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Social Cognitive Career Theory as Applied to the School-To-Work Transition

Mary E. Kelly
Seton Hall University

SOCIAL COGNITIVE CAREER THEORY AS APPLIED TO

THE SCHOOL-TO-WORK TRANSITION

BY

MARY E. KELLY

Dissertation Committee

Pamela F. Foley, Ph.D., Mentor
John Smith, Ed.D., Chair
Thomas Massarelli, Ph.D.
Lewis Z. Schlosser, Ph.D.
Susan M. Teague, Ph.D., External Reader

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Abstract

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The school-to-work (STW) transition occurs when young adults leave education and enter the full-time workforce. Most high school students in the United States will not graduate from a 4-year college and instead transition into the world of work, many filling positions in sales and service. Supporters of the STW movement advocate for educational reform to ensure that these students are prepared. The movement has been criticized because it lacks a theoretical basis. Social cognitive career theory (SCCT) was developed to explain how individuals form career interests, set vocational goals, persist in work environments, and attain job satisfaction. This study examines whether career decision self-efficacy, work outcome expectations, self- and environment exploration, overall life satisfaction, and socioeconomic status (SES) can predict an adaptive transition from school to the sales and service sectors, in the context of the SCCT work satisfaction model.

Results were mixed. As predicted, outcome expectations, career decision self-efficacy, and life satisfaction were all associated with job satisfaction, but only outcome expectations had significant unique predictive value. Further, career decision self-efficacy mediated the relationship between life satisfaction and job satisfaction, and outcome expectations mediated the relationship between decision-making and job satisfaction, in accordance with predicted pathways of the SCCT work satisfaction model.

Conversely, self- and environment exploration was unrelated to job satisfaction. The effect of SES was ambiguous, as higher and lower SES group means differed when the overall combination of variables used to predict work satisfaction was considered. However, differences were not detected when each measure was considered separately, which makes it problematic to interpret the group mean difference. Similarly, SES did not moderate the effect of any variable in terms of ability to predict job satisfaction.

Overall, there are indeed clear paths to work satisfaction and thus to adaptive transition for young adults who move from school to work in the sales and service sectors without benefit of a college degree. This study is unique since workers from sales and service occupations are generally not included in career inquiry. However, because so many work in these sectors, more research needs to be dedicated to this population.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter 1:

Introduction

Most people must work for a living, and thus, vocational development is one of

the areas that have been studied extensively by researchers interested in this important

aspect of human behavior. Social cognitive career theory (SCCT; Lent, Brown, &

Hackett, 1994) is one of the newer career theories, constructed to explain and predict the

ways in which individuals form career interests, set goals, and persist in the work

environment. As with many career theories, however, much of the extant research tends

to focus on individuals who are college-bound, college students, or college-educated.

Currently, some career theorists (e.g., Blustein, Juntunen, & Worthington, 2000;

Blustein, Phillips, Jobin-Davis, Finkelberg, & Roarke, 1997; Worthington & Juntunen,

1997) have begun to investigate the school-to-work (STW) movement, whose supporters

advocate for educational reform to ensure that high school graduates are prepared to

become viable members of the workforce. Psychologists who support the STW

movement argue that, since most workers in the United States do not possess a 4-year

degree, it is important to consider the vocational development of the majority. One of the

criticisms of the STW movement is that it lacks a theoretical basis. The overall purpose

of this study, therefore, is to determine whether segments of the SCCT model are relevant

for the non-college-educated population.

Introduction to the Problem

The field of counseling psychology traces its roots to the study of vocational

development, and the wealth of extant career-related research supports the notion that

scholars continue to recognize the importance of work in individuals' lives. The term

career, however, is typically used to connote a process in which a college-educated

individual chooses a logical sequence of successively higher-ranking paid positions, each

position serving as the foundation for the next (Blustein, 2006). Yet in 2002, only 26% of

all U.S. adults over the age of 25 held a bachelor's degree or higher (Day & Newburger,

2002). In 2001, 60% of male and 64% of female high school seniors planned to attend

either a 2-year or 4-year college beginning in the fall after graduation; however, just 66%

of female and 59% of male college students who enrolled in a 4-year program in 1995

had earned a bachelor's degree by 2001 (Mead, 2006). Thus, a significant proportion of

the college-bound will drop out of higher education at some point before obtaining a

degree. Further, about half of all college graduates do not hold employment that is

commensurate with their educational levels (Gray & Herr, 2000). Clearly, on the basis of

education alone, the notion of career as typically understood does not apply to a majority

of persons currently in the workforce, or to those planning to enter the workforce for the

first time. The implication is that the current body of work-related research virtually

ignores the 36% to 40% of high school students who never plan to attend college, as well

as the 34% to 41% of students who enroll in college but do not receive a degree. Thus,

the vocational interests of approximately 75% of young people transitioning from school

to work are not considered.

The past several decades have been witness to sweeping changes in the working

environment, in which such factors as advances in technology, corporate downsizing,

outsourcing, and global competition have irrevocably altered the landscape. Recent

college graduates seeking administrative and managerial positions certainly have been

affected by these changes. However, those workers who do not have at least a bachelor's

degree and who may have sought to earn their living in the industrial, manufacturing, or agricultural sectors may have even fewer available options in making the transition from school to work (Blustein et al., 2000).

As the U.S. economy continues to lose jobs in the industrial, manufacturing, and agricultural sectors, however, there has been a concurrent increase in the number of sales and service positions created, which are generally held by those who have little or no formal education beyond high school ("Handling and Expediting," 2006). The U.S. Bureau of Labor Statistics estimates that, between 2004 and 2014, there will be 40 million job openings for workers without college degrees who are entering the workforce for the first time, which is more than twice the number of positions that will be available for college graduates transitioning out of the student role (Crosby & Moncarz, 2006).

Most of the projected openings for the non-college-educated will be in sales or service-related occupations; the top four positions in terms of anticipated job availability will be cashier, retail salesperson, wait staff, and food preparation (Crosby & Moncarz, 2006). Yet few researchers have investigated the vocational development process of the non-college-educated worker in the sales or service sector. A notable exception is a study conducted by Blustein et al. (1997), in which the authors used a mixed qualitative and quantitative design to examine the school-to-work (STW) transition process for this group.

Blustein et al. (1997) employed grounded theory methodology to identify variables associated with a successful transition from school to employment within the sales and service sectors. Participants in the study were workers in the sales and service sectors who were between 18 and 29 years old, and who were neither college graduates

nor current college students. A successful or adaptive transition was operationalized as one in which the worker experiences high levels of job satisfaction along with high levels of congruence (i.e., the fit between the workers' current job choices and the workers' desired job choices).

Some of the factors that Blustein et al. (1997) found to correlate with an adaptive transition included life satisfaction, self- and environmental exploration, and decision-making, which was conceptualized both in terms of process (individual or collaborative) and in terms of stress associated with making a vocational decision. Further, in describing successful vocational exploration strategies, workers who expressed high levels of job satisfaction cited exposure to role models, vicarious learning, and previous work experience as helpful factors. Thus, those reporting high levels of job satisfaction could be characterized as having been influenced by two of the four primary sources of self-efficacy (i.e., previous accomplishments and role models/vicarious learning), as conceptualized by Bandura (1986), in the domain of occupational exploration. This is important to note because some of the variables identified by Bandura in the context of social cognitive theory (i.e., self-efficacy, outcome expectations, and goal-setting) have previously been shown to predict vocational outcomes (e.g., S. D. Brown, Lent, & Gore, 2000; Ferry, Fouad, & Smith, 2000; Gore & Leuwerke, 2000).

Bandura's (1986) conceptualization of social cognitive theory has given rise to social cognitive career theory (SCCT; Lent et al., 1994), which was created as a framework to aid in the understanding of the ways in which individuals form career interests, make educational and vocational choices, and perform and persist in terms of academic and/or occupational endeavors. Briefly, the SCCT models describe the process

by which self-efficacy beliefs and outcome expectations influence career interests, which in turn moderate career intentions/goals. Intentions and goals lead to activity selection, which ultimately leads to performance attainment. The models demonstrate a feedback loop in which performance attainment acts as a source of self-efficacy and outcome expectations. Further, person inputs (e.g., gender, race, ethnicity) and background contextual factors (e.g., support systems, structural barriers) influence opportunities or learning experiences, which in turn influence self-efficacy and outcome expectations, while contextual factors may also affect choice goals and actions.

More recently, Lent and Brown (2006a) expanded the scope of SCCT, offering a new and related social-cognitive model designed to explain the ways in which previously identified inputs such as self-efficacy and outcome expectations, along with person and contextual variables, are related to job satisfaction. The authors cited recent research (Heller, Watson, & Ilies, 2004) that linked job satisfaction to overall subjective well-being, thus providing a rationale for the creation of this model. This research is discussed in more detail in Chapter II.

Blustein (1999) has described SCCT as "one of the most influential theoretical perspectives in career development" (p. 349), noting that the theory's "emphasis on self-efficacy beliefs provides a rich explanatory construct for researchers" (p. 350). Despite this strong influence, there has been almost no empirical research to date that applies SCCT specifically to young adults who are in the midst of the school-to-work transition. Thus, the current study will be designed to examine the variables Blustein et al. (1997) identified (i.e., life satisfaction, self- and environment exploration, decision-making) as

correlates of job satisfaction in the sales and service sectors, within the context of social cognitive career theory (SCCT; Lent et al., 1994).

In addition, outcome expectations will also be considered as a correlate of job satisfaction, in accordance with the SCCT model. It is important to consider this variable in the current study, as some scholars (e.g., Ali, McWhirter, & Chronister, 2005; Morrow, Gore, & Campbell, 1996) have posited that outcome expectations may be an especially germane predictor of work-related behaviors for certain populations (e.g., racial and ethnic minorities or individuals from lower SES backgrounds) who have been underrepresented in career development research. Likewise, Lent, Hackett, and Brown (1996) noted the importance of outcome expectations as a predictor of vocational behaviors when individuals face circumstances that restrict their abilities to make choices (e.g., economic necessity, lack of education).

The following sections of this chapter will provide a brief overview of the STW movement and of SCCT, including a rationale for its applicability to the population of interest in this study. Further, the statement of the problem, significance of this study, research questions, hypotheses, variables, and possible limitations are discussed.

School-to-Work (STW) Movement

As stated previously, more than two thirds of high school students in the U.S. will not graduate from a 4-year college, and many will instead transition directly from high school to the world of work. Recognizing that large numbers of these youths lack the skills necessary to successfully negotiate the STW transition, particularly in the current economic environment in which job shifts in the industrial sector are unfavorable for the non-college-bound, the federal government passed the School-to-Work Opportunities Act

of 1994 (STWOA). The purpose of the act was to allocate funding for curricular reform designed to impart occupation-specific competencies and thus to enhance vocational self-efficacy, particularly among the non-college-bound (Wilson, 1996). The act was also meant to encourage partnerships among stakeholders, including educators, employers, parents, and others, to identify and implement community-wide solutions. Noticeably absent from the list of stakeholders as conceptualized by the federal government were counseling psychologists, although the field of counseling psychology can trace its beginnings to the study of vocational development (Worthington & Juntunen, 1997).

Even though the federal government seemed to lack recognition that counseling psychologists could be active partners in curricular and policy reform, a number of scholars interested in the school-to-work transition have nonetheless heeded the call (e.g., Blustein, 2006; Blustein et al., 2000; Worthington & Juntunen, 1997) and have reacted to the concerns that precipitated the passage of STWOA. While the STW movement primarily addresses concerns that are vital to the future success of those students currently enrolled in primary or secondary education, the needed reforms may come too late for those non-college-educated adults who are already in the process of transitioning into the workforce. Accordingly, it is imperative to concurrently examine the vocational development of non-college-educated adults in the context of making optimal work transitions, which theoretically impacts job satisfaction and thus life satisfaction and overall subjective well-being.

Social Cognitive Career Theory (SCCT)

Social cognitive career theory (Lent et al., 1994) was conceptualized as a derivative of Bandura's (1986) general social cognitive theory, in which the intersection

of intrinsic and extrinsic factors influence psychosocial functioning. This is a relatively new theory in which Lent et al. expanded upon the scope of Bandura's work to focus exclusively on the development of the individual within the context of career. Lent et al. also incorporated the work of Hackett and Betz (1981), in which the concept of self-efficacy was first identified as an important factor in career development (the Hackett and Betz study focused specifically on the career development of women). Further, Lent et al. attempted to merge common aspects of theoretical frameworks previously developed and refined by other noted career theorists such as person-environment correspondence (Dawis & Lofquist, 1984), personality typology (Holland, 1985), social learning (Krumboltz, Mitchell, & Jones, 1976), life-span, life-space (Super, 1990), and developmental theory (Vondracek, Lerner, & Schulenberg, 1986). In this way, they created an inclusive system more capable of fully clarifying individual career development process (Lent, Brown, & Hackett, 2002). Specifically, the three basic SCCT models were developed as a means to understand the ways in which (a) career and academic interests are formed, (b) career choices are implemented, and (c) career performance outcomes are achieved (Lent et al., 1994). As stated previously, however, the notion of career as it is commonly understood may not apply to large numbers of workers in the United States.

As a relatively new theory, SCCT is attracting the attention of vocational researchers but currently lacks empirical support in terms of the population of interest in the current study. Specifically, some of the empirical research generated in support of SCCT has been conducted with college students and therefore may not be relevant to the non-college-educated (e.g., Diegelman & Subich, 2001; Ferry et al., 2000; Lent, Brown,

Brenner, et al., 2001; Lindley, 2005; Nauta, 2004; Schaub & Tokar, 2005). Other empirical studies involved specific professions, particularly in the math and science sectors (e.g., Lent et al., 2001). Beyond concerns about the population, many of the articles written about SCCT since its inception in 1994 are theoretical in nature, rather than studies that provided further empirical support of the model (e.g., Betz & Hackett, 2006; S. D. Brown & Lent, 1996; Byars & Hackett, 1998; Lent & Brown, 2002, 2006a; O'Brien & Heppner, 1996). Therefore, there is a need to expand the scope of SCCT in an attempt to understand whether the theory has validity and utility for non-college-educated workers who are effecting an STW transition.

Further, Lent and Brown (2006a) noted that versions of the SCCT work satisfaction model in particular have thus far been tested only in the domain of academic satisfaction among college students, and therefore have called for empirical investigation involving other populations. Also, Blustein (1999, 2006) has invited further career study involving the working-class population, underscoring the need to test the SCCT model with the population of interest in this study.

Statement of the Problem

The concepts of career and work in the United States are in a state of flux. Some of the industries that traditionally employed non-college-educated workers are in a period of decline, while the number of jobs in the sales and service sectors has grown. While most workers in the United States do not possess a college degree, the ratio of career development research focusing on college-educated vs. non-college-educated workers seems to be skewed in favor of those who are more educated. Further, the amount of research focusing on the sales and service sectors is especially scant. It is important to

consider that working-class individuals who do not possess a college degree should be given the same opportunities as their more educated colleagues to engage in work that provides a sense of job satisfaction. The SCCT work satisfaction model, if validated for use with this population, will help to provide some insight as to the factors that can enhance work satisfaction.

Significance of the Study

Non-college-educated workers are by far the largest segment of the workforce (Mishel, 2007). Job opportunities for the non-college-educated will continue to outpace opportunities for those with college degrees by more than a 2-to-1 margin during the 10-year period beginning in 2004, with the majority of the anticipated positions classified within the sales and service sectors (Crosby & Moncarz, 2006). At the same time, some sectors of the economy such as segments of manufacturing and agriculture that have been mainstays as employment options for adults without college degrees are projected to post either declines or less-than-average growth for the period 2004–2014, as these industries experience rising productivity due to increased automation and efficiency, as well as strong foreign competition (*Occupational Outlook Handbook*, 2005). Therefore, it is important to add to the body of research focused on the vocational development of those workers who do not possess a college education and who seek to earn their livelihoods as members of the sales and service economy.

School and career counselors could benefit from an expansion of the body of research focused upon adaptive STW transitions and the factors that facilitate those transitions. Similarly, employers are stakeholders, as employee turnover costs may be reduced if workers are satisfied with their jobs. Hence, it should be of interest to

employers to find ways in which to maintain a satisfied workforce. Further, policymakers and educators who are involved in the study of the school-to-work transition to effect changes to curricula could benefit from research highlighting vocational development-related variables of interest for non-college-educated adults. Such data may function as predictive and thus help to either support or suggest modifications to proposed curricular revisions.

On a broader scale, the growing disparity in terms of distribution of wealth in the United States is an ongoing problem, exacerbated by the shifts in the types of jobs that are becoming more commonly available to those who do not pursue higher education. In fact, in a followup to the Blustein et al. (1997) STW theory-building investigation, Blustein et al. (2002) found that even among the non-college-educated, young adults from a higher SES working in the sales and service sectors were more likely than those from a lower SES group to derive meaning from their work, to work in settings that were in some way related to their primary work interest, and to receive agentic and instrumental support from parents and others. (An example of agentic support might be providing introductions to employers, and examples of instrumental supports include lending money or encouragement.) These results suggest that young adults from a higher SES may find it easier than those from a lower SES to eventually move out of the lower-paying jobs typically found in the sales and service sectors. Thus, the study of the vocational development of the working class becomes an issue of social justice, because the efforts of individuals from a lower SES to do likewise may be blocked by environmental factors over which the individuals do not have control. Thus, the vocational development of the working-class population is an imperative that must be

considered within the field of counseling psychology (Hartung & Blustein, 2002;

Worthington & Juntunen, 1997).

Research Questions

The following are the specific questions addressed in the present study:

Research question 1. Will each of the person variables (i.e., life satisfaction, self-

and environmental exploration, and decision-making) and contextual variables (i.e., SES)

identified by Blustein et al. (1997, 2002) and the variable of outcome expectations

correlate positively with the outcome measure of job satisfaction among workers

transitioning into the sales and service sectors, in the context of SCCT (Lent et al., 1994;

Lent & Brown, 2006a)?

Research question 2. Will these variables each contribute unique variance as

predictors of job satisfaction, following the direct, moderating, and mediating pathways

as proposed in the SCCT work satisfaction model (Lent & Brown, 2006a)?

Research question 3. Will outcome expectations contribute more to explaining the

variance than the other variables (i.e., life satisfaction, self- and environment exploration,

and decision-making) identified by Blustein et al. (1997) as a predictor of job

satisfaction, as has been hypothesized in previous research?

Research question 4. Will non-college-educated workers from a higher SES

background experience more work satisfaction than workers from a lower SES

background, as reported in previous studies?

Hypotheses

In the original monograph outlining the framework of SCCT, Lent et al. (1994)

produced 12 sets of predictive propositions, which gave rise to 32 hypotheses. More

recently, Lent and Brown (2006a) expanded SCCT to include a model of work satisfaction. The hypotheses tested in the current study were adapted from the Lent and Brown (2006a) work satisfaction model, using person variables identified in the qualitative study conducted by Blustein et al. (1997), along with the variable of outcome expectations, as follows:

H_{1A} through H_{1E}: Based on Lent and Brown's (2006a) predictions within the context of the SCCT work satisfaction model:

H_{1A}: There will be a positive correlation between life satisfaction and work satisfaction.

H_{1B}: There will be a positive correlation between decision-making self-efficacy and work satisfaction.

H_{1C}: There will be a positive correlation between self- and environment exploration and work satisfaction.

H_{1D}: There will be a positive correlation between outcome expectations and work satisfaction.

H_{1E}: There will be a positive correlation between SES and work satisfaction.

H_{2A}: In accordance with Lent and Brown's (2006a) model, each of the five variables mentioned in H_{1A} through H_{1E} will contribute unique variance in the prediction of work satisfaction.

H_{2B}: Each of the five variables mentioned in H_{1A} through H_{1E} will serve as moderators and/or mediators in accordance with the pathways theorized in the SCCT work satisfaction model (Lent & Brown, 2006a), as described in Chapter IV, Table 6 (see Figure 1).

H_3: As maintained by a number of scholars (e.g., Ali et al., 2005; Lent et al., 1996; Morrow et al., 1996), the variable outcome expectations will account for more variance than will each of the other variables of interest (i.e., life satisfaction, decision-making self-efficacy, self- and environment exploration, SES).

H_{4A}: In accordance with the findings of Blustein et al. (2002), there will be a positive relationship between SES and job satisfaction for non-college-educated workers. Therefore, SES can be used to predict job satisfaction.

H_{4B}: Consistent with H_{4A}, mean scores on all measures that predict work satisfaction (i.e., life satisfaction, career decision-making self-efficacy, self- and environment exploration, outcome expectations) will be significantly higher for workers from a higher SES than for workers from a lower SES.
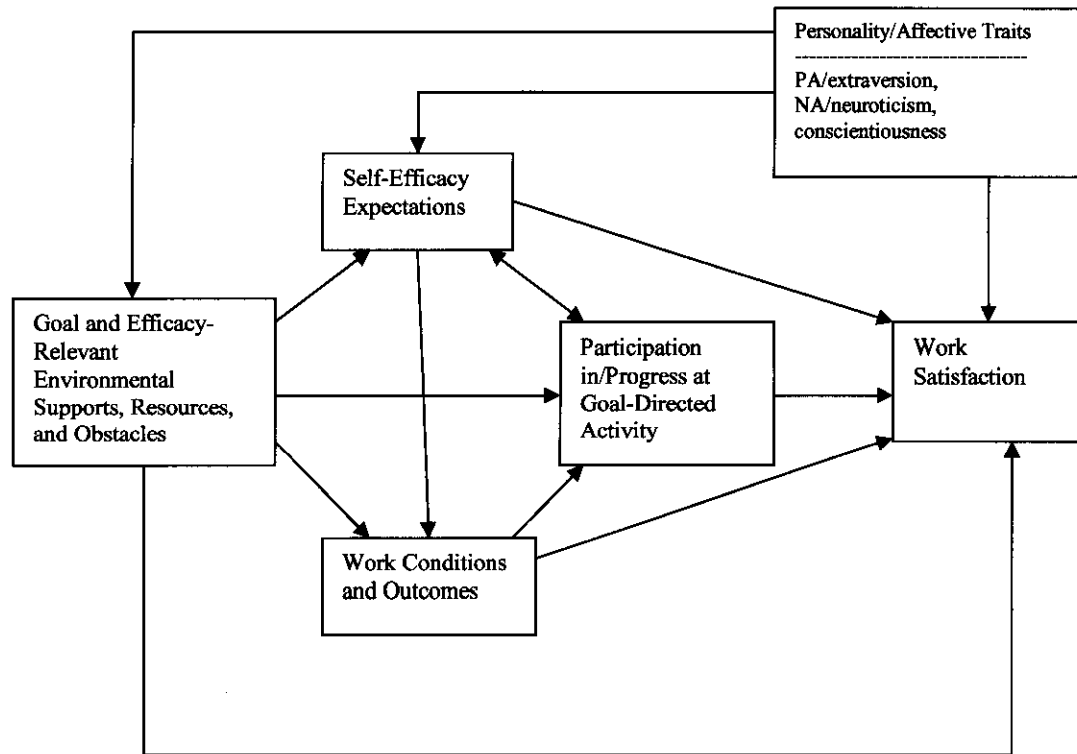
Figure 1. SCCT model of work satisfaction (Lent & Brown, 2006a). Reproduced with permission.

Definitions of Variables of Interest

Adaptive transition. An adaptive transition has been defined as one in which an individual experiences optimal levels of job satisfaction and congruence (Blustein et al., 1997). In the current study, an adaptive transition is defined in terms of work satisfaction, which is the criterion variable in Lent and Brown's (2006a) work satisfaction model, to be measured with the Generic Job Satisfaction Scale (GJSS; Macdonald & MacIntyre, 1997).

College-educated. Consistent with the U.S. federal government definition, the term college-educated refers to any individual who possesses a bachelor's degree or higher (Crosby & Moncarz, 2006).

Decision-making. Blustein et al. (1997) conceptualized decision-making in terms of process (i.e., individual or collaborative) and affect (i.e., feelings of stress associated with the process). Career decision-making self-efficacy is defined as the degree of confidence one has in one's own ability to make a career decision. It is assumed that individuals who are confident in their decision-making abilities will make individual decisions and will experience lower levels of stress associated with decision-making. In the current study, decision-making is viewed as career decision-making self-efficacy as measured by the Career Decision Self-Efficacy Scale-Short Form (CDSE-SF; Betz, Klein, & Taylor, 1996).

Environment exploration. Blustein et al. (1997) uncovered environmental exploration themes relating to the methods used to generate information about careers and the ways in which the information was used to inform vocational identity. For the current study, environmental exploration is defined as the degree of activity associated with individuals' exploration strategies, as measured by the Environmental Exploration subscale of the Career Exploration Survey (CES; Stumpf, Colarelli, & Hartman, 1983).

Job/work satisfaction. In the current study, the terms *job satisfaction* and *work satisfaction* are interchangeable. Further, both terms refer to an individual's overall level of satisfaction with his or her current position, as measured with the Generic Job Satisfaction Scale (GJSS; Macdonald & MacIntyre, 1997), as noted in the above definition of adaptive transition. The use of a generic rather than a domain-specific measure of job satisfaction is consistent with Lent and Brown's (2006a) assertion that the SCCT model had been designed to account for global satisfaction.

Life satisfaction. Life satisfaction is conceptualized in terms of global life satisfaction, as measured by the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985).

Non-college-educated. Consistent with the U.S. federal government definition, the term non-college-educated refers to any individual who does not possess a bachelor's degree or higher (Crosby & Moncarz, 2006). Non-college-educated individuals may be high school dropouts, high school graduates, those who have completed vocational/technical or other specialized training programs, holders of associate's degrees, or those who have completed some college but who are not currently enrolled in college.

Outcome expectations. In the context of SCCT, Lent et al. (1994) operationalized outcome expectations as the beliefs that individuals hold about the likely consequences of work-related behaviors. A domain-specific outcome expectation scale was constructed for the current study. This strategy has been endorsed by Lent and Brown (2006b) and has been employed in a number of studies in which SCCT variables have been tested (e.g., Diegelman & Subich, 2001; Lent et al., 2003).

Sales sector. According to the U.S. Department of Labor, sales occupations are divided into 12 distinct categories (*Occupational Outlook Handbook*, 2005). In the current study, the term *sales sector* encompasses three of the categories (i.e., cashiers, counter and rental clerks, and retail salespersons), to remain consistent with the types of positions held by the population studied by Blustein et al. (1997), from which the dependent and independent variables are derived.

School-to-Work (STW) transition. STW transition describes the process by which high school students (either graduates or nongraduates) who are not currently enrolled in a 4-year college program enter the full-time paid workforce.

Self-exploration. This term is defined as the degree of introspection in which an individual engages, as measured by the Self-Exploration subscale of the CES (Stumpf et al., 1983). Blustein et al. (1997) noted that self-exploration that leads to self-knowledge appeared to facilitate STW transition.

Service sector. According to the U.S. Department of Labor, sales occupations are divided into five distinct categories (*Occupational Outlook Handbook*, 2005). In the current study, the term *service sector* encompasses three of the categories (i.e., healthcare support, food preparation and service, and personal care and service occupations), to remain consistent with the types of positions held by the population studied by Blustein et al. (1997), from which the dependent and independent variables are derived.

Social cognitive career theory (SCCT). SCCT is a theoretical framework developed by Lent et al. (1994) to understand (a) the ways in which career interests are formed, (b) the ways in which academic and career choices are selected, and (c) occupational persistence and performance. Lent et al. produced theoretical models that link self-efficacy, outcome expectations, and goal-setting, all of which are assumed to be influenced by person and contextual factors. More recently, Lent and Brown (2006a) added *work satisfaction* as a variable of interest that can be similarly explained.

Socioeconomic status (SES). SES in the current study was determined by using the Nakao-Treas Socioeconomic Index (SEI; Nakao & Treas, 1994) in relation to the participants' parents' occupations. This methodology is consistent with that of Blustein et

al. (2002), who rationalized that young adults in the midst of an STW transition had not yet established their own SES apart from that of their parents.

Limitations

Participants in this study were individuals aged 18–29 years old who are currently working in selected sales and service jobs, and who are neither college students nor college graduates. Further, the participants resided in the metropolitan area of a large city in the Northeast. Therefore, only a small segment of the overall population of interest (i.e., non-college-educated adults) was included in the current study.

In addition, participants in the current study self-selected. It is not known whether those who chose to participate are in fact representative of non-college-educated workers who are in the midst of transitioning to jobs in the sales and service sectors. If the participants are not truly representative of the population of interest, it may not be possible to then generalize the results of the study. Also, the current study design called for calculations of correlations between variables of interest, but it was not possible to establish causality between any of the variables.

Another limitation may be the use of self-report measures, which raises a number of possible issues. For example, participants in the study may have responded to some of the measures in a socially desirable manner. Moreover, participants may have been likely to report inflated personal levels of job and life satisfaction. Brown and Krane (2000) noted that researchers such as Andrews and Withey (1976) found that most people respond in a positive manner to job- and life satisfaction surveys. Brown and Krane further posited that, although Savickas (1993) suggested that individuals at that time were less satisfied with their jobs, individuals would continue to report inflated scores on these

types of measures. Also, there may be monomethod bias, as pencil-and-paper instruments were the only sources of data; hence, as is the case with any monomethod data collection, the correlations may be inflated.

There may be limitations related to the measurement instruments. For one, the characteristics of the normative samples used to validate each of the instruments used in the current study may not match the characteristics of the current sample. The specific instruments and their possible limitations are discussed further in chapter III. A related limitation may be linked to the differential reading abilities of the current sample, some of who may speak, read, and write in English as a second language. Similarly, while every effort was made to ensure that the measurements chosen were appropriate in terms of the estimated reading levels of the members of the current sample, some participants may have had difficulty comprehending all of the survey questions.

Lastly, it is possible that some members of the population of interest have learning and/or developmental disabilities. This is relevant because this population may have different vocational needs than the mainstream population. However, people with learning and/or developmental disabilities are not the main focus of the current study, and there was no way in which members of this population were identifiable, as participants were not required to disclose their ability status.

Chapter II:

Literature Review

The purpose of this chapter is to provide a critical review and discussion of the literature relevant to the current study. This chapter includes the following sections: (a) school-to-work (STW), (b) social cognitive career theory (SCCT), (c) career decision-making self-efficacy, (d) outcome expectations, (e) self-exploration, (f) environment exploration, and (g) life satisfaction. Each section includes reviews of both theoretical and empirical research.

School-to-Work (STW)

The school-to-work (STW) transition generally refers to the process by which high school students (either graduates or nongraduates) who are not currently enrolled in a 4-year college program enter the full-time paid workforce. For some adolescents and young adults, however, the process is far from smooth, and these individuals may find themselves moving from job to job without a clear plan as to how to achieve long-term work satisfaction (Worthington & Juntunen, 1997).

Critics have pointed out that the educational system in the United States does little to prepare the non-college-bound for full and satisfying participation in the workforce (Smith & Rojewski, 1993). Further, even those students whose high school academic performance may be average or subpar may believe that attaining a bachelor's degree (or higher) is the only way in which to prepare for a viable career. Such students may begin studying at a 4-year institution only to find that they are ill prepared for the academic challenges presented and thus drop out of college. These students, then, transition into the

workforce as ill prepared for the vagaries of the current employment environment as their peers who did not choose to go to college in the first place (Gray & Herr, 2000).

In the United States, only 26% of all U.S. adults over the age of 25 hold a bachelor's degree or higher (Day & Newburger, 2002). This fact, coupled with the changes in the current work environment, in which some of the fastest-growing jobs are those which require little or no training beyond high school (Crosby & Moncarz, 2006), has given increased impetus to the STW movement. The overarching purpose of the STW movement is to ensure that students are prepared to enter the workforce. The federal government, through the passage of the School-to-Work Opportunities Act of 1994 (STWOA), allocated funding for the needed curricular reform (Wilson, 1996). A debate exists among scholars, however, as to whether all students or only those students who are non-college-bound should be the beneficiaries of such curricular changes (Blustein et al., 2000). The fact that a significant number of high school graduates who enter a 4-year institution do not ultimately earn a bachelor's degree seems to lend support to the notion that all high school students ought to be able to learn marketable skills during their secondary education. In fact, the STWOA was designed to address the needs of all students, but early criticism of the legislation focused on the lack of a concrete plan to accomplish the needed changes. In addition, Worthington and Juntunen (1997) pointed out that the STW movement lacked a theoretical framework, and was instead driven by economics, social policy, and educational reforms.

Blustein et al. (1997) sought to address the lack of an STW theoretical framework by conducting a qualitative study, in which they examined person and context variables found to facilitate an adaptive STW transition into selected occupations in the sales and

service sectors. As a response to Worthington and Juntunen's (1997) criticism that the successful STW transition had been conceptualized in economic terms, Blustein et al. defined an adaptive transition in relation to job satisfaction and job congruence. The authors chose a grounded theory study design to capture the experience of the individual making the STW transition, which had previously been lacking from the STW discourse.

Participants in the Blustein et al. (1997) study included 45 employed young adults aged 18–29 who were neither college students nor college graduates, and who had been working for fewer than 10 years. The participants worked in sales or service sector settings, such as hospitals, supermarkets, retail chains, and car washes. Blustein et al. posited that these jobs were representative of the types of employment available to workers who are unskilled or semiskilled. The participants were asked to describe their transition from school to work, and were also asked more structured questions designed to identify both person and contextual variables. Job congruence was measured via a comparison of each participant's Holland codes (i.e., a job classification system) for current versus ideal occupation, while job satisfaction was operationalized as an index score.

Blustein et al. (1997) analyzed the qualitative data using open and axial coding, which yielded a number of categories of themes, such as life satisfaction, work motivation, etc. Research team members then used a three-point rating scale to assign a low, medium, or high value to the subjective experience of each individual in terms of each of the identified themes. Correlations between these measures and the job satisfaction and job congruence measures were used to identify the variables that warranted further exploration.

Blustein et al. (1997) found the person variables of life satisfaction, self- and environmental exploration, and decision-making to be positively correlated to the outcome measure of job satisfaction; along with outcome expectations, these are the independent and dependent variables of interest in the current study, as outlined in chapter I. Blustein et al. also identified contextual variables (i.e., educational, relational, and other resources and barriers) related to job satisfaction; of these variables, SES is considered a variable of interest in the current study.

Blustein et al. (1997) noted that those young adults who were "purposeful, active, and assertive in their developmental tasks, despite the awareness of the obstacles that faced them" (p. 389) tended to accomplish more adaptive STW transitions. Purposeful, active, and assertive individuals were conceptualized as those who had been engaged in their work, as well as in the decision-making and exploration processes. Blustein et al. pointed out, however, that their findings in this regard were counter to the commonly held view that person factors are less important for those who have few employment options, such as non-college-educated work-bound youth who operate in the current work environment. Thus, it is important to provide additional empirical evidence to support the findings of Blustein et al., as is the intention of the current study. Validation of the findings of Blustein et al. may then lead to enhanced efforts to help non-college-bound students to develop skills in the areas of decision-making and self- and environment exploration.

Also responding to the need to link career theory to the STW movement, a number of researchers (Krumboltz & Worthington, 1999; Lent, Hackett, & Brown, 1999; Savickas, 1999; Swanson & Fouad, 1999) contributed to a special issue of *The Career*

Development Quarterly, published in June 1999, in which these authors examined existing career theories as they related to the STW transition. Among the theories addressed in this issue were Krumboltz's (1996) learning theory, Lent et al.'s (1994) SCCT, Super's (1990) developmental theory, and Holland's (1997) and Dawis's (1996) trait-and-factor theories. Most germane to the current study is the Lent et al. contribution, in which the authors applied the SCCT model to the STW transition. The Lent et al. article will be examined in the following section, which is devoted to a review of the SCCT literature.

However, it should be noted here that Brown (2000) criticized these attempts to apply existing theories to the STW transition, positing that their lack of attention to cultural differences and contextual factors renders these theories irrelevant to the STW process. Likewise, Herr (1999) argued that none of the existing theories presented would be able to fully explain the STW transition, and called for the creation of a new framework from which to understand the process. Herr's commentary focused in part on the perception that students who transition directly from high school to work may not possess the same types of opportunities to exercise personal agency as do their college-bound peers. However, as noted earlier, Blustein et al. (1997) found that person variables can make a difference in terms of job satisfaction outcomes for work-bound youth, thus making a case for testing the validity of existing theory. Moreover, it would seem that some of the criticism Brown directed toward career development theories in general may not apply to SCCT, as the Lent et al. (1994) and Lent and Brown (2006a) models do account for contextual variables.

An important feature of the STW movement is the notion that there are ways other than earning a 4-year degree for students to prepare to become viable members of the workforce (Boesel & Friedland, 1999; Gray & Herr, 2000; Worthington & Juntunen, 1997). Murray (2007) stated that a degree from a 4-year college may be relevant for only a minority of the population, and that the current economy has created a need for more workers skilled in trades, thus increasing the need for vocational education. Further, critics of the apparent societal norm that all high school graduates should aspire toward college enrollment point out that the college dropout rate has increased, and that many college dropouts fare poorly in the job market (Boesel & Friedland, 1999). Thus, this segment of the population (i.e., those students who are marginally prepared for college) would not have benefited from the type of vocational education that proponents of the STW movement favor while in high school, nor would the students realize the benefits of entering the workforce as college graduates.

This raises the question why some students are less prepared for college or work than others. Clearly, there can be differences in terms of intrinsic factors such as innate abilities, but there are also a number of extrinsic factors to consider. Blustein et al. (2002) identified social class as an important variable that influences the way in which individuals transition from school to work. The authors conducted a qualitative study utilizing a subset of the sample interviewed in the earlier work of Blustein et al. (1997), which consisted of young adults employed in working-class occupations, aged 18 to 29 years old, who were neither college students nor college graduates. Participants in the Blustein et al. (2002) study were categorized as either higher socioeconomic status (HSES) or lower socioeconomic status (LSES), according to their parents' occupations.

To create more meaningful SES categories, the researchers used a tripartite split, in which the upper third of the sample in terms of SES was compared with the lower third. The semistructured protocol was broad and general in terms of the types of questions included, and participants were also encouraged to describe their transition from school to work in an open-ended fashion.

Blustein et al. (2002) classified their findings into the following five categories: functions of work, self-concept crystallization and implementation, educational resources and barriers (internal and external), relational resources, and career adaptability (exploration and planfulness). In each of the categories, the authors compared and contrasted the experiences of those in the HSES and LSES designations. Overall results suggest that members of the LSES group were more likely to view work as a means by which to earn money for survival. On the other hand, members of the HSES group, perhaps not surprisingly, were more likely than the LSES group to derive meaning from their work, to work in settings that were in some way related to their primary work interest, and to receive agentic and instrumental support from parents and others.

The subcategory of exploration was most germane to the current study, as self- and environment exploration are two of the current variables of interest. Blustein et al. (2002) found that individuals in the HSES designation were more likely to engage in self- and environment exploration than those in the LSES designation; further, the breadth and depth of exploration were greater in the HSES group than in the LSES group. It is hypothesized in the present study that the degree of self- and environment exploration will correlate positively with job satisfaction. The findings of Blustein et al. suggest that socioeconomic status will function as a predictor of self- and environment exploration,

and thus moderate levels of job satisfaction. Hence, the STW transition appears to be more difficult for those individuals from a lower SES, thus bringing to bear once again the social justice aspect of the STW movement.

In summary, those educators, administrators, employers, policymakers, and counseling psychologists who support the STW movement embrace the idea that all students should possess marketable skills and are thus prepared for gainful employment when their formal education concludes. However, there has been dissention among the stakeholders as to how to best accomplish these goals. Counseling psychologists have argued that the STW movement lacks a theoretical basis from which to operate, and have sought to address this lack. Nonetheless, more work is needed to test whether existing frameworks are adequate to conceptualize optimal STW transitions or whether new theories must be constructed in order to do so.

Social Cognitive Career Theory (SCCT)

In this section, information about the precursors to SCCT (Lent et al., 1994) is provided. The precursors include Bandura's (1977, 1986) general social cognitive theory, and Hackett and Betz's (1981) landmark study in which the construct self-efficacy was first tied to career development. A description of SCCT (Lent et al., 1994) follows, including summaries of theoretical articles in which the intersection of SCCT and STW is discussed. Finally, some of the research surrounding applications of SCCT is critically reviewed and discussed.

SCCT background. Betz and Hackett (2006) asserted that many of those scholars who publish research involving SCCT have failed to recognize the underpinnings of the theory, specifically that Lent et al. (1994) based their work on the writings of Bandura

(1977, 1986) and Hackett and Betz (1981). Betz and Hackett posited that authors who are unaware of or unclear about the origins of SCCT may misapply the theory, which obviously has consequences for application of research results. Therefore, Betz and Hackett recommended that researchers become familiar with the seminal work of Bandura and Hackett and Betz before attempting to apply SCCT to a particular domain. Thus, the purpose of the following subsections will be to review and discuss those works, as well as to review studies in which the connections between self-efficacy, outcome expectations, and work outcomes have been explored and validated within the context of SCCT.

General social cognitive theory. Social cognitive theory is Bandura's (1986) attempt to explain human thought and behavior. Bandura argued that individuals are neither completely controlled by their environments nor are they able to exercise absolute free will. Rather, humans are shaped by their environments, but at the same time, humans impact the environment as well, with both person and behavior factors in play. Bandura referred to the relationship between person factors, outward behavior, and environment as "triadic reciprocity" (p. 18). Further, the relationship between any two of the three variables is bidirectional, meaning that neither the individual nor the environment is static. Bandura also noted the differential strength of each of the three factors, depending upon the situation. Because of the reliance on both person and contextual variables, along with the assertion that the person and the environment are in states of continual change, it seems evident that Bandura's social cognitive theory was a logical framework upon which to base a theory of career development, as Lent et al. (1994) have done with SCCT.

Self-efficacy. Bandura (1977, 1986) defined self-efficacy as the judgments that individuals make about their abilities to perform specific actions. It is important to note that the concept of self-efficacy is not a global one; rather, individuals may hold varying degrees of confidence in their abilities across a multitude of domains. Further, any measure of domain-specific self-efficacy may or may not be positively correlated with a measure of an individual's actual abilities in that domain.

Brown et al. (2002) conceptualized self-efficacy as distinct from self-rated abilities, positing that the two constructs are different in terms of item content, level of specificity, scaling, and temporal dimensions. To test whether self-efficacy and self-rated abilities are indeed separate, Brown et al. conducted a study in which they compared the utility of the two constructs as predictors of career interests and perceived career options. Participants in the study were 229 undergraduate students, who completed measures of self-rated abilities, occupational self-efficacy beliefs, perceived career options, and occupational interests. Perceived career options and occupational interests were operationalized in terms of Holland's (1985) themes. Using confirmatory factor analysis, the researchers constructed two-, three-, and four-factor models. The researchers then tested the fit of the models to the data, employing the chi-square goodness of fit test, the chi-square/degrees of freedom ratio, and the Goodness of Fit Index (GFI). Results demonstrated that the fit of the four-factor model was adequate, and that it fit the data better than the other two models. Further, the correlations between self-efficacy beliefs, occupational interests, and perceived career options were stronger than the correlations between self-rated abilities and the latter two variables in all Holland theme categories except Enterprising. Thus, Brown et al. concluded that the two constructs are distinct, and

that their results supported the use of self-efficacy as a predictive factor in the SCCT models.

Bandura (1977, 1986) identified the sources of self-efficacy beliefs, which included performance attainment, vicarious experiences derived through the observation of others, verbal persuasion, and physiological states. Bandura posited that of the four sources, performance attainment is the most influential, with positive performance results increasing and negative performance outcomes decreasing personal estimates of self-efficacy. The implication is that higher self-efficacy appraisals are associated with persistence toward goal attainment, irrespective of barriers to achievement. In the context of the current study, an individual's low estimate of career decision-making self-efficacy is hypothesized to predict lower levels of job satisfaction. On the other hand, a high estimate of career decision-making self-efficacy may not only relate to a higher level of job satisfaction but may also generalize to other related areas of functioning. Thus, an individual who feels confident about his or her ability to make adaptive vocational decisions may also, for example, hold similar beliefs about his or her ability to engage in self- or environment exploration, two other variables of interest in the current study.

Bandura (1977) conceptualized self-efficacy as a moderator of behavioral change; Hackett and Betz (1981) drew upon Bandura's work when they developed a framework with which to explain the career development process. While Hackett and Betz argued that their approach could be applied equally to men and women, the researchers chose to focus on the vocational development of the latter, in that they viewed the process to be especially difficult for women, given the workplace barriers (e.g., discrimination, harassment) women were more likely to face.

Hackett and Betz (1981) examined gender differences in each of the four sources of self-efficacy (i.e., performance accomplishments, vicarious learning, verbal persuasion, emotional arousal) identified by Bandura (1977). Hackett and Betz argued that men and women are given different opportunities to gain experience based on societal gender roles, thus differentially impacting men and women's ability to improve performance. Also, men have more same-sex role models in higher-level positions in the workplace than women, which offers women fewer opportunities for vicarious learning. In the context of verbal persuasion, early experiences of boys and girls are dissimilar in terms of encouragement and support offered by parents, teachers, and other significant adults. Finally, Hackett and Betz cited research (e.g., Sarason, 1963; Sarason, Davidson, Lighthall, & Waite, 1958) in which women have been shown to experience higher levels of anxiety than men, an emotional arousal state that may negatively impact estimates of self-efficacy. Hackett and Betz concluded that Bandura's self-efficacy theory, although not designed to explain career development specifically, provided a highly relevant framework that could be used to foster additional vocational-based research and to create interventions intended to increase the occupational self-efficacy of women.

To empirically support the above conclusion, Betz and Hackett (1981) conducted a study designed to examine the utility of Bandura's (1977) self-efficacy theory as a framework for understanding women's vocational development. The researchers hypothesized that career-based self-efficacy had a significant influence on occupational behaviors, specifically in terms of delineating the range of available occupations. Further, the researchers posited that there would be sex differences in perceptions of self-efficacy in terms of the ability to complete the educational requirements and job duties associated

with sets of traditionally and nontraditionally female occupations, as well as sex differences in interest in the occupations. "Female" occupations were defined as those in which at least 70% of incumbent workers were women, while nontraditionally female occupations were operationalized as those in which fewer than 30% of workers were women. Examples of traditional jobs were elementary teacher, secretary, and travel agent; nontraditional jobs included engineer, lawyer, and physician.

Participants in the Betz and Hackett (1981) study were 134 female and 101 male undergraduate students, who completed demographic forms, measures of self-efficacy, and confidence ratings relative to the listed occupations. Betz and Hackett also obtained American College Test (ACT) English and math scores for 62% of the total sample, to determine whether participants' estimates of self-efficacy were in line with the participants' actual abilities. The results of the study demonstrated that the sample of male and female undergraduate students possessed similar abilities, as measured by ACT scores. Nonetheless, male students were more confident in their abilities to complete the necessary education and to perform the duties of both the traditional and nontraditional jobs, while female students expressed confidence in their abilities mostly within the traditional range of occupations. Further, a positive correlation between self-efficacy in relation to nontraditional occupations and interest in nontraditional occupations was found for both sexes. Therefore, females who had low expectations about their abilities to complete educational requirements for nontraditional occupations, or about their abilities to persist in those occupations, were less likely to consider pursuing those occupations. These results suggested that individuals' estimates of their self-efficacy, whether or not realistic in terms of their actual abilities, can serve to artificially circumscribe the range

of occupations available to individuals. Thus, interventions designed to foster self-efficacy might help to broaden the scope of vocations that females might consider. A limitation of the Betz and Hackett (1981) study may lie in the fact that there are no longitudinal data to demonstrate whether the students indeed acted upon their expressed intentions to either pursue or foreclose upon a particular type of occupation. Yet, the relationship between self-efficacy and career interest formation for both males and females appeared to be supported.

Description of SCCT. As stated in chapter I, SCCT (Lent et al., 1994) was conceptualized as a derivative of Bandura's (1986) general social cognitive theory, in which the intersection of intrinsic and extrinsic factors influence psychosocial functioning. SCCT is a relatively new theory in which Lent et al. expanded upon the scope of Bandura's work to focus exclusively on the development of the individual in the context of career. Lent et al. also incorporated the work of Hackett and Betz (1981), in which the concept of self-efficacy was first identified as an important factor in career development. Further, Lent et al. attempted to merge common aspects of theoretical frameworks previously developed and refined by other noted career theorists such as person-environment correspondence (Dawis & Lofquist, 1984), personality typology (Holland, 1985), social learning (Krumboltz et al., 1976), life-span, life-space (Super, 1990), and developmental theory (Vondracek et al., 1986). In this way, an inclusive system more capable of fully clarifying individual career development process was created (Lent et al., 2002). Specifically, the three basic SCCT models were developed as a means to understand the ways in which (a) career and academic interests are formed,

(b) career choices are implemented, and (c) career performance outcomes are achieved (Lent et al., 1994, p. 80).

The SCCT interest development model (see Figure 2) links self-efficacy and outcome expectations to the development of occupational interests. Lent et al. (1994) posited that childhood exposure to various vocational options, whether experienced directly or vicariously, acts as a source of ideas about possible outcomes associated with those career options. Concomitantly, children engage in a wide variety of activities and receive differential reinforcement, depending upon their performance in various domains. The differential reinforcements received influence the beliefs that individuals hold about their abilities to perform tasks; these beliefs are defined as self-efficacy (Bandura, 1986). Lent et al. hypothesized that these beliefs, together with an individual's outcome expectations, will directly influence the types of interests that an individual will develop. At the same time, self-efficacy beliefs also directly influence outcome expectations. For example, an adolescent may know that physicians generally earn high salaries (an outcome expectation), but yet doubt the probability of becoming a physician, due to his or her lack of ability in biology and chemistry (self-efficacy beliefs). Thus, the outcome expectation for this adolescent may not include the option of earning a high salary as a physician.

Lent et al. (1994) theorized that self-efficacy and outcome expectations lead to the formation of vocational interests, which lead to the intention of becoming involved in activities that are congruent with those interests. Intentions are posited to lead to actual engagement in activities, which lead to performance outcomes. Whether an individual is successful at a given task then influences self-efficacy beliefs, as these data are

incorporated into the individual's self-concept in that specific domain. However, Lent et al. also argued that self-efficacy beliefs and/or outcome expectations could directly lead to activity engagement, irrespective of whether the individual develops career-specific interests. This SCCT model pathway may be particularly relevant for the population of interest in the current study, as some of those transitioning from school-to-work into the sales or service sectors may view a job as a way in which to earn a salary, regardless of whether there is interest in the occupation (Lent & Brown, 2006a).

Nauta, Kahn, Angell, and Cantarelli (2002), however, questioned the unidirectional relationship between self-efficacy beliefs and interest formation, as originally conceptualized in the SCCT model (Lent et al., 1994), positing that the relationship may actually be bidirectional. Nauta et al. implemented a longitudinal study of college undergraduates, designed to capture information about the relationship between the two variables at three points during the academic year. The students completed measures of career interests along with measures of self-efficacy; path analysis was conducted to determine the direction and strength of the relationships between variables.

Results of the Nauta et al. (2002) study indicated that there is a reciprocal relationship between interests and self-efficacy, with a number of significant interest-to-self-efficacy and self-efficacy-to-interest paths emerging. In the former case, interests were seen as supplying the motivating force to pursue specific courses of action, thus fostering an increase in self-efficacy through practice efforts. Hence, Nauta et al. both validated a portion of the SCCT model, and added another dimension to the ways in which self-efficacy and the formation of interests are related. This finding is brought to

bear in the SCCT work satisfaction model (Lent & Brown, 2006a), which depicts a bidirectional relationship between self-efficacy expectations and both participation in and progress at goal-directed activity. This model is discussed in more detail in a following section.

The SCCT (Lent et al., 1994) model of career choice (see Figure 3) is similar to the model of interest development, in that self-efficacy and outcome expectations in both cases are linked to interests. In the career choice model, however, interests are linked to goals and actions related specifically to vocational decisions. Importantly, the career choice model depicts contextual factors as moderators of the formulation of choice goals and the implementation of choice actions. Also, the career choice model specifies *learning experiences* as the source of self-efficacy and outcome expectations, and notes that person inputs (e.g., gender, race/ethnicity) and other background factors affect the types of learning experiences that individuals are afforded. As in the interest development model, Lent et al. posited that self-efficacy and outcome expectations could bypass interests and lead directly to choice goals, choice actions, or performance domains and attainments (the ultimate outcome variable in the career choice model). Also, the model depicts a feedback loop, in which performance domains and attainments (e.g., successful job entry) inform learning experiences.

More recently, Lent et al. (2008) completed a longitudinal study involving career choice for undergraduate engineering studies in which the researchers found that self-efficacy is a precursor to outcome expectations, interests, and goals. The role of outcome expectations as a precursor to interests and goals was not supported by the researchers'

data. However, the authors did not suggest that this finding applied equally to the Lent and Brown (2006a) model, which is the model tested in the current study.

The final basic SCCT model (Lent et al., 1994), the model of performance (see Figure 4), is actually a subset of the career choice model, in which self-efficacy and outcome expectations are linked to the formation of performance goals, which then lead to performance attainment levels (the ultimate outcome variable). In this model, self-efficacy and outcome expectations are informed by abilities and past performance. As with the other two basic models previously discussed, the model of performance depicts a feedback loop, in which performance attainment levels influence self-efficacy and outcome expectations.

It should be clear from the description of SCCT that Lent et al. (1994) set out to construct an integrative system of explanatory models that would account for factors that are both within and outside of an individual's locus of control in the domain of career (or vocational) development. Furthermore, Lent et al. attempted to bring together elements of existing career theories in order to build a comprehensive framework that could, in essence, be considered as the best of all worlds. To demonstrate the richness of the theory and to predict its potential for use with the population of interest in the current study, representative studies in which the SCCT models were tested will be discussed at length later in this section.

SCCT and work satisfaction. Lent and Brown (2006a) were interested in creating a work satisfaction model that would be useful both to vocational psychologists, who are concerned with the well-being of the individual, and to organizational psychologists, who attend to the relative health of the institution. The resulting model (see Figure 1) is a

derivative of both the original SCCT models (Lent et al., 1994) and of Lent's (2004) individual effort, which was directed toward the unification of subjective and psychological well-being measurement. While the Lent (2004) model aimed to offer a method by which to predict global well-being, the Lent and Brown (2006a) model specifically targets satisfaction in the domain of work.

Lent and Brown (2006a) thus expanded the SCCT base by proposing a related model that explains the relationships between self-efficacy expectations, work conditions and outcomes, participation in and/or progress toward goal-directed activity, and the ultimate outcome variable of work satisfaction. The work satisfaction model also accounts for differences in personality and affective traits, which are posited to link directly to and thus moderate the variables of work satisfaction, self-efficacy expectations, as well as the contextual factors (e.g., supports, barriers) that influence self-efficacy and outcome expectations.

In the context of the Lent and Brown (2006a) work satisfaction model that was partially tested in the current study, affective traits would be analogous with life satisfaction, one of the variables identified by Blustein et al. (1997) as being correlated with job satisfaction. This is consistent with Lent and Brown's opinion that "life satisfaction . . . has trait-like features" and "may also be a source of job satisfaction" (p. 243). Self-efficacy expectation, which links bidirectionally to participation in goal-directed activity, directly to work satisfaction, and is influenced directly by contextual supports and barriers, is operationalized as career decision self-efficacy. Self- and environment exploration will represent participation in goal-directed activity, which Lent and Brown linked bidirectionally to self-efficacy, as noted above, and directly to work

satisfaction. Further, Lent and Brown posited that work conditions and outcomes and contextual factors would influence the level of participation in goal-directed activity.

A weakness of the Lent and Brown (2006a) work satisfaction model may be that it is designed to account for generic work satisfaction, rather than to provide a multifaceted view. This aspect of the model may not be particularly troubling for those individuals who experience high levels of job satisfaction. However, those counselors working with individuals whose satisfaction levels are low might find it more helpful to be able to pinpoint the problem facets of their work lives (i.e., specific aspects, such as the work environment itself or relations with coworkers). Lent and Brown (2008) noted that the model can be adapted to aid in the understanding of facet satisfaction. Having this type of information would help counselors design more targeted interventions. Another limitation is that this model has been tested with college students only thus far, and therefore it was unclear whether the model would have validity for the population of interest in the current study. Further, the model depicts a unidirectional relationship between self-efficacy and work satisfaction, in which self-efficacy is the antecedent. However, the work of Nauta et al. (2002), described earlier, raises the question whether this relationship may also be bidirectional in nature.

The apparent strength of the Lent and Brown (2006a) work satisfaction model, as is the case with the Lent et al. (1994) parent model, is the way in which the individual is considered holistically and in context. Thus, despite the aforementioned question of validity, the work satisfaction model seems to hold promise for use with the population of interest in the current study.

Although the Lent and Brown (2006a) work satisfaction model may be too recent to have drawn much reaction from vocational psychologists, the overall concept of SCCT (Lent et al., 1994) has not been similarly spared. Brown (2000) criticized SCCT theory, noting that the model's attention to self-efficacy excludes those from collectivist cultures and who therefore may not value fully independent decisions, career or otherwise. Interestingly, Blustein et al. (1997) found that those young adults whose occupational decisions were made collaboratively were more likely to experience high levels of job satisfaction, regardless of their culture of origin.

Blustein (1999) seemed to hold a more positive view of SCCT (Lent et al., 1994) than did Brown (2000): Blustein lauded SCCT as "one of the most influential new theoretical perspectives in career development" (p. 349), noting that "self-efficacy beliefs may furnish work-bound youth with a critical internal psychological structure that will help them confidently negotiate the transition from school to work" (p. 350). Even as Blustein called for researchers to test the empirical validity of SCCT in the context of STW, however, he also cautioned that over-reliance on existing theory might shortchange the efforts to assist work-bound youth. Nonetheless, SCCT does appear to have at least face validity as an explanatory model for the STW transition, and thus SCCT merits empirical investigation.

Theoretical intersection of SCCT and STW. As mentioned earlier, one of the common criticisms of the STW movement is related to its apparent atheoretical basis. In response, Lent et al. (1996, 1999) explored the theoretical connections between SCCT and STW.

Lent et al. (1996) proposed that SCCT, with its attention to both person and contextual variables, might be a useful framework with which to explain and facilitate the STW process. The authors emphasized that, in accordance with their model, both distal and proximal influences must be properly attended to in order to facilitate adaptive STW transitions. Thus, Lent et al. contended that vocational education and interventions that center on helping students to form reasonable assessments of the students' abilities, as well as to develop realistic notions of expected work-based outcomes, ought to begin in the elementary grades, well before students begin to foreclose on career options.

In a similar vein, Lent et al. (1999) expanded upon their belief in the utility of an SCCT approach to STW, particularly in terms of their emphasis upon career-based interventions occurring throughout the elementary, middle, and secondary school years. The authors again conceptualized STW through the lens of SCCT, noting that vocational transitions are processes, and not discrete events in the lives of students. The authors also argued that children need to be taught to develop a mindset in which they attribute their successes to intrinsic factors, reasoning that, in the absence of such an attributional style, it may be difficult to implement interventions designed to foster self-efficacy beliefs. Addressing environmental supports and barriers germane to STW, Lent et al. (1999) cited the Blustein et al. (1997) qualitative study, noting that the SCCT models were designed to account for the effects of the contextual factors identified therein.

In expanding their worldviews to include STW transitions, Lent et al. (1996, 1999) did not offer empirical evidence that SCCT provides a useful framework, specifically for use with the planned population of interest. Nonetheless, they have offered their considered opinions that SCCT is suitable for explanatory and facilitative

purposes and called for research to validate their estimations, thus helping to provide a rationale for the current study.

Career Decision Self-Efficacy

Career decision self-efficacy is defined as the degree of confidence one has in one's own ability to make a career decision (Taylor & Betz, 1983). In the Blustein et al. (1997) study, decision-making was one of the variables that were positively correlated with job satisfaction. Blustein et al. conceptualized decision-making in terms of process (individual vs. collaborative) and in terms of stress associated with the task of decision-making. In the current study, it is assumed that individuals who are confident in their decision-making abilities (i.e., those with high levels of career decision self-efficacy) will experience lower levels of stress associated with decision-making. This assumption is consistent with findings of researchers such as Fuqua, Newman, and Seaworth (1988) and Hartman, Fuqua, and Blum (1985), who linked the person factors of state and trait anxiety to the construct of career indecision.

Similarly, Taylor and Betz (1983) hypothesized that a lack of confidence in one's ability (i.e., self-efficacy) with regard to the behaviors associated with choosing an occupation would lead to avoidance of those behaviors (i.e., career indecision). The results of the study, which included 346 college undergraduates, suggested that there exists a moderately strong relationship between career decision self-efficacy and career indecision. Thus, Taylor and Betz posited that interventions designed to enhance self-efficacy would lead to better decision-making strategies. In the context of the SCCT model (Lent and Brown, 2006a), enhanced career decision self-efficacy would lead to increased levels of work satisfaction.

Also in the context of SCCT, Gushue and Whitson (2006) examined the role of

gender role attitudes and ethnic identity as related to career decision self-efficacy and

career choice traditionality for Black and Latina high school students. The authors

hypothesized that higher levels of egalitarian gender role attitudes and stronger ethnic

identification would be associated with higher career decision self-efficacy, which would

in turn be negatively correlated with gender-traditional vocational goals. Results of path

analysis indicated that gender role attitudes (.33) and ethnic identity (.28) were both

significant predictors of career decision self-efficacy, which in turn was significantly and

negatively correlated (-.26) with gender traditionality. Thus, a portion of the SCCT model

was validated for this population. Further, Gushue and Whitson pointed to the importance

of career decision self-efficacy as a factor that is generalizable to other aspects of career

development, which is consistent with Bandura's conceptualization of the construct of

self-efficacy in general.

Outcome Expectations

Bandura (1986) defined an outcome expectation as an individual's judgment of

the likely consequence of a behavior. Fouad and Gillen (2006) conceptualized outcome

expectations in terms of if-then statements; i.e., *if* one engages in a particular task, *then*

one can expect particular results. Bandura maintained that it is important to make a

distinction between the consequence of the action and the action itself, noting that

individuals make choices based on their beliefs about possible outcomes. Bandura linked

outcome expectations to beliefs about self-efficacy, arguing that individuals perceive

outcomes to be positively correlated with the individuals' assessments of their abilities to

perform in specific arenas. In the context of SCCT, Lent et al. (1994) hypothesized that

individuals make vocational decisions in concert with their judgments about likely work-based outcomes (e.g., expected salary, level of prestige).

At the same time, a number of scholars (e.g., Ali et al., 2005; Lent et al., 1996; Morrow et al., 1996) have maintained that outcome expectations may be the most salient predictor of work outcomes for the population of interest in the current study. Yet, Fouad and Guillen (2006) argued that the connection between outcome expectations and vocational outcomes has been the least researched component of the SCCT models. Hence, it is hoped that the current study will add to the body of research surrounding outcome expectations, particularly in terms of how the construct operates within underserved populations.

Although Kenny and Bledsoe (2005) were more interested in the ways in which relational factors impacted the career behaviors of high school students, the authors did nonetheless consider career outcome expectations as a variable. The Kenny and Bledsoe study is especially relevant to the current study, in that participants included mostly minority high school students from an urban area, for whom contextual barriers were hypothesized to circumscribe career options. Participants completed measures designed to quantify levels of social support, peer beliefs, school identification, perceptions of educational barriers, outcome expectations, and career planning. Canonical correlation analysis was used to analyze the associations between the relational and career adaptability variables (including outcome expectations). A relevant result was that family emotional support was found to be a unique contributor to career outcome expectations. Thus, while the Kenny and Bledsoe study did not attempt to link outcome expectations to the prediction of career behaviors per se, the study's results do validate the hypothesized

connection between environmental supports and outcome expectations, as conceptualized in the SCCT work satisfaction model (Lent & Brown, 2006a). Further, Kenny and Bledsoe's results support the notion that outcome expectations are an important factor to consider when studying the vocational behaviors of underrepresented populations.

Fouad and Guillen (2006) reviewed some of the extant literature in which outcome expectations were a variable of interest. While the authors concluded that there is considerable empirical support for the consideration of the construct as a valid predictor of vocational behaviors, Fouad and Guillen did find fault with some of the measurement techniques employed by the various researchers. Specifically, Fouad and Guillen noted that a number of authors have made modifications to an instrument developed by Fouad, Smith, and Enochs (1997), but that few studies have been replicated using the adapted measures. Thus, Fouad and Guillen posited that there is a lack of evidence of reliability and/or validity for the modified instruments. However, Lent and Brown (2006b) argued that generic measures of SCCT constructs such as self-efficacy and outcome expectations may have limited utility, in that these constructs need to be considered in domain-specific contexts. Therefore, Lent and Brown's position could be construed as one in which extensive empirical evidence of reliability and validity might be compromised in favor of specificity.

Self-Efficacy, Outcome Expectations, and SCCT in Studies with Underrepresented Populations

As previously mentioned, although SCCT is a relatively new career theory, it has received a good deal of attention from the research community. Much of the attention has been centered on the career development of students in the elementary and secondary

grades, as well as college undergraduates. The prevailing thinking has been that, although

career choice behaviors are enacted throughout the lifespan, the concepts are most salient

during the years of late adolescence and early adulthood, when individuals are preparing

to enter the workforce (Lent et al., 1994). Hence, little attention has been paid to the

utility of the theory to predict work-based outcomes for adults who are in the midst of the

STW transition, and who are already employed, which is the overarching purpose of the

current study. Therefore, the focus of this section of the literature review will be upon

research in which typically underrepresented populations (i.e., low SES, Mexican

Americans, Blacks, rural Appalachian youth, female offenders) are studied within the

context of SCCT, in that some of the conclusions reached through this line of inquiry

may be more germane to the current study. It should be noted, however, that with the

exception of the study involving female offenders, the participants in each of the studies

reviewed below were either secondary or undergraduate students. Nonetheless, the

participants represent marginalized groups; participants in the current study are likely to

be members of groups that are similarly underrepresented. Particular attention will be

paid to research surrounding the constructs of self-efficacy and outcome expectations,

which are two of the variables of interest in the current study.

Bandura (1977, 1986) noted that self-efficacy is not a global concept; rather,

individuals may experience differing levels of self-efficacy depending upon context.

Accordingly, Lent and Brown (2006b) cautioned researchers to use domain-specific

measures in any tests of SCCT. Fouad and Smith (1996) attended to this concept of

domain-specificity when they tested portions of the SCCT model with self-efficacy as a

predictor of interest in math and science. The authors included the model inputs of

gender, age, self-efficacy, outcome expectations, and interests as predictors of intentions. Omitted were the model inputs of background context, learning experiences, and contextual influences. Participants in the study were 380 middle school students, who completed measures of math-science self-efficacy, outcome expectations, and intentions. The students were ethnically diverse, and 85% to 95% were of low SES. Employing path analysis, Fouad and Smith found that self-efficacy had a direct influence on interests (.29), which led to a direct influence on intentions (.28). In addition, there was a strong positive path between self-efficacy and outcome expectations (.55) and between outcome expectations and intentions (.39). Thus, portions of the SCCT model were validated for use with the middle school population. This is an important finding generally, in that there have been calls for curricular changes that instill career decision skills as early as the elementary grades (Lent et al., 1996, 1999).

Of particular relevance to the current study, the participants in the Fouad and Smith (1996) study were primarily of low SES, suggesting that the SCCT model may also have validity for the current population of interest. In addition, Fouad and Smith found a stronger relationship between outcome expectations and intentions than between self-efficacy and intentions, which is congruent with one of the hypotheses of the current study.

Flores and O'Brien (2002) chose to apply SCCT to the study of the career development of Mexican American adolescent women, to identify variables that might help or hinder this group in terms of achieving full occupational potential. As part of the rationale for their study, the authors cited the work of Arbona (1989), who reported that Hispanic women tend to cluster in low- and mid-level jobs, including those in the service

sector, which is one of the sectors of interest in the current study. Flores and O'Brien were particularly interested in the ways in which contextual factors (e.g., acculturation levels, mother's level of education), perceived supports (e.g., parental support), perceived barriers, and attitudes (e.g., mother's occupational traditionality, feminist attitudes) influenced career choice. Other inputs to the SCCT model included measures of nontraditional career self-efficacy and career aspirations. A total of 364 Mexican American adolescent women participated in the study. Following the SCCT interest model, in which Lent et al. (1994) hypothesized that learning experiences impact self-efficacy, and that self-efficacy impacts interests, Flores and O'Brien (2002) found that nontraditional career self-efficacy predicted nontraditional career interests. This is consistent with and thus offers validation of this segment of the SCCT model for use with this population. This finding also lends support to the utility of self-efficacy as a predictive factor within the current study. Flores and O'Brien posited that contextual factors (i.e. acculturation level, feminist attitudes, mother's education, mother's occupation nontraditionality) would impact opportunities for learning experiences and thus indirectly influence self-efficacy. However, these background contextual factors did not have a significant influence on levels of nontraditional career self-efficacy; hence, this segment of the SCCT model was not supported. This lack of support may be a function of the variables that Flores and O'Brien chose to test as moderators of learning opportunities, suggesting that there are other factors that account for the variance in levels of self-efficacy within this population.

Gainor and Lent (1998) tested the SCCT interest and choice models in the context of Black undergraduates' math-related course and major selections. The researchers

examined hypothesized relationships within the models, and used path analyses to test the models' fit with the data collected. Participants were 164 Black first-year students who completed social cognitive predictor measures of mathematics self-efficacy, math outcome expectations, sources of self-efficacy expectations (i.e., personal performance, vicarious learning, persuasion, state of arousal), interests, and intentions.

Results of the Gainor and Lent (1998) study supported the hypotheses that the sources of self-efficacy would significantly correlate with self-efficacy, and that self-efficacy would correlate significantly with outcome expectations. While the sources of self-efficacy tested contributed 50% of the variance toward explaining self-efficacy, personal experience was not the leading factor, as had been posited. The variables self-efficacy and persuasion contributed 39% of the variance in outcome expectations. In terms of interests, the findings supported the SCCT model, in that self-efficacy and outcome expectations yielded significant and unique paths to interest formation. Further, hierarchical regression demonstrated that the two variables accounted for 28% of the variance in the formation of interests. Likewise, the choice intention segment of the SCCT model was supported, with significant correlations between interests, self-efficacy, and outcome expectations linked to choice intentions.

Ali and McWhirter (2006) applied SCCT to rural Appalachian secondary students to determine the factors that contributed to the students' decisions to either go to college or enter the workforce directly from high school. The results of the study are particularly relevant to the current study, in that large numbers of Appalachian youth do not attend college. Participants included 338 11th grade students who aspired to one of four postsecondary conditions: (a) work full-time, (b) pursue vocational-technical training, (c)

pursue a 4-year degree, or (d) pursue a bachelor's degree and then a graduate degree. Participants completed assessments of SES, vocational/educational self-efficacy, vocational/educational outcome expectations, as well as a number of scales designed to measure potential supports and barriers to vocational/educational success. Multivariate analysis of variance (MANOVA) was conducted to determine if there were significant differences in scale means by the postsecondary aspiration group. The test yielded significant differences on nine of the SCCT predictor variables, including SES, outcome expectations, and self-efficacy. Next, the researchers conducted a discriminant function analysis (DFA) to determine whether the SCCT variables predicted membership in the four aspiration groups. Ali and McWhirter reported that the DFA results demonstrated that the SCCT variables were significantly better than chance in classifying the study participants but noted that the effect size was small (.18). Of special significance to the current study were the study findings vis-à-vis the work-bound students, who were found to have lower SES backgrounds, lower vocational/educational self-efficacy, and lower outcome expectations for college. Overall, the results of this study offered support to the predictive utility of the SCCT model pathways of self-efficacy and outcome expectations to vocational/educational aspirations for a population of underprivileged adolescents. The authors noted, though, that one of the limitations of the study was the reliance on measurement scales developed specifically for the population in question. Since an outcome expectation scale was designed specifically for the current study, this limitation may apply here as well. Lent and Brown (2006b), however, have supported the notion that SCCT researchers need to be able to construct domain-specific measures, as "SCCT

is more concerned with relatively dynamic and situation-specific aspects of people (e.g., self-views, future expectations) and their environments" (p. 13).

Chartrand and Rose (1996) discussed the shortcomings of most career theories in terms of addressing the needs of populations the authors defined as "at-risk;" i.e., individuals whose educational and vocational options are limited due to political, economic, social, and cultural conditions. At the same time, Chartrand and Rose lauded SCCT as "particularly promising because it includes constructs that account for differences in environmental opportunities as well as for individuals' beliefs about the environment" (p. 343). Thus, within the context of SCCT, Chartrand and Rose designed a career intervention for female offenders, noting that this population is especially vulnerable to unemployment or underemployment. The intervention was designed to provide information about occupations, to help the participants acquire self-knowledge, and to teach basic skills associated with the employment search process. Chartrand and Rose did not include empirical data to demonstrate intervention outcomes, since program evaluations had not been completed at the time of publication. However, the authors expressed confidence that SCCT holds promise for application to underserved populations, and that the creation of such interventions could act as a springboard toward expansion of the research base vis-à-vis those populations. This is an important consideration in the context of the current study, in that the population of interest may well include at-risk members who have either learning or developmental disabilities. *At risk* in the context of the current study refers to the possibility of being unemployed or underemployed.

The studies reviewed in this section tested aspects of SCCT models with populations that are typically underrepresented in the career literature (i.e., low SES, Mexican Americans, Blacks, rural Appalachian youth, female offenders). The population of interest in the current study is likely to be composed of groups that are similarly underrepresented, thus validating the choice of the literature to be reviewed. Further, the conclusions reached in the studies discussed in this section lend support overall to the use of the SCCT models with populations other than White, middle-class, college-educated individuals. The caveat, however, is that the models have not been tested with underserved populations who are currently in the workforce, in the midst of the STW transition. One of the aims of the current study is to address this oversight.

Self-Exploration

Self-exploration was one of the variables identified by Blustein et al. (1997) that correlated positively with job satisfaction. This term is defined as the degree of introspection in which an individual engages, as measured by the Self-Exploration and Internal Search Instrumentality Subscales of the Career Exploration Survey (Stumpf et al., 1983). Stumpf et al. conceptualized self-exploration as "the extent of career exploration involving self-assessment and introspection within the last three months" (p. 196). Blustein et al. noted that self-exploration that leads to self-knowledge appeared to facilitate STW transition.

The idea that self-exploration is related to vocational outcomes is not new. Anderson and Niles (2000) conducted a study in which they questioned both counselors and adult clients as to the most helpful aspects of career counseling sessions. Participants included 33 counselors and 43 clients, who were asked questions about the factors that

had been most helpful and important over the course of counseling, as well as what had been least helpful to the client. The authors then classified the responses by category, with the self-exploration classification to include "counseling process gains . . . such as increased self-awareness, more rational thinking, insight experiences, and behavior changes" (p. 255). The category also included references to assessments of skills, interests, and values. The research team reached consensus on the coding of 185 unique responses. Among clients, 52% of the *most helpful* responses were in the self-exploration category; 50% of the counselors' responses were similarly classified. For reference, self-exploration was the largest category, followed by the category of *support*, which garnered 31% and 34% of the responses, respectively.

The Gushue and Whitson (2006) study, in which the authors examined the role of gender role attitudes and ethnic identity as related to career decision self-efficacy and career choice traditionality for Black and Latina high school students, was reviewed in a previous section of this chapter. Briefly, the authors reported results of path analysis, indicating that gender role attitudes (.33) and ethnic identity (.28) were both significant predictors of career decision self-efficacy, which in turn was significantly and negatively correlated (-.26) with gender traditionality. In the context of self-exploration, Gushue and Whitson posited that their findings suggest that self-exploratory behaviors may be an important facet of career exploration, particularly in terms of developing gender role attitudes and ethnic identity.

Environment Exploration

As noted in chapter I, Blustein et al. (1997) uncovered environmental exploration themes relating to the methods used to generate information about careers and the ways

in which the information was used to inform vocational identity. The level of environment exploration was found to be positively correlated with job satisfaction. In the current study, environmental exploration is defined as the degree of activity associated with individuals' exploration strategies, as measured by the Environmental Exploration and Intended-Systematic Exploration subscales of the Career Exploration Survey (CES; Stumpf et al., 1983). In the context of SCCT and as related to the current study, environmental exploration is conceptualized as participation in a goal-directed activity.

Felsman and Blustein (1999) examined the role of peer relatedness in late adolescent career development in the context of attachment theory. The authors posited that those who are involved in close and intimate relationships with peers are more likely to effectively explore the vocational landscape. The study included 147 undergraduate students, 27% of whom had not yet selected an academic major. Participants completed measures of peer relatedness (attachment, intimacy, and mutuality) and career development (environment exploration, self-exploration, and progress toward commitment to career choice). Canonical analysis was used to examine the relationship between predictor (age, gender, and peer relatedness measures) and criterion variables (career development measures). The full model was significant, leading the researchers to conduct a series of semipartial analyses, in order to further examine the relationships between the variables. The results suggested that those students who experienced high degrees of peer attachment, along with a moderate capacity for intimacy and moderate maternal attachment, tended to engage more fully in environment exploration. These results are relevant to the current study, as Felsman and Blustein noted that peer

relatedness may help to buffer individuals from the negative emotional state associated with uncertainty in the present work environment. Further, it is posited that participants in the current study may be less likely than their college-educated peers to come from families in which one or both parents are college-educated, thus underscoring the importance of same-age confidants and role models for this group.

Life Satisfaction

The construct of life satisfaction is generally understood to refer to a global evaluation of one's existence (Heller et al., 2004). Blustein et al. (1997) found that life satisfaction was positively correlated with work satisfaction in the context of the school-to-work transition, thus providing a rationale for including life satisfaction as a variable of interest in the current study. As discussed previously, Lent and Brown (2006a) noted that life satisfaction may be a source of job satisfaction, and further characterized life satisfaction as having "trait-like features" (p. 243). This is important in the context of the current study, in that Lent and Brown conceptualized personality and affective traits as inputs to the work satisfaction model.

Lent and Brown (2006a) cited the Heller et al. (2004) study as one of the foundations of the work satisfaction model. Heller et al. debated the relative merits of top-down (person based) or bottom-up (situation based) approaches toward explaining subjective well-being in two ways: (a) the authors reviewed meta-analytic associations between personality traits, domain satisfaction measures, and life satisfaction; and (b) they constructed and tested three competing theoretical models. The first model was labeled a "direct effects" top-down model, in which four of the Big Five personality factors (neuroticism, extraversion, agreeableness, and conscientiousness) were each

linked directly to marital satisfaction, job satisfaction, and life satisfaction. (The authors

omitted the fifth personality factor, openness, because they could not find any empirical

evidence linking the construct to affectivity.) The second model, called the temperament

top-down model, depicted the four personality factors as each linked directly to life

satisfaction, which in turn linked to both marital and job satisfaction. Finally, the third

model, the integrative model, proposed direct links between each of the four personality

factors and each of the satisfaction domains (marital, job, life). In addition, marital and

job satisfaction each linked directly to (and thus were conceptualized as mediators of) life

satisfaction. This is the model that Heller et al. conceptualized as a combination of the

top-down and bottom-up approaches toward explaining subjective well-being.

Each of the models was tested using meta-analytic data. Heller et al. (2004) relied

on existing meta-analyses where available (i.e., relationships between job satisfaction-life

satisfaction, personality-job satisfaction, and correlations between the Big Five

personality traits), but conducted their own meta-analyses where necessary (e.g.,

relationships between marital and life satisfaction). In total, 117 studies were included in

the meta-analyses used to test the models. The authors provided summaries of the

correlations yielded from the meta-analytic data. The correlation found between job

satisfaction and life satisfaction is most relevant to the current study. A total of 57

studies, overall $N = 19,811$, returned an average r of .42. Thus, there is a moderate,

positive correlation between life satisfaction and job satisfaction.

Heller at al. (2004) found that the first model, which conceptualized a simple top-

down approach toward the explanation of life satisfaction, was not supported. The second

model, in which personality factors were hypothesized to correlate to life satisfaction,

which in turn then linked to domain-specific satisfaction (i.e., job and marital), did fit the data. Six paths were identified; the path linking life satisfaction to job satisfaction yielded a significant coefficient of .44. The third model, also known as the integrative model, depicted both top-down and bottom-up approaches. This model also fit the data; in this case, the path coefficient between life and job satisfaction was significant at .24. A total of 14 paths were identified in this model. Heller et al. posited that their results supported a top-down approach, albeit not the simplistic relationship as depicted in the first model. Further, the authors argued that an integrative approach, which includes bottom-up features, was supported. However, the authors noted that with eight fewer paths, the second model had the advantage of parsimony. Nonetheless, the third model, consistent with the model to be tested in the current study, combines both person and context factors as important in the prediction of domain satisfaction. In any event, the Heller et al. study supported the notion that life satisfaction and job satisfaction are related constructs, and thus supports the inclusion of life satisfaction as a variable of interest in the current study.

Summary

The purpose of this chapter has been to provide a critical review and discussion of the literature relevant to the current study. This chapter included a section outlining the school-to-work (STW) transition and provided an analysis of an STW theory-building study (Blustein et al., 1997), which is one of the foundations of the current research. In another section, SCCT (Lent et al., 1994; Lent & Brown, 2006a) was presented, and arguments were made in favor of applying SCCT to predict job satisfaction for an understudied population (i.e., the non-college-educated, transitioning to work in the sales and service sectors). Then, each of the variables that Blustein et al. identified as related to

work satisfaction (i.e., career decision self-efficacy, self-exploration, environment exploration, and life satisfaction) was discussed. In addition, the variable outcome expectations were explored, as this variable is one of the inputs in the Lent and Brown model, and previous research has shown that this variable may be particularly salient as a predictor of work outcomes for the population of interest in the current study.

While it appears that the analysis provided in this chapter provides a strong rationale for the current study, it must be noted that, with the exception of the Blustein et al. (1997) study, none of the research cited herein has been conducted with the present population of interest. Thus, some of the conclusions reached may not be replicated in the current study. At the same time, the lack of research surrounding the vocational development of noncollege graduates serves to underscore the need for the current study. This study will answer the call that many have made but apparently few have heeded: that is, to add to the body of research that is dedicated to the backbone of our society, the working-class population.

Chapter III:

Methodology

The purpose of this chapter is to provide information as to how the current study

was conducted. The population of interest and the method of sampling will be described,

along with the data collection methods. The measurement instruments will be addressed,

including a discussion of the reliability and validity of each. Lastly, the study design,

hypothesis testing, and statistical analyses will be reviewed.

Population of Interest

The overarching purpose of the current study is to examine SCCT (Lent et al.,

1994) as applied to the school-to-work (STW) transition, specifically in the sales and

service sectors. As mentioned in chapters I and II, Blustein et al. (1997) conducted a

qualitative study, designed to address the lack of a theoretical basis for STW initiatives.

The participants in that study were adults aged 18 to 29, who were employed in the sales

and service sectors, and who were neither college students nor graduates. Since the

variables of interest to be tested in the present research were drawn from the Blustein et

al. study, the same population demographics were considered for the current study.

Descriptive statistics for the participants in the present study are provided in chapter IV.

Participants were recruited in a similar manner as in the Blustein et al. (1997)

study; i.e., employers in the sales and service sectors in the New York/New Jersey

metropolitan area were contacted via telephone and sent a follow-up letter, in which they

were asked for permission to survey their employees. Since the original outreach to

employers did not yield enough participants, a local labor union that represents retail

workers was also contacted. The letter outlined the rationale for the employers and union

officials to consider participating in the study, including gaining a better understanding of the characteristics of the local labor pool. Employers were asked to identify those employees who matched the participant description, and solicitation letters were made available for those employees. As an incentive to participate in the study, $2.00 was included in each of the survey packets.

Power analyses were conducted to determine which of the planned statistical analyses required the highest number of participants. Results of power analysis indicated that 92 participants were needed to conduct multiple regression analyses consistent with H_{2A} and H_3 (i.e., each of the five variables mentioned in H_{1A} through H_{1E} will contribute unique variance in the prediction of work satisfaction; the variable outcome expectations will account for more variance than will each of the other variables of interest), with a medium (.15) effect size, $\alpha = .05$, power = .80 (Faul, Erdfelder, Lang, & Buchner, in press).

Procedure

Procedures for data collection varied, depending upon the differential operations of the organizations contacted for participant recruitment. When working directly with employers, I was given permission to meet with those employees who were interested in participating in the study and to distribute the study materials, along with an informed consent form. The participants were reminded of the voluntary nature of the study, as had been specified in the recruitment letter. The recruitment letter also contained assurances that individual survey results would not be reported to employers, and that results would be reported in group form only. Once the participants completed the informed consent, they were given the study materials; as previously noted, each packet contained a token

gift of $2.00 as an incentive to complete the survey forms. The packet also contained a stamped, self-addressed envelope in order that participants were able return the survey materials. In addition, I left the premises after I distributed the survey materials, in order to avoid any perception of coercion, and to further ensure that the anonymity of the participants was protected. A total of 113 survey packets were distributed in this manner.

The procedure was slightly different for the union members who participated in the study. In this instance, the survey packets (including the recruitment letter and consent form) were distributed to employees directly by union representatives. I was not given the opportunity to meet directly with the union members. Additionally, union members did not complete the survey materials at their place of employment, in order to avoid any conflict with retailer management. A total of 200 survey packets were given to a union officer, who in turn distributed all of the materials to the union representatives. The representatives, however, were not required by the union officer to report back the number of packets actually distributed to employees. Therefore, the total number of surveys distributed through the labor union is as best an approximation.

The research materials consisted of the following: (a) a demographic form, (b) the Career Decision Self-Efficacy Scale-Short Form (CDSE-SF; Betz et al., 1996), (c) the Environmental Exploration and Self-Exploration subscales of the Career Exploration Survey (CES; Stumpf et al., 1983) (d) the Generic Job Outcome Expectation Scale (GJOES), (e) the Generic Job Satisfaction Scale (GJSS; Macdonald & MacIntyre, 1997), and (f) the Satisfaction with Life Scale (SWLS; Pavot & Diener, 1993). Distribution of the materials was counterbalanced to prevent order effects. Total time for completion of the materials was approximately 20 minutes.

Research Instruments

Following are descriptions of each of the research instruments used in the current

study, along with psychometric data for each scale. Further, studies in which the various

scales have been validated are reviewed.

Demographic form. The demographic form (see Appendix A) was created for this

study. Participants in the current study were asked to provide their age, gender,

race/ethnicity, marital status, years of education, current job title, and length of tenure in

their current jobs. They were also asked to confirm their current educational status and

age; i.e., they noted whether they are currently attending college and/or have completed a

4-year college degree and whether they are younger than 18 or older than 29 years old.

These questions were added as a way in which to double-check the respondents'

eligibility for the study. Further, they were asked to provide the current (or latest)

occupations for each of their parents, so that approximations of SES could be derived.

SES was approximated using the procedure as outlined by Blustein et al. (2002).

Blustein et al. used the Nakao-Treas SEI (Nakao & Treas, 1994), which is an index based

on ratings of occupational characteristics of 1980 U.S. Census codes. This index is an

approximation of socioeconomic status based on occupation prestige, education, and

salary. The occupation scores listed in the Nakao-Treas SEI range from a high of 97

(physician) to a low of 17 (textile sewing/shoe machine operator). For the current study,

the researcher and two research assistants independently assigned a code to each

participant's parents' occupations. Any discrepancies were discussed until consensus was

reached. The higher of the two codes associated with the occupations of the respondents'

parents were used to establish the SES for the respondents. This procedure yields

continuous data, which was used to test H_{1E} (SES will be positively correlated with work satisfaction) and H_{4A} (SES can be used to predict work satisfaction).

The SES data were also used to form categorical variables, which is consistent with the methodology used by Blustein et al. (2002) in which the respondents were designated as either "higher" or "lower" SES, using a tripartite split, in which the highest one third of the sample in terms of SES were compared with the lowest one third. This procedure was used to create meaningful categories that do not overlap. The same procedure was used in the current study to test H_{4B}, which compares the higher- and lower SES groups in terms of the mean scores on each of the variables.

Career Decision Self-Efficacy Scale-Short Form. The Career Decision Self-Efficacy Scale-Short Form (CDSE-SF; Betz et al., 1996) was derived from the Career Decision Self-Efficacy Scale (CDSE; Taylor & Betz, 1983). The purpose of both scales is to assess the level of confidence one possesses in regard to one's ability to perform the tasks associated with making vocational decisions. The original Career Decision Self-Efficacy Scale (CDSE) was developed by Taylor and Betz, in an attempt to examine the utility of Bandura's self-efficacy theory (1977) in the context of the study of career indecision. The CDSE was seen as a way in which to gauge specific underlying causes of the inability to make vocational choices. Betz et al. noted the utility of the original scale, which included 50 items, but argued that its length was prohibitive in certain settings and situations, as well as for research. Thus, the authors created a scale that included 25 items, but that still retained the psychometric properties of the original CDSE. Further, Lent and Brown (2006b) stated that their experience with SCCT research led them to believe that shorter scales can be sufficiently reliable as measures of social cognitive

constructs. Since the current study calls for the administration of five different scales plus a demographic form, I chose the shorter scale for ease of administration.

Betz et al. (1996) evaluated the psychometric properties of the CDSE-SF by conducting a study in which 180 college undergraduates participated. The students completed the CDSE-SF to determine coefficient alphas for the five subscales (Self-Appraisal, Occupational Information, Goal Selection, Planning, and Problem-Solving), each containing five questions. Respondents indicated their level of confidence using a 10-point Likert-type scale in which 0 indicated *no confidence* and 9 indicated *complete confidence*. Participants also completed the Career Decision Scale (CDS; Osipow, 1987) and My Vocational Situation (MVS; Holland, Daiger, & Power, 1980), in an attempt to derive concurrent validity. The results yielded coefficient alphas for the subscales ranging from .73 to .83, which is comparable to the coefficient alphas for the original CDSE, which ranged from .86 to .89. In terms of the total scale, the coefficient alpha for the CDSE-SF was .94 vs. .97 for the CDSE. Further, Betz et al. reported concurrent validity correlations for the CDSE-SF as compared to the CDS and MVS as higher than the correlations between the original CDSE and the CDS and MVS, in all except two comparisons (i.e., CDSE-SF vs. CDS Indecision and CDS Certainty).

The CDSE-SF (Betz et al., 1996) was used in a study by Gushue and Whitson (2006), which was reviewed in detail in the previous chapter. The study, in which 104 ethnic minority students participated, was designed to investigate the effects of racial identity and gender role attitudes in terms of career choice goals. In this context, the scale yielded a .86 coefficient alpha.

The CDSE-SF was also used in a study designed to examine the career development behaviors of Latino/a high school students of lower SES backgrounds (Gushue, Clarke, Pantzer, & Scanlan, 2006). The participants in this study were 85 males and 43 females, mean age 16.12 years old (*SD* = 0.91). In this study, the coefficient alpha was found to be .89.

In the current study, the coefficient alpha for the entire scale was .93, indicating good reliability. Further, this result compares favorably to the reliability statistics reported in the studies mentioned above, in which the CDSE-SF was used in studies of college students, ethnic minority high school students, and high school students from lower SES backgrounds.

Career Exploration Survey. The Career Exploration Survey was developed by Stumpf et al. (1983) as a measure by which to assess three different dimensions of career exploration (the exploration process, reactions to exploration, and beliefs about exploration). There are a total of 16 subscales across the dimensions. Two of the subscales of the Exploration Process Dimension were used in the current study: the Environmental Exploration subscale was used to assess the variable environment exploration in the current study, and the Self-Exploration subscale was used to assess the variable self-exploration. Both subscales contain items that begin with the phrase, "To what extent have you behaved in the following ways over the past 3 months"; participants responded to a 5-point Likert-type scale, in which 1 represented *little*, and 5 represented *a great deal*. Sample items on the former subscale include "Obtained information on specific jobs or companies" and "Initiated conversations with knowledgeable individuals in my career area," while samples of items on the latter subscale include "Contemplated

my past" and "Been retrospective in thinking about my career." The two subscales were combined to estimate an overall index of exploratory activity, consistent with the strategy used by Blustein, Devenis, and Kidney (1989) in their study of the relationship between the identity formation and career development of college students.

To construct the scales and to develop reliability and validity measurements, Stumpf et al. (1983) conducted four different studies. In Study 1, the authors generated 92 survey items based on a review of the literature and interviews held with job seekers. The items were tested with a sample of 241 graduate business students, mean age 26.3 (SD = 4.41) who utilized campus job placement services. Further analysis led the authors to eliminate some of the items, resulting in the final total of 59 items across the 16 subscales. Coefficient alphas for the Self- and Environment Exploration subscales were found to be .88 and .83, respectively.

The purpose of the Stumpf et al. (1983) Study 2 was to conduct an initial examination of CES validity. Two groups of students completed the survey. The first group (n = 57) consisted of individuals who were completing a 3-week class designed to facilitate career change into business occupations, and the second group (n = 61) was made up of graduate business students who had completed a course in career decision-making. The survey was administered to the group of career changers at two time intervals, to assess changes in behaviors and cognitions as a result of the career course intervention. The career changers' Time 1 scores were compared with the business students' scores. It was expected that there would be differences in each group's approaches to the career exploration process, based on factors such as amount of knowledge about the business world and the degree of confidence with which each group

operated in its search behaviors. Results showed that the career changers had engaged in significantly less environment exploration, had less information, were less focused, and considered a higher number of occupations. The career changers were also significantly less confident about the employment outlook and less certain about career exploration outcomes. Thus, the scale appears to be sensitive to the differences in job seekers' approaches toward career exploration.

Stumpf et al. (1983) conducted Study 3 to determine whether the instrument was valid for use with undergraduates. A total of 185 students completed the survey (mean age = 22.1, SD = 2.62); 85% expected to graduate within 3 months and be employed within 5 months. The resulting scores were compared to the graduate students' scores; however, the graduate students did not expect to seek employment for an average of 9 months from the time of the survey, vs. the 3-month window for undergraduates. The undergraduates' scores were significantly higher in the areas of environment exploration, frequency, and amount of information. In addition, the undergraduates obtained a greater amount of information, considered fewer occupations, and had greater focus and satisfaction with information. These results are consistent with the contention of Stumpf et al. that the measurement of career exploration behaviors will vary depending upon the timing of the career decision point.

Blustein et al. (1989) made slight modifications to the wording of the Self- and Environment Exploration subscales of the CES in the authors' study of the relationship of the identity formation process and career development. These modifications were made to account for the fact that the majority of undergraduates were not at the point of making the transition from undergraduate to graduate student and/or member of the workforce. A

total of 99 undergraduate students participated in the study. Internal consistency

coefficients were found to be .81 for the Self- and .89 for the Environment Exploration

revised subscales; the test-retest coefficients were .83 and .85, respectively, across a 2-

week interval. Blustein et al. inferred the content and construct validity of the scales

based on consistency with outcomes predicted by career development theory. As noted

above, Blustein et al. also combined the two subscales to create an overall index of

exploratory activity; the authors did not report the coefficient alpha for the combined

scale.

Hardin, Varghese, Tran, and Carlson (2006) used the Environment Exploration

subscale of the CES in their study of gender differences in the relationships among

anxiety, self-construal, and career exploration. Participants in the study were 161 college

students, and the mean age was 18.97 years (SD = 1.47). The internal consistency

coefficient for the subscale was found to be .87. Overall results of the study suggested

that levels of social anxiety did not directly influence levels of environment exploration.

Werbel (2000) used the Self- and Environment Exploration subscales of the CES

in his study of the relationships among career exploration, job search intensity, and job

search effectiveness. Werbel constructed a model in which self-exploration and

environment exploration were linked to job search intensity, which in turn linked to the

criterion variables of job satisfaction and initial compensation, which together were

operational definitions of job search effectiveness. Werbel found a significant correlation

between the Self- and Environment Exploration subscales (r = .51); thus, those

individuals who engage in self-exploration are also moderately likely to engage in

environment exploration.

While the research outlined above demonstrates evidence of good reliability and validity, there are at least two areas of possible limitations inherent with the use of the Self- and Environment Exploration subscales of the CES. First, the CES was designed as a tool with which to measure career exploration behaviors before gaining employment. In the current study, the participants were already employed, which might seem to affect the validity of the measure. However, Blustein et al. (1997) studied young adults already in the workforce and found that individuals who had engaged in self- and environment exploration reported higher levels of job satisfaction. While the Blustein et al. study was qualitative in nature and thus participants may have been retrospective in their report of job search behaviors, the results nonetheless support the use of an instrument such as the Environment Exploration and Self-Exploration subscales of the CES. It is assumed that continued self- and environment exploration, even in the context of employment, will increase levels of job satisfaction. Further, Stumpf et al. viewed the outcomes of exploration as "part of a dynamic exploration process which changes over time as a function of experience, past exploration, reactions to past exploration, and current beliefs regarding the utility of future exploration" (p. 217). Therefore, career exploration is defined not as a discrete event but rather as a fluid course of development over time.

Another possible limitation was that the CES was created and normed with college undergraduate and graduate students. There had been no previous evidence that the CES had been used with the current population of interest.

As previously noted, the Self- and Environment Exploration subscales of the CES were combined and presented as a single instrument in the current study. The coefficient alpha for the two combined scales was .89; coefficient alphas for the Self-exploration and

Environment Exploration subscales were .77 and .88, respectively. Thus, the two

subscales were combined, and each of the subscales was taken on its own evidenced

satisfactory reliability statistics, comparable to those observed in studies of undergraduate

and graduate students. Further, the two scales were significantly correlated ($r = .64$),

which is consistent with Werbel's (2000) findings, meaning that those members of the

current sample who were self-introspective were moderately likely to engage in

exploration of the work environment as well. Therefore, similar to the findings of

Blustein et al. (1997), it appears that the use of the CES subscales is supported for the

current population.

Generic Job Outcome Expectations Scale. The Generic Job Expectations Scale

(GJOES) was constructed for use in the current study. This scale was designed to

measure the relative importance of the types of outcomes that workers in lower-level

sales and service positions might expect. This strategy has been endorsed by Lent and

Brown (2006b), who argued that generic measures of SCCT constructs such as self-

efficacy and outcome expectations may have limited utility, in that these constructs need

to be considered in domain-specific contexts. In addition, this strategy has been employed

in a number of studies in which SCCT variables have been tested (e.g., Diegelman &

Subich, 2001; Lent et al., 2003).

The GJOES contains 18 questions that begin with the phrase, "If I stay in my

current job." Several outcomes were listed, including extrinsic benefits such as "I will

earn a regular paycheck" and intrinsic benefits such as "I will have a sense of purpose."

The two types of questions are in keeping with Blustein and his colleagues' (2002)

findings that sales/service workers from a lower SES were more likely to view work as a

means by which to survive, while workers from a higher SES were more likely to derive meaning from their work. Respondents used a 5-point Likert-type scale to indicate how true the statement is, with 1 *not at all true* and 5 *very true*. Content validity was established by asking members of the population of interest for their comments about the items before the actual data collection. Specifically, the instrument was reviewed by 5 workers (a cosmetologist, a bank teller, a cashier, and two health club workers). These workers were asked to comment about whether they thought the statements represented valid job outcomes, and whether they would add or subtract any of the statements. No changes were made to the original scale as a result of this review.

The present study also offers preliminary evidence of concurrent validity, since the measure correlated positively with job satisfaction in the present sample ($r = .70$), as theorized by Lent and Brown (2006a). However, this conclusion is tentative, due to the relatively small sample ($N = 92$). This result will be discussed further in chapter IV.

An obvious limitation of the GJOES was that there was no prior evidence of reliability for the scale. However, Lent and Brown's (2006b) position, as outlined above, could be construed as one in which extensive empirical evidence of reliability and validity might be compromised in favor of specificity. Further, a coefficient alpha of .92 was observed in the current study, meaning that the scale had good reliability for use with this sample.

Generic Job Satisfaction Scale. The Generic Job Satisfaction Scale (GJSS; Macdonald & MacIntyre, 1997) was developed as a measure that could be used within a wide range of occupation types. The initial item pool was tested with a sample of 855 working adults in Ontario, Canada, representing six occupational categories, including

sales and service. The results of a factor analysis supported the inclusion of 10 items; Cronbach's alpha for the scale was .77. The authors posited that the reliability coefficient reflected their attempt to create a scale that measured relevant facets of job satisfaction. Concurrent validity was established by establishing correlations between the GJSS and other variables inside and outside the workplace, such as characteristics of the job, workplace affect, general affective reactions, and personal problems. Examples of items on the scale include "I feel close to the people at work" and "I feel good about my job." Responses are measured along a 5-point Likert-type scale, in which 1 signifies *strongly disagree* and 5 signifies *strongly agree.*

The strength of the GJSS lies in the fact that it was developed using a population of working adults, including members of the sales and service sectors. Further, the GJSS is meant to measure global, rather than domain-specific job satisfaction, which is in line with the way in which Lent and Brown (2006a) conceptualized their model. A weakness, however, is that no evidence exists of this scale having been used in any other research study. Thus, there had been no other evidence of reliability and/or validity, other than that which was contained in the original study designed to create the scale (i.e., Macdonald & MacIntyre, 1997). However, in the current study, the observed internal consistency for the scale was observed to be .85. This is consistent with Macdonald and MacIntyre's observation and suggests that the instrument is reliable for use with young adult workers from the sales and service sectors.

Satisfaction with Life Scale. The Satisfaction with Life Scale (SWLS; Diener et al., 1985) was developed to assess global, rather than domain-specific, satisfaction with life. The authors refer to life satisfaction as "a cognitive, judgmental process" (p. 71). The

scale consists of five statements such as "The conditions of my life are excellent" and "In most ways, my life is close to my ideal." Respondents rate their agreement with the statements using a 7-point Likert-type scale, anchored by ratings of *strongly disagree* to *strongly agree*.

Diener et al. (1985) conducted a total of three studies to create the scale and establish reliability and validity estimates. Study 1 involved 176 undergraduate students who completed the measure; 2 months later, 76 of these students completed the measure a second time. The 2-month test-retest correlation was .82; the coefficient alpha was .87. Study 2 relied on two samples of undergraduates: the 176 students who had been part of Study 1, and a different group of 163 undergraduates. All of the students completed the SWLS as well as a battery of other measures of subjective well-being. The positive correlations between the SWLS and the other measures ranged from .47 to .75, thus suggesting good convergent validity. At the same time, correlations with a measure of negative affect were -.37 and -.32, suggesting acceptable discriminant validity.

Pavot and Diener (1993) reviewed the literature and, citing a total of about 23 research studies, reported that the SWLS has been widely used in research applications. Thus, normative data for a wide range of populations exists, including adult samples. Coefficient alphas have been found to range from .79 to .89, while test-retest coefficients range from .83 over 2 weeks, to .54 over 4 years. The coefficient alpha in the current study was .85, which is within the range of reliability statistics cited by Pavot and Diener.

In summary, Cronbach's alphas for all of the instruments used in the current study ranged from .85 to .93, meaning that all were observed to have satisfactory reliability.

Thus, the use of each of the measures seems to be supported for use with the current population, which lends validity to the observed results, discussion, and conclusions.

Study Design

The overarching purpose of the current study was to partially test the utility of social cognitive career theory (SCCT; Lent et al., 2004) in the context of predicting work satisfaction for those individuals transitioning from school to work in the sales or service sectors. The specific model tested was the SCCT work satisfaction model (Lent & Brown, 2006a), which is a multistage explanatory conceptualization of the factors that contribute to satisfaction with one's current employment. A multistage model is defined as one in which there are "one or more exogenous variables and two or more endogenous variables" (Pedhazur & Schmelkin, 1991, p. 312). Pedhazur (1982) defined an exogenous variable as "a variable whose variability is assumed to be determined by causes outside the model under consideration" and an endogenous variable as "one whose variation is to be explained by exogenous and other endogenous variables in the causal model" (p. 178).

Lent and Brown (2006a) identified the work satisfaction model's key elements as follows: (a) work/education satisfaction (operationalized in the current study as generic job satisfaction), (b) personality and affective traits (satisfaction with life), (c) goals and goal-directed activity (self- and environment exploration), (d) self-efficacy (career decision self-efficacy), (e) work conditions and outcomes (generic job outcome expectations), and (f) goal-relevant environmental supports, resources, and obstacles (SES). Two of the key elements identified by Lent and Brown (i.e., personality/affective traits and goal-relevant environmental supports, resources, and obstacles) could be characterized as exogenous, while the remaining variables could be considered to be

endogenous. Thus, in the current study, the variables SES and life satisfaction would be classified as exogenous, while career decision-making self-efficacy, self- and environment exploration, outcome expectations, and work satisfaction would be classified as endogenous.

While the overall design for the current study could best be classified as nonexperimental, there are differences in the approaches by particular type of hypothesis. Each of the hypotheses will be discussed in terms of appropriate statistical analysis in the following section. In terms of relevant study design by hypothesis, H_{1A} through H_{1E} are examples of a correlational design, while the remaining hypotheses are examples of ex-post facto, causal comparative design. An ex-post facto design exists when independent variables of interest, such as SES, cannot be manipulated by the researcher.

Hypothesis Testing

Following is a description of each of the hypotheses tested in the current study. In addition, a description of the statistical analyses used to test each hypothesis is provided.

H_{1A}: There will be a positive correlation between life satisfaction and work satisfaction.

H_{1B}: There will be a positive correlation between decision-making self-efficacy and work satisfaction.

H_{1C}: There will be a positive correlation between self- and environment exploration and work satisfaction.

H_{1D}: There will be a positive correlation between outcome expectations and work satisfaction.

H_{1E}: There will be a positive correlation between SES and work satisfaction.

Each of these hypotheses of correlation is based on Lent and Brown's (2006a) predictions within the context of the SCCT work satisfaction model. Bivariate zero-order correlations were used to test H_{1A} through H_{1E}. Bivariate correlation measures the strength of the relationship between two continuous variables (Tabachnick & Fidell, 2001).

H_{2A}: In accordance with Lent and Brown's (2006a) model, each of the five variables mentioned in H_{1A} through H_{1E} will contribute unique variance in the prediction of work satisfaction.

H_{2B}: Each of the five variables mentioned in H_{1A} through H_{1E} will serve as moderators and/or mediators in accordance with the pathways theorized in the SCCT work satisfaction model (Lent & Brown, 2006a).

H_3: As maintained by a number of scholars (e.g., Ali et al., 2005; Lent et al., 1996; Morrow et al., 1996), the variable outcome expectations will account for more variance than will each of the other variables of interest (i.e., life satisfaction, decision-making self-efficacy, self- and environment exploration, and SES).

H_{2A} and H_3 were tested using a series of multiple regression analyses, in which work satisfaction was the dependent variable, and life satisfaction, career decision-making self efficacy, self- and environment exploration, outcome expectations, and SES were the independent variables. Regression analysis is used to ascertain the relationship between a dependent variable and multiple independent variables, while assessing the relative importance of each of the independent variables toward the prediction of the dependent variable. Pedhazur and Schmelkin (1991) noted that estimates of effects of variables in multistage models can be calculated using multiple regression. The specific procedure the authors outlined calls for "each endogenous variable to be regressed on the

variables said to affect it, and the b's (unstandardized coefficients) or β's (standardized coefficients) are taken as indicating the effects of the variables with which they are associated" (p. 314). This procedure has been used in previous studies (e.g., Ali et al., 2005) in which the predictive value of SCCT was pilot-tested for use with a marginalized group.

H_{2B} was tested using a series of multiple regression analyses, in which the moderating and/or mediating effects of each of the variables were tested in various combinations, within the context of the SCCT work satisfaction model. Frazier, Tix, and Barron (2004) endorsed using multiple regression as a viable means to test for the effects of moderator and mediator variables in multistage models. Thus, multiple regression was used first to test the direct relationships of the independent variables to the dependent variable (H_{2A} and H_3) and then to determine which (if any) paths in the SCCT work satisfaction model were significant when moderating or mediating relationships were considered (H_{2B}).

H_{4A}: In accordance with the findings of Blustein et al. (2002), there is a positive relationship between SES and job satisfaction for non-college-educated workers in the sales and service sectors.

A regression analysis was used to test H_{4A}. As noted above, regression analysis is used to ascertain the relationship between a dependent variable and an independent variable, while assessing the relative importance of the independent variable toward the prediction of the dependent variable.

H_{4B}: Consistent with H_{4A}, mean scores on all measures that predict work satisfaction (i.e., life satisfaction, career decision-making self-efficacy, self- and

environment exploration, outcome expectations) will be significantly higher for workers from a higher SES than for workers from a lower SES.

Multivariate analysis of variance (MANOVA) was used to test H_{4B}. MANOVA is the appropriate statistical test to use when there are two or more levels of an independent variable and two or more dependent variables (Tabachnick & Fidell, 2001). In the case of the current study, the sample consisted of two groups, those with lower SES and those with higher SES. The variables used to predict work satisfaction (life satisfaction, career decision-making self-efficacy, self- and environmental exploration, and outcome expectations) are treated as dependent variables in the context of MANOVA. The differences in the mean scores for each of the dependent variable measures were assessed using the MANOVA procedure.

Summary

The purpose of this chapter has been to discuss the methodology used in the current study. Methods of determining the sample size and characteristics of the sample were reviewed. The study design was presented, and each of the hypotheses was discussed along with the appropriate statistical analysis used to test each hypothesis.

Chapter IV:

Results

The focus of this chapter is to provide the results of the statistical analyses of the current study. Sample demographics, descriptive statistics, tests of hypotheses, and a summary of findings are presented.

Sample Demographics

As discussed in chapter III, approximately 313 survey packets were distributed. A total of 110 packets were returned, yielding an estimated response rate of 35.1%. A total of 18 surveys were not used in the data analysis because the respondent was either older than 29 years old ($n = 8$), unemployed ($n = 4$), currently attending a 4-year college ($n = 3$), or a graduate of a 4-year college ($n = 3$). Thus, 92 surveys were usable, yielding an adjusted response rate of 29.4%. Participants in the present study ranged in age from 18 to 29 years old ($M = 22.6$, $SD = 3.4$). More than half were female (60.9%), and the majority were single (84.8%). Most participants were White (76.1%), while 10.9% were Black, 8.7% were Latino/a, 3.3% were Asian/Pacific Islander, and 1.1% did not disclose race/ethnicity.

The majority ($n = 60$, 65.2%) of the participants were members of a retailer's union; of these, 25 (41.2%) worked as supermarket cashiers. Other supermarket-related occupations included such job titles as stock clerk, customer service, and front-end runner. The 32 participants (34.8%) who were not union members were employed in a variety of sales and service jobs, including bank teller, wait staff, and hairstylist/cosmetologist. Length of current employment for the entire sample ranged from 1.5 months to 11 years ($M = 3.6$ years, $SD = 2.9$ years).

Most of the participants ($n = 83$, 91.2%) finished high school; of the 8 (8.8%) who did not, 4 earned a General Equivalency Diploma (GED). Of those who received additional training, 12 participants (13.0% of the total sample) earned a degree from a 2-year college, 28 (30.4%) attended some college, 8 (8.7%) went to a trade/professional school, 2 (2.2%) joined the military, 3 (3.3%) reported other training, and 1 (1.1%) did not disclose specifics about further education. A total of 34 (37%) of the participants had no further training after high school.

Multivariate analysis of variance (MANOVA) revealed no significant differences in terms of continuous demographic variables (i.e., age, years of secondary education, months in current job, SEI score) between the participants who were union members and the participants were nonunion members: Wilks' $\Lambda = .955$, $F(4,85) = 1.06$, and $p = .383$. There were also no differences in terms of the categorical variables gender [$X^2(1, N = 92) = .05$, $p = .83$], marital status [$X^2(2, N = 92) = 1.52$, $p = .47$], or race/ethnicity [$X^2(3, N = 91) = 1.58$, $p = .66$] between the two groups.

The range of SEI scores for the entire sample was 28 to 93 ($M = 52.3$, $SD = 15.7$). The SEI scores for the higher SES group ($n = 31$) ranged from 63 to 93 ($M = 68.3$, $SD = 7.0$), and the range for the lower SES group ($n = 31$) was 28 to 39 ($M = 33.2$, $SD = 4.1$). In comparison, Blustein et al. (2002) reported a range of 26 to 76 ($M = 50.35$, $SD = 20.23$) for the entire sample, and means of 69.6 and 31.1 for the higher and lower SES groups, respectively.

Further, possible effects of union membership status on each of the variables of interest in the current study were analyzed utilizing MANOVA. This step was necessary to ensure that there were no underlying differences between the two groups that would

affect the results. Table 1 contains the mean values of each of the variables for both groups. The MANOVA was not significant, Wilks' $\Lambda = .912$, $F(6,85) = 1.37$, $p = .238$. As no differences were detected in demographic variables or mean scores on each of the measures, the union and nonunion groups were combined for all analyses.

Table 1

Means and Standard Deviations for the CDSE-SF, CES, GJOES, GJSS, SWLS, SEI – Union vs. Nonunion Members

	Total sample (N = 92)		Union (n = 60)		Nonunion (n = 32)	
Scale	*M*	*SD*	*M*	*SD*	*M*	*SD*
CDSE	92.86	14.69	94.89	14.70	89.06	14.10
CES	33.46	9.78	33.48	10.02	33.42	9.48
GJOES	64.76	14.41	65.01	14.23	64.30	14.96
GJSS	36.25	7.18	37.12	6.52	34.63	8.13
SWL	21.34	6.92	21.38	7.52	21.25	5.73
SEI	52.26	15.71	51.52	14.68	53.66	17.65

CDSE = Career Decision Self-Efficacy-Short Form; CES = Career Exploration Survey; GJOES = Generic Job Outcome Expectations Scale; SWLS = Satisfaction with Life Scale; SEI = Socioeconomic Index; GJSS = Generic Job Satisfaction Scale

Descriptive Statistics

Means and standard deviations for the entire sample for each of the scales used in the present study (CDSE-SF; Self- and Environment subscales of the CES; GJOES; GJSS; and SWL) are presented in Table 2. Ranges of possible scores for each of the measures are as follows: CDSE-SF, 25 to 125; CES, 11 to 55; GJOES, 18 to 90; GJSS, 10 to 50; SWL, 5 to 35; and SEI, 17 to 97.

Table 2

Means and Standard Deviations for the CDSE-SF, CES, GJOES, GJSS, SWLS, and SEI –

Higher vs. Lower SES

Scale	Total sample $(N = 92)$		Higher SES $(n = 31)$		Lower SES $(n = 31)$	
	M	*SD*	*M*	*SD*	*M*	*SD*
CDSE	92.86	14.69	89.92	17.56	92.83	12.46
CES	33.46	9.78	32.81	8.32	29.60	10.59
GJOES	64.76	14.41	63.19	13.97	68.29	11.79
GJSS	36.25	7.18	36.06	7.34	36.97	6.77
SWL	21.34	6.92	23.26	6.68	20.10	7.32
SEI	52.26	15.71	68.29	7.02	33.19	4.05

CDSE = Career Decision Self-Efficacy-Short Form; CES = Career Exploration Survey; GJOES = Generic Job Outcome Expectations Scale; SWLS = Satisfaction with Life Scale; SEI = Socioeconomic Index; GJSS = Generic Job Satisfaction Scale

Tests of Hypotheses

The first set of hypotheses (H_{1A} through H_{1E}) predicted that there would be positive correlations between each of the independent variables (decision-making, self- and environment exploration, outcome expectations, life satisfaction, and SES) and the dependent variable (job satisfaction). Bivariate zero-order correlations were used to test these hypotheses. Results are presented in Table 3. Three of the five independent variables were significantly correlated with job satisfaction at the .01 level: outcome expectations ($r = .701$), decision-making ($r = .352$), and life satisfaction ($r = .317$). There is a strong positive relationship between outcome expectations and job satisfaction, and a moderate positive relationship between each of the other two significant variables (decision-making, life satisfaction) and job satisfaction. There were no significant correlations between job satisfaction and the variables self- and environment exploration or SES. Thus, three of the five correlational hypotheses were supported.

Table 3

Correlations between CDSE-SF, CES, GJOES, SWLS, SEI, and GJSS (N = 92)

	GJSS	CDSE-SF	CES	GJOES	SWLS
CDSE	.352**				
CES	.090	.363**			
GJOES	.701**	.348**	.080		
SWLS	.317**	.340**	-.059	.243*	
SEI	-.063	.000	.217*	-.140	.219*

$*p < .05$ (2-tailed)
$**p < .01$ (2-tailed)

CDSE = Career Decision Self-Efficacy-Short Form; CES = Career Exploration Survey; GJOES = Generic Job Outcome Expectations Scale; SWLS = Satisfaction with Life Scale; SEI = Socioeconomic Index; GJSS = Generic Job Satisfaction Scale

In addition to the statistically significant correlations between the independent variables and the dependent variable job satisfaction, there were statistically significant relationships between several of the independent variables. As shown in Table 3, decision-making self efficacy shared positive and moderate correlations with self- and environment exploration, outcome expectations, and life satisfaction. There were small positive correlations between life satisfaction and outcome expectations, between SES and self- and environment exploration, and between SES and life satisfaction.

H_{2A} stated that each of the five variables mentioned in H_{1A} through H_{1E} would contribute unique variance in the prediction of work satisfaction. A related hypothesis, H_3, stated that the variable outcome expectations would account for more variance than would each of the other variables of interest (i.e., life satisfaction, decision-making self-

efficacy, self-and environment exploration, and SES). Each of these two hypotheses was tested using multiple regression analysis, in which job satisfaction was the criterion variable and outcome expectations, life satisfaction, decision-making self-efficacy, self- and environment exploration, and SES were the predictor variables. The linear combination of the independent variables was significantly related to job satisfaction, $F(5, 86) = 18.63, p < .01$. $R^2 = .52$, meaning that 52% of the variance in work satisfaction is accounted for by this combination of predictor variables. However, as shown in Table 4, only the partial correlation between outcome expectations and work satisfaction was significant ($r = .64, p < .01$). Therefore, H_{2A} is not fully supported by this analysis. Nevertheless, as the variable outcome expectations alone accounts for 49% of the total variance in work satisfaction, meaning that the other four variables contributed only an additional 3%, this analysis does support H_3. While H_{2A} is not fully supported based on this analysis, this result may be somewhat deceiving. Although Lent and Brown (2006a) posited that each of the independent variables would have a direct relationship with the dependent variable, they also theorized that some of the variables within the SCCT model would serve as moderators and mediators to other variables. Thus, additional analyses were necessary to explore the mediating relationships of each of the independent variables within the SCCT model, in accordance with H_{2B}.

Table 4

Bivariate and Partial Correlations of the Predictors with Job Satisfaction (N = 92)

Predictors	Correlation with job satisfaction	Partial correlation with job satisfaction (controlling for all other predictors)
Decision-making	.352**	.087
Exploration	.090	.028
Outcomes	.701**	.642**
Life satisfaction	.317**	.172
SES	-.063	-.013

**p < .01

Accordingly, a series of multiple regression analyses was used to estimate the

effects of each of the variables on the prediction of job satisfaction in the context of the

model. As previously noted, Pedhazur and Schmelkin (1991) maintained that estimates of

effects of variables in multistage models, such as the SCCT work satisfaction model, can

be calculated using multiple regression. The specific procedure the authors outlined calls

for "each endogenous variable to be regressed on the variables said to affect it, and the

b's (unstandardized coefficients) or β's (standardized coefficients) are taken as indicating

the effects of the variables with which they are associated" (p. 314).

Similarly, Frazier et al. (2004) endorsed the use of multiple regression analysis to

test for the effects of moderator and mediator variables in explanatory models. A

moderator changes the direction and/or strength of a relationship between a predictor and an outcome variable (Baron & Kenny, 1986). In the current analysis, the exogenous variable SES is treated as a moderator. This is in accordance with the findings of Blustein et al. (2002), who observed that work-related behaviors associated with the school-to-work transition differed by social class. In essence, the purpose of this analysis is to detect a possible interaction. An interaction effect exists when the effect of the independent variable on the dependent variable differs because of the presence of the moderator variable (Jaccard & Turrisi, 2003). In the current study, the interaction hypothesis states that the independent variables career decision self-efficacy, outcome expectations, self- and environment exploration, and life satisfaction will predict job satisfaction, but only for those participants from a higher SES.

To test for moderator effects with continuous variables, Frazier et al. (2004) endorsed a procedural sequence that calls for centering or standardizing variables, creating product terms, and then structuring a hierarchical multiple regression equation. The equation is formed by first entering the standardized variable and potential moderator, followed by the product term, which represents the potential interaction. In the present study, this procedure was implemented to test the possibility that the independent variables decision-making self-efficacy, outcome expectations, self- and environment exploration, and life satisfaction differentially predicted work satisfaction, depending upon the level of SES. The results of these analyses were not significant, meaning that SES did not alter the strength or direction of the relationship between any of the independent variables and the dependent variable job satisfaction (see Table 5).

Table 5

Hierarchical Regression Analysis Summary for Testing Moderator Effects in Prediction

of Job Satisfaction

Step and variable	*b*	SE	β	R^2
Step 1				
SES (*z* score)	-.46	.71	-.06	
CDSE (*z* score)	2.53	.71	.35	.13**
Step 2				
SES x CDSE	.04	.79	.01	.00
Step 1				
SES (*z* score)	-.62	.77	-.09	
CES (*z* score)	.78	.77	.11	.02
Step 2				
SES x CES	-.34	.83	-.05	.00
Step 1				
SES (*z* score)	.26	.55	.04	
GJOES (*z* score)	5.06	.55	.71	.49***
Step 2				
SES x GJOES	1.12	.58	.15	.02
Step 1				
SES (*z* score)	-1.00	.73	-.14	
SWL (*z* score)	2.50	.73	.35	.12**
Step 2				
SES x SWL	1.23	.68	.18	.03

**$p < .01$
***$p < .001$

CDSE = Career Decision Self-Efficacy-Short Form; CES = Career Exploration Survey; GJOES = Generic Job Outcome Expectations Scale; SWLS = Satisfaction with Life Scale; SEI = Socioeconomic Index; GJSS = Generic Job Satisfaction Scale

Baron and Kenny (1986) defined a mediator as a variable that accounts for the relationship between a predictor and a criterion. According to the Lent and Brown (2006a) model, it is hypothesized that the relationship between career decision self-efficacy and job satisfaction is mediated by the extent to which an individual engages in self- and environment exploration. In other words, career decision self-efficacy is

hypothesized to lead to self- and environmental exploration, which in turn leads to job

satisfaction. The mediational properties of the endogenous independent variables

(decision-making self-efficacy, outcome expectations, self- and environmental

exploration) are tested in various combinations in accordance with the pathways

theorized in the SCCT work satisfaction model, as described in Table 6.

Table 6

Hypothesized Mediating Relationships Tested in Accordance with H_{2B}

Hypothesized mediator	Set #*	Mediates relationship between:	
		Independent variable	Dependent variable
CES	1	CDSE	GJSS
	2	GJOES	GJSS
CDSE	3	SWL	GJSS
	4	SWL	CES
	5	SWL	GJOES
	6	CES	GJOES
	7	CES	GJSS
GJOES	8	CDSE	GJSS
	9	CDSE	CES

CDSE = Career Decision Self-Efficacy-Short Form; CES = Career Exploration Survey; GJOES = Generic Job Outcome Expectations Scale; SWLS = Satisfaction with Life Scale; SEI = Socioeconomic Index; GJSS = Generic Job Satisfaction Scale

*Corresponds to outcomes detailed in Table 7

To test for mediator effects, Frazier et al. cited Baron and Kenny (1986) and Judd

and Kenny (1981), who recommended the following procedure: (a) regress the dependent

variable on the independent variable, (b) regress the mediator on the independent

variable, and (c) regress the dependent variable on both the independent variable and on

the mediator. To establish mediation, Baron and Kenny (1986) maintained that the

independent variable must affect the dependent variable in the first equation, the

independent variable must affect the mediator in the second equation, and the mediator must affect the dependent variable in the third equation. Baron and Kenny further stated that if all these conditions hold in the expected direction, then the effect of the independent variable must be less in the third equation than it is in the first; perfect mediation holds if the independent variable has no effect when the mediator is controlled.

Using the example previously cited, based on Lent and Brown (2006a), one of the relationships hypothesized in the current study was that the independent variable career decision self-efficacy (CDSE) would predict generic job satisfaction (the dependent variable), and that this relationship would be mediated by self- and environment exploration. In other words, CDSE was expected to lead to self- and environment exploration, which then in turn would lead to generic job satisfaction. Thus, in the current study, the associated set of equations and expectations for this hypothesis were as follows: (a) job satisfaction was regressed on career decision self-efficacy, and career decision self-efficacy was expected to have a significant effect on job satisfaction; (b) self- and environment exploration (the mediator) was regressed on career decision self-efficacy (the independent variable), and career decision self-efficacy was expected to have a significant effect on self- and environment exploration; and finally, (c) job satisfaction was regressed on both self- and environment exploration and career decision self-efficacy, and it was predicted both that self- and environment exploration would have a significant effect on job satisfaction and that the relationship between career decision self-efficacy and job satisfaction would be lower than it was in the first equation.

Table 7 contains the results of the sets of three multiple regression equations associated with each of the nine sets of predictor and mediator variables, representing all

possible mediating pathways in the SCCT model (statistics for direct relationships

between independent variables and the dependent variable work satisfaction were

included in Table 4).

Table 7

Regression Analysis Summary for Independent and Mediator Variables in the Prediction

of Work Satisfaction

Variables	*b*	SE	β
Set 1:			
Testing Step 1:			
Outcome: GJSS			
Predictor: CDSE	.17	.05	.35**
Testing Step 2:			
Outcome: CES			
Predictor: CDSE	.24	.07	.36***
Testing Step 3:			
Outcome: GJSS			
Mediator: CES	-.03	.08	-.04
Predictor: CDSE	.18	.05	.37 **
Set 2:			
Testing Step 1:			
Outcome: GJSS			
Predictor: GJOES	.35	.04	.70***
Testing Step 2:			
Outcome: CES			
Predictor: GJOES	.05	.07	.08
Testing Step 3:			
Outcome: GJSS			
Mediator: CES	.03	.06	.03
Predictor: GJOES	.35	.04	.70***
Set 3:			
Testing Step 1			
Outcome: GJSS			
Predictor: SWL	.32	.10	.32**
Testing Step 2			
Outcome: CDSE			
Predictor: SWL	.72	.21	.34**
Testing Step 3			
Outcome: GJSS			
Mediator: CDSE	.14	.05	.28**
Predictor: SWL	.23	.11	.22*

Set 4:
Testing Step 1:
  Outcome: CES
  Predictor: SWL   -.08   .15   -.06
Testing Step 2:
  Outcome: CDSE
  Predictor: SWL   .72   .21   .34**
Testing Step 3:
  Outcome: CES
  Mediator: CSDE   .29   .07   .43***
  Predictor: SWL   -.29   .15   -.21*

Set 5:
Testing Step 1
  Outcome: GJOES
  Predictor: SWL   .51   .21   .24*
Testing Step 2
  Outcome: CDSE
  Predictor: SWL   .72   .21   .34**
Testing Step 3
  Outcome: GJOES
  Mediator: CDSE   .30   .10   .30**
  Predictor: SWL   .29   .22   .14

Set 6:
Testing Step 1
  Outcome: GJOES
  Predictor: CES   .12   .16   .08
Testing Step 2:
  Outcome: CDSE
  Predictor: CES   .54   .15   .36***
Testing Step 3
  Outcome: GJOES
  Mediator: CSDE   .36   .10   .37**
  Predictor: CES   -.08   .16   -.05

Set 7:
Testing Step 1:
  Outcome: GJSS
  Predictor: CES   .07   .08   .09
Testing Step 2:
  Outcome: CDSE
  Predictor: CES   .54   .15   .36***
Testing Step 3:
  Outcome: GJSS
  Mediator: CDSE   .18   .05   .37**
  Predictor: CES   -.03   .08   -.04

Set 8:
Testing Step 1
  Outcome: GJSS
  Predictor: CDSE

Testing Step 1 Outcome: GJSS Predictor: CDSE	.17	.05	.35**
Testing Step 2 Outcome: GJOES Predictor: CDSE	.34	.10	.35**
Testing Step 3 Outcome: GJSS Mediator: GJOES	.33	.04	.66***
Predictor: CSDE	.06	.04	.12
Set 9:			
Testing Step 1 Outcome: CES Predictor: CDSE	.24	.07	.36***
Testing Step 2 Outcome: GJOES Predictor: CDSE	.34	.10	.35**
Testing Step 3 Outcome: CES Mediator: GJOES	-.04	.07	-.05
Predictor: CDSE	.25	.07	.38***

*p <.05; **p < .01; ***p < .001

CDSE = Career Decision Self-Efficacy-Short Form; CES = Career Exploration Survey; GJOES = Generic Job Outcome Expectations Scale; SWLS = Satisfaction with Life Scale; SEI = Socioeconomic Index; GJSS = Generic Job Satisfaction Scale

    In the present study, three sets of variables satisfied the conditions as specified by

Baron and Kenny (1986): Based on these criteria, career decision self-efficacy was found

to mediate the effect of life satisfaction as a predictor of both job satisfaction (Set 3) and

outcome expectations (Set 5); and outcome expectations was found to mediate the effect

of career decision self-efficacy as a predictor of job satisfaction (Set 8). To test the

significance of the mediated effects, each of the mediated effects was divided by its

calculated standard errors in order to yield a z score. If the z score is greater than 1.96, the

effect is significant at the .05 level (Frazier et al., 2004, p. 128). Contrary to the results

stated above, the results of the significance calculation for Set 3 yielded a z score of 1.67,

indicating that the mediated effect was not significant. Thus, although these variables met

the criterion outlined by Baron and Kenny, the mediating effect of career decision self-

efficacy on life satisfaction as a predictor of job satisfaction was not strong enough to

reach statistical significance. Conversely, calculations for Sets 5 and 8 yielded z scores of

2.2 and 3.12, respectively, indicting significant mediated effects, meaning that career

decision self-efficacy mediated the effect of life satisfaction as a predictor of outcome

expectations, and outcome expectations mediated the effect of career decision self-

efficacy as a predictor of job satisfaction. These mediated relationships, along with the

direct relationship between the independent variable outcome expectations and the

dependent variable work satisfaction (as depicted in Table 4) are shown in Figure 5.
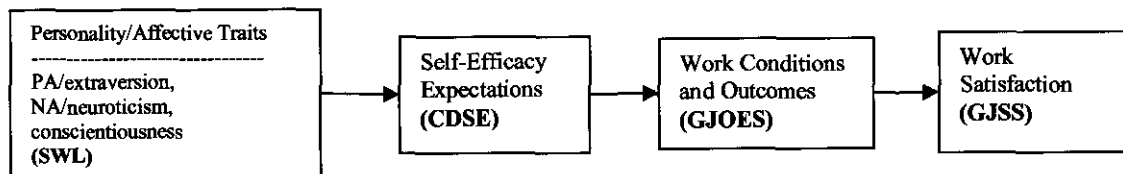
Figure 5. Significant pathways.
SWL = Satisfaction with Life; CDSE = Career Decision Self-Efficacy; GJOES = Generic Job Outcome
Expectations Scale; GJSS = Generic Job Satisfaction Scale

H_{4A} stated that, in accordance with the findings of Blustein et al. (2002), there

would be a positive relationship between SES and job satisfaction for non-college-

educated workers in the sales and service sectors. Linear regression was used to test

whether SES is a significant predictor of job satisfaction for the population of interest in

the current study. The resulting equation was not significant, $F(1, 90) = .363, p = .548$.

Therefore, H_{4A} was not supported, meaning that higher SES did not predict greater job satisfaction in this sample, contrary to what had been suggested by Blustein et al.

According to H_{4B}, mean scores on all measures that predict work satisfaction (i.e., life satisfaction, career decision-making self-efficacy, self- and environment exploration, and outcome expectations) would be significantly higher for workers from a higher SES than from a lower SES. MANOVA was used to test this hypothesis. Significant differences were found between the higher and lower SES groups on the dependent measures, Wilks' $\Lambda = .78$, $F(4, 57) = 4.06$, $p < .01$. The multivariate η^2 was .22, meaning that 22% of the multivariate variance of the dependent variables is associated with the group factor.

Although MANOVA revealed significant multivariate effects, follow-up tests indicated no significant univariate effects. According to Tabachnick and Fidell (2001), MANOVA may not reveal differences not shown in follow-up analyses because it may have more power than would separate ANOVAs, which appears to be the case in the current study. Thus, since this analysis did not reveal significant differences in mean scores for higher and lower SES participants for each of the variables tested, a conservative view would be that H_{4B} is not fully supported. A more appropriate statement might be that there was a significant difference in the group means for the combination of predictor variables tested in the model, but not for any individual variable.

Summary

The results of the current study are mixed. Blustein et al. (1997, 2002) found that adaptive decision-making, self- and environmental exploration, life satisfaction, and level of SES predict job satisfaction for young adults transitioning from school to work who

are employed in sales and service occupations. Further, several researchers (e.g., Ali et al., 2005; Morrow et al., 1996; Lent et al., 1996) posited that outcome expectations are an important predictor of job satisfaction for this population. While three of these variables (outcome expectations, decision-making, life satisfaction) shared positive bivariate correlations with job satisfaction, only outcome expectations was found to have significant unique predictive value. Further, the variable decision-making mediated the relationship between life satisfaction and job satisfaction, and outcome expectations mediated the relationship between decision-making and job satisfaction, as predicted by Lent and Brown (2006a). Thus, 3 of the 12 paths in their work satisfaction model were found to be significant for a non-college population. Lastly, similar to the findings of Blustein et al. (2002), higher and lower SES group means differed when considering the overall combination of variables used to predict work satisfaction. However, differences were not detected when each measure was considered on its own, which makes it problematic to interpret the group mean difference. Similarly, SES did not serve as a moderator variable to any of the independent variables of interest in this study. These results are discussed in further detail in chapter V.

Chapter V:

Discussion

The purpose of this chapter is to discuss the results of the study, to summarize the

findings, and to consider implications for counseling psychology practice and workplace

initiatives. The limitations of the study are also addressed, and areas for future research

directions are identified.

Intersection of STW and SCCT

As discussed in chapter I, the school-to-work (STW) transition for those who do

not have the benefit of a 4-year college degree is an area that has been largely neglected

by career researchers. There are some notable exceptions, however. For example,

Blustein and his colleagues (1997, 2002) have made the study of this population a major

focus. The two studies cited, in which factors associated with adaptive STW transitions

were identified, are in fact the basis for the parameters of the present study. Specifically,

the studies were used to choose the population of interest, and the variables that Blustein

found to predict work satisfaction as a measure of an adaptive STW transition were tested

in the present study. Thus, a key purpose of the present study was to validate Blustein's

findings and, by extension, to add to the body of literature that addresses the STW

transition for students who enter the world of work without a 4-year college degree.

As previously noted, one of the criticisms of the STW movement is the lack of a

theoretical basis by which to guide decision-making across multiple areas, including

policy, curricula, and career counseling interventions. Thus, another key purpose of the

present study was to determine whether the work satisfaction model as conceptualized by

Lent and Brown (2006a) might serve as a framework. This model was chosen because of

its particular attention to contextual factors and inclusion of variables demonstrated to have predicted associations with work satisfaction for various populations, including those not traditionally considered in the career literature (e.g., Ali & McWhirter, 2006; Chartrand & Rose, 1996; Flores & O'Brien, 2002). In essence, the present study was an attempt to integrate the work of Blustein et al. (1997, 2002) with that of Lent and Brown in the context of the STW transition and job satisfaction.

As discussed in detail in chapter II, Blustein et al. (1997) conducted a mixed design study, the purpose of which was to identify the factors that facilitate an adaptive STW transition into selected occupations in the sales and service sectors. The researchers operationalized an "adaptive transition" as one in which the worker experiences job satisfaction and job congruence. Job satisfaction was measured as an index score, while job congruence was conceptualized by comparing the Holland code of the study participants' current occupation with that of their preferred vocational choice.

Among the factors that Blustein et al. (1997) found to correlate with the job satisfaction facet of an adaptive transition were life satisfaction, self- and environment exploration, and decision-making, all of which are variables of interest in the current study. In addition, the authors identified contextual variables such as educational, relational, and other resources and barriers related to job satisfaction. In the current study, SES was conceptualized as an index of the degree to which these barriers exist and influence job satisfaction.

Moreover, in a follow-up to the 1997 study, Blustein et al. (2002) identified social class as an important variable that influences the way in which individuals transition from school to work. The results of the 2002 study suggested that those workers from a higher

SES background were more likely to derive meaning from their work, to work in settings congruent with their primary work interests, and to receive agentic and instrumental support from their parents and others. The latter dimension relates to some of the relational resources and barriers that Blustein et al. (1997) discovered in the earlier study of this population, thus strengthening the rationale to include SES as a variable of interest in the current study.

While Blustein et al. (1997, 2002) did not specifically identify outcome expectations as a variable related to work satisfaction, other scholars have made this connection. For example, Ali et al. (2005), Lent et al. (1996), and Morrow et al. (1996), identified outcome expectations as especially germane to the prediction of work-related behaviors for underrepresented populations or those who face barriers to their abilities to make vocational choices. Further, Lent and Brown (2006a) included outcome expectations as one of the predictor variables in their work satisfaction model. Thus, a measure of outcome expectations was added to the variables identified by Blustein et al. (1997, 2002) as related to work satisfaction.

Summary of Results of Hypothesis Testing

The first set of hypotheses in the current study theorized positive correlations between each of the predictor variables (career decision self-efficacy, outcome expectations, self- and environment exploration, life satisfaction, SES) and the criterion variable (job satisfaction). As demonstrated by Blustein et al. (1997) and hypothesized by Lent and Brown (2006a), each of these predictor variables has/or is expected to have a direct relationship with the criterion.

Three of the five predictor variables (outcome expectations, career decision self-efficacy, and satisfaction with life) were found to have significant correlations with job satisfaction in the present study. Of the three variables, the association between outcome expectations and job satisfaction was the strongest. Self- and environment exploration and SES were not related to job satisfaction.

The second and third sets of hypotheses dealt with the relative ability of each of the independent variables to predict the dependent variable, both in terms of direct and indirect relationships as conceptualized by Lent and Brown's (2006a) model of work satisfaction. When all the independent variables were taken together, only outcome expectations was found to have significant unique predictive value, accounting for 49% of the 52% of the variance in work satisfaction predicted by the overall model. When analyzed within the context of the Lent and Brown model, three pathways were found to have significant predictive value: satisfaction with life led to career decision self-efficacy, which led to outcome expectations, which in turn predicted job satisfaction.

The fourth set of hypotheses predicted the effect of SES on job satisfaction, both in terms of differences between mean scores for each of the independent variable and dependent variable measures and as a moderator variable, differentially predicting work satisfaction at different levels of social class. While the group means for each of the independent variables differed for the higher and lower SES cohorts, differences were not detected when each independent variable was considered on its own. Further, SES did not serve as a moderator variable and thus did not influence the strength or direction of any of the independent variables in terms of their ability to predict work satisfaction.

Discussion of Results of Hypothesis Testing

To engage in a discussion about job satisfaction, it is critical to consider the broader context. Specifically, the economic conditions in the United States have changed considerably since Blustein et al. (1997, 2002) conducted their groundbreaking studies. In fact, the economic conditions worsened dramatically during the 18-month data collection period for the current study, which began in July 2007 and concluded in January 2009. Throughout this time frame, Americans saw rising unemployment rates, increasing numbers of mortgage foreclosures, a precipitously declining stock market, and numerous bank and business failures. The American Psychological Association (APA) Practice Organization (2008) reported that 84% of women and 75% of men in the United States are stressed about the economy. Thus, it is likely that work behaviors and job satisfaction ratings were tempered by individuals' perceptions of the state of the economy in general and about the individuals' own financial health in particular.

This overall context may help to explain why Blustein et al.'s (2002) observation that those workers from a higher SES background transition more adaptively into the workforce (with "adaptive transition" operationalized in terms of job satisfaction) was not seen in the current study. It may be that workers from both the higher and lower SES cohorts in the current study feel equally fortunate to have a job at this time of economic turmoil and rising unemployment rates.

In the same vein, Blustein et al. (2002) found that workers from a higher SES background were "more likely to engage in exploration and were more planful than their [lower SES] counterparts" (p. 321). In the current study, workers from a higher SES

background were as likely to engage in exploration than their lower SES counterparts, as demonstrated by similar mean scores on the self- and environment exploration measures. There are at least two ways of explaining this finding: either the lower SES cohort in the present study is generally more introspective than the lower SES participants in the Blustein et al. study, or the current economic realities have leveled the playing field between the two groups. That is, those workers from the higher SES who are not graduates of 4-year colleges may no longer have the luxury of engaging in a planful exploration process before finding employment. The latter explanation seems more likely: the fact that self- and environment exploration did not correlate with job satisfaction for either the lower or higher SES groups in this study suggests that practicality trumps planfulness in terms of finding employment when the economic outlook is grim.

Consistent with the findings of Blustein et al. (1997), there were significant correlations between job satisfaction and two other adaptive transition variables (career decision self-efficacy and satisfaction with life). Blustein et al. reported a moderate positive correlation between life and job satisfaction ($r = .47$), while the correlation in the present study was more modest ($r = .32$). This observation should be interpreted with caution, however, as the measures used in the current study were not the same ones as used by Blustein and his colleagues. Nonetheless, this finding adds to the growing body of literature concerning the relationship between subjective well-being and work satisfaction.

Blustein et al. (1997) observed two distinct features of the career decision process: the process and the stress associated with the making a decision. The authors

found that those who had a quick, pragmatic approach to decision-making and who also sought out advice from those who had relative success in their own occupations were more likely to be satisfied in their work. Blustein et al. also noted that those who were dissatisfied in their jobs had difficulty in making choices, or simply did not trust their ability to make good decisions. Thus, those who were dissatisfied might be said to lack career decision self-efficacy. The findings of the current study are in concert with Blustein et al.'s (1997) in this regard, in that career decision self-efficacy was positively related to job satisfaction. Therefore, the current study also offers support for the use of the CDSE-SF (Betz et al., 1996) for this unique population. More importantly, this finding underscores the importance of teaching career decision skills to all students, not just those students who are college-bound.

By far, the strongest correlate of work satisfaction was outcome expectations. As mentioned previously, this variable was not expressly identified by Blustein et al. (1997, 2002) as related to an adaptive transition. However, a number of other researchers have pointed to the importance of outcome expectations in consideration of job outcomes, particularly for those workers for whom choices may not be plentiful. Generally speaking, these workers tend to be less educated or come from lower SES backgrounds and/or marginalized groups. However, in the current economic environment where jobs are not as plentiful overall, it may be that individuals from more privileged groups are also facing fewer employment choices. Thus, outcome expectations may drive work satisfaction for a larger segment of the population at present. For example, Associated Press reporter Hilary Russ (2009) recently interviewed unemployed individuals who are applying for and getting seasonal jobs traditionally held by teenagers and/or foreign

workers. In the words of a former employee of a media company who previously earned $50,000 a year and who now works at a boardwalk attraction, "If it feeds your children and puts a roof over your head, it's perfect" (p. 10).

In fact, outcome expectations not only shared the strongest relationship with work satisfaction of all the variables tested, but the outcome expectations variable was the only variable to have a significant unique value in terms of directly predicting work satisfaction. Further, outcome expectations mediated the relationship between career decision self-efficacy and work satisfaction. In other words, those workers who were confident in their ability to make work decisions were also more optimistic that they would receive the benefits they expected if they continued in their current job. At the same time, career decision self-efficacy mediated the relationship between life satisfaction and outcome expectations. In essence, those individuals who were more positive about their life circumstances were also more likely to feel confident in their ability to make decisions about their transition from school to work. Each of these pathways was hypothesized as a part of the Lent and Brown (2006a) work satisfaction model. This is an important finding, in that the model had not been tested previously with workers transitioning from school to the sales and service sectors.

Several pathways posited by Lent and Brown (2006a) were not validated in the current study. As has been noted, SES, which represented Lent and Brown's concept of environmental supports, resources, and obstacles, did not directly predict work satisfaction, nor was SES a significant moderator variable. As has also been noted, participation and progress at goal-directed activity, operationalized in the current study as self- and environment exploration, was not a significant predictor of work satisfaction.

Apart from the previously mentioned explanations that reference the current economy as a factor, it may be that the variables chosen herein to operationalize "goal-directed activity" did not match precisely enough with Lent and Brown's conceptualization of this construct in terms of specificity. That is, Lent and Brown tied goal-directed activities to outcomes related to a specific job, while Blustein et al. (1997) saw self- and environment exploration as part of an overall transition process.

Overall, the results of the current study at least in part validate the findings of Blustein et al. (1997, 2002), in that several of the variables the authors identified as important factors in effecting an adaptive school-to-work transition were also found to be related to job satisfaction, which can be seen as a marker of a successful transition from school to the world of work. Further, parts of the Lent and Brown (2006a) work satisfaction model were also validated for use with a type of worker not generally considered a target population for career-based research. Along the same lines, some of the measures used in this study (i.e., CDSE-SF and Self- and Environment Exploration subscales of the CES) had not been used previously to assess vocational behaviors of the current population of interest. Thus, the current study offers some evidence of validation for use of these measures with this unique population.

Implications for Practice

Overall, the most compelling feature of the current study is that the results suggest clear pathways to job satisfaction for individuals who do not have college degrees and who are transitioning into the workforce via the sales and service sectors. As observed by Blustein et al. (1997) and validated herein, given certain conditions, an optimal transition from school to work is well within the grasp of those who toil within these types of

occupations. These results also complement the work of other scholars (e.g., Boesel & Friedland, 1999; Gray & Herr, 2000; Worthington & Juntunen, 1997) who have raised questions about the "college for all" mentality that seems so pervasive in American society.

Lent and Brown (2006a) created their work satisfaction model in an attempt to bring together some of the differential concerns facing vocational and organizational psychologists. In keeping with this philosophy, some of the implications mentioned herewith could be of interest to both groups of practitioners, albeit perhaps for different reasons.

For example, outcome expectations was clearly the most salient factor in terms of predicting work satisfaction. Those who counsel individuals seeking employment might urge them to be clear about the intrinsic and extrinsic benefits they would like to receive in exchange for their work. In essence, there needs to be clarity about the terms of the "psychological contract," or the reciprocal exchange agreement between employer and employee (Rousseau & Tijoriwala, 1999). Such clarity may help potential employees to formulate and ask pertinent questions at job interviews to determine whether their expectations are likely to be met. Fulfillment and overfulfillment of the psychological contract have been found to predict job satisfaction for temporary workers (Montes & Irving, 2008), while lower person-organization congruence is associated with an increased perception of psychological contract violations and occupational stress (Bocchino, Hartman, & Foley, 2003).

Similarly, those who consult with organizations might view increased work satisfaction as a way in which to increase retention, thereby reducing costs associated

with employee turnover. In addition, breaches of the psychological contract have been shown to lead to increased absenteeism among workers in the service sector (Deery, Iverson, & Walsh, 2006). Thus, consultants might advise their constituents to carefully examine potential employees' preferred job outcomes and ascertain whether employees are likely to achieve those outcomes in a given job. As Bocchino et al. (2003) pointed out, consulting psychologists can facilitate the employee selection process by assessing organizational culture and screening potential employees for fit.

Limitations

Lent and Brown (2006a) cited the work of Bandura (1986) when they outlined parameters for studying work satisfaction from a social-cognitive perspective. Specifically, Bandura argued that predictors need be tailored to criterion variables and to one another along salient dimensions, including time frame. In this regard, the limits of what Lent and Brown set out to do with their model may have been stretched somewhat. That is, some of the measures (career decision self-efficacy, self- and environment exploration) dimensionalize behaviors that took place as part of the school-to-work transition, which occurs over time. Similarly, SES represented the type of parental support young adult workers might expect as they prepare to enter the workforce. In contrast, other scales (outcome expectations, job satisfaction, self-efficacy) measured attitudes at a particular point in time. Although there was a compelling rationale to include these variables (i.e., these were the factors identified by Blustein et al. as related to an adaptive school-to-work transition process), the temporal differences in measures may have limited the utility of the Lent and Brown (2006a) model.

In addition to the variable outcome expectations, four of the variables identified by Blustein et al. (1997, 2002) as related to an adaptive transition were examined in the current study in terms of their ability to predict and correlate with a measure of work satisfaction. Three of these variables were found to be related to the outcome measure. However, Blustein et al. (1997) operationalized the "adaptive school-to-work transition" as one in which individuals experienced both work satisfaction and job congruence. No measures of job congruence were included in the current study. It would have been advantageous to include such a measure to more closely parallel Blustein's strategy, which may have altered the results.

Another limitation may arise from the fact that the measure of outcome expectations (GJOES) was constructed specifically for this study. Although the initial reliability was acceptable, further studies are necessary to validate the use of this measure.

As has been noted, no differences were detected between the higher and lower SES groups on any single measure used in the current study, although there was a significant overall difference observed when all of the variables were taken together. These contradictory outcomes are likely due to low power, which may be a function of the relatively small sample size. It is quite possible that performing the same statistical analyses with a larger sample would yield significant differences in mean scores for one or more of the measures used.

Pedhazur and Schmelkin (1991) noted that events that take place over the course of a study may ultimately affect the study outcome. As mentioned previously, the

economic conditions worsened dramatically during the data collection period. Thus, the internal validity of the current study may be compromised due to history.

As with any nonexperimental study, it was not possible to establish causality between any of the variables. Further, participants were not randomly selected for this study, meaning that those who self-selected to participate may not represent the entire population of interest. Thus, results of this study may not generalize to other samples of workers in similar types of business sectors.

Directions for Future Research

A research focus on the types of jobs typically available for non-college-bound and non-college-educated young adults is infrequent yet much needed within the career literature (Blustein, 2006). The present study represents a serious effort to understand and explain optimal vocational development for a subset of these workers. This study also represents a solid attempt to conceptualize their vocational satisfaction within an existing theoretical framework (i.e., Lent & Brown, 2006a), and the results offer promise as to the utility of this theory for use with the current population. Further, the results of this study suggest that related SCCT models (Lent et al., 1994) could help to explain the ways in which members of this population develop vocational interests, set vocational goals, and persist in their occupations. Clearly, then, there is much more work to be done to effect the kinds of changes needed to ensure that all young adults, irrespective of educational attainment, are well prepared in terms of making the transition from school to work.

Following the lead of Blustein et al. (2002), it would be interesting to find out whether non-college-educated individuals working in the sales or service sectors who are from a higher SES background do indeed transition out of these lower-level positions

more rapidly and effectively than do their lower SES counterparts. Blustein et al. (1997) included a measure of job congruence as an element of "adaptive transition." This measure was designed to determine whether individuals were working in their preferred fields. A longitudinal study in which job congruence was measured at various intervals might shed some light in this area.

The participant demographics in the current study are fairly representative of the racial/ethnic mix in the geographic area from which workers were recruited. However, it would be beneficial to include larger numbers of underrepresented individuals to study the ways in which race/ethnicity relates to the school-to-work transition for members of the workforce without college degrees. Similarly, comparisons might be made between male and female school-to-work transitioners as well in order to determine the role of gender.

In addition, it is possible that a number of young adults who transition into sales and service occupations received special education services at some point. Along the same lines, some school districts employ work study programs for those students who are not college-bound. It would, therefore, be of interest to study the ways in which special education and/or work study programs prepare these young adults for the school-to-work transition.

As noted by Fouad and Guillen (2006), the connection between outcome expectations and vocational outcomes has been the least researched component of the SCCT models. While the current study adds to the body of research surrounding outcome expectations, particularly in terms of how the construct operates within underserved populations, this area warrants more investigation. It might be useful to validate the

outcome expectations measure (GJOES) created for the current study by employing the GJOES in a similar study.

As previously noted, the current study is somewhat unique in that workers from sales and service occupations are generally not the subjects of career inquiry. However, since there are such high numbers of workers in these particular sectors, much more research must be dedicated to this population. The benefit of such a line of inquiry would no doubt be of interest to those organizations that employ these workers. More importantly, workers in every occupation deserve to derive a sense of satisfaction from their jobs, and to be as well prepared as possible to enter the workforce. Perhaps the results of this study can help in this regard.

References

Ali, S. R., & McWhirter, E. H. (2006). Rural Appalachian youth's vocational/educational postsecondary aspirations: Applying social cognitive career theory. *Journal of Career Development, 33,* 87–111.

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

American Psychological Association Practice Organization. (2008). *Americans stressed over economy, more report symptoms.* Retrieved May 3, 2009, from http://www.apapractice.org/apo/in_the_news/americans_stressed.html#

Anderson, W. P., & Niles, S. G. (2000). Important events in career counseling: Client and counselor descriptions. *Career Development Quarterly, 48,* 251–263.

Andrews, F. M., & Withey, S. B. (1976). *Social indicators of well-being: Americans' perceptions of life-quality.* New York: Plenum Press.

Arbona, C. (1989). Hispanic employment and the Holland typology of work. *Career Development Quarterly, 37,* 257–268.

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

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice Hall.

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

Betz, N. E., & Hackett, G. (2006). Career self-efficacy theory: Back to the future. *Journal of Career Assessment, 14,* 3–11.

Betz, N. E., Klein, K. L., & Taylor, K. M. (1996). Evaluation of a short form of the Career Decision Self-Efficacy Scale. *Journal of Career Assessment, 4,* 47–57.

Blustein, D. L. (1999). A match made in heaven? Career development theories and the school-to-work transition. *Career Development Quarterly, 47,* 348–352.

Blustein, D. L. (2006). *The psychology of working: A new perspective for career development, counseling, and public policy.* Mahwah, NJ: Erlbaum.

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

Blustein, D. L., Devenis, L. E., & Kidney, B. A. (1989). Relationship between the identity formation process and career development. *Journal of Counseling Psychology, 1989,* 196–202.

Blustein, D. L., Juntunen, C. L. & Worthington, R. L. (2000). The school-to-work transition: Adjustment challenges of the forgotten half. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (3rd ed., pp. 435–470). New York: Wiley.

Blustein, D. L., Phillips, S. D., Jobin-Davis, K, Finkelberg, S. L., & Roarke, A. E. (1997). A theory-building investigation of the school-to-work transition. *The Counseling Psychologist, 25,* 364–402.

Bocchino, C. C., Hartman, B. W., & Foley, P. F. (2003). The relationship between person-organization congruence, perceived violations of the psychological

contract, and occupational stress symptoms. *Consulting Psychology Journal: Practice and Research, 55,* 203–214.

Boesel, D., & Friedland, E. (1999). *College for all? Is there too much emphasis on getting a 4-year college degree?* Washington, DC: National Library of Education.

Brown, D. (2000). Theory and the school-to-work transition: Are the recommendations suitable for cultural minorities? *The Career Development Quarterly, 48,* 370–375.

Brown, S. D., & Krane, N. E. R. (2000). Four (or five) sessions and a cloud of dust: Old assumptions and new observations about career counseling. In S. D. Brown & R. W. Lent (Eds.), *Handbook of counseling psychology* (3rd ed., pp. 740–766). New York: Wiley.

Brown, S. D., & Lent, R. W. (1996). A social cognitive framework for career choice counseling. *Career Development Quarterly, 44,* 354–366.

Brown, S. D., Lent, R. W., & Gore, P. A., Jr. (2000). Self-rated abilities and self-efficacy beliefs: Are they empirically distinct? *Journal of Career Assessment, 8,* 223–235.

Byars, A. M., & Hackett, G. (1998). Applications of social cognitive theory to the career development of women of color. *Applied & Preventive Psychology, 7,* 255–267.

Chartrand, J. M., & Rose, M. L. (1996). Career interventions for at-risk populations: Incorporating social cognitive influences. *Career Development Quarterly, 44,* 341–353.

Crosby, O., & Moncarz, R. (2006). Job outlook by education. *Occupational Outlook Quarterly, 50,* 24–52. Retrieved October 29, 2006, from http://www.bls.gov/opub/ooq/2006/fall/art02.pdf

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

Day, J. C., & Newburger, E. C. (2002). The big payoff: Educational attainment and synthetic estimates of work-life earnings. In *Current population reports* (pp. 1–13). Washington, DC: U.S. Census Bureau. Retrieved June 24, 2006, from http://www.uscensus.gov

Deery, S. J., Iverson, R. D., & Walsh, J. T. (2006). Toward a better understanding of psychological contract breach: A study of customer service employees. *Journal of Applied Psychology, 91,* 166–175.

Diegelman, N. M., & Subich, L. M. (2001). Academic and vocational interests as a function of outcome expectancies in social cognitive career theory. *Journal of Vocational Behavior, 59,* 394–405.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49,* 71–75.

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (in press). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods.*

Felsman, D. E., & Blustein, D. L. (1999). The role of peer relatedness in late adolescent career development. *Journal of Vocational Development, 54,* 279-295.

Ferry, T. R., Fouad, N. A. , & Smith, P. L. (2000). The role of family context in a social cognitive model for career-related choice and behavior: A math and science perspective. *Journal of Vocational Behavior, 57,* 348–364.

Flores, L. Y., & O'Brien, K. M. (2002). The career development of Mexican American

adolescent women: A test of social cognitive career theory. *Journal of Counseling*

Psychology, 49, 14–27.

Fouad, N. A., & Guillen, A. (2006). Outcome expectations: Looking to the past and

potential future. *Journal of Career Assessment, 14,* 130–142.

Fouad, N. A., & Smith, P. L. (1996). A test of a social cognitive model for middle school

students: Math and science. *Journal of Counseling Psychology, 43,* 338–346.

Fouad, N. A., Smith, P. L., & Enochs, L. (1997). Reliability and validity evidence for the

Middle School Self-Efficacy Scale. *Measurement & Evaluation in Counseling &*

Development, 30, 17–31.

Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects

in counseling psychology research. *Journal of Counseling Psychology, 51,* 115-

134.

Fuqua, D. R., Newman, J. L., & Seaworth, T. B. (1988). Relation of state and trait

anxiety to different components of career indecision. *Journal of Counseling*

Psychology, 35, 154–158.

Gainor, K. A., & Lent, R. W. (1998). Social cognitive expectations and racial identity

attitudes in predicting the math choice intentions of Black college students.

Journal of Counseling Psychology, 45, 403–413.

Gore, P. A., Jr., & Leuwerke, W. C. (2000). Predicting occupational considerations: A

comparison of self-efficacy beliefs, outcome expectations, and person-

environment congruence. *Journal of Career Assessment, 8,* 237–250.

Gray, K. C., & Herr, E. L. (2000). *Other ways to win: Creating alternatives for high school graduates* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Gushue, G. V., Clarke, C. P., Pantzer, K. M., & Scanlan, K. R. L. (2006). Self-efficacy, perceptions of barriers, vocational identity, and the career exploration behaviors of Latino/a high school students. *Career Development Quarterly, 54,* 307–317.

Gushue, G. V., & Whitson, M. L. (2006). The relationship of ethnic identity and gender role attitudes to the development of career choice goals among Black and Latina girls. *Journal of Counseling Psychology, 53,* 379–385.

Hackett, G., & Betz, N. E. (1981). A self-efficacy approach to the career development of women. *Journal of Vocational Behavior, 18,* 326–336.

Handling and expediting customer transactions. (2006, November 12). *The Star-Ledger,* pp. 9-39, 9-41.

Hardin, E. E., Varghese, F. P., Tran, U. V., & Carlson, A. Z. (2006). Anxiety and career exploration: Gender differences in the role of self-construal. *Journal of Vocational Behavior, 69,* 346–358.

Hartman, B. W., Fuqua, D. R., & Blum, C. R. (1985). A path-analytic model of career indecision. *Vocational Guidance Quarterly, 33,* 231–240.

Hartung, P. J., & Blustein, D. L. (2002). Reason, intuition, and social justice: Elaborating on Parson's career decision-making model. *Journal of Counseling & Development, 80,* 41–47.

Heller, D., Watson, D., & Ilies, R. (2004). The role of person versus situation in life satisfaction: A critical examination. *Psychological Bulletin, 130,* 574–600.

Herr, E. L. (1999). Theoretical perspectives on the school-to-work transition: Reactions and recommendations. *Career Development Quarterly, 47,* 359-364.

Holland, J. L. (1985). *Making vocational choices: A theory of vocational personalities and work environments* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Holland, J. L., Daiger, D. C., & Power, P. G. (1980). *My vocational situation.* Palo Alto, CA: Consulting Psychologists' Press.

Jaccard, J., & Turrisi, R. (2003). *Interaction effects in multiple regression* (2nd ed.). Thousand Oaks, CA: Sage.

Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in treatment evaluations. *Evaluation Review, 5,* 602–619.

Kenny, M. E., & Bledsoe, M. (2005). Contributions of the relational context to career adaptability among urban adolescents. *Journal of Vocational Behavior, 66,* 257–272.

Krumboltz, J. D., Mitchell, A. M., & Jones, G. B. (1976). A social learning theory of career selection. *The Counseling Psychologist, 6,* 71–81.

Krumboltz, J. D., & Worthington, R. L. (1999). The school-to-work transition from a learning theory perspective. *The Career Development Quarterly, 47,* 312–325.

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

Lent, R. W., & Brown, S. D. (2002). Social cognitive career theory and adult career development. In S. G. Niles (Ed.), *Adult career development: Concepts, issues and practices* (3rd ed., pp. 76–97). Columbus, OH: National Career Development Association.

Lent, R. W., & Brown, S. D. (2006a). Integrating person and situation perspectives on work satisfaction: A social cognitive view. *Journal of Vocational Behavior, 69,* 236–247.

Lent, R. W., & Brown, S. D. (2006b). On conceptualizing and assessing social cognitive constructs in career research: A measurement guide. *Journal of Career Assessment, 14,* 12–35.

Lent, R. W., & Brown, S. D. (2008). Social cognitive career theory and subjective well-being in the context of work. *Journal of Career Assessment, 16,* 6–21.

Lent, R. W., Brown, S. D., Brenner, B., Chopra, S. B., Davis, T., Talleyrand, R., et al. (2001). The role of contextual supports and barriers in the choice of math/science educational options: A test of social cognitive hypotheses. *Journal of Counseling Psychology, 48,* 474–483.

Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior, 45,* 79–122.

Lent, R. W., Brown, S. D., & Hackett, G. (2002). Social cognitive career theory. In D. Brown (Ed.), *Career choice and development* (4th ed., pp. 255–311). San Francisco: Wiley.

Lent, R. W., Brown, S. D., Schmidt, J., Brenner, B., Lyons, H., & Treistman, D. (2003). Relation of contextual supports and barriers to choice behavior in engineering majors: Test of alternative social cognitive models. *Journal of Counseling Psychology, 50,* 458–465.

Lent, R. W., Hackett, G., & Brown, S. D. (1996). A social cognitive framework for studying career choice and transition to work. *Journal of Vocational Education Research, 21,* 3–31.

Lent, R. W., Hackett. G., & Brown, S. D. (1999). A social-cognitive view of school-to-work transition. *Career Development Quarterly, 47,* 297–311.

Lent, R. W., Hung-Bin, S., Singley, D., Schmidt, J. A., Schmidt, L. C., & Gloster, C. S. (2008). Longitudinal relations of self-efficacy to outcome expectations, interests, and major choice goals in engineering students. *Journal of Vocational Behavior, 73,* 328–335.

Lindley, L. D. (2005). Perceived barriers to career development in the context of social cognitive career theory. *Journal of Career Assessment, 13,* 271–287.

Macdonald, S., & MacIntyre, P. (1997). The Generic Job Satisfaction Scale: Scale development and its correlates. *Employee Assistance Quarterly, 13,* 1–16.

Mead, S. (2006). The truth about boys and girls. In *The evidence suggests otherwise* (pp. 1–21). Washington, DC: Education Sector. Retrieved September 8, 2006, from http://www.educationsector.org

Mishel, L. (2007). Testimony before the Labor-HHS Subcommittee of the U.S. House of Representatives. Retrieved March 25, 2007, from http://www.epi.org/content.cfm?id=2624

Montes, S. D., & Irving, P. G. (2008). Disentangling the effects of promised and delivered inducements: Relational and transactional contract elements and the mediating effect of trust. *Journal of Applied Psychology, 93,* 1367–1381.

Morrow, S. L., Gore, P. A., Jr., & Campbell, B. W. (1996). The application of a sociocognitive framework to the career development of lesbian women and gay men. *Journal of Vocational Behavior, 48,* 136–148.

Murray, C. (2007, January 17). What's wrong with vocational school? *Wall Street Journal,* p. A10.

Nakao, K., & Treas, J. (1994). Updating occupational prestige and socioeconomic scores: How the new measures measure up. In P. V. Marsden (Ed.), *Sociological methodology* (pp. 1–72). Washington, DC: American Sociological Association.

Nauta, M. M. (2004). Self-efficacy as a mediator of the relationships between personality factors and career interests. *Journal of Career Assessment, 12,* 381–394.

Nauta, M. M., Kahn, J. H., Angell, J. W., & Cantarelli, E. A. (2002). Identifying the antecedent n the relation between career interests and self-efficacy: Is it one, the other, or both? *Journal of Counseling Psychology, 49,* 290–301.

O'Brien, K. M., & Heppner, M. J. (1996). Applying social cognitive career theory to training career counselors. *Career Development Quarterly, 44,* 367–377.

Occupational outlook handbook, 2006-07 edition. (2005). Retrieved October 29, 2006, from http://www.bls.gov/oco/home.htm

Osipow, S. H. (1987). *Manual for the Career Decision Scale.* Odessa, FL: Psychological Assessment Resources.

Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment, 5,* 164–172.

Pedhazur, E. J. (1982). *Multiple regression in behavioral research: Explanation and prediction* (2nd ed.). New York: Hold, Rinchart & Winston.

Pedhazur, E. J., & Schmelkin, L. P. (1991). *Measurement, design, and analysis: An integrated approach.* Hillsdale, NJ: Erlbaum.

Rousseau, D. M., & Tijoriwala, S. A. (1999). What's a good reason to change? Motivated reasoning and social accounts in promoting organizational change. *Journal of Applied Psychology, 84,* 514–528.

Russ, H. (2009, May 4). The job pool at resorts getting crowded. *The Star-Ledger,* pp. 9–10.

Sarason, I. G. (1963). Test anxiety and intellectual performance. *Journal of Abnormal and Social Psychology, 66,* 73–75.

Sarason, S. B., Davidson, K., Lighthall, F., & Waite, R. (1958). Rorschach behavior and performance of high and low anxious children. *Child Development, 29,* 277–285.

Savickas, M. L. (1993). Career counseling in the post-modern era. *Journal of Cognitive Psychotherapy, 7,* 205–215.

Savickas, M. L. (1999). The transition from school-to-work: A developmental perspective. *The Career Development Quarterly, 47,* 326–337.

Schaub, M., & Tokar, D. M. (2005). The role of personality and learning experiences in social cognitive career theory. *Journal of Vocational Behavior, 66,* 304–325.

Smith, C. L., & Rojewski, J. W. (1993). School-to-work transition: Alternative for educational reform. *Youth & Society, 25,* 222–250.

Stumpf, S. A., Colarelli, S. M., & Hartman, K. (1983). Development of the Career Exploration Survey (CES). *Journal of Vocational Behavior, 22,* 191–226.

Super, D. E. (1990). A life-span, life-space approach to career development. In D.

    Brown, L. Brooks, & Associates (Eds.), *Career choice and development* (pp.

    197–261). San Francisco: Jossey-Bass.

Swanson, J. L., & Fouad, N. A. (1999). Applying theories of person-environment fit to

    the transition from school-to-work. *The Career Development Quarterly, 47,* 337–

    347.

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.).

    Needham Heights, MA: Allyn & Bacon.

Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the

    understanding and treatment of career indecision. *Journal of Vocational Behavior,*

    22, 63–81.

Vondracek, F. W., Lerner, R. M., & Schulenberg, J. E. (1986). *Career development: A*

    life-span developmental approach. Hillsdale, NJ: Erlbaum.

Werbel, J. D. (2000). Relationships among career exploration, job search intensity, and

    job search effectiveness in graduating college students. *Journal of Vocational*

    Behavior, 57, 379–394.

Wilson, W. J. (1996). When work disappears. *Political Science Quarterly, 111,* 567–595.

Worthington, R. L., & Juntunen, C. L. (1997). The vocational development of non-

    college-bound youth: Counseling psychology and the school-to-work transition

    movement. *Counseling Psychologist, 25,* 323–363.

Appendices

APPENDIX A
Demographic Questionnaire

Please provide the following information about yourself, which will help us to better understand the results of this study. This information is strictly confidential, and will only be reported only in group format.

1. Do you have a degree from a four-year college? (BA/BS/BSN, etc.)
   Yes_____   No_____

2. Are you currently attending a four-year college?
   Yes_____   No_____

NOTE: If you answered "yes" to either Question #1 or #2, you are not eligible for this survey, and so you do not need to answer the rest of the questions. Thank you for your time.

3. Gender: _____Female   _____Male

4. Age:_____

5. Marital status:
   _____Single   _____Divorced
   _____Married/Partnered   _____Widowed

6. Number of children: _____   7. Do your children live with you? _____Yes _____No

8. Your race/ethnicity: _____

9. Highest grade completed: _____   10. Additional training received:_____

11. Your current occupation: _____

12. Approximate length of time you've been working at your current job:
   _____Years   _____Months

13. Current living arrangements:
   _____Live alone   _____Live with roommate(s)
   _____Live with spouse/partner   _____Live with parents/other family members
   _____Other:_____

14. Mother's current occupation (or last job held, if currently not working):

   _____

15. Father's current occupation (or last job held, if currently not working):

   _____

Thank you for your participation in this survey!

APPENDIX B
CDSE-Short Form

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Career Decision Self-Efficacy- Short Form (CDSE-SF)

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For more information, contact the copyright holder:

Nancy E. Betz, Ph.D.
Professor
Department of Psychology
The Ohio State University
1835 Neil Avenue Mall
Columbus, OH 43210-1222
e-mail: betz.3@osu.edu
Fax: 614-292-4537

Reference:

Betz, N. E., Klein, K. L., & Taylor, K. M. (1996). Evaluation of a short form of the

Career Decision Self-Efficacy Scale. *Journal of Career Assessment, 4,* 47–57.

APPENDIX C
Environment Exploration and Self-Exploration Subscales of the Career Exploration Survey (CES; Stumpf, Colarelli, & Hartman, 1983)

To what extent have you behaved in the following ways over the last 3 months:

1	2	3	4	5
Little				A great deal

1. Investigated career possibilities.

2. Went to various career orientation programs.

3. Obtained information on specific jobs or companies.

4. Initiated conversations with knowledgeable individuals in my career area.

5. Obtained information on the labor market and general job opportunities in my career area.

6. Sought information on specific areas of career interest.

7. Reflected on how my past integrates with my future career.

8. Focused my thoughts on me as a person.

9. Contemplated my past.

10. Been retrospective in thinking about my career.

11. Understood a new relevance of past behavior for my future career.

APPENDIX D

Generic Job Outcome Expectations Scale

Please consider to what extent the following statements are true:

1	2	3	4	5
Not at all true	Somewhat true	Don't know	True	Very true

If I stay in my current job:

1. I will earn a regular paycheck.

2. I will meet my financial obligations.

3. I will have job security.

4. I will receive benefits, like insurance or vacation time.

5. I will be able to learn new skills.

6. I will have flexible hours.

7. I will be able to get raises.

8. I will get experience that will help me get better jobs in the future.

9. I will feel productive.

10. I will be able to work close to home.

11. I will have a sense of purpose.

12. I will get promoted.

13. I will feel good about myself.

14. I will feel like I am making a contribution to society.

15. My self-esteem will increase.

16. I will feel proud of my accomplishments.

17. I will boost my confidence.

18. My family and friends will have a good opinion of me.

APPENDIX E

Job Satisfaction Scale (Macdonald & MacIntyre, 1997)

For each statement, please circle the number to indicate your degree of agreement.

	Strongly Disagree	Disagree	Don't Know	Agree	Strongly Agree
1. I receive recognition for a job well-done.	1	2	3	4	5
2. I feel close to the people at work.	1	2	3	4	5
3. I feel good about working for this Company.	1	2	3	4	5
4. I feel secure about my job.	1	2	3	4	5
5. I believe management is concerned about me.	1	2	3	4	5
6. On the whole, I believe work is good for my physical health.	1	2	3	4	5
7. My wages are good.	1	2	3	4	5
8. All my talents and skills are used at work.	1	2	3	4	5
9. I get along with my supervisors.	1	2	3	4	5
10. I feel good about my job.	1	2	3	4	5

APPENDIX F

Satisfaction with Life Scale (Pavot & Diener, 1993)

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding. The 7-point scale is as follows:

> 1 = strongly disagree
> 2 = disagree
> 3 = slightly disagree
> 4 = neither agree nor disagree
> 5 = slightly agree
> 6 = agree
> 7 = strongly agree

_____1. In most ways, my life is close to ideal.

_____2. The conditions of my life are excellent.

_____3. I am satisfied with my life.

_____4. So far, I have gotten the important things I want in life.

_____5. If I could live my life over, I would change almost nothing.

Figure 1
SCCT Work Satisfaction Model

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Lent, R. W., & Brown, S. D. (2006). Integrating person and situation perspectives on

work satisfaction: A social-cognitive view. *Journal of Vocational Behavior, 69,*

236-247.

Figure 2
SCCT Model of Interest Development

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Lent, R. W., & Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive

theory of career and academic interest, choice, and performance. *Journal of*

Vocational Behavior, 45, 79-122.

Figure 3
SCCT Model of Career-Related Choice Behavior

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Figure 4
SCCT Model of Task Performance

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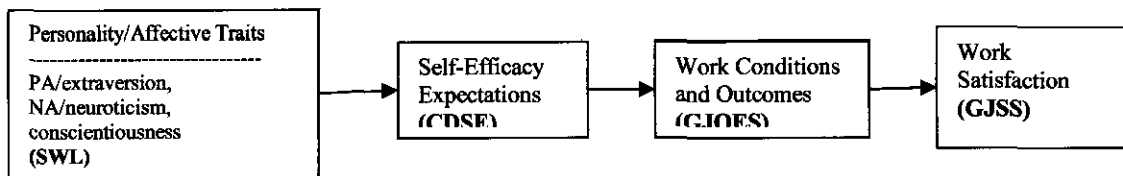
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Figure 5. Significant pathways.

Note. SWL = Satisfaction with Life; CDSE = Career Decision Self-efficacy; GJOES = Generic Job Outcome Expectations Scale; GJSS = Generic Job Satisfaction Scale