The findings suggest that prevention and intervention efforts should focus on both increasing family support and increasing access to the other types of resources implicated in shaping subjective status. Additional implications for both research and practice are discussed.

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TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION	1
II. LITERATURE REVIEW	6
Social Cognitive Career Theory	7
Constructs of Interest	8
Environmental Influences	8
Self-Efficacy Expectations	10
Outcome Expectations	11
Summary	12
Social Capital Theory	12
Social Class	14
Definition and Related Constructs	15
Socioeconomic Status	15
Poverty or Poor	15
Social Status	16
Social Class	16
Social Class as Identity	18
Relationship between Objective and Subjective Status	18
Development of Social Class Awareness	19
Differential Status Identity	20
Importance in Career Development	22
Socioeconomic Status	22
Subjective Status	24
Summary	26

Chapter
Family Process
Social Support Definition and Types
Importance in Career Development
Perceived Support
Enacted Support
Summary
Interaction of Status and Process
Poole, Langan-Fox, Ciavarella, and Omodei (1991)
Penick and Jepsen (1992)

Poole, Langan-Fox, Ciavarella, and Omodei (1991)	33
Penick and Jepsen (1992)	34
Way and Rossmann (1996)	35
Ali, McWhirter, and Chronister (2005)	36
Ali and Saunders (2006)	37
Implications for Future Research	37
Summary	38
Purpose of Study	39

III. METHODS	
Participants	
Procedure	
Measures	
Person and Family Context Variables	
Demographic Information and Socioeconomic Status	
Subjective Social Status	
Perceived Family Support	
Enacted Family Support	
Career-Related Outcome Variables	
Career Decision-Making Self-Efficacy	53
Career Outcome Expectations	

xi

Page

26

27

29

30

30

32

32

Chapter

IV. RESULTS	57
Preliminary Analyses	57
Path Analyses	59
Direct and Indirect Effects	63
Family Support as Moderator	66

V.	DISCUSSION	69
	Influence of Social Status	70
	Family of Origin Socioeconomic Status	70
	Subjective Social Status	72
	Relative Impact of Objective & Subjective Social Status	74
	Influence of Family Support	76
	Enacted Family Support	76
	Perceived Family Support	78
	Strengths & Limitations	79
	Implications for Practice	82
	Implications for Research	85
	Summary & Conclusions	86

APPENDICES	89
A. INFORMED CONSENT	89
B. INSTRUMENTS	92
Demographic Questionnaire	93
Differential Status Identity Scale	96
Family Support Measures	100
Career Decision Self-Efficacy – Short Form	103
Vocational Outcome Expectations Scale	104

0	5
0)

Page

LIST OF TABLES

Table	
1. Description of Study Constructs and Measures	. 45
2. Descriptive Statistics, Reliability Coefficients, and Correlations	. 58
3. Summary of Model-Fit Statistics	. 61
4. Unstandardized Parameter Estimates for Revised Model	. 65
5. Standardized Direct and Indirect Effects for Revised Model	. 67
6. Summary of Moderation Model-Fit Statistics	. 68

LIST OF FIGURES

Figure	Page
1. Social cognitive career theory's predicted relationship among variables	8
2. Hypothesized model for study	41
3. Revised model	64

CHAPTER I

INTRODUCTION

Growing up poor has been linked to a number of negative developmental outcomes, including lower levels of school achievement, poorer socioemotional functioning, and increased rates of medical and psychological disorders (APA, 2000; McLoyd, 1998). Today in the United States, nearly one in five children live in poverty (National Center for Children in Poverty, 2005), and there is some evidence to suggest that it has become more difficult to move out of poverty in the past twenty years (McLoyd, 1998). An individual's choice of career effects social class membership, making the gateway to social mobility partially (if not mostly) controlled by career trajectory. Key to intervention efforts is the evidence suggesting that the reverse may be true as well: social class background affects work choices and behaviors (Brown, Fukunaga, Umemoto, & Wicker, 1996).

Available research links family socioeconomic status (SES) to a number of career development variables. Individuals from lower status backgrounds tend to have lower occupational and educational aspirations (Jacobs, Karen, & McClelland, 1991; Rojewski, 1997; Rojewski & Yang, 1997; Solorzano, 1992). Growing up in a low SES family is also associated with higher levels of perceived barriers to educational and career attainment, lower levels of career-related self-efficacy, and lowered expectations for educational attainment (Lauver & Jones, 1991; McWhirter, Hackett, & Bandalos, 1998). These aspirations, expectations, perceived barriers, and self-efficacy levels directly translate into career-related choices and behaviors. According to the National Center for Educational Statistics, an opportunity gap remains between low-income and high-income students (U.S. Department of Education, 2002). Regardless of preparation or qualification levels, low-income youth are less likely to pursue a college education. Further, lowincome youth may be less prepared for the school-to-work transition, leaving them more likely to experience negative outcomes such as unemployment (Rojewski & Kim, 2003).

While SES appears to play a key role in the formation of vocational attitudes and decisions (for reviews, see Brown et al., 1996; Schulenberg, Vondracek, & Crouter, 1984; Whiston & Keller, 2004b), its mechanism of action is still unclear (Brown et al., 1996; Whiston & Keller, 2004a). Researchers have suggested a host of possible contributing variables, from child rearing patterns (Roe, 1956; Roe & Lunneborg, 1990) to a lack of available role models (Shulenberg et al., 1984), which may be associated with family SES. In a recent review of the literature, Whiston and Keller (2004b) concluded that family process variables (e.g., family relationships, parental aspirations and expectations, family support and advocacy) play a more important role in career development than either family structural variables (e.g., social class). Although current literature has confirmed the importance of each of these family variables in the career development process, the exact nature and extent of family influences has yet to be fully understood (Blustein, Juntunen, & Worthington, 2000; Hargrove, Creagh, &

Burgess, 2002; Whiston & Keller, 2004b). The deleterious impacts of poverty on child developmental outcomes – including cognitive functioning, academic achievement, and socioemotional functioning – have been shown to persist even after controlling for individual differences in family and parenting behaviors (McLoyd, 1998).

Hindering advances in achieving a better understanding of family influences on career development is an overall lack of attention to the realities of low-income persons on the part of psychologists (Lott, 2002). Career theorists have long noted the potential effects of social class on the development of vocational interest (e.g., Gottfredson, 1981, 1996; Super, 1953, 1980). Namely that social class restricts or expands the career options available to certain individuals and that this impacts career choice in conjunction with personality and developmental experiences. However, as one of a constellation of interrelated identity variables recognized as having an impact on psychological development and, more specifically, career development, social class has received historically less attention in the field of psychology than other similarly recognized factors such as race and gender (Brown et al., 1996; Frable, 1997; Whiston & Keller, 2004b). More recently, the status of social class as a "lost" variable in counseling and vocational psychology research has begun to receive increased attention (Blustein et al., 2002; Fouad & Brown, 2000; Heppner & Scott, 2004; Liu et al., 2004; Liu, Soleck, Hopps, Dunston, & Pickett, 2004).

Concurrent with the overall lack of attention to the variable, existing research has failed to utilize a consistent definition of the construct of social class. The term social class has often been used interchangeably with the terms socioeconomic status (SES) and

3

social status (Liu et al., 2004). A major criticism of the existing body of literature in vocational psychology is that it treats social class as a sociological variable (focusing on objective measurement of education level, income, and occupational status) instead of a psychological one (Brown, 2000; Brown et al., 1996; Liu et al., 2004). Social class includes components of socialization and class consciousness, in addition to other defining variables of occupation, income, wealth, personal prestige, association, power, and mobility (Gilbert & Kahn, 1993). In order for psychologists to more fully understand the psychological effect of social class membership on an individual's development, it will be necessary to shift the focus of future research (Thompson & Subich, 2007). SESrelated variables (i.e., parental occupation, income, or education level) are not viable foci of direct intervention for individual vocational psychologists because they require broader policy shifts aimed at achieving a more equal distribution of resources. Thus, the shift to examining the psychological effects of social class is also required before appropriate interventions can be developed to address the association of lower socioeconomic status with negative career development outcomes.

In conclusion, the existing body of research into family influences on the career development process has not fully explored the psychological effects of economic and social class variables and reflects a lack of consistent definition of such variables and a lack of attention to the modifiable influence of family process variables. This study sought to address these deficits in the literature, by examining both objective and subjective social class on the career development process, and by exploring potential mechanisms of action via including family process variables in the analysis of family influences.

Using social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994, 2000) and social capital theory (Bourdieu, 1986; Coleman, 1988) as the base, the career development outcome variables of career decision-making self efficacy and outcome expectations were examined. According to SCCT, these two cognitive variables form the basis for the formation of career interests and goals. SCCT has garnered considerable empirical support, and research supports self-efficacy and outcome expectations as important contributors to the career development process for young adults (Lent & Brown, 2006; Swanson & Gore, 2000).

In the chapter that follows, I summarize SCCT, social capital theory, and define the constructs of interest for this study. I also review the literature related to social class influences on development and the literature related to family process variables and social support as influences on the career development process. Finally, I outline the hypothesized relationships among constructs used in this study.

CHAPTER II

LITERATURE REVIEW

The family of origin has been identified as the most significant influence on career development (Brown, 2004; Whiston & Keller, 2004b). Families provide the environment in which work roles, values, expectations, and aspirations are transmitted to and formed by the child (Vondracek, Lerner, & Schulenberg, 1986). Researchers have found the family of origin to be an essential part of the context within which career decisions are made and enacted (Blustein, Phillips, Jobin-Davis, Finkelberg, & Roarke, 1997). A host of family context variables have been found to be related to the vocational behavior of youth, including socioeconomic status, family structure (e.g., single parent status), parent occupational and educational attainment, role modeling, support, family interaction style, and parent expectations for achievement (Penick & Jepsen, 1992; Whiston & Keller, 2004b). However, as noted in the introduction, most researchers agree that the exact nature and extent of the influence of the family on the career development process is yet to be known (Blustein, Juntunen, & Worthington, 2000; Whiston & Keller, 2004b). This study focused on the economic context of the family of origin and family process variables that may play a role in shaping career outcomes for young adults. The theoretical base for the study was social cognitive career theory and social capital theory.

Social Cognitive Career Theory

Social cognitive career theory (SCCT; Lent et al., 1994, 2000) is one of the most researched theories in vocational psychology and has received considerable empirical support for its propositions (Swanson & Gore, 2000; Lent & Brown, 2006). SCCT is based on Bandura's (1977, 1986) social cognitive theory and attempts to explain the process by which vocational interests and goals develop and by which these interests and goals are translated into action. The base of the theory is Bandura's emphasis on the triadic, dynamic, reciprocal interaction between the person (particularly beliefs or cognitions), behaviors, and the environment. Central to the theory is the idea of personal agency – the belief that the individual is capable of continual change and that his or her behaviors have power in the environment. Two important constructs effecting perceived personal agency are self-efficacy beliefs (i.e., can I do this?) and outcome expectations (i.e., what will happen when I do this?). The influence of these two constructs can be seen in three interconnected tenets which are key to the theory and which are displayed in Figure 1.

The first tenet of SCCT is that career-related learning experiences are shaped by both personal factors (e.g., intelligence, personality, etc.) and environmental factors (e.g., socioeconomic status, racism, etc.; Lent et al., 1994, 2000). Second, these learning experiences – particularly the individual's appraisal of these experiences – shape the person-cognitive variables of self-efficacy beliefs and outcome expectations. Third, the individual's self-efficacy beliefs and outcome expectations influence the development of career-related interests. Bandura (1986) believed that individuals are more likely to engage in behaviors, or in this case, careers, of which they feel capable and from which they expect positive outcomes. Career-related interests are then translated into goals and actions in the presence of contextual supports and absence of contextual barriers. Finally, this process – by which learning experiences effect self-efficacy beliefs and outcome expectations, and beliefs and expectations affect career-related interests, goals, and actions – is seen as being life-long. New experiences and choice actions continually influence beliefs about personal agency, completing the feedback loop.



Figure 1. Social cognitive career theory's predicted relationship among variables.

Constructs of Interest

Environmental influences. According to this model, environmental factors can influence the career development process in two ways and can be either objective or perceived (Lent et al., 1994, 2000). Background contextual factors shape the learning

environments to which the individual is exposed, resulting in self-efficacy and outcome expectations. The authors state that these contextual affordances form both the real and perceived opportunity structure within which career choices are made. Further, environmental barriers and supports are hypothesized to affect the individual's ability to follow-through on career-related tasks and can act to constrain or enhance the action phase of the process. Thus, in terms of family of origin influences on the career development process, financial constraints may act to restrict learning opportunities resulting in lowered self-efficacy and outcome expectations for activities outside of a narrow range. The individual's perception that their socioeconomic status is low may also act to inhibit the development of positive or high self-efficacy and outcome expectations. A high degree of family support for career-related activities and aspirations is theorized to counteract these potentially negative influences via enhancing cognitive-person variables.

Relative to other aspects of SCCT, research into hypothesized linkages between environmental influences and the career development process has been scant (Lent et al., 2000). Where it exists, research into the influence of contextual factors has focused on perceived barriers and restrictions rather than on supportive environmental conditions (Lent et al., 2000). As will be reviewed in the section on family of origin influences on career development, research supports the notion that social support from important adults has a positive impact on adolescents' career development. Lent et al. call for more research in this area, acknowledging its important repercussions for prevention and intervention efforts. Self-efficacy expectations. Bandura (1986) defines self-efficacy beliefs as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). Self-efficacy beliefs are thus cognitive assessments of abilities in a given area of behavior or functioning. Theorists in this area stress that self-efficacy cannot be considered a trait but rather is contextually based and dynamic (Betz & Hackett, 2006; Lent & Brown, 2006). Lent and Brown outline several ways in which the operation of self-efficacy beliefs has been operationalized in studies: (a) content or task-specific self-efficacy – appraisals of the ability to execute a given task; (b) coping efficacy – appraisals of the ability to overcome or address obstacles; (c) process efficacy – appraisals of the ability to manage a series or progression of tasks required to complete a given process; and (d) self-regulatory efficacy – appraisals of the ability to persist in growth-oriented behaviors in the face of negative circumstances. Thus, there exists a range of specific ways to operationalize self-efficacy given the domain of interest and the type of efficacy of interest.

Self-efficacy is influenced by four factors: (a) performance accomplishments – the direct experience of success at performing the behavior; (b) vicarious experiences – observing others do the behavior; (c) verbal persuasion – other's encouragement; and (d) physiological responses – arousal or emotional responses (Betz & Hackett, 2006). Again, in terms of family of origin influences on the career development process, individuals from a lower social class background may have had less exposure to role models who can provide vicarious learning experiences associated with professional occupations and may have been limited in the scope of activities in which they had an opportunity to engage to build a background of performance accomplishments. If family support for career development was lacking, this would also be expected to lower self-efficacy in this domain, given a lack of encouragement from important adults. In this study, the focus was on process efficacy around career decision-making. Additional details related to this particular type of self-efficacy are provided in the section describing the measure of career decision-making self-efficacy utilized in the study.

Outcome expectations. Bandura's (1986) concept of outcome expectations involves the anticipated consequences of a course of action. Like self-efficacy expectations, outcome expectations are not trait-like, but rather are dynamic and domain specific (Lent & Brown, 2006). Bandura outlines several types of outcome expectations: (a) social reactions, (b) physical sensations, and (c) self-evaluations – in each case these may be either positive, negative, or neutral. Relative to the construct of self-efficacy, research into the role of outcome expectations in the career development process is lacking, resulting in a lack of clarity with respect to its role (Fouad & Guillen, 2006). While self-efficacy beliefs are believed to be the stronger predictor of behavior, outcome expectations are theorized to provide a unique contribution to the likelihood of attempting a given behavior. In conditions of oppression, such as those experienced growing up in poverty, researchers have asserted that outcome expectations would be expected to be lower and would be expected to have a greater impact on behavior than self-efficacy expectations (Morrow, Gore, & Campbell, 1996). In this study, the focus was on the outcomes expected from the career decision-making process. Additional details related to

this particular type of outcome expectation are provided in the section describing the measure of career outcome expectations utilized in the study.

Summary

This study focused on the SCCT components of background contextual affordances, environmental supports, and the person-cognitive variables of self-efficacy and outcome expectations. Given SCCT's propositions, the hypothesized relationship between these variables was that favorable background contextual affordances would result in higher self-efficacy and outcome expectations via learning opportunities and experiences. It was also hypothesized that the presence of supports in the environment would mediate this relationship, directly influencing the person-cognitive variables themselves as well. The existing research supports these hypotheses.

Social Capital Theory

Social Capital Theory is built on the notion that different types of capital, or resources, contribute to one's ability to achieve a desired outcome. Coleman (1988) describes the role of capital as "productive, making possible the achievement of certain ends that in its absence would not be possible" (p. S98). Social capital is one such type of resource or tool which contributes to the ability to engage in goal-directed action.

With its rise in popularity as a construct in social science research, definitions of social capital have become less concise (Yang, 2007). As a result, Yang has argued that a return to Bourdieu (1986) and Coleman's (1988) initial conceptualizations is necessary. They defined the construct of social capital as resources of the social group which might

be used for one's own purposes. These resources may be either tangible (e.g., money) or abstract (e.g., social influence).

Social capital theory, then, would propose that greater the access to social capital would result in positive, useful outcomes for the individual. Related to the career development process, the presence of social capital would be expected to facilitate an individual's ability to engage in activities that would help move toward desired career outcomes. Social capital would enhance career development opportunities by providing important resources, such as job prospects.

In his classic text, *The Truly Disadvantaged*, Wilson (1987) argued that social isolation and a lack of social capital – particularly social networks with individuals or institutions representative of "mainstream" society – result in reduced career opportunities and reduced mobility for those living in poverty. Wilson examined the broad societal and economic trends that contributed to the creation of a concentrated underclass population in urban, city-centers by the early 1980s. He noted that the resulting concentrated communities of poverty were characterized by high rates of crime, teenage pregnancy, single-parent families, joblessness, and residential instability. Wilson asserted that *concentration effects* were responsible for continuing the cycle of disadvantage by way of the socialization of and role models provided to youth living in these neighborhoods. Thus, Wilson highlighted the important impact of social capital on an individual's opportunity structure.

Other theorists and researchers have also highlighted differences in access to social capital by social group. Members of a group with lower socioeconomic standing

are often part of a network that has fewer and less varied resources available (Lin, 2000). In contrast, those from high status backgrounds would be expected to have greater access to social capital and, therefore, a greater ability to achieve desired career-related outcomes.

This study examines the role of social support as a form of social capital. Given the propositions of social capital theory, it was hypothesized that greater levels of social support would be associated with more positive career outcomes. It was also expected that levels of social support might vary by social status.

Social Class

While psychology has historically been remiss in addressing the influence of social class on development (Brown et al., 1996; Frable, 1997; Lott, 2002; Whiston & Keller, 2004b), there has been a growing recognition of the need for increased research into the role of social class variables (Fouad & Brown, 2000; Heppner & Scott, 2004; Liu et al., 2004; Liu, Soleck, Hopps, Dunston, & Pickett, 2004). Typically the domain of sociologists, it is important to acknowledge that, as Brown et al. (1996) assert, "social class is not merely a sociological phenomenon but also a psychological one" (p. 160). As such, there is a need for psychologists to reconceptualize their treatment of social class from that of a "nuisance variable," which is addressed as an afterthought in many studies, to a core intrapsychic one (Liu et al., 2004). Doing so will allow for greater exploration of the role of social class context in development and, more specifically, vocational development.

Definition and Related Constructs

In this section, I define social class and the associated constructs which are found in the sociological and psychological research on the influence of social stratification on development and behavior. I start with the definitions of socioeconomic status, poverty, and social status, because the vast majority of existing studies in psychology have incorporated only these concepts. I then provide a definition of social class and outline its unique features relative to these other constructs.

Socioeconomic status. Socioeconomic status (SES) is generally considered to be comprised of occupation, education, income, prestige, power, and lifestyle (House, 1981 as cited in McLoyd, 1998). Thus, it is a multidimensional construct that has been difficult to measure and define. Researchers vary in their use of these different components. For example, a study by Ryan et al. (2002) examining the benefits of a child development program as a function of SES used the following variables to reflect status: employment status, education level, income per person, owning transportation, mother's age when first child born, father's presence or absence, marital status, ethnicity, and child's birthweight. However, SES is most often measured via some combination of income, education, and occupational status (Liu et al., 2004).

Poverty or poor. The designation of living in "poverty" or being "poor" is sometimes conferred interchangeably. However, the actual use of the term poverty implies a very specific economic and social situation. There typically are two ways that poverty has been defined and measured in social science research. The first is via the federal poverty guidelines. These guidelines are used to determine eligibility for services and differ slightly from the poverty threshold which is used to determine poverty status by the U.S. Census Bureau. According to the 2003 version of the poverty guidelines, a family of four making \$18,400 or less is considered impoverished and eligible for certain services, including Head Start, Food Stamps, and the National School Lunch Program (U.S. Department of HHS, 2003). A second option is the income-to-needs ratio. To compute the income-to-needs ratio, the pre-tax income of all family members is aggregated and then divided by the current federal poverty threshold for the given family size (Duncan, Brooks-Gunn, Yeung, & Smith, 1998). Families with a ratio of one or less are considered to be living in poverty. This method still relies on the government-defined guidelines, but researchers are able to avoid limiting their sample to those currently receiving services.

Social status. Social status is considered a broader term than SES or social class. It incorporates an individual's other identity and cultural influences (such as gender, sexual orientation, or disability status) which act to influence collectively the person's standing in society (Fouad & Brown, 2000). Thus, the term is often used as a "catch all" construct and may refer to socioeconomic status, social class, social standing (reflecting privilege or oppression), or some combination thereof.

Social class. Gilbert and Kahn (1993) identify nine variables that, when considered in conjunction, define and organize the class system in the United States. They are occupation, income, wealth, personal prestige, association, socialization, power, class consciousness, and mobility. Thus the definition of social class incorporates and extends the definition of socioeconomic status. For counseling psychologists, the fundamental difference lies in the inclusion of *socialization* and *class consciousness*. First, defined as the process by which children learn the norms, expectations, and "rules" of society, socialization is critical to the maintenance of a class system (Gilbert & Kahn). The socialization process is thought to result in the differential attitudes toward and behaviors around sex, work, authority, education, and leisure activities that have been found across social classes (Brown et al., 1996). Second, class consciousness is the awareness of position within a hierarchical social class system and of the resulting impacts on one's life (Liu et al., 2004).

The conceptualization of social class as conferring group membership and resulting in the transmission of cultural values implies that class, like ethnicity or gender, can be considered an identity variable. As such, social class must be understood to be dynamic and influential in the development of personal identity (Constantine, 2002; Fouad & Brown, 2000). The idea of social class as a worldview or identity captures the similarities in attitudes, beliefs, and behaviors that exist between individuals of the same social status (for instance, around work, leisure, and retirement found by Brown et al., 1996), while allowing for individual variation based on differences in socialization experiences and individual levels of class consciousness. The section that follows presents findings supporting the notion of social class as a subjective identity or worldview that develops with age and that may provide a unique contribution to the understanding of vocational development.

17

Social Class as Identity

Relationship between objective and subjective status. Almost all psychology research to date has used measures which, in actuality, fail to capture the critical components of social class outlined above, and are thus more representative of SES. One exception has been research within the field of health psychology by Nancy Adler and colleagues. Using an image of a ladder with 10 rungs, respondents are asked to imagine that the ladder represents U.S. society. Instructions continue by stating that those at the top of the ladder have the most money, highest education, top jobs, and are the "best off" and those at the bottom of the ladder have the least money, lowest education, worst jobs, and are the "worst off" (Adler, Epel, Castellazzo, & Ickovics, 2000). Respondents are asked to choose the rung that best represents where they are in relation to others in the U.S. In a series of articles, these researchers have found that subjective status is a more powerful predictor of health-related outcomes (e.g., self-rated health, heart rate, sleep latency, cortisol habituation) than objective indices of SES (Adler et al., 2000; Goodman et al., 2001; Ostrove, Adler, Kuppermann, & Washington, 2000).

For adults, responses on the subjective status scale were found to be significantly related to objective indicators of status (household income, own occupation, partner's occupation), except for African American women, for whom only household income was significantly related (Ostrove et al., 2000). Interestingly, adolescents' placements on the ladder were only moderately correlated (r = .38, p < .001) with maternal rankings and weakly correlated with father's education level (r = .21, p < .01) based on a sample of 166 adolescents and their mothers (Goodman et al., 2001). The authors suggest that this

provides evidence that objective and subjective social status can be considered to be separate elements of social standing. Further, the reliability of responses increased as the age of the respondents increased (.83 for subjects 15 years of age or older versus .68 for subjects younger than 15 years of age). The authors attribute this finding to social status perceptions crystallizing with age (Goodman et al.).

Development of social class awareness. In addition to the findings by Adler and colleagues, other researchers have explored the development of social class awareness in childhood and how this developing awareness may begin to impact self-concept and career development. Research suggests that an awareness of social class develops early in life (Mookherjee & Hogan, 1981; Ramsey, 1991). For instance, Ramsey (1991) found that children are able to reliably classify into social class categories based on perceptual cues (e.g., attire) by the age of 6. In a study with children ages 5 to 14, Weinger (2000) further discovered that these perceived differences translate into differing expectations for career success. Children in the study were shown photographs representing families at different levels of social status (a rundown home or a nicer house with landscaping) and, in response to questions about career outcomes for children to achieve their career goals.

In a large sample of children from grades three through twelve, Simmons and Rosenberg (1971) found that elementary school children were able to rank occupations by prestige level, and that their rankings were highly correlated with those of adults (Spearman rho rank-order correlation of .93). Further, the authors found that 70% of high-school-aged participants perceived unequal opportunities in life, with a majority of these respondents attributing barriers to socioeconomic or racial/ethnic disadvantage. Interestingly, this awareness of a differential opportunity structure did not necessarily translate to a diminished view of personal chances for success. Almost all respondents (97%) in Simmons and Rosenberg's study indicated that they felt they had a "better chance" or "just as good a chance" to succeed as most other people, regardless of SES background. An additional finding of this study suggests the possibility that class awareness can serve as a motivating factor. Participants who had a greater awareness of differences in occupational prestige were more likely to express an interest in upward mobility.

These findings suggest that a psychologically-based conceptualization of social class may provide a unique contribution to the understanding of vocational development. In an attempt to address the need for a framework within which to examine social class as an intrapsychic variable, Fouad and Brown (2000) proposed the concept of *differential status identity*. Differential status identity captures individual perceptions of and reactions to the influence of social class.

Differential status identity. In the United States, there is an assumption of merit involved in social stratification. That is, social class membership or social standing is presumed to be deserved based on hard work or lack thereof (Heppner & Scott, 2004). Given this societal bias, it is apparent that an internalization of one's social standing may have a powerful psychological effect. Found and Brown (2000) intended the concept of differential status identity (DSI) to help explain the influence of both race and class on psychological and identity development, based on the recognition that these two contributors to social standing are inextricably intertwined.

The authors assert that, rather than directly influencing development, race and class are manifest in perceived differences in social standing and that it is these perceived differences that impact psychosocial development. An individual's social context and groups of membership are contained within an overall social hierarchy, whereby different individuals and groups have differential access to resources and levels of influence in the larger social system. The experience of social standing across multiple dimensions of the self or groups of membership effects psychological development and behavior.

According to the DSI model, those growing up in the most subordinate group (i.e., in poverty and the conditions that accompany it, such as residing in low-SES, innercity neighborhoods) developmentally are most effected, as opposed to those closer to or above the average status (i.e., in the middle class and residing in suburban neighborhoods). As part of the model, social status is defined as representing relation and access to three dimensions: economic resources (income, wealth, economic security), prestige (social valuation in the forms of occupational prestige, group association, consumption habits), and power (control over social values in the forms of political participation, ability to influence public policy, access to government benefits). An individual may have different levels of access to each of these three dimensions, and each contributes to his or her relative social standing, highlighting the multidimensional nature of social status.

Importance in Career Development

In their review of the literature in 1984, Schulenberg, Vondracek, and Crouter called the impact of SES on career development "pivotal." The authors stated that "If one were permitted only a single variable with which to predict an individual's occupational status, it would surely be the SES of the individual's family" (p. 130). In fact, the influence of social status can be seen at all stages of the career development process, from career aspirations to retirement choices (Brown et al., 1996). Of interest in working with adolescents and young adults is how early vocational attitudes and behaviors are impacted by social status, as these set the stage for later vocational choice and outcomes. In this section, I first provide an overview of the literature on the relationship between SES and career development variables for this population. Second, I review the limited research on social class influences on adolescent and young adult career development that utilizes the constructs of subjective status or differential status identity.

Socioeconomic status. Several reviews of the literature have documented SES influences on career-related variables (Brown et al., 1996; Fouad & Brown, 2000; Whiston & Keller, 2004b). Included here is a summary of findings related to outcomes particularly relevant to the career development of adolescents and young adults: the development of educational and occupational aspirations and expectations, views on the world of work, the perception of barriers hindering the ability to follow through on educational or career-related goals, and self-efficacy for personal educational and occupational achievement.
Available studies provide strong evidence to suggest that having a lower SES family background is related to restricted career-related aspirations and expectations. Multiple studies have found a difference in the prestige level of students' vocational aspirations (i.e., their planned future occupation) based on SES background (e.g., Hanna & Kahn, 1989; Jacobs, Karen, & McClelland, 1991; McWhirter & Paa, 1996; Mullet, Neto, & Henry, 1992). Students are more likely to aim for careers similar in prestige to their background (i.e., the prestige level of their parents' jobs). Three studies utilizing National Education Longitudinal Study (NELS) data from 1988 also support this conclusion (Rojewski & Kim, 2003; Rojewski & Yang, 1997; Solorzano, 1992). In fact, Rojewski and Yang (1997) estimated that SES may explain approximately 10% of the variance in occupational aspirations. They found that the effect of SES on occupational aspirations was larger than that of race/ethnicity or gender. Similarly, Solorzano's (1992) concluded that, regardless of ethnic background, aspirations and occupational expectations rose with SES. These contextual effects of SES may extend beyond the home. In a sample of 546 African-American adolescents, Quane and Rankin (1998) found that neighborhood disadvantage level (poor vs. middle-class neighborhoods) was related to lowered employment expectations for the youth.

Other research supports the notion that social status influences the way in which career choices are approached. In a qualitative study of the school-to-work transition with young adults, Blustein et al. (2002) found that high SES participants were more likely to view their work as a source of meaning and personal satisfaction and to be engaged in work related to their interests, long-term goals, and self-concept. Conversely, low SES participants expressed a need to work for economic survival and were more likely to be focused on a short-term timeframe. These same low SES participants also described greater external barriers to educational participation and were less likely to engage in career exploration activities.

The perception of barriers to pursuing an education may help explain the statistic that a college opportunity gap exists regardless of level of preparation (National Center for Education Statistics, 2002). The percentage of college-qualified high school students who go on to attend college decreases with household income. Growing up in a low SES family is associated with higher levels of perceived barriers to educational and career attainment and lowered plans for educational attainment (McWhirter, Hackett, & Bandalos, 1998).

Finally, Hanna and Kahn (1989) found that self-efficacy expectations varied with SES. As SES increased so did student ratings of their ability to do or learn a range of jobs. Likewise, when students were asked about their beliefs in their ability to complete training requirements related to a job and to perform the required job tasks, Lauver and Jones (1991) found that self-efficacy increased with SES.

Subjective status. Research findings that assess the impact of perceptions of social status on career development are limited. Existing studies offer a mixed view on the influence of subjective status. First, two studies, which utilize a recently created measure based on the concept of differential status identity as outlined by Fouad and Brown (2000), link perceived status with career-development-related variables in the direction suggested by the research on SES: lower perceived status relates to poorer outcomes. In

one of these studies, only weak correlations were found between scores on the DSI measure and the prestige level of occupational aspirations and status-attainment self-efficacy (r = .10 to .23 for the various subscales; Ruiz de Esparza, Porter, & Brown, 2003). In another recent use of DSI, Thompson and Subich (2006) found that higher perceived access to economic and social resources was associated with higher levels of career decision self-efficacy (r = .24, p < .01). In this same study, the researchers used hierarchical regression analysis to examine the contribution of DSI scores to career decision self-efficacy independent of attempts to respond in a desirable manner, as there was concern that participants would skew their social status based on a desire for impression management. The authors found a small but significant contribution ($\Delta R^2 = .04$).

Contrasting with these findings are several studies suggesting the possibility that awareness of disadvantaged status may act as a motivating force, resulting in higher aspirations rather than as a barrier. In the Simmons and Rosenberg (1971) study introduced previously, the researchers measured class consciousness as being composed of four dimensions: awareness of occupational prestige differences, familiarity with and understanding of the term "social class," ability to identify peers of higher or lower status, and awareness of barriers to opportunity. Lower levels of class consciousness were found in students from lower-class backgrounds, and class consciousness was found to increase with age for all class groups. Those participants who evidenced greater class consciousness had higher expectations for their own social mobility. Using a longitudinal design, Diemer (2009) found that among poor youth of color, consciousness of and motivation to change or challenge social inequity was associated with occupational expectations, and later adult occupational attainment.

In a qualitative study of young adults with learning disabilities, Lindstrom, Doren, Metheny, Johnson, and Zane (2007) found that family socioeconomic status influenced initial career-related choices of low-SES participants via a perceived or real pressure to contribute to the family financially starting at a young age and via a motivation to achieve greater financial stability and status than that of the family of origin. Both the young adults and their parents saw the early work experiences as providing a foundational work ethic, sense of responsibility, and time management skills. Additionally, the young adults from low-SES backgrounds expressed aspirations for achievement beyond that of their parents.

Summary. The role that perceived status plays in the career development process remains unclear. The recent availability of the DSI measure will make it easier to continue to explore the influence of status perceptions in future research. However, the body of literature with respect to SES provides a clearer picture, relating status background to lowered aspirations, expectations, and self-efficacy and to higher perceived barriers to educational and occupational attainment.

Family Process

Within the realm of career development, multiple areas of family functioning have been assessed for their impact on career-related variables. These family process variables include parental attachment, parent support, parent modeling, parenting styles, parent-communicated expectations, family cohesion, and family involvement in school and career decision-making (Penick & Jepsen, 1992; Wall, Covell, & MacIntyre, 1999; Whiston & Keller, 2004b; Young et al., 2001). The available studies clearly suggest that family process factors have a sizable influence on career development outcomes.

The consideration of relational influences in vocational development has emerged as a new area of focus in the field. Researchers have called for greater attention to and recognition of how the quality of significant relationships informs the context in which decision-making and action occur (Blustein, 2001; Blustein, Prezioso, & Schultheiss, 1995; Schultheiss, 2000, 2003). Additionally, researchers have proposed a greater emphasis on the role of positive environmental factors, such as relational support, noting that past research has tended to highlight the impact of barriers and constraints (Lent et al., 2000). It has been suggested that social support may even act to assist an individual in overcoming the impact of perceived and encountered barriers (Kenny, Blustein, Chaves, Grossman, & Gallagher, 2003; Lent et al., 2000).

Family support is a potential protective factor and positive influence on career development that should be explored further. In this section, I first define the construct of social support and the types of support that have been differentiated. I then review the literature examining the impact of perceived family support and enacted family support on vocational development for adolescents and young adults.

Social Support Definition and Types

Multiple operationalizations of social support exist (House, Kahn, McLeod, & Williams, 1985; Tardy, 1985). Social support is considered one aspect of the content of social relationships and describes a functioning or process component of the relationship

(House, Umberson, & Landis, 1988). Barerra (1986) outlined three types of social support: perceived support (subjective experience of support from others), enacted support (support actually received from others), and embeddedness (ties to a social network). In contrast, Tardy (1985) differentiated between five dimensions of social support and fit these into a hierarchical model. From the top down, these dimensions are as follows: direction (received or provided), disposition (available or enacted), description/evaluation (described or evaluated), content, and network (the source: family, close friends, neighbors, co-workers, community, or professionals). His support content typology is based on House's (1981) distinction between emotional (provision of trust, empathy, love), instrumental (helping behaviors), informational (advice), and appraisal (evaluative feedback) support.

Providing support for Barrera's distinction between perceived and enacted support is the finding that correlations between the two are typically only moderate, suggesting that they are distinct constructs (r < or = .30; Lakey & Drew, 1997). Also weakly correlated are subjective reports of the quality of an adolescents' relationships with outside perceptions of those same relationships (i.e., those of parents, teachers, or other observers), and it is the adolescents' reports that show a stronger association with developmental outcomes (Feldman, Wentzel, & Gehring, 1989). SCCT stresses the active role of the individual in interpreting his or her environmental context (Lent et al., 1994, 2000); however, no direct comparisons between objectively-measured and subjectivelymeasured family support were found in conducting the literature review for this study. Therefore, it may be useful to consider each of these types of support and their relative impact on career development.

Importance in Career Development

In their review of the literature, Whiston and Keller (2004b) describe the positive influence of support from parents as a major theme in the literature, noting that studies have linked a positive parent-child relationship with higher aspirations and expectations, a secure sense of self, greater career-related self-efficacy, and increased career commitment. Social support emerges as a critical factor in the career choice process for college students, particularly in enabling them to overcome barriers to implementing that choice (Lent et al., 2002). Additionally, adolescents rank the support of their mothers and fathers as a greater source of influence on their own career expectations than teachers, peers, or school counselors (Paa & McWhirter, 2000).

Reflecting the importance of multiple forms of support from others, particularly family members, Blustein et al. (1997) documented the importance of both emotional and instrumental support for young adults engaging in the school-to-work transition. Instrumental support came in the form of assistance finding jobs and hearing workrelated information. Emotional support was most helpful when it was within the context of a relationship with a balance between caring and challenging interactions (Blustein et al.). Phillips, Blustein, Jobin-Davis, and White (2002) echoed this finding. Adolescents described the emotional and instrumental support received from adults in their lives as a key aid in their transition from school-to-work. In addition to active support, these students identified the real-life experiences shared by these adults as supporting their readiness to engage in the world of work themselves.

In this section, I first provide an overview of the literature on the importance of perceptions of family support on career development. Second, I review studies which have sought to elucidate particular parent behaviors contributing to youth's career development process.

Perceived support. When parents are perceived as supportive, adolescents are more likely to report higher expectations for their futures (McWhirter et al., 1998), more advanced educational plans (McWhirter et al., 1998), greater career certainty (Constantine, Wallace, & Kindaichi, 2005), higher career aspirations (Flores & O'Brien, 2002), and greater career-related and educational self-efficacy (Gushue & Whitson, 2006; Turner, Steward, & Lapan, 2004). In fact, Turner and Lapan (2002) found that perceptions of parent support explained 29 to 43% of the variance in self-efficacy for different career types in a sample of 7th and 8th-grade students. Further, adolescents who describe their family as being unsupportive are more likely to have less clearly defined goals for the future and to see multiple barriers to achieving their goals (Hill, Ramirez, & Dumka, 2003). A lack of parent support is also predictive of the perception of limited access to opportunity for educational and career development (Wall et al., 1999).

Enacted support. Receiving parent encouragement for career- or academic-related pursuits is associated with higher levels of self-efficacy and outcome expectations (e.g., Ferry, Fouad, & Smith, 2000). Receiving instrumental support (e.g., ideas about job opportunities) is associated with greater work salience and higher vocational expectations

(Diemer, 2007). Further, Blustein et al. (2002) found that youth particularly valued their parent's encouragement around engaging in career exploration activities, information and assistance provided in career planning, and assistance in finding jobs or learning of job leads as they engaged in the transition to work. Young and colleagues have been studying these and other specific intentional actions on the part of parents which may influence vocational development.

Young has examined critical incidents between parents and children and looked at the intentions behind parents' actions (Young, 1994). He sees career development as occurring within the family context and parents as making choices intended to influence the career-related behaviors of their children in a variety of ways. He argues that it is important to recognize the purposeful and conscious nature of parent helping behaviors and has explored the different ways in which parents contribute to the career development "project" of their children.

Young, Friesen, and Pearson (1988) gathered information about the most frequent parent activities intended to influence adolescent's career development from a sample of 207 parents, ages 29 to 62. The researchers gathered critical incidents from the parents, categorized them, and then constructed a scale in order to code the frequency of specific behaviors among all of the parent participants. The most frequently used independent actions (those undertaken by the parent on the part of the child but without their involvement) were structuring the home environment, providing instrumental support (e.g., buying books), and observing the child. The most frequently cited joint actions (those performed with the child) were giving information, giving feedback, setting expectations, encouraging, and providing advice and suggestions.

Way and Rossmann (1996) used this intentional interaction perspective in a largescale study with 1266 12th-grade adolescents and 879 young adults. They constructed a measure for parents' intentional career-related interactions based on Young's work. In both the adolescent and young adult samples, intentional parent interactions contributed indirectly to school-to-work transition readiness via increasing students' intrinsic motivation for learning.

Summary. There is sufficient evidence to conclude that perceived family support is highly influential in shaping the career-related behaviors and attitudes of adolescents and young adults. The role that intentional support behaviors by parents play in vocational development has only begun to be explored. Therefore, further research including this added dimension of support will be useful.

Interaction of Status and Process

One explanation given for the findings linking family social status to career development has been differences in parent involvement or family functioning (Whiston & Keller, 2004b). In the realm of child development in general, the deleterious impacts of poverty on child developmental outcomes – including cognitive functioning, academic achievement, and socioemotional functioning – have been shown to persist even after controlling for individual differences in family and parenting behaviors (McLoyd, 1998). In a study utilizing data from the National Education Longitudinal Study (NELS) of 1988 to examine predictors of college completion, Trusty (2004) found a much stronger effect for SES than for parent involvement: an increase in SES by one standard deviation resulted in a 62% increase in the likelihood of degree completion; in contrast, a one-standard-deviation increase in parent involvement only increased the likelihood of degree completion by 13%.

Some vocational research has suggested that children from low SES backgrounds receive less support from their parents for career endeavors. For instance, low SES young adults in a qualitative study by Blustein et al. (2002) reported that more disruptions in the parent-child relationship (e.g., divorce or conflict) and less instrumental support (e.g., assistance in obtaining job leads, career information, direct input on career decisionmaking and planning activities) than their high SES counterparts. However, in another study using the 1988 NELS data set, Trusty, Watts, and Erdman (1997) found that SES explained less than 1% of the variance in parental involvement in the career development process for adolescents.

The majority of existing studies have not included a direct comparison of the influences of family status and family process variables on career development. In this section, I review the findings of several studies which did incorporate both SES and family process. I then discuss the implications for future research.

Poole, Langan-Fox, Ciavarella, and Omodei (1991)

In this longitudinal study, Poole, Langan-Fox, Ciavarella, and Omodei (1991) examined contributors to the professional attainment of young adults in Australia. The sample of approximately 3000 students was surveyed at the ages of 18 (during their senior year in high school), 21, and 27. Relevant here are their findings related to the contributions of family of origin SES (composite of parents' education and occupational status) and perceived parental expectations (single item asking whether their parents wanted them to go on to higher education) on student occupational outcome expectations (measured via expectation for either professional or nonprofessional status). Results of a path analysis found that parental expectations was the stronger predictor of student occupational expectations (beta = .29 versus beta = .05 for SES). Thus, in this study, the family process variable was a more powerful influence than family status.

Penick and Jepsen (1992)

This study of 215 adolescents in the 11th grade examined how family functioning was associated with vocational identity development and the engagement in career exploration and planning activities. Family functioning was measured along relationship dimensions (cohesiveness, expressiveness, conflict, sociability, idealization, and disengagement) and system maintenance dimensions (locus-of-control, family style, and enmeshment). Background information related to parents' occupational prestige was utilized to represent SES. SES was not found to be highly correlated with any of the family functioning dimensions (r = .04 to .16, with only the relationship to locus of control at a moderate level of r = -.29). Results of regression analyses found that perceived family functioning was more strongly related to the outcome variables than SES, and the contribution of SES was not statistically significant. Again in this study, family process was the more powerful influence.

Way and Rossmann (1996)

Way and Rossmann (1996) studied family influences on vocational development, including the variables of family functioning, parent intentional interactions, family work values, and parent participation in schooling. The researchers examined the impact of these variables on student learning processes and readiness for the school-to-work transition. Included in the study were the individual background factors of sex, race, SES, and family structure (i.e., whether single parent). Two separate studies were conducted: one with 1266 adolescents in the 12th grade, representative of the U.S. secondary school population, and one with 879 adult students from two-year colleges. Each study conducted a path analysis testing a hypothesized model predicting transition readiness (assessed via measures of vocational identity, work effectiveness skills, career indecision, and post-high school plans).

In the adolescent study, SES was found to directly contribute to most variables of family functioning: a proactive family interaction style, more parent involvement in school, more interaction related to the career development process (Way & Rossmann, 1996). In terms of the overall model predicting transition readiness, SES exerted no total or direct effects on readiness. Only indirect effects for SES were found via its impact on family functioning.

In the adult study, SES was assessed for both the family of origin (parent education and occupation) and the current family (Way & Rossmann, 1996). The results were that family of origin SES was again found to exert a direct effect on family functioning variables: proactive family functioning, family interactions related to the career development process, and greater perceived support for career development. However, family of origin SES was not directly or indirectly linked with school-to-work transition readiness. SES in the current family was directly linked with transition readiness. This suggests that current status may be more important for career development variables. It also provides support for the notion that family functioning may vary by status background.

Ali, McWhirter, and Chronister (2005)

Ali, McWhirter, and Chronister (2005) examined the relationships between SES, vocational and educational self-efficacy, vocational outcome expectations, perceived social support (from parents, friends, and siblings), and perceptions of educational barriers. The sample for the study was 114 adolescents in the 9th grade of whom 32% were eligible for free and reduced lunch (a commonly-used indicator of poverty status). In preliminary analyses of the correlations between these variables, SES was related to mother and father support (r = .35 and .37, p < .01) and to the outcome variables of self-efficacy and outcome expectations (r = .24 and .22, p < .05) at a moderate, statistically significant level.

A hierarchical multiple regression analysis was used to assess the relative contributions of social support and SES in predicting self-efficacy. In contrast to prior findings, mother and father support were not significant predictors, and SES did not provide any additional unique variance. Only sibling and peer support was found to be significantly predictive of higher self-efficacy. Findings were similar for the regression equation predicting outcome expectations. Self-efficacy, sibling support, and peer support were the only significant predictors.

Ali and Saunders (2006)

In this study, Ali and Saunders (2006) examined the predictors of college expectations for 87 adolescents in the 10th and 11th grade in a high school in rural Appalachia, an area where an estimated 30% of adults live in poverty. A hierarchical multiple regression analysis was used to assess the relative contributions of mother's education and occupation, father's education and occupation, vocational/educational selfefficacy, and perceived parental support in predicting students' expectations for completing college. SES was assessed from parent education levels and occupational prestige. Additional analyses were conducted to determine whether parent support and SES predict self-efficacy and whether SES predicts parent support. The results of the analysis indicated that parent support was a significant predictor of both vocational/educational self-efficacy, or parent support. This finding suggests that parent support, the family process variable examined, has greater impact than family status.

Implications for Future Research

The findings of these four studies are mixed with regard to the relative contributions of SES and family process variables to career development outcomes. Each of the studies reviewed uses objective measures of SES and a variety of family process measures. Each study also differed in the outcome variable under study (occupational expectations, school-to-work transition readiness, social-cognitive variables, or college expectations). Given this range of targeted variables, it is difficult to make generalization based on these research studies.

One theme is that the influence of SES diminished or vanished when family process was taken into account (Ali & Saunders, 2006; Way & Rossmann, 1996) and that family process variables were the stronger influence (Penick & Jepsen, 1992; Poole et al., 1991). This reflects the general conclusion that can be drawn from a comparison of the findings related to each potential influence (see Whiston & Keller, 2004b). While it has been suggested that SES may be linked to family support behaviors, with less support being perceived and received within low SES families, this finding was only evidenced in one of the studies reviewed (Way & Rossmann).

Thus, more research is clearly warranted in order to replicate and extend these findings. In fact, in concluding their extensive review of the literature, Whiston and Keller (2004b) recommend a return to the examination of family structural variables (e.g., SES) and new investment in determining particular parent behaviors influential for vocational development. The authors label the impact of SES significant but note the limited understanding of how this influence operates and how it interacts with other family variables.

Summary

The review of the literature and summary of SCCT supports a number of conclusions. First, the existing body of literature has failed to address the psychological aspects of social class, instead maintaining a sociological focus on its objective

measurement. With its high potential to impact the career development process, additional research into the role and influence of social class is needed. Second, little is known about the way that social class background and family process characteristics interact to influence outcomes. Numerous researchers have called for research investigating family variables that may be viable foci of prevention and intervention. Thus, this review emphasizes the importance of research analyzing the contribution of family of origin context on vocational behavior. This dissertation study aimed to address the existing deficits in the literature and contribute to the discipline's understanding of family influences on career development.

Purpose of Study

The aim of this study was to examine the role that family background and process variables have on social cognitive career-related outcome variables. I hoped to further elucidate the particular role of social status, both objective and subjective, and its interaction with family support in the career development of young adults – specifically college students. A non-experimental, survey design was employed to explore the relationships among family of origin socioeconomic status, subjective social status, perceived family support for career development, enacted family support for career development, and the social cognitive variables of self-efficacy beliefs and outcome expectations. My research questions were the following:

Research Question 1: Is there a relationship between socioeconomic status in the family of origin and social-cognitive career-related variables? It was hypothesized

that there is a significant, positive relationship between family SES and careerrelated self-efficacy and between family SES and outcome expectations. *Research Question 2:* Is there a relationship between an individual's subjective social status and social-cognitive career-related variables? It was hypothesized that there is a significant, positive relationship between subjective status and career-related self-efficacy and between subjective status and outcome expectations.

Research Question 3: Which is the more powerful influence on social-cognitive career-related variables: objective status (family of origin SES) or subjective status? It was hypothesized that an individual's perceptions of his or her status will have a stronger relationship with career-related self-efficacy and with outcome expectations.

Research Question 4: How does enacted family support for career development affect the relationship between objective social status and social-cognitive career-related variables? It was hypothesized that enacted family support will mediate the relationship between social status and career-related self-efficacy and between social status and outcome expectations. Also, it was hypothesized that students who report higher levels of enacted family support will experience higher levels of career-related self-efficacy and outcome expectations, regardless of their level of social status.

Research Question 5: How do perceptions of family support for career development affect the relationship between objective social status and social-

cognitive career-related variables? It was hypothesized that perceptions of family support will mediate the relationship between social status and career-related selfefficacy and between social status and outcome expectations. Also, it was hypothesized that students who perceive higher levels of family support will experience higher levels of career-related self-efficacy and outcome expectations, regardless of their level of social status.

The model representing the hypothesized relationship among the variables under study is depicted in Figure 2.



Figure 2. Hypothesized model for study: Expected relationships among family SES, subjective social status, perceived family support, enacted family support, career decision self-efficacy, and career-related outcome expectations. SES = socioeconomic status.

CHAPTER III

METHODS

Participants

Participants were male and female undergraduate students, aged 18 to 22 years, from 2- or 4-year community colleges, colleges, and universities. A total of 308 surveys were collected online. Of these, six were discarded because the participant indicated that they were outside of the accepted age range. An additional 22 were dropped from the study because of incomplete data (they abandoned the survey before reaching the end and failed to complete two or more of the measures). This resulted in a sample of 279.

Of the participants in the sample, 85% were female, and 14% were male, with one participant identifying as transgender. The mean age for the sample was 19.9 (SD = 1.5). The self-identified ethnicity of participants was 79% Euro-American, 7% Asian or Asian-American, 7% multiethnic, 4% Latino/a, 1% Middle Eastern, 1% "other," and less than 1% each for Native American, African-American, and Pacific Islander.

Ninety-six percent (n = 269) of the students were attending a 4-year college or university, with the remaining students indicating attendance at either a 2-year college (2%) or a community college (2%). Participants identified their U.S. area of residence as follows: 81% Northwest, 7% Southeast, 6% Northeast, 2% Southwest, 2% South, 1% Midwest, and 1% "other." Forty-nine percent (n = 136) of the students reported being currently "partially financially dependent upon one or more of my parents/guardians," whereas 38% reported being fully financially dependent, 10% identified as financially independent, and 3% endorsed currently being in "a relationship in which I share financial responsibility or my partner provides for me (romantic partnership or marriage)."

Procedure

Data collection occurred during the fall and winter terms of the school year. Participants for the study were solicited in two ways. First, college-aged students in the Eugene, Oregon area were solicited via advertisements on the University of Oregon campus. Fliers were posted in the student union and in classroom buildings. Permission to hand out fliers in large survey courses was also obtained from instructors in the Psychology, Sociology, and Family and Human Services departments. Email advertisements were sent to departmental secretaries at the University of Oregon requesting that they be distributed to student lists.

As a second form of recruitment, I used a snowball sampling technique (Gall, Gall, & Borg, 2003). Snowball sampling relies on previously identified group members to identify others in the population and is considered a non-probability sampling technique. In this technique, well-located people provide guidance in recommending potential participant sources which may be tapped for recruitment. As increasing numbers of people become aware of the study, the researcher is able to find an increasing number of potential participants. In this study, I communicated with faculty, staff, colleagues, and

co-workers who recommended email listserves, other faculty/staff, and/or individuals from a variety of educational institutions who could connect me with additional contacts.

Data was collected in the form of an online questionnaire battery. Participation eligibility criteria were as follows: (a) a student currently enrolled in a 2- or 4-year educational institution, (b) between the ages of 18-22, and (c) able to read and write English. I provided monetary incentive in order to increase recruitment success. Each participant was offered the opportunity to submit contact information in order to receive a five dollar Starbucks gift card as compensation for their participation.

Study advertisements included (a) a brief description of the study, including the eligibility criteria and approximate length of time required to complete the survey (25 minutes), (b) a statement of the compensation opportunity, and (c) a web-based link connecting them to the survey web pages. The web link included in advertisements led participants to the informed consent statement (see Appendix A). In the informed consent statement, participants had the opportunity to read a brief description of the study and were informed of their right to decline or discontinue participation at any time in the research process without negative consequence. Because of the anonymous nature of the study, participants did not sign the informed consent but instead indicated consent by completing and submitting the survey.

Measures

In this section, I describe each of the measures used in this study. All measures are included in Appendix B. Table 1 provides an overview of study constructs and their associated measures.

Construct	Measure	# Items	Variable Type		
Socioeconomic Status	Nakao-Treas	1	Continuous		
	Socioeconomic Index (SEI)		Range = 17 to 97		
Subjective Social Status	Differential Status	60	Continuous		
	Identity Scale (DSIS)		Range = 60 to 300		
Perceived Family Support for	Family of Origin Career	10	Continuous		
Career Development	Development Support		Range = 10 to 30		
Enacted Family Support for	Parent Intentional Career-	10	Continuous		
Career Development	Related Interactions		Range = 10 to 40		
Career Decision-Making Self-	Career Decision Self-	25	Continuous		
Efficacy	Efficacy Scale – Short Form (CDSE-SF)		Range = 1 to 5		
Career Outcome Expectations	Vocational Outcomes	12	Continuous		
	Expectations Scale (VOE)		Range = 1 to 4		

Table 1. Description of Study Constructs and Measures

Person and Family Context Variables

Demographic information and socioeconomic status. Participants were asked to fill out a brief demographic questionnaire with questions regarding their age, race/ethnicity, sex, financial status, and parental occupation. The Nakao-Treas Socioeconomic Index (SEI; Nakao & Treas, 1994) was used to assess the socioeconomic background of each participant. This measure allows for a numeric score to be assigned to an occupational title. The Nakao-Treas SEI is used to represent "objective" social status for this study.

SEI scores are based on updated occupational data obtained by the 1989 National Opinion Research Center (NORC) General Social Survey (GSS) using 1980 U.S. Census occupational titles (Nakao & Treas, 1994). SEI scores can range from 17 (e.g., sewing machine operator) to 97 (e.g., physician), with a mean score of 52.5. SEI scores have been used extensively by sociologists studying social status since Duncan created the first such measure in 1961 (Nakao & Treas). In late adolescence, it is expected that the social standing of their family of origin still exerts considerable influence on current attitudes and behaviors (Brown et al., 1996). Therefore, parent occupational titles were used to calculate SEI scores for the participants.

Scores were assigned for parents or other caregivers who provided direct financial support and lived in the household during the participants' adolescent years. Consistent with prior research, if two or more SEI scores are available for a participant, the highest score for the household was used (Blustein et al., 2002; Lauver & Jones, 1991; McWhirter, 1997). Scores were assigned independently by me and two research assistants. Interrater reliability was assessed, and scores for any discrepancies were determined collaboratively by the raters, with additional consultation as needed from Ellen H. McWhirter. SEI scores for this sample ranged from 27 to 97.

Subjective social status. Perceived social status was assessed using the Differential Status Identity Scale (DSIS; Brown et al., 2002). The DSIS was constructed based on Fouad and Brown's (2000) conceptualization of differential status identity

which outlines three dimensions of social status in terms of the relation and access to (a) economic resources, (b) prestige, and (c) power. Each of these dimensions is represented in a subscale of the measure. The resulting 60-item scale has been used in several initial validation studies (Thompson & Subich, 2006; Thompson & Subich, 2007).

Respondents are asked to compare themselves to the "average U.S. citizen" for items based on a 5-point, Likert-type scale with response options ranging from *very much below average* (scored as -2) to *very much above average* (scored as +2) on the economic resources and social power subscales. Response options are slightly different for the social prestige subscale: *much less* (scored as -2) to *much more* (scored as +2). Consistent with recommendations in prior studies, scores will be converted to a 1 to 5 scale for analysis purposes. Item scores are summed to create three separate subscale scores and a total scale score. Higher scores represent higher perceived status.

The economic subscale consists of 30 items which ask the respondents about perceptions of how they compare to the average U.S. citizen in terms of having the financial means to take part in a variety of behaviors. Sample items include "ability to travel recreationally," "ability to afford prescription medicine," and "ability to afford regular dental visits." The social subscale consists of 15 items which ask respondents about perceptions of the extent to which society values or appreciates various aspects of their lives. Sample items include "type of car you drive," "neighborhood in which you live," and "ethnic/racial group." Finally, the power subscale consists of 15 items which ask respondents to indicate how much social power they perceive themselves as having relative to the average citizen. Sample items include "influence state or federal

educational policies," "receive a fair trial," and "contact people in high places for a job or position."

The authors' validation work on the measure is ongoing (M. T. Brown, personal communication, February 23, 2007), but preliminary research has been conducted and published by Thompson and Subich in several articles. This preliminary research supports the division of the scale into multiple subscales (Thompson & Subich, 2007). A four factor structure emerged in this preliminary analysis, which included two distinct economic subscales: one which the authors labeled "basic needs" and another which the authors labeled "amenities." In a separate study, these authors tested the relative contributions of each of the DSIS subscales (Thompson & Subich, 2006). When entered in varying order in hierarchical multiple regression analyses, the subscale entered first was always found to account for the unique variance in the outcome variable – each subsequent subscale entered did not contribute additional variance. This suggests that dividing this measure into multiple subscales for analysis purposes may have little utility.

In terms of scale reliability, internal consistency coefficients have been high. In a sample of 174 college students (average age 22.4 years; 80% Caucasian), an alpha of .98 was obtained (Thompson & Subich, 2006). In this same sample, the authors tested the scale's discriminant validity by testing the correlation with measures of self-esteem (r = -.08) and psychological entitlement (r = .04). Neither relationship was statistically significant, suggesting that DSIS is a distinct construct. Further, scores on the measure were related positively and statistically significantly to self-reported social class (r = .45,

p < .01) and childhood family income (r = .38, p < .01). This suggests that DSIS scores are related to but also distinct from other family of origin status measures.

In a second sample of 221 college students (average age 21.9 years; 80% Caucasian), an alpha of .97 was obtained (Thompson & Subich, 2006). Again in this sample, there was a moderate, positive, statistically-significant relationship between DSIS scores and self-reported social class (r = .62, p < .01) and between DSIS scores and childhood family income (r = .45, p < .01).

Finally, in a third sample of 454 college students (average age 22.1 years; 72% Caucasian), these same researchers obtained an alpha of .97 for the measure (Thompson & Subich, 2007). Positive, statistically-significant relationships were reported between the scale scores and self-reported social class (r = .56, p < .01) and childhood income level (r = .42, p < .01). Analyses also revealed that subscale scores were consistently lower for African-American participants than for Caucasian participants. An alpha of .97 was obtained for the present study.

Perceived family support. Perceptions of support for career development were assessed using a 5-item scale developed by Way and Rossmann (1996). Items reflect financial, emotional, and instrumental types of support perceived as being present in the family of origin. Respondents are asked to identify the extent to which the family they grew up in has provided different kinds of support. Response options include *no support* (scored as 1), *a little support* (scored as 2), or *considerable support* (scored as 3). Sample items are "To what extent has the family you grew up in given you financial support for your education and training?" and "To what extent has the family you grew up in given up in given

you information and contacts that helped you with your occupational choices?" Higher total scores reflect higher levels of perceived support from the family of origin.

An internal reliability coefficient of .83 was obtained in a sample of 879 adults attending two-year colleges in the states of Arizona, Georgia, Minnesota, and Pennsylvania (Way & Rossmann, 1996). The sample was mostly Euro-American (77%), female (75%), married (59%), and represented a range of ages: below 21 (17%), 21-25 (26%), 26-30 (14%), 31-35 (13%), and 36 and older (22%). In this sample, family of origin career development support was correlated positively with family of origin proactive functioning – a variable assessing family functioning patterns via measurement of family cohesion, organization, democratic decision-making, sociability, and other related characteristics using Bloom's (1985) comprehensive survey of family functioning (r = .58). Family of origin career development support was also correlated positively with parent intentional career-related interactions (variable described in the section that follows, r = .53). Suggesting criterion-validity, support scores were also correlated positively with school transition smoothness (r = .46) – a variable assessed via the time lapse between high school and further schooling and the consistency of study interest areas between high school and current schooling.

Five items have been added to this measure for the purposes of this study (items 6 through 10). These items were created to represent Tardy's four types of support. Because the original scale items focus on instrumental support (items 1, 4, and 5), I added items reflecting appraisal (item 6), emotional (items 7 and 10), and informational (items 8 and 9) support. The new items are written in a format similar to the original items: "To what extent has the family you grew up in helped you understand your strengths and/or talents," "To what extent has the family you grew up in encouraged you to pursue your goals and/or plans for the future," "To what extent has the family you grew up in been available if you want to talk about a problem," "To what extent has the family you grew up in been helpful when you have questions about educational or career-related issues," and "To what extent has the family you grew up in expressed pride in your educational or career-related accomplishments?" (items 6 through 10 respectively). The modified tenitem version of the scale was evaluated for internal consistency (via coefficient alpha) and unidimensionality (via exploratory factor analysis).

Psychometric properties for the modified version of this measure were sufficient; therefore, the modified version was used in subsequent analyses. An alpha of .85 was obtained for the present sample, suggesting adequate internal consistency (Clark & Watson, 1995). An exploratory factor analysis (EFA) was conducted using maximumlikelihood extraction, no rotation, and listwise deletion of missing values. The size of the eigenvalue for the first factor relative to that of the next largest factor was 5:1. Further, the variance of inter-item correlations was reasonably low (0.016), suggesting adequate unidimensionality (Clark & Watson).

Enacted family support. Enacted family support for career development was assessed using a 10-item scale developed by Way and Rossmann (1996). The scale was developed based on the qualitative research of Young and Friesen (1992), which examined intentional actions of parents attempting to influence the career development of their children. The assumption underlying Young and Friesen's work is that parent behaviors are often purposeful in their intent and seek to influence children's development in specific ways. Based on parent reports of their intentions around a select set of critical incidents described in interviews, Young and Friesen developed categories based on the content of the intention. Way and Rossmann's scale assesses for the following types of interactions from Young and Friesen's work: skill acquisition, facilitation of human relationships, increasing independent thinking and action, development of personal responsibility, enhancing self-image, and decreasing sex-role stereotyping.

Respondents are asked to indicate the degree to which items reflect the family they grew up in. Response options range from *very untrue for my parent(s)/guardian(s) or family* (scored as 1) to *very true for my parent(s)/guardian(s) or family* (scored as 4). Sample items are "My family helped me to develop job skills which are useful now," "My family stressed that males and females have similar abilities and career alternatives," and "My family stressed that I must be responsible for my own actions." Higher total scores reflect the presence of more intentional interactions on the part of the respondent's parents.

An internal reliability coefficient of .86 was obtained in a sample of 879 adults attending two-year colleges in the states of Arizona, Georgia, Minnesota, and Pennsylvania (Way & Rossmann, 1996). This sample is described in more detail in the section immediately preceding this one. In addition to this scale's correlation with family of origin career development support (r = .53), scores on this scale were also positively correlated with family of origin proactive functioning (r = .63) and to a lesser degree with transition smoothness (r = .28). An alpha of .80 was obtained for the present study. *Career-Related Outcome Variables*

Career decision-making self-efficacy. Career decision-making self-efficacy can be conceptualized as an individual's judgment of personal competency in completing the tasks necessary to make positive career-related choices and is considered a form of process efficacy (Betz & Taylor, 2001; Lent & Brown, 2006). The Career Decision Self-Efficacy Scale (CDSE-SF; Betz & Taylor, 2001; Betz, Klein, & Taylor, 1996; Taylor & Betz, 1983) is a scale developed to assess this construct. The scale was constructed based on Crites' (1978) theory of career maturity which outlined five areas of competency within the domain of career choice: self-appraisal, occupational information, goal selection, planning, and problem solving. The resulting 25-item scale has been used extensively within the vocational psychology literature.

Respondents are asked to rate each of a series of statements reflective of careerrelated decision-making tasks on a 5-point, Likert-type scale with response options ranging from *no confidence at all* (scored as 1) to *complete confidence* (scored as 5). Sample tasks are "Determine what your ideal job would be," "Prepare a good resume," and "Choose a career that will fit your lifestyle." Higher total mean scores reflect higher levels of self-efficacy in this domain.

Reliability and validity evidence for the CDSE has been reported by Betz and colleagues (Betz & Luzzo, 1996; Betz & Taylor, 1994; Betz & Taylor, 2001; Betz, Hammond, & Multon, 2005; Betz et al., 1996). Recent studies have reported internal

consistency coefficients of .95 in a sample of 224 adults from a variety of ethnic, education, and employment backgrounds (Juntunen & Wettersten, 2006) and .97 for a sample of 325 Midwestern high school seniors, the majority of which were Euro-American (77%; Metheny, McWhirter, & O'Neil, 2008). An alpha of .95 was obtained for the present study.

Career outcome expectations. Career outcome expectations can be defined as an individual's imagined consequences of engaging in a career. Outcome expectations were assessed using the Vocational Outcome Expectations scale (VOE; McWhirter, Rasheed, & Crothers, 2000). Respondents indicate their degree of agreement with 6 statements on a 4-point, Likert-type scale with response options ranging from *strongly disagree* (scored as 1) to *strongly agree* (scored as 4). Item scores are averaged, with higher scores indicating more positive outcome expectations. Sample items from the scale include "I will be successful in my chosen career/occupation" and "My talents and skills will be used in my career/occupation."

In a sample of high school sophomores, test-retest reliability at 9 weeks was reported as r = .59 (McWhirter, Rasheed, & Crothers, 2000). Concurrent validity was demonstrated via the scale's moderate correlation (r = .54) with a five item outcome expectation measure developed by Fouad and Smith (1996). Recent studies have reported high internal consistency coefficients. An alpha of .90 was found for a sample of 325 seniors at an urban public high school in a midsized Midwestern city, of which the majority were Euro-American (77%) and of a mean age of 17.5 (Metheny, McWhirter, & O'Neil, 2008). An alpha of .92 was found for a sample of 114 ninth-grade students in a semi-rural, Northwestern high school, of which the majority were Euro-American (77%) and of a mean age of 14.7 years (Ali, McWhirter, & Chronister, 2005). While the measure has not been used with a young adult population previously, measure items are constructed such that they can be considered appropriate for a variety of ages. Further, the measure has been used successfully with high school seniors, and there is a lack of available measures developed specifically for a college-aged population.

Given the measure's brevity and inclusion of items that are not specific to careerrelated choices (e.g., "The future looks bright for me" and "I can make my future a happy one"), six items were added to this measure (items 7 through 12). These items were created to represent Bandura's three types of outcome expectations. Added items reflect self-evaluation or satisfaction (items 7 and 10), physical (items 8 and 12), and social (items 9 and 11) outcomes associated with career choices. These items are specific to outcomes related to the career decision-making process: "I will get the job I want in my chosen career," "My career/occupation choice will provide the income I need," "I will have a career/occupation that is respected in our society," "I will achieve my career/occupational goals," "My family will approve of my career/occupation choice," and "My career/occupation choice will allow me to have the lifestyle that I want" (items 7 through 12 respectively).

Psychometric properties for the modified version of this measure were sufficient; therefore, the modified version was used in subsequent analyses. An alpha of .92 was obtained for the present sample, suggesting adequate internal consistency (Clark & Watson, 1995). An exploratory factor analysis (EFA) was conducted using maximumlikelihood extraction, no rotation, and listwise deletion of missing values. The size of the eigenvalue for the first factor relative to that of the next largest factor was 7:1. Further, the variance of inter-item correlations was reasonably low (0.008), suggesting adequate unidimensionality (Clark & Watson).

CHAPTER IV

RESULTS

Preliminary Analyses

Of the 279 cases in the sample, twenty-three percent (n = 63) contained missing item responses. Overall, less than 1% of the data was missing. Little's missing completely at random (MCAR) test indicated that missing items were missing completely at random, χ^2 (6522) = 6554.06, p = .39. Therefore, in order to maximize sample size, expectation maximization (EM) imputation was used to calculate maximum likelihood estimates for missing values in the data set (Dempster, Laird, & Rubin, 1977).

An examination of the data for outliers revealed five cases with large Mahalanobis D-squared values and p-values less than .01. Visual inspection of these cases revealed that the respondent's data contained little variability in responses on some measures, suggesting that the respondent may not have considered each item separately when answering. As a result, these cases were discarded, leaving a total of 274 cases in the final sample. The means, standard deviations, and range of mean item scores, as well as alpha coefficients for each measured variable and a correlation matrix, are presented in Table 2.

Variable	M	SD	Range	α	1	2	3	4	5	6
1. Socioeconomic status	64.50	18.79	27-97							
2. Subjective social status	3.24	0.57	1.32-4.93	.97	.26***					
3. Perceived family support for career development	2.64	0.36	1.40-3.00	.85	.25***	.46***				
4. Enacted family support for career development	3.36	0.43	2.00-4.00	.80	.11	.23***	.53***			
5. Career decision self- efficacy	3.94	0.59	2.00-5.00	.95	.06	.35***	.26***	.25***		
6. Career outcome expectations	3.44	0.41	2.33-4.00	.92	05	.26***	.29***	.34***	.58***	

Table 2. Descriptive Statistics, Reliability Coefficients, and Correlations among Measured Variables ***p < .001.
Examination of skewness and kurtosis statistics (using a cutoff value of +/-1.00), along with histograms, suggested that distributions for the following variables approximated normal: socioeconomic status, subjective social status, enacted family support, career decision self-efficacy, and career-related outcome expectations. The data for perceived family support was both negatively skewed (-1.47) and leptokurtic (1.95). However, the skew and kurtosis values for this variable did not exceed Kline's (1998) identified the threshold values for skew (+/-3.00) and kurtosis (+/-10.00) beyond which data is considered to seriously depart from normality and to be problematic for structural equation modeling (SEM) analyses. Further, path analyses are generally robust to violation of normality for larger samples (>100; Tabachnick & Fidell, 2001).

Path Analyses

Research questions regarding the relative strength of independent variables in influencing the outcome variables and the potential mediating role of family support were addressed via path analysis. The model introduced in Figure 2 served as the basis for creating the path model. The exogenous (independent) variable in the path model was family socioeconomic status (SES). The endogenous (dependent) variables in the path model were perceived family support for career development, enacted family support for career development, subjective status, career decision self-efficacy, and career outcome expectations. I used Amos 9.0 (Arbuckle, 2005) and maximum likelihood estimation (MLE) to run the path analysis and to calculate path coefficients and model fit indices.

I randomly split my sample of 274 students into two samples: a calibration sample (n = 134) and a validation sample (n = 140). The calibration sample was used to test the

hypothesized model (see Figure 2). The validation sample was reserved to allow for cross-validation in the case that model revisions were required (Klem, 1995).

In evaluating model fit, I used a variety of goodness-of-fit indices: chi-square value (χ^2) and significance, the comparative fit index (CFI), the Tucker-Lewis index (TLI), the standardized root-mean-squared residual (SRMR), and the root-mean-square error of approximation (RMSEA). A large and statistically significant (p < .05) chi-square value suggests that the model is a poor fit for the data (there is a statistically significant divergence between the sample and the fitted covariance matrices). Hu and Bentler's (1999) recommended cutoff values for each additional goodness-of-fit index were utilized in order to reduce the risk of rejecting a model which correctly represents the relationship between constructs in the population (Type 1) and of retaining a model which is incorrectly specified (Type II) error. Specifically, criteria for model retention were CFI and TLI values above .95, an SRMR value below .08, and an RMSEA value below .06.

The various goodness-of-fit indices for the hypothesized model, tested in the calibration sample, are presented in Table 3. The chi-square statistic value was large and statistically significant, χ^2 (3, N = 134) = 48.07, p = .00. In addition, the various other indices also suggested poor model fit with the data. Therefore, the hypothesized model was rejected.

Model	χ^2	df	р	CFI	TLI	SRMR	RMSEA	90% CI for RMSEA
Hypothesized model ^a	48.07	3	.00	.67	66	.14	.34	(.26, .42)
Revised model ^a	0.08	1	.77	1.00	1.10	.00	.00	(.00, .15)
Revised model ^b	0.96	1	.33	1.00	1.00	.01	.00	(.00, .22)
Revised model ^c	0.02	1	.89	1.00	1.04	.00	.00	(.00, .08)

Table 3. Summary of Model-Fit Statistics *Note.* CFI = comparative fit index; TLI = Tucker-Lewis index; SRMR = standardized root-mean-squared residual; RMSEA = root-mean-square error of approximation; CI = confidence interval. ^a Calibration sample (n = 134). ^b Validation sample (n = 140). ^c Full sample (n = 274).

Given the lack of prior research examining the causal relationship among the variables under study, modifications to the hypothesized model were considered which might improve the fit. In order to minimize the risk of improving fit but constructing a substantively meaningless model (i.e., one that capitalizes on chance characteristics of this sample and can not be replicated), only modifications consistent with theory and/or prior research were considered (MacCallum, Roznowski, & Necowitz, 1992).

The modification indexes suggested six additional possible paths that might improve the fit of the model. Of these, two paths were chosen which met the criteria of being consistent with theory and/or prior research: (a) a path from enacted family support for career development to perceived family support for career development, and (b) a path from perceived family support for career development to subjective social status. The path from enacted family support to perceived family support was consistent with prior research finding a moderate, positive relationship between these variables (r = .53; Way & Rossmann, 1996). Further, Barerra (1986) theorized perceptions of support and enacted support as being two related but distinct subtypes of support. The hypothesis that intentional parent interactions related to career development (i.e. enacted family support) impacts an adolescent's subjective experience of support from parents around career development (i.e. perceived family support) is plausible. Adding a path from perceived family support to subjective social status was also consistent with theory. The construct of differential status identity is meant to capture an individual's understanding of his or her social standing in U.S. society, partly based on his or her access to social resources. A perception of greater support from family for career development might be linked with more perceived status and resources in social contexts.

The path analysis was rerun with the revised model in the calibration sample. The results are presented in Table 3. The revised model fit the data significantly better than the hypothesized model, χ^2 difference(2, N = 134) = 47.99, p < .01. Goodness-of-fit indices for the revised model indicated good fit. To determine if the revised model could be replicated, the revised model was rerun in the validation sample (n = 140). Again, the goodness-of-fit indices indicated a good fit (see Table3).

I performed a multiple group analysis to test for model invariance across the two sample groups. This analysis compares two models: one in which the parameters are allowed to vary across the groups and one in which the parameter values are constrained to be equal between the two groups. A statistically significant chi-square value suggests that the parameter estimates vary across groups. The results of the multiple group analysis indicated that there were not any statistically significant differences in the path coefficients between the calibration sample and the validation sample, $\chi^2(16, N = 274) = 20.70, p = .19$. Therefore, as a final step, the revised model was run in the original, combined sample (n = 274). The goodness-of-fit indices indicated a good fit (see Table3). *Direct and Indirect Effects*

The squared multiple correlation coefficients (R^2) indicated that the revised model accounted for 32% of the variance in perceived family support, 1% of the variance in enacted family support, 23% of the variance in subjective social status, 16% of the variance in career decision self-efficacy, and 39% of the variance in career outcome expectations. Figure 3 shows the revised model, including associated standardized parameter estimates and their statistical significance. Table 4 provides the unstandardized parameter estimates for the model.



Figure 3. Revised model predicting career decision self-efficacy and career-related outcome expectations. *Note.* Values reflect standardized parameter coefficients. Paths which failed to reach statistical significance are shown with dashed lines. SES = socioeconomic status. *p < .05; **p < .01; ***p < .001.

Path	Unstandardize d parameter estimate (B)	SE	CR	p
Enacted ← SES	0.003	0.007	1.800	.072
Perceived support	0.004	0.001	3.822	<.001
Perceived support \leftarrow Enacted support	0.426	0.042	10.162	<.001
Subjective status \leftarrow SES	0.005	0.002	2.920	.004
Subjective status \leftarrow Perceived support	0.663	0.087	7.657	<.001
CDSE ← Subjective status	0.312	0.065	4.771	<.001
$CDSE \leftarrow SES$	-0.002	0.002	-0.917	.359
CDSE ← Perceived support	0.091	0.118	0.773	.439
CDSE ← Enacted support	0.211	0.089	2.356	.018
COE ← Perceived support	0.082	0.069	1.184	.236
$\cos \leftarrow ses$	-0.003	0.001	-2.498	.012
$COE \leftarrow Subjective status$	0.025	0.040	0.636	.525
$COE \leftarrow CDSE$	0.349	0.035	9.885	<.001
COE ← Enacted support	0.166	0.053	3.150	.002

Table 4. Unstandardized Parameter Estimates for Revised Model

Note. SES = socioeconomic status; CDSE = career decision self-efficacy; COE = career outcome expectations.

Table 5 summarizes the standardized direct and indirect effects for the revised model. Indirect effects involve mediation via one or more intervening variables (Meyers, Gamst, & Guarino, 2006). When the effect of intervening variables was taken into account, there were statistically significant indirect effects between SES and subjective status ($\beta = .10, p < .05$) and between SES and career decision self-efficacy ($\beta = .11, p < .05$). Significant indirect effects were also found between enacted support and subjective status ($\beta = .21, p < .05$), career decision self-efficacy ($\beta = .09, p < .05$), and career outcome expectations ($\beta = .17, p < .05$); between perceived support and career decision self-efficacy ($\beta = .13, p < .05$) and between subjective status and career outcome expectations ($\beta = .11, p < .05$); and between subjective status and career outcome expectations ($\beta = .11, p < .05$); and between subjective status and career outcome expectations ($\beta = .13, p < .05$). The indirect effects between SES and perceived support and between SES and career outcome expectations were not statistically significant. *Family Support as Moderator*

I conducted further exploratory analyses to test the possibility that the effect of family of origin SES on the career-related outcome variables might be moderated by family support (rather than mediated as hypothesized in the original model). While no direct effect was found for SES on career decision self-efficacy and only a small, negative direct effect was found for SES on career outcome expectations, this analysis was conducted in order to determine if the effect of socioeconomic status might reach statistical significance at certain levels of family support.

		Inde	ependent varia	ble	
Dependent variable	SES	Enacted support	Perceived support	Subjective status	CDSE
Enacted support					
Direct	.11				
Indirect					
Perceived support					
Direct	.19	.51			
Indirect	.06				
Subjective status					
Direct	.16		.42		
Indirect	.10	.21			
CDSE					
Direct	05	.16	.06	.30	
Indirect	.11	.09	.13		
COE					
Direct	12	.18	.07	.04	.51
Indirect	.08	.17	.11	.15	

Table 5. Standardized Direct and Indirect Effects for Revised Model *Note.* SES = socioeconomic status; CDSE = career decision self-efficacy; COE = career outcome expectations. Dashes indicate that the effect does not exist in the model.

I first computed the interaction terms: SES*enacted family support and SES*perceived family support. Four separate models were tested using Amos 9.0 (Arbuckle, 2005). In the first set of hypothesized models, perceived support and SES, along with the interaction term (SES*perceived support), were included as potential predictors of career decision self-efficacy (model 1) and of career outcome expectations (model 2). In the second set of hypothesized models, enacted support and SES, along with the interaction term (SES*enacted support), were included as potential predictors of career decision self-efficacy (model 3) and of career outcome expectations (model 4). All four models were run using the original, combined sample (n = 274).

The fit indices for each of the four models are provided in Table 6. The models including perceived support as a possible moderating variable (model 1 and model 2) were both rejected based on the fit indices. Additionally, in model 1, none of the path coefficients were statistically significant. In model 2, only the path from SES to career outcome expectations reached statistical significance. This mirrors the results for the revised mediational model tested previously.

The models including enacted support as a possible moderating variable (model 3 and model 4) were both rejected based on the fit indices as well. For each model, the RMSEA value of .09 was above the suggested cutoff of .06 (Hu & Bentler, 1999). While an RMSEA value of .09 can be considered to reflect mediocre fit (Byrne, 2001), none of the path coefficients for either model was statistically significant. Therefore, there was no evidence for the possible moderating effect of family support.

Model	χ^2	df	р	CFI	TLI	SRMR	RMSEA
Moderation model 1	17.23	1	.00	.99	.92	.10	.24
Moderation model 2	17.23	1	.00	.99	.92	.10	.24
Moderation model 3	3.22	1	.07	1.00	.99	.04	.09
Moderation model 4	3.22	1	.07	1.00	.99	.05	.09

Table 6. Summary of Moderation Model-Fit Statistics

Note. CFI = comparative fit index; TLI = Tucker-Lewis index; SRMR = standardized root-mean-squared residual; RMSEA = root-mean-square error of approximation.

CHAPTER V

DISCUSSION

The purpose of this study was to better understand the role of the family of origin in the career development of college students. Specifically, I sought to examine the influences of social class background and family support for career development and how they interact to influence career development outcomes. Family social class background was examined using both a traditional measure of objective socioeconomic status and a newly available measure of subjective status, in order to assess their relative impact. The social-cognitive variables of career decision-making self-efficacy and career outcome expectations were selected as the outcome variables for this study.

Based on prior research and the dual lenses of SCCT and social capital theory, I expected that higher family SES would be associated with higher career decision-making self-efficacy and career outcome expectations. I also hypothesized that perceptions of greater social status would be associated with higher self-efficacy and outcome expectations. Given that SCCT highlights the influence of appraisals of one's context, I expected that subjective status would be the more powerful predictor of both outcome variables. Finally, I hypothesized that both perceived and enacted family support for career development would mediate the relationship between social class background and the outcome variables and that higher levels of support would be associated with higher levels of career-related self-efficacy and outcome expectations, regardless of the level of social class background. In this section, I summarize the findings of this study and discuss the results in the context of the existing career development literature. Findings are organized according to my five research questions. I then discuss the strengths and limitations of the study and implications for research and practice.

Influence of Social Status

Family of Origin Socioeconomic Status

I hypothesized that there would be a significant, positive relationship between family SES and career-related self-efficacy and between family SES and outcome expectations. Results did not support this hypothesis. The coefficient for the path between SES and career decision self-efficacy was not statistically significant, meaning that SES did not have a direct effect on this variable in the present sample. There was, however, a small, statistically significant, indirect effect on self-efficacy, with SES operating through perceived family support and subjective social status.

A number of prior reviews of the literature have concluded that SES is a powerful influence on the career development process and its outcomes (Brown et al., 1996; Fouad & Brown, 2000; Schulenberg, Vondracek, & Crouter, 1984; Whiston & Keller, 2004b). Therefore, the lack of a direct relationship in this study is somewhat surprising. However, the finding echoes some earlier research studies in which SES exerted only a small or non-statistically significant influence on career-related outcome variables (Ali & Saunders, 2006; Penick & Jepsen, 1992; Poole et al., 1991). It also replicates prior

findings in which SES exerted an indirect effect through variables related to family process (e.g., Way & Rossmann, 1996).

In SCCT, SES background is considered one of the distal inputs shaping the context in which decision-making occurs. A number of the past studies in which an effect for SES was found were conducted with high school students (e.g., Hannah & Kahn, 1989; Lauver & Jones, 1991; Rojewski & Kim, 2003). It may be that the impact of distal contextual affordances, like SES, declines with time and with the entry into a college environment, in which – at least theoretically – access to some types of helping resources (e.g., career counseling or academic support services) becomes equalized. These results must be interpreted with caution, however, given that the sample for this study was predominantly Euro-American.

Past studies have shown that ethnic minority students perceive higher careerrelated and educational barriers than ethnic majority students and have lower selfefficacy for coping with these barriers (Luzzo & McWhirter, 2001; McWhirter, 1997; McWhirter, Torres, Salgado, & Valdez, 2007). Ethnic differences in levels of careerrelated self-efficacy have also been found, with non-majority students having lower selfefficacy levels (Lauver & Jones, 1991). Therefore, the equalizing effects associated with college entry may be less powerful for groups that have greater relative disadvantage. As Whiston and Keller (2004b) have pointed out, the number of studies focused on understanding the impact of family structure variables (e.g., single-parent status or socioeconomic background) seems to have declined in the past twenty years. Therefore, a call to research and better understanding of the variability in findings seems warranted. The coefficient for the path between SES and career outcome expectations was small and negative. In this sample, outcome expectations fell as SES rose. Although the relationship was weak, this finding was unexpected given that SCCT predicts that lower SES will result in reduced outcome expectations.

Characteristics of this particular sample may be responsible for this result. In particular, all participants had already achieved college admission and had experience with success in navigating the requirements of college life. Given this context, it may be that participants from low SES backgrounds expected better outcomes given their proven ability to overcome barriers to educational advancement. In addition, participants had likely been exposed to modeling by peers from similar status backgrounds. Thus, recent performance accomplishments and vicarious experiences may have been a more powerful influence on participants' outcome expectations, as compared with distal family background status variables. Research has shown performance accomplishments to be the most powerful influence on an individual's self-efficacy level; however, no such studies have yet been conducted related to assessing the relative power of influences on outcome expectations (Fouad & Guillen, 2006).

Subjective Social Status

I hypothesized that there would be a significant, positive relationship between subjective status and career-related self-efficacy and between subjective status and outcome expectations. Results were partially consistent with this hypothesis. There was a moderate, positive, statistically-significant relationship between subjective social status and career decision self-efficacy. No direct relationship was found between subjective status and career outcome expectations. However, there was a statistically-significant indirect effect on outcome expectations, with subjective status operating through self-efficacy.

The finding of a direct relationship between subjective status and self-efficacy is in line with initial studies examining the influence of DSIS on social-cognitive outcome variables (Thompson & Subich, 2006). The mechanism of action linking these two variables remains unclear. The DSIS measures an individual's comparison of him or herself to others in U.S. society in terms of relationship with and access to economic resources, prestige, and power. Self-efficacy is theorized to be influenced by four primary sources - performance accomplishments, vicarious experiences, verbal persuasion, and physiological responses – which do not directly relate to DSIS constructs (Bandura, 1986). It may be that self perceptions of lower social standing results in feelings of powerlessness within society, and that this sense of powerlessness is accompanied by a lowered sense of efficacy for making decisions related to choosing a career – a choice which potentially will contribute to later social standing in society. Further, it may be that perceptions of social status reflect true disparities in access to resources. The link between these two variables could then be reflective of fewer vicarious experiences of seeing others in one's social group succeed or model a positive career decision-making process, less opportunity for performance accomplishments, less supportive verbal persuasion from others in the individual's social system, and the physiological responses associated with social standing (e.g., higher salivary cortisol levels for low SES children; Lupien, King, Meaney, & McEwen, 2001).

The finding of an indirect relationship between subjective status and outcome expectations suggests that the influence of subjective status on outcome expectations operates through self-efficacy beliefs. SCCT hypothesizes that self-efficacy influences outcome expectations, with expectations of positive outcomes increasing as beliefs in efficacy rise. Differences in perception of social standing may have a greater effect on the contributors to self-efficacy (e.g., performance accomplishments) than on those related to outcome expectations (symbolic thinking, vicarious experiences, and incentive value; Bandura, 1977, 1986). For instance, those who perceive themselves as having a lower social standing may be just as able to imagine positive consequences of their career choices; however, it is their self-efficacy that is directly affected by a lack of access to resources – indirectly lowering their outcome expectations when compared to peers who perceive themselves as having a higher social standing. Given the results showing both direct and indirect influences on social-cognitive variables, this study provides further evidence for the relevance of examining subjective status as a contributor to the career development process, and for exploring the ways in which perceptions of contextual affordances influence social-cognitive variables.

Relative Impact of Objective & Subjective Social Status

I hypothesized that an individual's perceptions of his or her status would have a stronger relationship with career-related self-efficacy and with outcome expectations than would an individual's objective status. This hypothesis was partially supported. As discussed previously, subjective status had a moderate, direct effect on career decision self-efficacy, and a small, indirect effect on outcome expectations. Socioeconomic status did not have a direct relationship with self-efficacy, but SES did have a small, indirect effect on self-efficacy and a small, direct effect on outcome expectations. The strongest direct and indirect relationships with the outcome variables were for subjective status as compared to SES.

These findings replicate research by Thompson and Subich (2006, 2007) utilizing the relatively new DSIS measure and demonstrating its ability to provide a unique contribution, beyond traditional measures of status. This study provides further support for the superiority of subjective measures of social status and the need to go beyond the traditional measures of social class that have dominated the psychological literature (Liu et al., 2004). It also suggests that perceptions of the environment may be more influential than objective aspects, and that proximal contextual factors may be more influential than distal ones. SES in the family of origin captures the individual's environment growing up; however, subjective status perceptions capture the individual's current experience of themselves in the social hierarchy – informed by family status background, but shaped too by more recent changes in access to resources.

The results of this study suggest that increasing student access to certain types of resources may positively impact career-related outcome variables. Students had higher career decision self-efficacy and outcome expectations when they perceived themselves as having greater access to economic, social, and power resources. Subjective status views, as measured in this study, include relative access to resources such as health and dental care, monetary savings, and contacts in positions of power. Thus, while past research has examined access to economic resources (via studies utilizing SES as a

variable) and access to social support, this study implicates a broader array of resources as having an impact on the career development and indicates that including an examination of the impact of a wider range of resources could be useful.

Influence of Family Support

Enacted Family Support

I hypothesized that enacted family support for career development would mediate the relationship between social status and career-related self-efficacy and between social status and outcome expectations. I also hypothesized that students who report higher levels of enacted family support for career development would experience higher levels of career-related self-efficacy and outcome expectations, regardless of their level of social status. These hypotheses were partially supported by the data. SES levels did not influence enacted family support levels, as reported by participants. Thus, there was no evidence that enacted family support mediated the relationship between SES and the outcome variables. There was also no evidence for enacted family support moderating the relationship between SES and outcome variables.

The lack of differences in enacted family support by SES level affirms prior research findings showing that SES explains very little of the variance in parent involvement in the career development process of adolescents (e.g., Trusty, Watts, & Erdman, 1997). Certain parent behaviors meant to shape children's career decisionmaking processes may be universal across SES groups and may be representative of the broader U.S. culture (versus cultural norms based on social standing) or may vary based on family-specific norms that are unrelated to social standing. For example, the enacted family support measure includes items such as "My family always emphasized the importance of hard work and doing one's best" and "My family stressed that I must be responsible for my own actions." Such parent or family behaviors appear to be unconnected to social standing based on the results of this study.

Enacted family support for career development had a weak, direct effect on both outcome variables. This finding affirms the impact of social support in the career development process and is reflective of a major theme in the career development literature, namely that support from parents and family is a positive influence for youth (Whiston & Keller, 2004b). While the correlations between enacted support and each outcome variable were moderate, the path coefficients in the final model were only weak. The weak nature of the relationships may be the result of the consideration of other potentially important variables in the model – variables which have not previously been included in such studies.

Enacted family support also had an indirect effect on both outcome variables, operating through perceived family support and subjective social status. Enacted family support had a strong, direct effect on perceptions of family support and a moderate, indirect effect on subjective status. Thus, intention behaviors on the part of parents or family members help shape not only the individual's perception of family support for the career development process but also the general perception of social standing for the student. Perceived family support and enacted family support were only moderately correlated. Similar to past findings, this suggests that these are different constructs, and supports Barrera's (1986) distinction between the two.

Perceived Family Support

I hypothesized that perceptions of family support for career development would mediate the relationship between social status and career-related self-efficacy and between social status and outcome expectations. I also hypothesized that students who perceive higher levels of family support for career development would experience higher levels of career-related self-efficacy and outcome expectations, regardless of their level of social status. These hypotheses were partially supported by the data. The influence of family of origin SES on career decision self-efficacy operated indirectly through perceived family support and subjective social status. Thus, perceptions of family support did operate as a mediator for the relationship between SES and one of the outcome variables. However, there were no direct relationships between perceptions of family support and either outcome variable. There was also no evidence for perceived family support moderating the relationship between SES and the outcome variables.

The finding that perceived family support for career development was directly influenced by family SES mirrors past findings suggesting that levels of family support might vary by social status (e.g., Blustein et al., 2002; Way & Rossmann, 1996). However, in this study, family SES was only linked to perceptions of family support but not to enacted family support. The finding that only perceived family support was influenced by SES level in the family of origin suggests that participants of different SES backgrounds did not experience different amounts of career-related interaction with their parents, but rather may have perceived less attitudinal or emotional support during the process. Influenced itself by family SES, perceived family support directly influenced subjective status perceptions and indirectly influenced career decision self-efficacy. The finding of an impact on career decision self-efficacy supports prior research which has linked perceived support with this outcome for adolescents (e.g., Gushue & Whitson, 2006; Turner et al., 2004; Turner & Lapan, 2002). The level of perceived family support was directly related to subjective social status, and the link was moderate and statistically significant. Thus, perceptions of greater support from the family were related to higher social status perceptions. This finding shows the powerful impact of the family in shaping an individual's perception of social standing and perceived relationship to the rest of the social hierarchy. It also suggests that family support acts as a protective factor for individuals who grow up with limited access to other types of resources.

Strengths & Limitations

This study makes an important contribution to the career development literature by incorporating the quantitative measurement of social class as a subjective identity variable rather than relying solely on a static, objective index of status. The results of this study confirm that perception and interpretation of the environment are more powerful influences on these social-cognitive outcomes than objective factors. Further, the study expands understanding of contributors to the formation of status identity, specifically illuminating the role of family support for career development in shaping a student's perception of his or her status in society.

This study also addresses the need for research which might help shape prevention and intervention efforts aimed at enhancing the career development process of young adults. While the objective SES (i.e., parent occupation, education, income) of students is not a viable focus of direct intervention for career counselors, family or parent support potentially is subject to modification. In their review of the literature, Whiston and Keller (2004b) noted the lack of information on parent behaviors linked with positive career development outcomes. This study utilized a quantitative family support measure originally developed by Way and Rossmann (1996) to capture specific behaviors intended by parents to influence the career development process, based on the findings of Young and Friesen's (1992) qualitative research with families. While the findings of this study do not provide a view of which items in the measure might be most important to the career development process, they do suggest that the behaviors measured had an important indirect impact on career-related self-efficacy and outcome expectations. Therefore, specific, helpful, parenting behaviors can be derived by examining the items included in the measure.

An additional strength of the study is that it responds to the call for an examination of how family status and family process interact in the career development process for youth. This study utilized path analysis to look at status and process variables in conjunction so as to better understand their mechanisms of action. A strength of path analysis is that it allows for the estimation of both direct and indirect effects and the estimation of the relative magnitude of different paths among variables. Using path analysis, I was also able to test a hypothesized model capturing how these variables might be expected to interact given prior research and theory. The final, resulting model can be used in future research to continue to examine how status and process variables act together to shape career development.

A weakness of the study is that the sample was largely Euro-American and female. Existing research has suggested possible ethnic and sex differences for some of the variables under study – although these findings have been mixed. For example, ethnic differences in levels of career-related self-efficacy have been found in some studies, with non-majority students having lower self-efficacy levels than their Euro-American peers (Lauver & Jones, 1991); however, other studies have found the opposite (Chung, 2002). It has also been suggested that family support may be a greater influence on the career development of ethnic minority students (Whiston & Keller, 2004b). Additional research will be necessary to confirm that the model produced in this study holds for more diverse samples of students.

An additional weakness of the study related to the sample is that it was composed solely of college students. The results may be less applicable to young adults from low SES backgrounds as a result. While there was adequate variance in the SES of the students who participated, the mean SES level for the sample was above the mean for the general population. This has implications for the generalizability of the results, especially to young adults who are not attending college.

This study was exploratory in nature. The original model was modified based on the results of the path analysis. While care was taken to ensure that only modifications consistent with prior research and theory were made, the danger still exists that the model has been shaped by chance characteristics of this particular sample and may not be replicable in a separate sample. It will be important to attempt to replicate these findings in additional, diverse samples.

A final limitation to the present study is that it was not longitudinal in nature and it relied exclusively on self-report data. The data is correlational, and therefore, conclusions cannot be drawn about causation among the variables. In this study, collegeage participants were asked to think about their experiences during their high school years and to report parent occupations and family support levels from that time. Support for the model generated from this study could be strengthened by the collection of longitudinal data following students from high school to college and by inclusion of measures which solicit the input of other reporters (e.g., family members' reports of support given for career development). This would also allow for conclusions to be drawn about causation and reinforce the need for prevention and intervention efforts in response to the findings.

Implications for Practice

The results of this study confirmed the impact of not only family of origin SES but also family support on career development outcome variables. Based on the model developed and tested in this study, these influences partially operate through perceptions of social standing. This suggests that prevention and intervention efforts should focus on both increasing family support and increasing access to the other types of resources implicated in shaping subjective status.

Increasing parent and family involvement in the vocational development of adolescents is an important goal for career counselors. Young and colleagues (Young et al., 2001) have proposed conceptualizing parent-child interactions around career development as a family project, a set of goal-directed activities which might be enhanced during career counseling. I recommend that practitioners consider multiple types of support when encouraging potential family contributions. Education and training on how to provide effective career development-related support could also be offered to parents and family members. This work with family members could aim to ensure that they are addressing the variety of needs of youth engaged in the career development process – from providing information about different career options, to showing interest in and being willing to have conversations around decision-making, to helping to highlight strengths or talents, to encouraging goal pursuit, or to providing assistance in identifying sources of additional information or support.

Further, as part of supporting family members in their attempts to help youth in the career development process, family members could themselves be invited to participate in career-development-related activities typically offered solely to adolescents or young adults. These joint activities with family and youth could provide the base for vicarious learning experiences for the adolescent, at the same time as helping to illustrate and encourage family support. A current and more widespread example of this is events like "Take Your Daughter or Son to Work Day." Finally, as part of encouraging family involvement, professionals might provide resources to family members in order to better allow the family to aid in the adolescent's career exploration. Examples of resources or events, which might typically be only directed towards the adolescent, are access to online career exploration sites, interest and values assessment tools, college planning discussions, and career fairs.

This study also highlights the role of other resources in shaping perceived social standing and indirectly impacting career development outcomes. The wide variety of resources implicated in shaping status identity merit consideration as part of prevention and intervention efforts. Within the category of economic or material resources, this could include increasing student access to health or dental care, to the use of computers, or to quality education – as examples. Within the categories of prestige or power resources, this might include increasing student connection with contacts in positions of power, increasing student ability to influence their social context (e.g., via school government), or empowering students toward efforts to influence state or federal laws or policies. While these types of efforts are not typically linked to student career development, all have potential impacts on perceptions of social standing and indirectly on career development outcomes according to the results of this study.

Research has supported the effectiveness of career-related intervention programs designed to target sources of self-efficacy expectations (e.g., vicarious learning; Gainor, 2006). The implications for practice presented here provide additional ideas to shape such programs. Interventionists have chosen the goal of increasing self-efficacy – whether in the domain of career decision-making, a specific occupational area, or a specific academic subject – due to the substantial support in the literature for its important impact on the career development process (Gainor). Perceived self-efficacy has been linked to a variety of outcomes, including women's pursuit of traditionally male occupations (Betz

& Hackett, 1983), adolescents' career interests (Turner et al., 2004), and types of careers considered (Bandura, Barbaranelli, Caprara, & Pastorelli, 2001). These findings speak to the importance of undertaking prevention and intervention efforts aimed at shaping career-related self-efficacy, and this study has provided new information about how family support and access to resources impact career decision-making self-efficacy in particular.

Implications for Research

The modified path model created in this study needs to be tested in other samples to ensure that the changes were not simply representative of these particular participants. It would also be useful for future tests of the model to include more diverse samples with regard to sex, ethnicity, and college attendance. With longitudinal data, similar findings would present an even stronger case for the practice implications discussed here.

The findings of this study suggest the importance of both economic and social resources, in the form of support, in the career development process for youth. I recommend that future research explore each type of resource in greater depth, so that prevention and intervention efforts can be shaped accordingly. In particular, given the importance of social support to the outcomes studied here, it would be useful to examine which types of support might be most impactful for youth across levels of subjective social status. This could include examining which of Tardy's four types of support (i.e., instrumental, appraisal, emotional, and informational) is the strongest contributor to career-related outcomes. It could also include an examination of specific parent behaviors

and specific aspects of the environment in terms of resources (i.e., economic social, power) to determine which contribute most to the career development of young adults.

The results of this study highlight the importance of subjective status in the career development process. They suggest the utility of continuing to refine measures of subjective social status and of incorporating such measures more regularly in career-related studies. This research expands on the work of Thompson and Subich (2006, 2007) examining the relationship of subjective status with other input and outcome variables. The results of the present study identified not only family of origin SES but also perceived family support as shaping perceived social standing. Future research should continue to explore what other environmental variables might contribute to the formation of subjective status – particularly those variables which might be appropriate targets of prevention or intervention efforts.

Summary & Conclusions

The family of origin plays a pivotal role in the career development process (Brown, 2004; Whiston & Keller, 2004b). Research has long linked socioeconomic status in the family of origin with important career development variables (Brown et al., 1996). These links have shown that low SES is associated with a host of undesirable outcomes: lower career decision-making self-efficacy, lower occupational and educational aspirations, and greater perceived barriers to career success. Until recently, no studies existed which examined subjective status or social class identity and its impact on the career development process. As social class is recognized to be one of several, core, interacting aspects of identity, its influence on the career development process is important for vocational psychologists and career counselors to understand. Further, there have been only a handful of studies examining the dynamic interplay of social status in the family of origin and family process factors (e.g., parenting behaviors and relational styles; Whiston & Keller, 2004b). Better understanding the relative contributions of family process can help shape prevention and intervention efforts.

The purpose of this study was to better understand the role of both family status and family process in the career development of young adults. Status was measured using both a traditional, objective index and a more recently developed subjective measure. Family process was examined using the variables of perceived and enacted family support. A path analysis was conducted to explore the relationship among these variables and their relative contributions to the career development outcomes of career decisionmaking self-efficacy and career-related outcome expectations. The results of the study provide further evidence of the importance of the family in the career development process. While the influence of family SES, enacted family support, and perceived family support on outcomes was primarily indirect (these variables operated through subjective status), there was a moderate, direct relationship between subjective social status and career decision-making self-efficacy. Further, this study presented additional reliability and validity evidence for assessment instruments measuring family support, subjective social status, and career-related outcome expectations.

I provided several implications for both practice and research. With regard to career counseling and support of the career development process, I recommend a greater emphasis on connecting students with social contacts in positions of power and on involving parents in the career development process of their children. In future research, the modified path model specified in this study needs to be tested in additional samples. Additionally, I recommend that future studies begin to examine which types of family support (e.g., informational, emotional, appraisal, or instrumental support) and which parenting behaviors are most important to the formation of subjective status, and which contribute indirectly to the formation of career-related self-efficacy. Exploration of other variables that might contribute to the formation of subjective status is also recommended.

APPENDIX A

INFORMED CONSENT

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Web Survey Informed Consent Document

Invitation to Participate: You are invited to participate in a dissertation research study conducted by Jennifer Metheny, M.S., a doctoral candidate in Counseling Psychology at the University of Oregon. The following information is provided to help you make an informed decision about whether or not you want to participate in this study. Please feel free to email me with questions: jmetheny@uoregon.edu.

Eligibility: You are eligible to participate in this study if you are a current college student, are between the ages of 18 and 22, and you are able to write and speak English.

Purpose of the Study: The purpose of this study is to better understand how family experiences influence the process of choosing and pursuing a career.

Explanation of Procedures: If you decide to participate, you will fill out a web-based questionnaire, which should take about 25-35 minutes to complete. Once you have completed the questionnaire, your responses will be electronically sent back to me over a secure server. The information that you provide (e.g., name [optional], contact information [optional], and survey answers) will remain completely confidential and will be stored in a secure, password-protected server on the Internet. If you choose to provide your identifying information (name and contact information) in order to obtain the gift card, this information will not be linked in any way with your survey answers.

Potential Risks and Discomforts: On occasion some people may experience some distress when completing psychological questionnaires. If you should feel distressed at any time during the study, you may email me and I will email you a list of mental health resources and referrals. You may also withdraw from the study at any time without any consequences. You may also skip particular questions which you choose to not answer.

Potential Benefits: The benefits you may personally receive from participating in this study include the opportunity to make a significant contribution to research and knowledge on college students' career development. If you are one of the first 300 students to submit a completed questionnaire, you will also have the opportunity to receive a \$5 Starbuck's gift card. If you so choose, you will submit your contact information (name, address, and email address) in addition to the answers on your survey battery. Your identifying and contact information will not be linked in any way to your answers in the survey battery. That is, your contact information and survey responses are sent to me separately. After every 30 days, I will mail participants who are one of the first 300 respondents a \$5 Starbuck's gift card.

Voluntary Participation and Withdrawal: Your participation is voluntary. You may withdraw your consent and discontinue participation at anytime without penalty. You may also skip any question that you do not wish to answer.

Assurance of Confidentiality: Your identity will be kept confidential because your name or other identifying information will not be attached to the answers that you provide. I will store confidential survey data on a secure computer server, protected by a login ID and password available only to me. Any identifying participant information will be kept on a separate, secure server. Contact information will be used only for those who want to receive the \$5 Starbuck's gift cards. All downloaded data will be stored on a password-protected computer and/or in a locked file cabinet to further ensure confidentiality. The information obtained in this study may be published in a scientific journal or presented at scientific meetings for which only generalized groups of data will be used, and therefore in no way will reveal your identity.

Rights of Research Participants: Your rights as a research participant have been explained to you. If you have any additional questions about this study, please contact Jennifer Metheny, M.S. at (541) 346-3227 or Ellen McWhirter, Ph.D. (541) 346-2443, Dissertation Chair and Faculty Advisor, at the Counseling Psychology and Human Services Department, 5251 University of Oregon, Eugene, OR 97403. If you have any questions concerning your rights as a research participant, contact the Office for the Protection of Human Subjects, 5237 University of Oregon, Eugene, 97403, (541) 346-2510. You may print out a copy of this Informed Consent Form for your records. Submission of the online questionnaire will be considered your consent to participate.

BY COMPLETING THIS QUESTIONNAIRE, YOU AGREE THAT YOU UNDERSTAND THE PROCEDURES DESCRIBED ABOVE AND THAT YOU AGREE and CONSENT TO PARTICIPATE IN THE STUDY.

If you have read and understand the above statements, please click on the "Continue" button below to indicate your consent to participate in this study.

APPENDIX B

INSTRUMENTS

Demographic Questionnaire

Instructions: These questions request general information about you. Remember that the information you provide is anonymous. Please respond to the items below by either indicating your response or selecting the one category that best represents you. You may skip any question(s) that you feel uncomfortable answering.

1) I am currently a student at a

____ Four-year college or university

Two-year college

Community college

Other (please specify)

2) U.S. area of current residence: (pick the option that best applies)

Northv	vest		
Southv	west		
Midwe	est		
Northe	east		
Southe	ast		
South			
Other	(please specify)		
2) .			
3) Age:			
4) Sex:	Male	Female	Transgender
-	•• • . •		
5) If you are a	in international stud	ent, please indicate you	ir country of origin:
6) Race/Ethn	n icity : please mark a	ll that apply	
Dlast	on A friend American		
Black	or Euro	1 ,	
white	or Euro-American		
Hispan	$\operatorname{Inc} / \operatorname{Latino}(a)$		
Asian o	or Asian-American		
Native	American or Alaska	an Native	
	Islander		
Middle	e Eastern		
<u><u> </u></u>			

7) Dependent Status:

I am currently partially financially dependent upon one or more of my parents/guardians.

I am currently fully financially dependent upon one or more of my parents/guardians.

I am currently financially independent.

I am currently in a relationship in which I share financial responsibility or my partner provides for me (romantic partnership or marriage).

Family Background Information

The following questions refer to your experiences growing up – specifically the years during which you were in <u>high school</u>. For the purposes of this study, your "family" is considered to be the household in which you spent most of your time. *If you experienced more than one household (for instance, due to divorce or other circumstances), please respond based on the household you considered to be your primary residence.*

8) While in high school, I considered the social class status of my family to be:

- _____ poor or working poor
- working class
- _____ lower middle class
- _____ middle class
- _____ upper middle class
- _____ upper class

9) While in high school, the approximate annual income of my family was:

- _____ not applicable or don't know
- _____ zero or less than \$12,000
- _____ \$12,000 to \$25,000
- \$25,000 to 35,000
- \$35,000 to 75,000
- \$75,000 to 100,000
- \$100,000 to 300,000
- Greater than \$300,000

10) In high school, my parents/guardians' highest level of education: *please be as specific as possible, for example: "2 years of high school"*

_____ mother ______ father ______ other guardian (please specify)______
11) In high school, my parents/guardians' occupation or job: *please be as specific as possible*

_____ mother ______ father ______ other guardian (please specify)______

Differential Status Identity Scale

Economic Scale I

Directions: 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	Equal	Above average	Very much		
below average				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 afford additional educational experiences for your children (now or in the						
future), you would mark "0" for item 1 below.						

	Very below a	Very much below average -2		al	Very bove av	much verage +2
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 Bloomingdales, Saks Fifth Avenue, or Barneys	-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

Economic Scale II

Directions: 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	Equal	Above average	Very much
below average				above average
-2	-1	0	+1	+2

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

		Very much below average -2		ał	Very bove av	much verage +2
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.	Car(s)	-2	-1	0	+1	+2
6.	Computer(s)	-2	-1	0	+1	+2
7.	New appliances (washers, dryers, refrigerators, et	ic.) -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

Social Scales I, II, and III

Much less	Less	Equal	More	Much more +2
-2	-1	0	+1	
			Much less -2	Much more +2

Directions: Indicate your response to each item below using the following scale:

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

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...?

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
6.	Type of car you drive	-2	-1	0	+1	+2
7.	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...?

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

Power Scale

Directions: 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:

t be	Very much Below average	Equal	Above avera	ge	Ve aboy	ery muc	h age
	-2 -1	0	+1		uoov	+2	ugo
For	example, if you believe you are equal to	the average U.S.	citizen in yo	ur abil	ity to	be	
resp	ected and heard by others in your comm	unity, you would	mark "0" for	item	1 belo	w.	
			Very much			Very 1	nuch
		belo	ow average		ab	ove ave	erage
			-2				+2
1.	Contact people in high places for a jo	ob or position	-2	-1	0	+1	+2
2.	Contact people who can help you get problems	t out of legal	-2	-1	0	+1	+2
3.	Start in a high-profile position of resp	ponsibility	-2	-1	0	+1	+2
4.	Get information and services not ava public	ilable to the gen	eral -2	-1	0	+1	+2
5.	Control how your group is represented and the public	ed in history, me	edia, -2	-1	0	+1	+2
6.	Receive a fair trial		-2	-1	0	+1	+2
7.	Become a millionaire by legal means	8	-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 city/town	your state or	-2	-1	0	+1	+2
11.	Influence state or federal educational	policies	-2	-1	0	+1	+2
12.	Influence the policies of a corporatio	n	-2	-1	0	+1	+2
13.	Influence where and when stores are	built and operat	ed -2	-1	0	+1	+2
14.	Influence where and when waste trea built and operated	tment facilities	are -2	-1	0	+1	+2
15.	Influence the decision-making of fou hospitals, museums, etc.	indations, charit	ies, -2	-1	0	+1	+2

Family Support Measures

Family of Origin Career Development Support

Directions: Please answer the following questions about the family you grew up in.

1. To what extent has the family you grew up in given you financial support for your education and training?

a. no financial support	b. a little financial	c. considerable
	support	financial support

2. To what extent has the family you grew up in given you information and contacts that helped you with your occupational choices?

a. no information	b. a little information	c. considerable
and/or contacts	and/or a few contacts	information and/or
		many contacts

3. To what extent has the family you grew up in given you emotional support for your educational training?

a. no emotional	b. a little emotional	c. considerable
support	support	emotional support

4. To what extent has the family you grew up in given you maintenance support (time and study space, help with school work, college applications, etc.)?

a. no maintenance	b. a little maintenance	c. considerable
support	support	maintenance support

5. To what extent has the family you grew up in shown an interest in and/or participated in your education?

a. no interest and/or	b. a little interest	c. considerable interest
participation	and/or participation	and/or participation

6. To what extent has the family you grew up in helped you understand your strengths and/or talents?

a. no help	b. a little help	c. considerable help
understanding	understanding	understanding

7. To what extent has the family you grew up in encouraged you to pursue your goals and/or plans for the future?

a. no encouragement	b. a little	c. considerable
	encouragement	encouragement

8. To what extent has the family you grew up in been available if you want to talk about a problem?

a. no availability	b. a little availability	c. considerable
		availability

.

9. To what extent has the family you grew up in been helpful when you have questions about educational or career-related issues?

a. no help with	b. a little help with	c. considerable help
questions	questions	with questions

10. To what extent has the family you grew up in expressed pride in your educational or career-related accomplishments?

a. no expressed pride	b. a little expressed	c. considerable
	pride	expressed pride

Parent Intentional Career-Related Interactions

Directions: Families vary in the ways they interact with each other. Indicate the degree to which these statements describe the <u>family you grew up in</u>. Use this 4-level scale to determine your response:

Very untrue for my Fairly un parent(s)/guardian(s) parent(s) or family or 1		Fairly untrue for my parent(s)/guardian(s) or family 2	Fairly tr parent(s)/g or fa	ue for my guardian(s) amily 3	Very true for my parent(s)/guardian(s) or family 4		
				Very untrue 1			Very true 4
1.	My family helped are useful now.	me to develop job skill	s which	1	2	3	4
2.	My family always hard work and doi	emphasized the import ng one's best.	ance of	1	2	3	4
3.	My family tried to which might limit	protect me from exper my development.	iences	1	2	3	4
4.	My family encourt to not give in to pe dependent on othe	aged me to be my own eer pressure or be overly rs.	person; y	1	2	3	4
5.	My family has goa achieve through m	als and needs that they ve.	wanted to	1	2	3	4
6.	My family stressed similar abilities an	d that males and female d career alternatives.	es have	1	2	3	4
7.	My family tried to children in our fan	make sure that the adu nily got along well.	lts and	1	2	3	4
8.	My family stressed differences among others.	the importance of acc people and being help	epting ful to	1	2	3	4
9.	My family tried to myself and to deve	make me feel good abe elop confidence.	out	1	2	3	4
10.	My family stressed my own actions.	l that I must be respons	ible for	1	2	3	4

Career Decision Self-Efficacy – Short Form

The Career Decision Self-Efficacy Scale (CDSE-SF; Betz & Taylor, 2001; Betz, Klein, & Taylor, 1996; Taylor & Betz, 1983) is a 25-item scale which utilizes a 5-point, Likert-type response scale with response options ranging from *no confidence at all* (scored as 1) to *complete confidence* (scored as 5). Respondents are asked to rate each of a series of statements reflective of career-related decision-making tasks. Sample tasks are "Determine what your ideal job would be," "Prepare a good resume," and "Choose a career that will fit your lifestyle."

The CDSE-SF is a copyrighted measure. The CDSE materials and rights to use may be purchased from Nancy E. Betz. Interested parties may obtain more information about the instrument from the following:

Dr. Nancy Betz, Professor Ohio State University Department of Psychology 238 Townshend Hall 1885 Neil Avenue Mall Columbus, OH 43210-1222 Phone: (614)292-8185 Email: betz.3@osu.edu

Vocational Outcome Expectations Scale

Directions: Please respond to each question by marking your answers along the 4-point scale shown below:

`

	Strongly disagree 1			Strongly agree 4
1. My career planning will lead to a satisfying career for me.	1	2	3	4
2. I will be successful in my chosen career/occupation.	1	2	3	4
3. The future looks bright for me.	1	2	3	4
4. My talents and skills will be used in my career/occupation.	1	2	3	4
5. I have control over my career decisions.	1	2	3	4
6. I can make my future a happy one.	1	2	3	4
7. I will get the job I want in my chosen career.	1	2	3	4
8. My career/occupation choice will provide the income I need.	1	2	3	4
9. I will have a career/occupation that is respected in our society.	1	2	3	4
10. I will achieve my career/occupational goals.	1	2	3	4
11. My family will approve of my career/occupation choice.	1	2	3	4
12. My career/occupation choice will allow me to have the lifestyle that I want.	1	2	3	4

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