



University of Tennessee, Knoxville
**TRACE: Tennessee Research and Creative
Exchange**

Doctoral Dissertations

Graduate School

8-2013

Understanding the Career Development of Underprepared College Students

Amber Nicole Hughes
ahughe18@utk.edu

Follow this and additional works at: https://trace.tennessee.edu/utk_graddiss



Part of the [Student Counseling and Personnel Services Commons](#)

Recommended Citation

Hughes, Amber Nicole, "Understanding the Career Development of Underprepared College Students. " PhD diss., University of Tennessee, 2013.
https://trace.tennessee.edu/utk_graddiss/2438

This Dissertation is brought to you for free and open access by the Graduate School at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Doctoral Dissertations by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

To the Graduate Council:

I am submitting herewith a dissertation written by Amber Nicole Hughes entitled "Understanding the Career Development of Underprepared College Students." I have examined the final electronic copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Counselor Education.

Melinda M. Gibbons, Major Professor

We have read this dissertation and recommend its acceptance:

Marianne Woodside, Jennifer Morrow, John Lounsbury

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

Understanding the Career Development of Underprepared College Students

A Dissertation Presented for the

Doctor of Philosophy

Degree

The University of Tennessee, Knoxville

Amber Nicole Hughes

August 2013

Dedication

This dissertation is dedicated to my family. Thank you to my parents, Brenda and David Hughes, for your encouragement, support, love, and for always believing in me. Without you, I would never be here or made it this far. I also want to thank my siblings: Aaron, Mikah, Seth, Shayla, and Caleb. You have each been there for me when I needed you and have made me who I am today. Finally, thank you to T.Jaye. You were there for me through the good times and the not-so-good times. I love you all.

Acknowledgements

Many people helped me to complete this project and my degree. Dr. Melinda Gibbons, my dissertation chair and mentor, patiently guided me through this process. She expanded my knowledge of career development, mentored me in the field of career counseling, and supported me throughout the year. Dr. Marianne Woodside, my committee member and advisor, unfailingly supported and encouraged me through my years in the doctoral program. Dr. Jennifer Morrow, my committee member and supervisor, introduced me to research and inspired me to be confident in my abilities as a researcher. Dr. John Lounsbury, my committee member, supported me throughout this process. Finally, Dr. Eric Heidel, my statistical consultant, provided awesome statistical assistance and guidance.

Other faculty members provided exceptional support throughout my studies. Dr. Shawn Spurgeon encouraged me to breathe when I was forgetting to breathe. Dr. Joel Diambra always knew when I needed a laugh and a break. Dr. Tricia McClam gave me confidence in my teaching and allowed me to build my skills with her guidance.

Finally, this dissertation never would have been possible without the help of Mr. Michael “Brody” Broshears and Mrs. Renee Rowland in the University Division at the University of Southern Indiana. They introduced me to the population and inspired me to want to better understand the career needs of this wonderful group of students. They also provided me with access to the population for my study and gave me wonderful support throughout.

Abstract

The purpose of this study was to examine the career development of underprepared college students through a framework of Relational Career Theory. Demographic information was reported for the population to help better understand these students. Specifically, the constructs of family influence, locus of control, and career decision-making self-efficacy were explored as they relate to perceived success in college. Finally, gender differences for each construct were also examined. The demographic information collected supports reported statistical information about this group in that students of a minority status and first-generation college students were overrepresented in the population. No significant relationship between the RCT constructs and perceived success in college were found. However, significant correlations between external locus of control and family expectations, financial support, and values and beliefs were found indicating that a greater family influence is related to external control. Additionally, higher levels of career decision-making self-efficacy were related to internal locus of control and informational support from family. These findings support previous research as well as theorized RCT connections. Finally, no significant differences between men and women were found. This study provides further information about underprepared college students to help practitioners better understand this population. This study also provides significant correlations between the RCT constructs of family influence, locus of control, and career decision-making self-efficacy.

Table of Contents

Chapter One: Introduction.....	1
Underprepared College Students.....	2
Social Constructionist Theory.....	5
Relational Career Theory.....	6
Relational Theory Influences.....	8
Statement of the Problem.....	10
Purpose of the Study.....	11
Research Questions.....	11
Definition of Terms.....	12
Delimitations.....	12
Limitations.....	13
Organization of the Study.....	13
Chapter Two: Review of the Literature.....	14
Background on Developmental Education.....	14
Underprepared College Students.....	18
Career-Related Research on Underprepared Students.....	24
High school students.....	25
College students.....	27
Development of Relational Career Theory.....	32
History of Career Counseling.....	32
Social Constructionism.....	33
Relational Career Theory.....	35
Family Influence.....	39
Family Influence and Gender Differences.....	43
Locus of Control.....	46
Career Decision-Making Self-Efficacy.....	51
Underprepared College Students and Relational Career Theory.....	56
Chapter Three: Method.....	59
Research Questions.....	59
Participants.....	59
Procedure.....	62
Instrumentation.....	64
Demographic Scale.....	64
Family Influence Scale.....	64
Internality, Powerful Others, and Control Scale.....	66
Career Decision-Making Self-Efficacy Scale.....	68
Data Analysis.....	70
Chapter Four: Results.....	72
Description of the Population.....	72
Research Questions.....	75
Research Question One.....	75
Research Question Two.....	78
Research Question Three.....	81
Summary of Findings.....	82

Chapter Five: Discussion.....	83
Summary of Research.....	83
Understanding the Population.....	84
Relational Career Theory.....	87
Family Influence.....	88
Locus of Control.....	89
Career Decision-Making Self-Efficacy.....	90
Explaining Perceived Success.....	91
Influence of Gender.....	93
Limitations.....	94
Implications for Practitioners.....	94
Future Research.....	97
Summary.....	98
References.....	99
Appendices.....	116
Appendix A: Demographic Questionnaire.....	117
Appendix B: Family Influence Scale.....	120
Appendix C: Internality, Powerful Others, and Chance Scales.....	121
Appendix D: Career Decision Self-Efficacy Scale – Short Form.....	122
Appendix E: Informed Consent.....	123
Vita.....	124

List of Tables

Table 1: Participant Descriptions.....	73
Table 2: Educational Descriptive Statistics	75
Table 3: Descriptive Statistics.....	78
Table 4: Correlation Matrix.....	80
Table 5: Descriptive Statistics by Gender for FIS.....	81
Table 6: Descriptive Statistics by Gender for IPC and CDSE-SF.....	82

Chapter One

Introduction

Underprepared college students are a growing population of students that have specific and unique career needs (National Center for Education Statistics, 2010). Career success is directly related to academic achievement as demonstrated by higher earnings and lower unemployment rates of individuals with a college degree (United States Bureau of Labor Statistics, 2013). Many of their career issues relate to their ability to succeed academically. For example, underprepared college students face challenges such as increased time to graduate, financial pressures due to increased time in school, and limited choices of college major because of having to take additional remedial courses. In addition to challenges related to taking remedial coursework, underprepared students are also likely to fall into other categories of students already identified as at-risk, such as first-generation college goers (Pascarella, Pierson, Wolniak, & Terenzini, 2004), students from low socioeconomic status (Walpole, 2003), and being of a racial/ethnic minority (Aud, et al., 2011). Combined, these characteristics make underprepared college students a population with more career needs than the typical college student. Unfortunately, minimal research exists on this group of students. Because of the many contextual factors related to their development, Relational Career Theory (RCT) serves as a useful lens through which to examine this group.

Relational Career Theory, which falls under the umbrella of social constructionist career theories, considers the relationships, historical, and cultural factors that help construct career development (Blustein, 2011). According to RCT, individuals make meaning through interactions with others (Blustein, Schultheiss, & Flum, 2004). While individual characteristics are important for student success in college, underprepared students also cite social and cultural

factors outside of college as influences on their ability to do well (Barbatis, 2010). These social and cultural factors include family influence (Fouad et al., 2010) and locus of control (Lachman & Weaver, 1998). These factors are especially important in underserved populations (Blustein, Medvide, & Kozan, 2011; Duffy & Dik, 2009), such as underprepared students. Additionally, relationships and discourse with others are important in making career decisions (Phillips, Christopher-Sisk, & Gravino, 2001). By further exploring these factors with underprepared college students, we can better inform the practice of those working with this population.

Underprepared College Students

Each year, more students are entering college not yet ready for college-level coursework (Provasknik & Planty, 2008). These students are identified by a variety of labels, including underprepared, developmental, and remedial, but are defined in similar ways. Underprepared college students are students who place into at least one remedial course at the college level. Typically, remedial courses are offered in core subjects, such as math, English, and writing (Provasknik & Planty, 2008). Most institutions require incoming students to take a placement exam upon admission to determine their need for remedial courses in different subjects (National Center for Education Statistics, 2003). Students then are placed into remedial courses to help them become college-ready.

Institutions vary on policies and services surrounding remedial education. For example, some institutions offer credit for the courses and others do not (National Center for Education Statistics, 2003). Additionally, fewer four-year public institutions are offering remedial courses and are depending on community colleges to serve this population (Provasknik & Planty, 2008; U.S. Department of Education, 2011). However, despite the push for remedial education to be offered by community colleges, about 70% of four-year institutions offered these courses in the

2010-2011 academic year (U.S. Department of Education, 2011). In all, the number of students taking remedial courses in college is increasing (National Center for Education Statistics, 2010), with 36% of college students reporting taking at least one remedial course in 2007-2008 (Aud et al., 2011).

Underprepared college students face specific challenges that may affect their success in college. Because of the required extra courses, students may spend a longer time in college than other students (Attewell, Lavin, Domina, & Levey, 2006; Kolajo, 2004). This increased time in college may result in added financial pressures for students taking remedial courses (Goldstein, 1997; Palmer, Davis & Hilton, 2009). Adams et al. (2012) surveyed 31 states in a study looking at remediation and graduation rates. Researchers found that 9.5% of community college students in remediation graduated, while 13.9% of students not in remediation graduated; in 4-year universities, 35.1% of students in remediation graduated, but 55.7% of students not in remediation graduated (Adams et al., 2012). These students are in great need of support services. However, underprepared college students may be less likely to seek out support services due to the belief that they need to do things on their own (Palmer, Davis & Hilton, 2009). Finally, underprepared college students may be unaware they are taking remedial courses, or of the financial and academic ramifications of taking remedial coursework (Deil-Amen & Rosenbaum, 2002). All of these factors may influence the academic success of underprepared college students.

Degree attainment appears directly related to an individual's career success as demonstrated by employer expectations, employment rates, and earnings. Employers today expect future employees to enter the workforce with more skills than were expected in the past (Lerman & Schmidt, 1999). Thus, to better prepare for the workforce, individuals need to acquire

post-graduate training. Additionally, employment rates and earnings (United States Bureau of Labor Statistics, 2013). According to the United States Bureau of Labor Statistics (2013), individuals with a Bachelor's degree earn on average \$1,066 per week while individuals with a high school diploma earn \$652 per week. The unemployment rate for individuals with a Bachelor's degree is 4.5% while the unemployment rate for individuals with a high school diploma is at 8.3%. Current trends in the workforce indicate that individuals will benefit from obtaining higher education. This link between an individual's skills and training and employment rates and earnings demonstrates a link between education and career.

Underprepared college students also have specific career needs related to career decision-making self-efficacy and locus of control. When looked at through a relational lens, these needs indicate that relationships play a part in career development. In terms of locus of control, underprepared students are more likely to have an external locus of control than prepared students (Grimes, 1997). Students with an external locus of control are less likely to demonstrate strong decision-making skills (Baiocco, Laghi, and D'Alessio, 2009). While an external locus of control is not conducive to career decision-making, relationships on campus can help students overcome this deficit. Peterson (1993) found a positive relationship between perceived career decision-making self-efficacy and academic integration for underprepared college students. Researchers also found that providing underprepared students with the opportunity to participate in learning communities, or groups of students taking courses together, was related to student success (Barbatis, 2010; Bueschel, 2009). These findings indicate that when college students feel more a part of the college community, they are more confident in their abilities to make career decisions. Additionally, underprepared students have stated that social support from off-campus sources such as family and former teachers are important to their success in college

(Barbatis, 2010). Thus, individual factors related to career, such as career decision-making, may be related to contextual factors such as family influence and locus of control.

Social Constructionist Theory

Traditionally, career theories have focused on the individual (Richardson, 1993). The field of career counseling arose in the early 1900s with the need to place individuals in jobs (Pope, 2000), and in 1909, Parsons (Sharf, 2002) initiated the career counseling movement by using assessments to fit individuals with careers. Career theorists such as Holland (1997) further developed the concept of fitting individuals with careers based on individual interests and personality types. Super (1990) incorporated the influence of family, school, community, and other contextual factors through his archway of career determinants. Gottfredson (1981) further described career development by including consideration of race, gender, and socioeconomic status. While these approaches are still in use today, career theories have expanded to include the social and contextual influences on career (Blustein, 2011; Lent, Brown & Hackett, 1994; Savickas, 2011).

While multiple theoretical orientations consider the influence that environment, culture, and context (e.g., Blustein, 2011; Lent, Brown, & Hackett, 1994; Savickas, 2011) have on the individual, social constructionist theorists consider the context essential to the creation of knowledge. Alternatively, traditional career theories take an objective approach to career (Bassot, 2012). According to these approaches, one truth is known and the individual must fit into pre-determined categories. The newer approaches to career have moved away from this objective approach and suggest that career and knowledge are created or constructed by the individual (Savickas, 2011). Thus, it is the job of counselors to understand the unique perspective of each client. Social constructivist theories provide a major shift from traditional

career theory and the focus on the individual. Theories falling under the social constructionist umbrella propose that knowledge is socially constructed through interactions with others using discourse (Young & Collin, 2004). The social constructionist movement and the focus on relationships led to the development of RCT (Blustein, 2011).

Relational Career Theory

The introduction of social constructivism into career counseling launched the development of relational theories that included consideration of culture and relationships into ideas about work (Blustein, Medvide, & Kozan, 2011). Relational theories differ from other constructivist theories because the focus is on the *we* rather than the individual (Blustein, Schultheiss, & Flum, 2004). Relational theory takes knowledge creation out of the individual and places it into the social interaction. Thus, the focus is on the process of creating knowledge rather than the knowledge that is created (Young & Collin, 2004). So while traditional career theories use assessments and other tools to draw information out of the client, relational career theories acknowledge the role of the career counselor in using language to create career discourse (Bassot, 2012). Knowledge is not created inside the person, but outside through interacting with the surrounding environment (Bassot, 2012). In understanding the individual through a relational lens, practitioners seek to understand how the individual and family members work together to negotiate career development.

By integrating relationships into career theory, theorists acknowledge the role relationships play in people's lives (Schultheiss, 2003). The role that relationships play in work is complex and twofold. First, the workplace is a social context that involves interactions with others. At the same time, personal relationships influence the way individuals make choices about work (Blustein, 2011). Basic assumptions of relational theory are that knowledge is

created through relationships, understanding is historically and culturally grounded, and individuals can have different views of the world (Blustein, Schultheiss, & Flum, 2004). These concepts lead to the belief that career and personal counseling are one and the same (Blustein, Medvide, & Kozan, 2011). Relational theorists believe that work is embedded in family and personal lives (Richardson, 1993). Therefore, constructs that were traditionally thought of as personal issues, such as family relationships, are now considered in terms of career counseling and development. By moving away from this traditional separation of work and personal, we can better understand individuals who fall outside of what has long been thought of as typical career development.

The integration of career and personal allows us to also consider work experiences that may not traditionally be considered as a career. Blustein (2011) expanded relational theory to include all work, not just work that has personal meaning or fulfillment. According to Blustein (2011), the field needs a theory that explains what happens when people do not have as many choices in their career development. Relational theory provides a useful inclusion of these individuals because relationships are profoundly important for individuals whose work does not have meaning. This theory also provides a basis for understanding the career development of individuals who have limited choice in their career. For underprepared students, choice may be limited by financial need or lack of academic preparedness. When career choice is moderated or limited, locus of control may be more affected by external factors than internal ones (Duffy & Dik, 2009).

Relational Career Theory continues to evolve as new research and theorists seek to further develop the theory. For this study, the constructs of family influence, locus of control, and career decision-making self-efficacy are being explored through a framework of Relational

Career Theory. The concept of family influence on career grew out of the development of RCT. Thus, research on family influence on career continues to build knowledge on Relational Career Theory. Career researchers link internal locus of control to positive career development (Luzzo & Ward, 1995). However, theorists (Duffy & Dik, 2009) proposed the research on locus of control previously focused on populations who have the ability to have an internal locus of control. This indicates that research on varied populations might provide a different view of the impact of external control on career. Finally, career decision-making self-efficacy has a multitude of research in career literature to link it positively to career development (Betz & Vuyten, 1997). While RCT research has begun to explore aspects of career decision-making, no research specifically links the construct with this theory. This study seeks to add to the literature on RCT through the described constructs.

Relational theory influences. Relational theories of career indicate that families influence career and work in a variety of ways. Family relationships form the context through which individuals make meaning (Blustein, 2011). Researchers found varying effects of the influence of family on such aspects of career development as career commitment and decidedness, career decision-making self-efficacy, and career indecision (Felsman & Blustein, 1999; Scott & Church, 2001; Whiston & Keller, 2004). For example, Whiston and Keller (2004) noted that family influences career commitment and decidedness. One qualitative look at family influence on career found that decision-making includes others as active participants in the process rather than passive or intrusive participants (Phillips, Christopher-Sisk, & Gravino, 2001). The research on relationships and career development indicates that relationships with family members do play a part in career development.

Research suggested that locus of control is related to aspects of career decision-making (Baiocco, Laghi, and D'Alessio, 2009; Gati et al., 2011; Lease, 2004). Locus of control is the expectation that life outcomes are either the result of one's own actions or of external factors (Spector, 1988). While locus of control is partly based on individual or internal factors, there are external factors that contribute to a sense of control (Duffy & Dik, 2009). Additionally, Lachman and Weaver (1998) proposed that sense of control over one's life is based on external factors such as life circumstances (Lachman & Weaver, 1998). These contextual or external factors that contribute to locus of control may be more relevant for populations that typically have less control over their lives. Duffy and Dik (2009) suggested that most career research has focused on populations who have the ability to have more internal control over choices. However, for underrepresented groups, external factors may be more salient.

According to Bandura (1977), self-efficacy is the belief that one can successfully perform the behavior to produce the desired outcome. These beliefs can influence choice of activities and events. Lent and Brown (1996) described the concept of self-efficacy as it applies to career development. They stated that goals and choice making are the result of a three-way interaction between outcome beliefs, self-efficacy and interests. Previous research explored the connection between relational theory and career decision-making self-efficacy (Blustein, Walbridge, Friedlander, & Palladino, 1991; Hargrove, Creagh, & Burgess, 2002). Findings are mixed, with some qualitative research indicating that others are actively involved in career decision-making (Phillips, Christopher-Sisk, & Gravino, 2001) while other research found less of a family influence on this factor (Whiston, & Keller, 2004). These conflicting findings signify the need for further research in this area.

Statement of the Problem

Underprepared college students are a growing population. These students face specific challenges such as increased time in college, financial pressures, and limited career options. Underprepared college students also may fit into other categories considered at-risk such as first-generation college students (Pascarella, Pierson, Wolniak, & Terenzini, 2004), students of racial/ethnic minority (Aud et al., 2011), and low socioeconomic status backgrounds (Walpole, 2003). For example, Adams et al. (2012) found that of students in remediation at two-year colleges, 67.7% were African-American and 58.3% were Hispanic, while 46.8% were White. At four-year colleges, 39.1% of students in remediation were African-American, 20.6% were Hispanic, and 13.6% were White. Additionally, 64.7% of remediated students at two-year colleges and 31.9% of students at four-year universities were from low-income backgrounds (Adams et al., 2012). In another study, Chen (2005) found 55% of remediated students were first-generation college students compared to 27% whose parents held a bachelor's degree or higher. These combined factors make the underprepared student population one that faces unique challenges in their career development. However, there is a significant lack of research on this population. Additionally, underprepared college students are a growing population (National Center for Education Statistics, 2010) with low graduation rates (Adams et al., 2012) and specific career needs.

The career needs of underprepared students are best looked at through the lens of RCT. Relational theory considers knowledge to be socially constructed (Young & Collin, 2004). Thus, individuals do not live in a vacuum and create knowledge internally, but create knowledge through interactions and discussion with others (Richardson, 1993). Relational theorists (Blustein, 2011; Richardson, 1993) believe that social factors are especially important for

populations that may have limited choices in their career (Blustein, 2011) or are underserved by traditional career theories geared toward only a segment of the population (Richardson, 1993).

Purpose of the Study

The purpose of this study was to examine how career decision-making, locus of control, and family influence related to the perceived success of underprepared students from a social constructionist perspective. Relational theory is a new career theory that could benefit from further research with different populations. Additionally, there is very little career research on underprepared college students despite the fact that this population is growing in both two- and four-year universities (National Center for Education Statistics, 2010). No research has looked at career development of underprepared college students from a relational view. This research could impact how practitioners work with underprepared students in terms of academic advising, career counseling, and program development and design. Relational Career Theory is a theory that is still evolving. This study adds support to the theory. Specifically, I looked at factors of family influence (Fouad et al., 2010), locus of control (Lachman & Weaver, 1998), and career decision-making self-efficacy (Lent, Brown, & Hackett, 1994) from a relational perspective. This study adds support to ideas that family and culture influence locus of control and career decision-making self-efficacy. This study also begins to describe how these constructs relate to one another. Ultimately, this research expands knowledge of this population and this theoretical orientation.

Research Questions

- 1) What are the typical levels of family influence, locus of control, career decision-making self-efficacy, and **perceived success** in underprepared college students?

- 2) How does family influence, locus of control, and career decision-making self-efficacy relate to perceived success in school among underprepared college students?
- 3) What are the differences by gender on family influence, locus of control, and career decision-making self-efficacy of underprepared college students?

Definition of Terms

- Underprepared: College students who have taken at least one remedial course at the college level. Remedial courses are classes offered to students who are not ready to take college-level courses (Provasknik & Planty, 2008).
- First-generation college student: College students who are the first members of their families to attend college (Chen, 2005).
- Low socioeconomic status: Students are and classified as being of low, middle, and high SES based on their parents' education level, mother's and father's occupation, and family income (National Center for Education Statistics, 2010.).
- Career Decision-Making Self-Efficacy: One's belief that one can successfully complete tasks to make a career decision (Betz & Luzzo, 1996).
- Family: This definition of family includes parents and siblings but also broader family such as grandparents, aunts, and uncles (Fouad et al., 2010).
- Locus of control: The expectations that life outcomes are controlled by one's own actions or by external forces (Spector, 1988).

Delimitations

The boundaries of the study are based on the population. The population is students enrolled in developmental courses at a single Midwestern university with a large underprepared student population, and so does not represent the college student population as a whole or

developmental college students as a whole. Also, students were surveyed during the spring semester. So the population is limited to students enrolled in developmental courses during the spring semester.

Limitations

The limitations of this study included limited generalizability. Because of the delimitations of the population, the results are limited in the populations to which they can be generalized. This study is not experimental and thus the results may have been influenced by confounding variables. The population serves as another limitation. The data collected was collected in spring semester which eliminates students who dropped out after the fall semester. Finally, the data collected was based on self-report by the participants.

Organization of the Study

In Chapter One, the purpose of this study as well as its relevance to career theory and career counseling practice has been described. The population of underprepared college students has been described as well as the theoretical foundation for this study, Relational Career Theory. Major terms have been defined, and the statement of the problem has been introduced. In Chapter Two, the relevant literature is reviewed, including social constructionist theories and Relational Career Theory, underprepared college students, locus of control, family influence, and career decision-making self-efficacy. Chapter Three describes the research methodology and design, as well as the data analysis plan. In Chapter Four, results from the analysis of the data are presented. Finally, Chapter Five presents a discussion of the results and findings and implications for future research and practice.

Chapter Two

Review of the Literature

This chapter reviews the literature relevant to the current study. The first section reviews the literature on underprepared college students. A second section explores the literature on Relational Career Theory. This section includes both a history of career counseling and an explanation of social constructionist theories which serve as a theoretical foundation for Relational Career Theory. Additionally, the literature on Relational Career Theory and the specific constructs of family influence, locus of control, and career decision-making self-efficacy are reviewed.

Background on Developmental Education

High numbers of students are entering college unprepared to take college-level coursework (Aud et al., 2011). Thus, colleges and universities are left with providing remedial or developmental courses for these underprepared students. This growing need has led college administrators and state legislators to debate the role and place of developmental education in higher education (Ignash, 1997). While the debate on developmental education continues, many colleges shifted developmental offerings to community colleges over the past 20 years (United States Department of Education, 2011). Institutional practices may be affecting student success in that students are often unaware of their remedial placement (Deil-Amen & Rosenbaum, 2002). There is no clear answer to the issue of developmental education, but the decisions made by administrators do directly impact underprepared students.

Bueschel (2009) provided an overview and explanation of developmental education in a discussion of community colleges. She explained that courses preceding college credit courses are called developmental, basic skills, remedial, and pre-collegiate. While community colleges

offer college courses eligible for transfer to four-year institutions, they also offer developmental courses for students unprepared for college-level courses. According to Bueschel (2009), students entering college typically take a placement test and are then recommended for certain levels of coursework in math and English. Some institutions restrict registration to other levels of courses in the case of remedial course needs, but others do not. Bueschel (2009) claimed that placement exams are not standardized among institutions, and some exams are more accurate than others. So while the process of placing students in developmental courses seems to be the same among institutions, the requirements for placing students into these courses is not standardized.

College administrators and state legislators continue to debate who should provide developmental education to underprepared college students. Ignash (1997) reviewed the current situation of developmental education. Because of the cost of providing these courses in colleges, she described different tactics used by states to address the issue of developmental education. Ignash (1997) noted that some colleges banned or limited remedial offerings while others pushed developmental education to community colleges. Still other states proposed to charge high schools with funding some of the cost of developmental education. However, many four-year colleges still continue to offer remedial courses on their campuses. While the debate on developmental education is still ongoing, it seems clear that no one knows best practices for this population.

According to the United States Department of Education (2011), the total number of public two- and four-year institutions offering developmental coursework has gone down from 92.4% in the 1989-1990 school year to 89.6% in 2010-2011. Upon closer inspection, fewer four-year institutions offered developmental coursework with 82.9% in 1989-1990 down to 75.5% in

2010-2011. This differed from two-year institutions that increased the offerings of developmental coursework from 98.2% in 1989-1990 to 99.4% in 2010-2011. These statistics indicated that more underprepared students are found at community colleges than four-year institutions, but most postsecondary institutions, in general, still provide some remedial courses. In a longitudinal study of 6,879 students, Attewell et al. (2006) found that two-year colleges were more likely to place students in remedial courses than four-year universities even for students who had similar academic ability. This indicated differences in placement procedures between two- and four-year institutions rather than differences in student abilities. Because community colleges are more likely to offer developmental coursework and to place students in these classes, much of the literature comes from community colleges. Overall, the numbers suggest that currently, both two- and four-year universities regularly provide remedial coursework to their underprepared students.

Goldrick-Rab (2010) reviewed 25 years of academic policy and research on community college student success and identified 750 studies that utilized rigorous quantitative and qualitative methodology. She identified characteristics of the institutions or policies that affected student success. One of these factors included the opportunity structure, or outside factors, that affected community colleges and ultimately the success of their students. According to Goldrick-Rab (2010), community colleges are public institutions considered to be a middle ground between high school and higher education. This may explain why legislators and four-year college administrators appear to be pushing community colleges to house developmental education. Additionally, because of institutional practices in remedial education, Goldrick-Rab (2010) found many students did not know they were taking remedial courses due to the

information practices of the institution. Institutional practices and policies seem to impact developmental students both directly and indirectly.

Other research identified additional issues in the information practices of community colleges. Deil-Amen and Rosenbaum (2002) conducted a qualitative study examining the ways community colleges handle information management related to remedial coursework. They collected data from multiple sources, including interviews with 130 students and 54 faculty and staff, focus groups, and observations, at two community colleges over two years. The researchers (Deil-Amen & Rosenbaum, 2002) identified a *stigma-free* approach to remediation, meaning that community college staff worked to develop ways to avoid stigmatizing remedial students. However, this led to students being unaware of their situation, which in turn delayed recognition of their placement in remedial or developmental courses. Ultimately, students failed to consider more realistic career options because they did not understand the impact of remediation on their academics. Deil-Amen and Rosenbaum (2002) also found that two-year colleges placed more emphasis on transferring to four-year institutions than on occupational training. Because the social mission of the colleges was to provide education to disadvantaged students, they chose to offer college credit for remedial coursework for financial aid reasons. Thus, remedial courses were listed in course catalogs alongside other college-level courses with no indication that students would not receive college credit for these classes (Deil-Amen & Rosenbaum, 2002). While institutional practices of community colleges are designed to benefit students, the approach of *stigma-free* remediation may be hindering student success.

The growing need for developmental education has led to debates in higher education as to who should be responsible for providing the resources. While some lay the blame on high schools for not educating students (Ignash, 1997), students are still graduating from high school

underprepared for college coursework. Thus, colleges must decide what to do with these students. While developmental education seems to be moving to community colleges (United States Department of Education, 2011), community college practices may hinder the success of these students. By avoiding stigma in developmental education, students are unaware they are underprepared and, as a result, are unrealistic with their academic and career goals (Deil-Amen & Rosenbaum, 2002). Additionally, while community colleges offer more remedial coursework than four-year institutions (United States Department of Education, 2011), underprepared students are attending four-year institutions either as transfer students or as incoming freshmen. The number of college students enrolled in remedial coursework at four-year institutions is a significant portion at nearly 20% (Adams et al., 2012).

Underprepared College Students

Underprepared college students represent a notable portion of students in both two- and four-year institutions. While much of the research on this population has been done at the community college level, about one-fifth of four-year college students are also taking remedial coursework (Adams et al., 2012). Research examining both the demographics of this population and the overall success of remedial coursework continues to be conducted. Because of this, the National Center for Education Statistics requested special reports to analyze this population. Provasnik and Planty (2008) conducted an analysis of community colleges using data collected for the National Center for Education Statistics. They examined characteristics of community college students and compared them to students at four-year institutions. Provasnik and Planty (2008) found that, based on a survey of beginning postsecondary students in 2003-2004, 29% of community college students took a remedial class compared to 19% of students at a four-year institution. A total of 21% of all beginning postsecondary students reported taking a remedial

course. Aud et al. (2011) also analyzed data for the National Center for Education Statistics. The researchers considered remedial education for their analysis. They reported that in 2007-2008, 36% of college students reported having taken a remedial course. They also found that more students who reported being of a racial/ethnic minority (African American – 45% and Hispanic – 43%) took remedial courses than White students (31%). While there are more underprepared college students attending community colleges, there are still a significant number of underprepared students at four-year institutions.

Adams et al. (2012) used data from 31 participating states and created a report on remedial education. States reported data using a standardized method, and findings were based on the calculated medians of the state data. The researchers found that 51.7% of freshmen entering a two-year college needed remediation and 19.9% of freshmen entering four-year universities needed remediation. They reported differences in remediation based on race and ethnicity. African American (39.1% at four-year institutions, 67.7% at two-year institutions) and Hispanic (20.6% at four-year institutions, 58.3% at two-year institutions) students were more likely than White (13.6% at four-year institutions, 46.8% at two-year institutions) students to need remedial courses. Adams et al. (2012) also reported high percentages of low-income students needing remediation, with 31.9% at four-year institutions and 64.7% at two-year institutions. In terms of the effects of remediation, they found most students did not complete remediation coursework. At two-year colleges, while 62% of students completed remediation, only 22% completed remediation and then continued onto credit-bearing college courses within two years. At four-year colleges, while 74.4% of students completed remediation, only 36.8% of those completed remediation and other courses within two years. While there were no large differences by race in the completion of the first two years of college coursework, higher

percentages of low-income students did not complete the courses, with 79.9% at two-year institutions and 69.6% at four-year institutions not completing remedial coursework (Adams et al., 2012). This research indicates that remediation alone may not be effective in helping students graduate. It also supports findings that more students of ethnic minority statuses and more students from low SES backgrounds take remedial coursework.

One extensive study considered multiple aspects of remedial students including the characteristics of the students as well as the effects of remediation. Attewell et al. (2006) used data from a longitudinal study that followed students starting in the eighth grade to determine if students who completed remediation had a better chance of graduating. They followed up on this study by gathering college information about the 6,879 students that participated. Of the students surveyed, 40% took at least one remedial course. The researchers (Attewell et al., 2006) found that more students from a lower socioeconomic status (SES) took a remedial course than did students from the highest SES category (52% vs. 24%). Additionally, African American students were more likely to take remedial coursework than White students with similar academic skills, preparation, and social background. Clear demographic differences existed in students needing remedial course work.

Attewell et al. (2006) also found significant negative effects for students enrolled in remediation related to academic progress. They considered academic progress at multiple levels – completing 10 or fewer credit hours, taking time off before returning to school, and completing a two- or four-year degree. They found students who enrolled in a remedial course were more likely to complete 10 or fewer credit hours and take time off before returning to school. Students who enrolled in a remedial course were also less likely to graduate from two-year institutions than students who did not take a remedial course. At first this indicated that students who took

remedial courses were negatively affected by the classes. However, when the researchers controlled for variables such as academic and family background, the differences disappeared. This implies that remediation alone does not impact academic progress negatively. Ultimately, when combined with other factors that put students at-risk, remediation may compound the problem. When Attewell et al. (2006) examined graduation rates from four-year institutions however, they found that remediation significantly impacted students' graduation rates even when they controlled for family and academic background. So in four-year institutions, remediation alone may negatively impact academic progress. Remediation also increased time to graduate for students at four-year institutions. However, over half (52%) of students who took remedial courses at four-year institutions graduated within 8 years, compared to 78% of students who did not take remedial coursework. So while remediation did not improve graduation rates for any students, it did not significantly hinder student graduation rates (Attewell et al., 2006).

Other research considered the effects of taking remedial coursework on graduation and found varied results. Goldrick-Rab (2010) conducted a literature analysis of 750 studies on community colleges. In her findings, she noted the effects of taking remedial classes. She reported that some studies indicated short-term positive effects from remediation. However, other studies found no impact on degree completion or a negative impact on degree completion. This indicates that in the short-term remediation may be successful, but remediation alone may not ultimately help students graduate.

Some findings suggest that remediation may have effects on graduation and major choices. Bettinger and Long (2009) considered the impact of remediation on college performance and persistence. They tracked 28,000 students over six years, comparing students who had been remediated with similar students who had not been remediated. They found that

students in remediation were more likely to graduate in six years and less likely to drop out. Additionally, the researchers (Bettinger & Long, 2009) determined that remediation may impact major choice. Taking remedial English classes appeared to discourage English as a major while taking remedial math courses encouraged math as a major choice. Based on this study, remedial coursework appeared to have some affect on graduation and on major choice.

One study found clear results that remediation is not successful. Horn, McCoy, Campbell, and Brock (2009) examined the effects of student placement into remedial courses on completion of coursework. They specifically looked at placement into remedial English courses and subsequent completion of an introductory college-level English course. The researchers considered scores on English placement tests, remedial scores, and grades in college-level course of 1,022 community college students. They found that 473 students were placed into remedial English. Of those, 387 students completed the remedial class successfully but only 88 completed the college-level English course. Based on the results, they determined that taking remedial coursework was not adequately preparing students for college-level courses in English. Additionally, many students did not take the college-level English course at all. Based on the findings from this study, some remedial coursework appears unsuccessful at preparing students for college-level courses.

While many studies reported demographics, including race and ethnicity, for underprepared students, two studies focused more specifically on students of minority status. Bahr (2010) examined the racial gap in math remediation of freshmen college students at community colleges. Using data collected by the state, Bahr analyzed data from one cohort of students and followed them for six years, reaching a total of about 70,000 students. Bahr (2010) identified gaps in the likelihood of successful math remediation for students of a minority status.

Specifically, he found that Black and Hispanic students faced disadvantages and did worse in remedial math than White students. However, much of the racial differences in successful remediation in math appeared to be due to differences in math skill at the start of college. While race appeared to play a small role in successfully completing remedial courses, Bahr (2010) determined that overall, students of the four major racial groups gained similar benefits from remediation.

In another study, Hoyt (1999) tracked three years of entering freshmen cohorts at a community college to determine who had graduated, transferred, was still enrolled or had dropped out. The researcher found a relationship between remediation and retention, specifically, that more remediation related to higher dropout rates. In the cohorts studied, 64-72% of each year's students who required remediation dropped out. Additionally, students of a minority ethnicity had higher remediation rates, with 62% placing into remedial coursework, twice as many as White students. Finally, Hoyt (1999) determined that for remedial students, financial support was a major factor in staying in school. Students that worked full-time and were from a lower SES were more likely to drop out. Other factors, including being of a minority status and being a first-generation college student, increased chances of a student dropping out. Based on this research, remediation appears to have a negative effect on graduation rates. Being of a minority status may not directly impact remediation success, but does appear to be another risk factor.

Underprepared college students are also likely to be first-generation college students. Terenzini, Springer, Yaeger, Pascarella, and Nora (1996) explored characteristics specifically of first-generation college students. They surveyed 2,685 first-generation and traditional college students to determine if the two differ on various characteristics. They found first-generation

college students were more likely to come from low-income homes and be Hispanic. They also were more likely to score lower on assessments of critical thinking, math, and reading skills. These findings indicate that first-generation college students scored lower on basic skills upon entering college than do traditional college students. In another study of first-generation college students, Bui (2002) surveyed 64 first-generation college students and 68 traditional college students. He found that first-generation college students were more likely to be of an ethnic minority, come from a low-income family, and speak a language other than English at home. First-generation students also worried more about financial aid than traditional students. Students who are first-generation college students also are likely to fall into other categories that place them at-risk, such as being from low-income homes, of an ethnic minority, and entering college with lesser academic skills than traditional students.

According to the literature, the effects of remediation are unclear. Some research has shown positive effects, while other research has demonstrated negative or no effects. It appears remediation courses alone may not sufficiently help underprepared students stay in college. One clear finding from the literature is that underprepared students are more likely to be Black or Hispanic, from a low SES, or a first-generation college student. While these factors do not appear to inhibit student success in remediation, they do add another dimension to a student's ability to succeed in college.

Career-Related Research on Underprepared Students

Underprepared college students face various challenges in their career development. As demonstrated above, underprepared college students are more likely to be of an ethnic or racial minority, come from a low SES family, and be a first-generation college student. These factors alone place students at-risk for dropping out of college (Radford, Berkner, Wheelless, Shepherd,

& Hunt-White, 2010). While little research has been conducted specifically with underprepared college students and their career development, some studies produced career-related findings. This section outlines career research with both high school and college students considered at-risk for dropping out of school. Additionally, the limited research on the career development of underprepared college students is reviewed.

High school students. Research conducted with at-risk high school students can provide insight into the career development of underprepared college students. Many at-risk high school students plan to attend college (Gibbons, Borders, Wiles, Stephan, & Davis, 2006; Kern, 2000) and have some realistic and positive beliefs about college (Kern, 2000). However, clear differences in educational and career plans for at-risk students compared to students not considered at-risk indicate that underprepared college students may have special career needs.

Gibbons et al. (2006) looked at the educational and career plans for 222 ninth-graders, testing for differences by ethnicity, gender, and parent education level. They found most students listed a career of interest that required a four-year degree, with quality of programs, cost, and financial aid opportunities considered most important factors in making a decision about college. When considering differences in ethnicity, the researchers (Gibbons et al., 2006) found significantly more Caucasian students reported that enjoying their career was the most important factor to consider in career choice, while African American students reported that doing the career well or money/salary were the most important factors. The researchers also considered differences between prospective first-generation college students (PFG) and students who had at least one parent with some post-secondary education (NFG). They found that fewer PFG students were enrolled in college preparatory classes (52.7%) compared to NFG students (75.9%). PFG students also rated themselves lower in their classes academically than NFG

students. PFG students also differed from NFG students in plans after graduation. Fewer PFG students reported plans to attend a 4-year university (65%) versus 87.3% of NFG students who planned to attend a four-year university. Research indicates clear differences in career plans and factors influencing their career choices between at-risk groups and groups not considered at-risk.

In other research with at-risk high school students, Kern (2000) considered the college choices of minority high school students and reported descriptive results from the survey. The researcher surveyed 1,179 high school students: 49% were African American, 21% were Hispanic, and 19% were White. Kern (2000) found about half of the students surveyed reported no career direction at the time of the survey. The majority of students reported hoping to make many friends in college (81%), deciding to go to college on their own (80%), planning to stay in college until graduation (84.8%), and being encouraged by family to attend college (77.5%). Additionally, about half of the students reported they were not interested in campus life, and many claimed wanting to attend college near home (66%) or family (72.8%). Minority high school students have some positive beliefs about college, but also have beliefs that could negatively impact their success.

Finally, Ladany, Melincoff, Constantine, and Love (1997) considered commitment to the career choices process of at-risk high school students. The researchers surveyed 189 students: 44% of the students were African American, 36% were White, 9% Asian American, and 4% Latino or Latina. They found vocational exploration and commitment to career choices were related to their vocational identity, need for occupational information, perceived barriers to goals, and the number of occupations they considered. Therefore, students who were less open to career exploration and commitment were less stable in their vocational identity, reported a greater need for career information, and perceived more barriers. Additionally, students who

were uncommitted to career choices also had problems in other career areas. At-risk students face additional barriers to their career and a lack of career information which may lead to problems with their career choices and commitment.

College students. Research with first-generation college students signifies these students are entering college lacking academic skills. Reid and Moore (2008) used a qualitative analysis to better understand the college readiness of first-generation college students. They interviewed 13 undergraduate students enrolled in a four-year university. The researchers identified two themes from the data analysis: preparation which helped with student success and skills lacking for student success. All participants discussed certain classes, organizations or teachers who helped them prepare. While two participants reported feeling better prepared than their peers, seven reported that they felt less prepared. Many students reported feeling academically prepared for English classes, but many also felt unprepared for college math and science courses. Ten students reported feeling that their study habits in high school did not prepare them for college-level work. First-generation college students seem to be dissatisfied with their college preparation.

Other research indicates differences in college success with minority students and first-generation college students. Stage (1999) considered college student success among different ethnic and family background groups of college students, looking specifically at academic achievement and motivation. Stage found that White and Hispanic students were more socially confident, felt they were seen as more of a leader, felt they had better rapport with instructors, and had a more internal locus of control than Asian-American students. Stage found no differences in social and academic integration between first-generation college students and non-first-generation college students. White students had significantly higher overall grade point

averages and higher major grade point averages than any other participants. Clear differences in academic performance between White students and minority students can impact career success.

Research looking at students from differing socioeconomic backgrounds also gives more information about underprepared college students. Walpole (2003) conducted a longitudinal study of students who entered college in 1985. Using data from the Cooperative Institutional Research Program, the researcher surveyed 2,417 individuals from low SES and 2,475 from high SES families, focusing on those attending four-year institutions. The researcher looked at activities while in college, including contact with faculty, time spent studying, co-curricular activities and working. Walpole (2003) also looked at income, educational attainment, and educational aspirations of individuals nine years after college entry. Students from low SES backgrounds reported spending less time in student clubs and groups and more time working. The researcher also found that low SES students indicated spending less time studying and had lower grade point averages. Nine years after entering college, low SES students had lower levels of income, graduate school attendance, and educational attainment than high SES students. Overall, it seems that students from lower SES backgrounds engage in different activities during college, specifically working more, than students from higher SES backgrounds. After graduating, students from low SES backgrounds enter the workforce at higher rates, but earn less.

Some qualitative findings focused on the success of underprepared college students. Barbatis (2010) conducted a qualitative study to look at the impact of living-learning communities on student success. The research included 22 participants in a living-learning community who were underprepared students. In living-learning communities, college students live near one another, such as on the same dormitory floor, and take one or more classes

together. The researcher (Barbatis, 2010) identified four themes from the interviews: precollege characteristics, external college support/community influences, social involvement, and academic integration. According to Barbatis (2010), students said the factors that contributed to their success were individual characteristics which included racial and cultural identification. Students also identified supportive families as contributing to their success. Additionally, they mentioned individuals in the larger community such as teachers as those who helped them succeed. Barbatis (2010) claimed that disengagement from family and friends may not be related to student success, but rather, maintaining supportive relationships may be more helpful. Students also talked about how culture, race, or ethnicity contributed to their overall success. Finally, students identified the most important influences in their success as being outside of the college setting, such as family and high school teachers. Parents were identified as being instrumental in the lives of underprepared, ethnically diverse students (Barbatis, 2010). Personal characteristics, family support, and campus engagement appear to contribute to the academic success of underprepared college students.

Other qualitative studies looked at underprepared college student readiness. Byrd and MacDonald (2005) examined the college readiness of underprepared first-generation college students. Utilizing qualitative analysis, they interviewed eight underprepared first-generation college students who had successfully graduated from a community college. The researchers identified three categories of themes from the interviews: skills perceived as important for college readiness, background factors and life experiences that contribute to college readiness, and nontraditional student self-concept. Within the first category, researchers identified themes such as time management, having goals, and academic skills as important for college readiness. The researchers named themes of family factors, career influences, and financial concerns as

important for college success. Finally, researchers noted themes of positive self-concept and an understanding of institutional policies that contributed to their success. Academic skills, family support, and understanding of institutional policies appear to contribute to college success.

In a quantitative study, Grimes and David (1999) surveyed 500 students entering a community college. Fifty-one percent of the students were identified as being college-ready, while 49% of students were considered underprepared. The researchers were interested in identifying differences between underprepared students and college-ready students. They found the two populations differed on their educational aspirations. The underprepared college students planned for fewer years in college and had more aspirations for vocational and associate degrees than for four-year degrees. Underprepared students also reported partying more and watching more television in the past year versus college-ready students, who reported spending more time attending a religious service, talking about politics, and socializing with different ethnic groups (Grimes & David, 1999). Differences between underprepared college students and college-ready students indicate that underprepared college students exhibit characteristics that may negatively affect their success.

One researcher used quantitative methods to examine the career decision-making self-efficacy of underprepared college students. Peterson (1993) considered the relationship of career decision-making self-efficacy and academic, social, and overall integration of underprepared college students. Utilizing surveys from 1,549 underprepared college students, Peterson found a significant relationship between career decision-making self-efficacy and academic and social integration. For men and women, the results showed significant relationships between the constructs; however, women scored slightly higher than men in the relationship between career decision-making self-efficacy and integration. Therefore, the more confident underprepared

students were in their career decision-making abilities, the more they felt they were a part of the university (Peterson, 1993). When students are more integrated socially and academically, they are more likely to remain at the university.

The limited research on the career development of underprepared college students indicates this population faces compound challenges to their academic and career development. Underprepared college students are more likely to be of a racial or ethnic minority, low SES, and first-generation student; all factors that already place college students more at-risk for dropping out of college (Radford et al., 2010). Underprepared college students face some additional academic challenges. For example, underprepared college students may have lower academic goals in that they are less likely to plan to attend a four-year university (Gibbons et al., 2006; Grimes & David, 1999). Underprepared college students also may be less likely to engage in campus social activities (Grimes & David, 1999; Kern, 2000). This social support, however, may contribute to student success (Barbatis, 2010). This population also has specific career-related issues. First, underprepared students may face more barriers to their career and receive less information about occupations, which is related to lower levels of vocational exploration and career commitment (Ladany et al., 1997). Underprepared college students also may have lower career decision-making self-efficacy (Peterson, 1993). Ultimately, the career research on underprepared college students is limited. However, this population seems to have specific career needs that warrant further research.

Underprepared college students place significant importance on their families as demonstrated by choosing colleges close to home and by considering families as a support system (Kern, 2000). Additionally, this group of students may place more value on work rather than career; they need to work while in college, are more likely to choose two-year degrees, and

focus on finding jobs right out of college. Because of this, underprepared college students may be less socially integrated into college which impacts their likelihood to remain in school and their career decision-making self-efficacy. These students also seem to face barriers to their careers, and have a lack of information about careers that impacts career choice and commitment. This is a group of students that typically would not attend a four-year university. However, a significant number of students are attending four-year colleges, bringing with them specific needs in terms of their education and career.

Development of Relational Career Theory

History of Career Counseling

The literature in the field of career counseling is extensive. Pope (2000) provided a brief history of the field in which he identified six stages of development. In the first stage, career counseling came about in the early 1900s from a need to place individuals in jobs (Pope, 2000). The second stage of development focused on counseling in the schools. In the third stage, the focus of career counseling shifted to colleges and universities. The fourth stage brought about the idea that work should have meaning in people's lives. The fifth stage saw a transition to the information age. Currently, the field is in the sixth stage which emphasizes technology and multicultural counseling (Pope, 2000). Current career theories developed out of those established during the fourth stage of development when career theorists and practitioners began to integrate the concept of choice into career (Pope, 2000).

The idea that individuals can choose careers rather than be placed into jobs led to the development of a variety of career theories. This review highlights two early theories that considered the roles of social context and relationships in career development. Donald Super (1990) maintained that individuals go through stages of career development. He put forth an

idea of career development as occurring throughout the life span and affecting all life roles. As part of his theory, Super described individual development and also included contextual pieces that influenced the individual's career development. He considered the impact that family, the community, and the environment had on career development through his archway of career determinants (Super, 1990). Additionally, in describing life roles, he explained that these roles are negotiated through our own expectations and others' expectations of us (Super, 1990).

Linda Gottfredson (1981) added to the field of career by proposing that career development is influenced by gender and power. According to this theory, children become aware of gender stereotypes for careers at an early age. Their awareness of these stereotypes impacts their choice of careers. As children develop further, they begin to orient to careers that have more power and social status (Gottfredson, 1981). Theories such as these that include the social aspects in our career development set the stage for later career theories to consider contextual issues.

Social Constructionism

Relational Career Theory has its roots in the social constructionist movement. According to Guba and Lincoln (1998), research in the social sciences stems from one of four competing paradigms. These paradigms, or basic belief systems, help individuals organize beliefs such as the nature of knowledge and how knowledge is obtained. The four paradigms identified by Guba and Lincoln (1998) include positivism, postpositivism, critical theory, and constructivism. Positivism is the belief that knowledge exists and is independent from those trying to discover it. According to postpositivism, reality or knowledge exists, but because humans are flawed, we will never know the truth. Critical theory assumes there is a truth that has been influenced over time by society, race, cultural, and other such factors. Finally, constructivism holds that there are

multiple realities that are socially and experientially based. In constructivism, there is no known truth, but multiple truths that are constructed by the individual based on their personal and societal experiences (Guba & Lincoln, 1998). Social constructionism stems from the constructivist paradigm.

According to the constructivist paradigm, knowledge is created within the context of the social interactions (Guba & Lincoln, 1998). Several career theories fall within the constructivist paradigm, but still have essential differences. Young and Collin (2004) discussed the differences between the two categories of career theories that fall within this paradigm. They refer to the first as constructivist, while the second is social constructionism. According to Young and Collin (2004), within social constructionism, knowledge is socially constructed and grounded in the historical and cultural context of conversations. This differs from the constructivist career theories that consider knowledge as an individual, cognitive process influenced by context (Young & Collin, 2004). In social constructionist theories, the emphasis is on the process of knowledge creation rather than the results (Young & Collin, 2004). Therefore, context does not simply influence the individual's creation of knowledge, context helps create what the individual knows. Since the language we use is a result of our historical and cultural grounding, what we know is the result of our constructed language (Young & Collin, 2004).

Language is a major component of the social constructionist approach to career. According to Young and Collin (2004), knowledge is created through social interactions. Because language is so important in conducting these interactions, researchers cannot ignore the impact it has on career development (Young & Collin, 2004). Additionally, one must also consider the cultural and historical influences on the language people use. The language people use is the result of social context (Young & Collin, 2004). Mercer (2000) focused specifically on

the role of language and words in the construction of knowledge. He stated that the experience of talking shapes what individuals say which impacts what they think (Mercer, 2000).

Individuals use language to work with one another to negotiate meaning and create common knowledge. Language creates what is known through discourse with others. Therefore, it is conversation that shapes what people think. Social constructionist theories fall within the constructivist paradigm which asserts knowledge is created rather than discovered (Guba & Lincoln, 1998). Social constructionist theories differ from other constructivist theories in how knowledge creation takes place. While most constructivist theories consider knowledge to be created inside the individual, social constructionist theories put knowledge creation outside the individual (Bassot, 2012). By putting knowledge into the social realm, language becomes an important component (Mercer, 2002). Therefore, individuals interact with others and their social and cultural context to create knowledge.

Relational Career Theory

Relational career theories developed because of a need to fully acknowledge the role of the social world in the development of career. Richardson (1993) was one of the first theorists to begin discussing the importance of establishing a new career theory that addressed the importance of describing work in people's lives. Other researchers continued to develop the theory (e.g., Blustein, 2001; Blustein, Schultheiss, & Flum, 2004; Schultheiss, 2003) with Blustein's (2011) article outlining the major concepts of the theory. This section describes the major contributions to RCT.

New trends in career theories sought to address two major issues, according to Richardson (1993). Richardson (1993) described these two problems with current career theories and addressed them by describing the beginnings of Relational Career Theory. The first

problem was a gap between new advances in the fields of psychology and counseling and their integration into career counseling. The second problem was that traditional theories were oriented toward the White middle class (Richardson, 1993). To address these two issues, Richardson (1993) proposed a *theory of working*, consisting of three parts. First, the theory focused on work in people's lives rather than careers. Secondly, it considered career from the social construction perspective, and third, the theory viewed work from the individual's perspective. Richardson (1993) claimed that by focusing on traditional careers, or work done outside the home, theories ignored work done outside this structure which limits the view of career. Her approach also allowed for consideration of work embedded in family and personal lives (Richardson, 1993). While Richardson was one of the first to write about the inclusion of relational theories into the career field, other theorists contributed to the development of the theory (Blustein, 2011; Schultheiss, 2003).

The evolution of RCT continued as Blustein (2001) further redefined the psychology of working. He highlighted the parallels between personal counseling and career counseling. Blustein (2001) suggested that the separation between work and personal is an unnecessary split that relational career theories seek to repair. He also identified three major themes from three early articles (Blustein et al., 2001; Phillips, Christopher-Sisk, & Gravino, 2001; Schultheiss, Kress, Manzi, & Glasscock, 2001) considered major contributions to the development of Relational Career Theory. The first theme involved the complexity of the shared space of relationships and work. All three articles suggested that when asked about life experiences, people describe this shared space. The second theme held that social support is a complex concept. Finally, the third theme described the influence that social and cultural context has on work.

To further define relational career theories, Blustein, Schultheiss, and Flum (2004) explained the theory's place within social constructionism. Because social constructionism is unique in that it takes knowledge outside of the individual and places it into the social realm. Blustein et al (2004) identified several assumptions that must hold true for Relational Career Theory to work. The first assumption is that knowledge is created. This assumption stems from social constructionism, as mentioned above, and reasons that truth is created by individuals interacting with one another. The second assumption is that understanding is historically and culturally grounded (Blustein et al., 2004). The third assumption is that knowledge is constructed through relationships. Finally, socially constructed views of the world can take a variety of paths (Blustein et al., 2004). Relational Career Theory falls within a social constructionist framework, and therefore, these assumptions must be true.

Based on all the assumptions described above, all relational career theorists hold certain beliefs. First, RCT is a social constructionist theory (Blustein, Schultheiss, & Flum, 2004; Richardson, 1993) which means that knowledge is created through varied and complex social interactions. Relational career theorists also believe that career and relationships exist in the same space and interact in complex ways (Blustein, 2001; Richardson, 1993). This blurs the line between career and personal development and indicates that the two should not be considered separately. Another common assumption is that family and culture play a large part in career development (Blustein, 2001; Blustein, Schultheiss, & Flum, 2004; Richardson, 1993). Finally, relational career theorists consider the theory a way to define career for individuals who do not hold jobs outside the home or do not have a choice in their careers (Blustein, 2001; Richardson, 1993). Relational career theories provide a new and different way of considering the impact that family and culture has on career development.

Relational theory has continued to evolve and become better defined. Blustein (2011) recently identified the major objectives characterizing RCT. The first objective is that the space in which working and relationships occur is interrelated. Each domain is interrelated rather than separate from one another. Relational theory expands the idea of career to include domains that were traditionally not considered work or work that is not thought of as a career (Blustein, 2011). This allows for a career theory that applies to all individuals, even those who may not have the ability to choose their career. By including all kinds of work in the definition of career, relational career theories serve as a basis for helping all individuals, not just those who have the privilege of choice in career. The second objective is that knowledge is constructed through social interactions (Blustein, 2011). Relationships are integral in facilitating self-awareness, exploration, and career decision-making. This differs from other career theories that may recognize the impact of relationships on the individual. Relational Career Theory considers relationships to be part of career development rather than simply context that influences the development.

Relational Career Theory provides a new way to conceptualize career by considering the impact that relationships and culture has on career development. Because the theory is still new, it is evolving in its conceptualization and through research. Research on the constructs involved in RCT is limited. However, some research focuses on exploring the impact that family influence has on various aspects of career and on locus of control. Relational Career Theory emphasizes the importance of contextual factors in career development. Thus, understanding how context interacts with the individual to establish locus of control can better explain the theory. Finally, the specific construct of career decision-making self-efficacy is well researched,

but rarely through a relational lens. The sections below represent the current empirical literature of these concepts.

Family Influence

Family influence on career is the most researched topic related to Relational Career Theory. Relational researchers discovered varying results of the impact that family has on career. While many studies produced findings to support the idea that family influences career (Hartung, Lewis, May & Niles, 2002; Kenny & Bledsoe, 2005; Motulsky, 2010; Whitson & Keller, 2004) other studies showed no significant results (Hartung, Lewis, May & Niles, 2002; Whitson & Keller, 2004). Additionally, other research demonstrated differences in gender in terms of the influence of family on career (Kenny & Donaldson, 1991; Lopez, Campbell, & Watkins, 1988; Whitson & Keller, 2004). While the findings are conflicted, it is clear that family does influence career development, but exactly how this happens is in question.

Whiston and Keller (2004) reviewed the literature from 77 studies relevant to RCT. They looked at the influence of the family-of-origin on career development. They then summarized and organized the literature, breaking it down first by age group and then by construct. In the 32 studies related to college students, the researchers found family does influence career commitment and decidedness. Specifically, open and supportive families positively facilitate career development while unrealistic expectations from family have a negative influence. However, families seem to have less influence on career decision-making self-efficacy and on career indecision. This extensive review of the literature considered both quantitative and qualitative studies in the findings. The qualitative research in this area overwhelmingly supported the idea that family influences career, while the quantitative research produced variable results.

In another qualitative study, Blustein et al. (2001) qualitatively analyzed 19 case examples from the “Getting Down to Cases” section of *The Career Development Quarterly*. By analyzing these cases, the researchers attempted to magnify the intersection of work and personal issues in counseling. The researchers found that the counselors or discussants requested more information about the client’s family and relationships in more than half of the cases, even though the focus was career counseling. In addition, the researchers noted four categories of themes from the analysis. The first theme was that of relational support from family. A second theme described the motivational and conflictual overlap of work and relationships. Thirdly, researchers noted a theme of re-enacting family roles in career decision-making processes. The final theme was the social and economic frames that limit the work and relationships spaces (Blustein et al., 2001). The findings from this study indicate that career and personal counseling inhabit an overlapping space.

Other qualitative findings indicate that relationships, including those with family, have a role in career development. Lindstrom, Doren, Metheny, Johnson, and Zane (2007) used a case study method to explore the importance of family in the career development and post-school outcomes of young adults with learning disabilities. Participants were 13 young adults with a learning disability. The researchers primarily utilized interview data with key informants such as parents and high school teachers. Lindstrom et al. (2007) found that while socioeconomic status influenced early career decision-making, family interactions played a large part in career outcomes for the participants. They established that family wishes for the future, family guidance and planning activities, and family status all impacted the career development of these young adults. Additionally, Fouad et al. (2008) interviewed 12 Asian Americans using a semi-structured interview. The researchers found four domains related to family and social influences

from their analyses: family influence, cultural influence, social structural influences, and role models. They found family influences on career choices were pervasive and continued through to adulthood. Specifically, they noted family obligations, family expectations, family support, and family values all influenced the career choices of the participants. Finally, researchers (Noonan, Hall, & Blustein, 2007) explored the influence of relationships at work on the school-to-work transition of 27 urban high school juniors and seniors. From the interviews, the researchers determined four themes: receipt of mobility encouragement; perceptions of similarity, difference, and being understood; awareness of stratification; and navigation of identity. Two of these themes related specifically to the participants' relationships with their supervisors: encouragement for mobility from adults in their workplace and perceptions of similarities and differences and of being understood. Qualitative findings support the influence that family and relationships have on career.

While the qualitative research in this area supports the influence of relationships on career, quantitative results are mixed. Quantitative studies have found that different aspects of the family may have an influence on career development. However, research is not clear on the exact relationship between the two. Tang, Fouad, and Smith (1999) examined the effect that family background and expectations have on Asian-American career choices. Through surveys of 191 college students, they found no family involvement effect on career self-efficacy and interests. However, the researchers established a significant effect of family involvement on career choice. Other researchers (Hartung, Lewis, May, & Niles, 2002) surveyed undergraduate students to look at family interaction patterns relative to levels of work and family role salience and to levels of vocational identity. These researchers determined that individuals who perceived their family to be more functionally adaptive and cohesive participated more in home

and family roles later in life. On the other hand, family cohesion and adaptability did not significantly relate to vocational identity and work-role salience. Therefore, while family seemed to have an influence on the individual's work at home, there were no clear relationships to career development. Finally, Kenny and Bledsoe (2005) explored the contributions of relational factors to career adaptability in 322 ninth-graders from large public high schools. They considered family, but also support from friends and teachers. These researchers established that students who perceived more support from teachers, friends, and family scored higher on dimensions of career adaptability. These studies showed that family does have an influence on certain aspects of career development, although the influence is not as clear as in qualitative studies.

Other quantitative research also found conflicting results. Scott and Church (2001) explored the influence of attachment on the career development of children of divorced parents. They surveyed about 300 undergraduate students, half whose parents had divorced. The researchers specifically considered the concept of conflictual independence, which is separation free from guilt and resentment. Their results indicated that greater independence from parents and greater attachment to parents was modestly associated with career commitment. They also determined that students of divorced families showed less career decidedness than students of intact families. However, they found no differences in progress toward career commitment or tendency to foreclose. While this research shows that family has some influence on career commitment, family did not appear to influence career commitment.

Blustein, Walbridge, Friedlander, and Palladino (1991) published the results of two studies in one article. In the first study, they assessed undergraduate students with two living parents to determine the relationship between psychological separation and career decision-

making self-efficacy. The researchers found no significant relationships between the two variables. In a second study of undergraduate students from intact families, they looked at the effects of psychological separation and parental attachment on committing to career choice and the approach used in the commitment process. The researchers found that parental attachment combined with conflictual independence, freedom guilt or resentment towards one's parents, had the most effect on the commitment to career choices processes of adolescents. This research indicates that positive separation from parents influences career commitment, but does not influence career decision-making. While the results of quantitative research on the influence of family on career are varied, gender seems to consistently play a role.

Family Influence and Gender Differences

Some researchers used quantitative research to consider family influence in terms of parental attachment and psychological separation related to gender differences. This research demonstrated that family influence, specifically attachment, may impact men and women differently. Kenny and Donaldson (1991) looked at family structure and attachment variables and their effects on social competence and psychological well-being during transition to college. They surveyed 226 first-year college students and found gender differences in how participants responded to these constructs. First, they found that college women were more attached to their parents than college men. The researchers also found that women viewed attachment as more positive than men. Women who were more attached were also more socially competent and scored higher on psychological well-being. The researchers found no significant results for men. Other researchers (Lopez, Campbell, & Watkins, 1988) explored interrelations between family structure and psychological separation and psychological separation and college adjustment measures of 815 college students. Again, differences existed between men and women. The

researchers found that men and women respond differently to inappropriate family structure. Men were able to remain detached from family conflict while women remained emotionally attached to the family. They also found structurally sound families were related to low levels of conflict regarding separation. Finally, they found a relationship between conflicted psychological separation and college adjustment. Studies have shown gender differences in how family impacts an individual's ability to adjust and transition to college. Because college success is related to career development, this research indicates gender differences may occur in career development.

Women have been participants for multiple qualitative studies on Relational Career Theory. Motulsky (2010) explored the career transitions of 13 midlife women, ages 42-57, who completed a career change. In her analysis, she explored themes of connection and disconnection the women talked about in their various relationships. She concluded that connections in a variety of relationships, including spouse or partner, parents, friends, and work colleagues, empowered and encouraged progress and growth. She also determined that disconnections in relationships indicated psychological distress. Ultimately, she noted healthy relationships centered around the career change are necessary for empowerment and positive growth.

Pearson and Bieschke, (2001) looked at family influences on the career development of fourteen African American women well established in their careers. From their analysis of the interviews, they identified seven domains focused on family and social influences. These domains included the extended family network, family values regarding work, gender roles, nuclear family relationships, racism, social movements, and social resources. Pearson and Bieschke (2001) concluded from these findings that for participants, family influenced career

development. The researchers also identified a common theme of family as a source of both information and influence on their career paths.

Finally, Richie et al. (1997) investigated the career development of 18 high achieving African American-Black and White women. Using qualitative analysis, they discovered that women had a strong relational orientation in both personal and professional lives. Additionally, participants talked about belonging to a community and expressed both positive and negative contributions from their families. Regardless of the effects of the relationships, participants were very aware of the impact of relationships on their lives. Qualitative research on career development indicates, particularly for women, that family does play a role in career.

Despite the varying findings of the influence that family has on career, the majority of research demonstrated that family impacts career development. Differences in research methodologies may explain some of the conflicting findings. The differences lie first in how family influence is measured. For example, some researchers looked at relational factors (Kenny & Bledsoe, 2005) to measure family influence while others considered parental attachment (Kenny & Donaldson, 1991; Lopez, Campbell, & Watkins, 1988). A second difference is the construct used to measure career. Some researchers considered vocational identity (Hartung, Lewis, May, & Niles, 2002) and others career adaptability (Kenny & Bledsoe, 2005), which may explain some of the varied findings. Finally, the use of quantitative versus qualitative methodology may explain some differences. All of the qualitative research found themes related to family influence (Fouad et al., 2008; Lindstrom et al., 2007; Motulsky, 2010; Noonan, Hall, & Blustein, 2007; Pearson & Bieschke, 2001; Richie et al., 1997), while the quantitative research indicated varied results (Blustein, Walbridge, Friedlander, & Palladino, 1991; Scott & Church, 2001; Tang, Fouad, & Smith, 1999). All of these differences in research methodology play a

part in the findings. Ultimately, these opposing findings speak to the need for further research in the area of family influence on career.

Locus of Control

The concept of locus of control has its place in career research, but only recently has been introduced to relational career research. Spector (1988) defined locus of control as an individual's belief that outcomes are caused either by the self (internal locus) or external factors (external locus). An individual holds these beliefs of control based on family, culture, and other relational constructs. Levenson (1981) also described locus of control as being both internal and external. However, Levenson (1981) expanded the concept of an external locus of control to be multidimensional, including a belief that powerful others or chance influences occurrences. By using a multidimensional approach to external control, Levenson addressed the fact that an external locus of control might not always be negative. Levenson's expanded definition of locus of control fits with relational theory by considering the positive impact that relationships might have on control.

Researchers (Bacanli, 2005; Lease, 2004; Powell & Luzzo, 1998) linked locus of control to various aspects of career development including career decision-making self-efficacy. An internal locus of control appears to have a more positive influence on career decision-making self-efficacy than an external locus of control. In addition to the links between locus of control and career, researchers found racial (Lease, 2004) and social class (Lachman & Weaver, 1998) differences in locus of control. Locus of control has begun to be linked to Relational Career Theory as well. According to Blustein (2011), relational theory accounts for times when individuals have little or no control over their career choices. In terms of relational theory, locus of control becomes a characteristic of the individual influenced, or rather, created by

relationships and social interactions (Bullers, 1999). Therefore, locus of control needs to be further explored in terms of RCT.

Locus of control seems to have an impact on the career development of college students. Researchers (Gifford, Briceno-Perriott, & Mianzo, 2006) explored the influence that locus of control has on academic achievement. They looked at locus of control and ACT scores as predictors of college success in 3,066 college freshmen. Gifford et al. (2006) found locus of control predicted academic success as measured by grade point average. Those scoring as having an internal locus of control had higher grade point averages than those with an external locus of control. In addition to predicting academic success, locus of control has also been linked to job choices of undergraduates. Luzzo and Ward (1995) looked at locus of control and vocational congruence of 61 undergraduate college students. They considered vocational congruence to be choosing a part-time job related to their career interests. The researchers found that locus of control predicted career aspirations or current occupation choices of college students. Students with an internal locus of control were more likely to choose part-time jobs in college that related to their career interests (Luzzo & Ward, 1995). Internal locus of control in college students seems to have a positive effect on career development.

Researchers also considered locus of control in terms of specific career concepts such as career maturity and career decision-making. They found that a more internal locus of control was related to more positive career development. Powell and Luzzo (1998) looked at the career maturity and career decision-making attributional style of 253 high school students. In this study, attributional style included a measure of locus of causality, or locus of control. The researchers determined that more internal control related to more knowledgeable and more positive attitudes about career decision-making (Powell & Luzzo, 1998). Finally, Bacanli (2005) explored the

relationship between personal indecisiveness and personal characteristics that included locus of control. The researcher collected data from 399 Turkish freshmen college students. Bacanlı (2005) found that personal indecisiveness was related to locus of control. Specifically, the researcher determined that an external locus of control related to indecisiveness. Ultimately, the research further demonstrates that an internal locus of control is more positive than an external locus of control.

Few studies have considered locus of control in terms of Relational Career Theory. However, researchers explored locus of control in terms of concepts that are related to RCT. One such concept is that of family and work interaction. One study, (Bullers, 1999) explored the impact of family and work on perceived control. Bullers considered the effect that work and family influence had on women's perceived control. She surveyed 3,508 women between the ages of 34 and 44 and found that different levels of working versus staying at home influenced women's perceived control. Employed women without children had higher levels of perceived control, while the single, unemployed, and nonparent combinations all had negative effects on control. Working moms had lower levels of perceived control. The researcher determined that parenthood had more of a negative effect on control rather than employment status (Bullers, 1999). This research indicates that current family status does influence feelings of control in women. Women who work and have a family seem to have less of an internal locus of control.

Other control concepts considered in terms of relational theory are those related to culture, such as race and social class. Lease (2004) considered differences in locus of control based on race. She surveyed 433 students and found that African American students were more likely to have a more external locus of control. Additionally, an external locus of control predicted struggles with decision-making in these students. In another study, Lachman and

Weaver (1998) looked at social class differences in sense of control for 3,032 participants. They found significant social class differences in sense of control. Individuals from lower social classes had stronger beliefs in external factors of control. Thus, individuals from lower social classes may feel they have little ability to control their careers. Social class impacts the conversations and social interactions an individual has, and thus, influences the individual's career knowledge (Lachman & Weaver, 1998). Individuals from lower classes appear to receive messages that their career choice is determined by external factors while individuals from higher classes receive messages that career choice is determined by internal, personal factors. Because social class impacts career development and decisions, understanding how locus of control differs based on social class is important.

While the research is limited, some studies have directly considered locus of control in terms of RCT. Lease and Dahlbeck (2009) looked at attachment, parenting styles, and locus of control related to career decision-making self-efficacy. The researchers also considered the influence of gender on the constructs. Researchers collected data from 257 undergraduate college students. They found attachment to the mother predicted career decision-making self-efficacy for females. Additionally, the researchers found that internal locus of control predicted career decision-making self-efficacy for males only (Lease & Dahlbeck, 2009). In another study, Duffy (2010) examined sense of control and career adaptability in about 2,000 first-year college students. He found a strong relationship between sense of control and career adaptability. Therefore, students who feel a sense of control may be more inclined to be adaptable in their careers. Duffy (2010) also looked at control as a mediator for social support, optimism, and self-esteem and found sense of control mediated social support, optimism, and self-esteem. This

research indicates that locus of control impacts career development and that relational constructs such as parental attachment and social support may be related to locus of control.

Finally, Duffy and Dik (2009) discussed the relationship between internal and external factors that influence career decision-making. They stated internal factors come from within, and external factors include such things as family, life circumstances, religion and spirituality, and social service motivation. The authors proposed that external factors constrain or motivate an individual's choices. External factors also interact with internal factors. Duffy and Dik (2009) claimed that most career research focused on populations who have the ability to have more internal control over choices. However, the authors proposed that for underrepresented groups, external factors may be more salient. According to Duffy and Dik (2009), external factors moderate career development rather than just serving as barriers or supports to career development.

Locus of control appears to be related to career development. Research indicates that a more internal locus of control is related to more positive career development. The literature directly linking locus of control to Relational Career Theory is limited. However, research has found in an interaction between control and family (Bullers, 1998) and differences in locus of control based on social class (Lachman & Weaver, 1998) and race (Lease, 2004). Because these concepts are directly related to RCT, the research indicates that locus of control has a place in the theory and deserves further research. The few studies that have considered locus of control in terms of relational concepts such as social support (Duffy, 2010) and parental attachment (Lease & Dahlbeck, 2009) found these concepts to be related to locus of control. Additionally, theorists recently began to incorporate locus of control into discussions of Relational Career Theory

(Duffy & Dik, 2009). Thus, locus of control warrants more research to determine its place in Relational Career Theory.

Career Decision-Making Self-Efficacy

Career decision-making is a smaller part of overall career development focused specifically on the task of choosing or deciding a career. Career decision-making self-efficacy is defined as an individual's belief that he or she is capable of making career decisions (Taylor & Betz, 1983). Researchers have linked high levels of career decision-making self-efficacy to lower career indecision (Betz, Klein, & Taylor, 1996; Betz and Voyten, 1997), more positive career decision-making attitudes (Luzzo, 1993), and more positive career beliefs (Luzzo & Day, 1999). Career decision-making self-efficacy also is related to more academic and social integration of underprepared college students (Peterson, 1993). Overall, career decision-making is an important component of career development.

Career decision-making self-efficacy evolved from Bandura's (1977) theory on self-efficacy. According to Bandura (1977), efficacy is the belief that one can successfully perform a behavior. Bandura (1977) stated that efficacy comes from four places, two of which include social aspects – vicarious experience and verbal persuasion. Verbal persuasion is information received from others, while vicarious experience includes observing other people's experiences. Lent, Brown, and Hackett (1994) applied the concept of self-efficacy to career development. According to the theorists, goals and career decisions are the result of interaction between self-efficacy, beliefs, and interests. While Bandura (1977) and Lent, Brown, and Hackett (1994) acknowledged the impact of context on self-efficacy, they still focused on the individual rather than the social in the creation of these beliefs.

Theorists and researchers have begun to explore career decision-making self-efficacy from a social constructionist standpoint. Lopez and Andrews (1987) were among the first to claim that career decision-making is not an individual process, but the outcome of a larger set of transactions with the family. For example, during adolescence, individuals attempt to establish an identity separate from parents. While parents can support this process by allowing it to happen, parents often become too involved in the career decision-making of their children. Adolescents may turn to parents for help with career decisions, but receive a prescriptive response rather than support in the process. Thus, career decisions become the result of social interactions with family members rather than an individual process influenced by family (Lopez & Andrews, 1987). Duffy and Dik (2009) also discussed career decision-making in terms of RCT. They noted that external factors, such as family, are not simply barriers or supports to career development, but may serve as moderators. For many individuals, career choice is moderated by life circumstances and family needs. Thus, career choice behavior may not be explained by theories that focus solely on the individual.

Researchers found mixed results in studies on cultural and racial differences in career decision-making self-efficacy. Relational Career Theory considers culture to impact career development. Fouad and Byars-Winston (2005) looked at cultural differences in career choice through a meta-analysis of four articles. They found no race differences in career aspirations or decision-making but did find race differences in career opportunities and barriers. Other researchers examined differences in career decision-making self-efficacy by race (Gloria & Hird, 1999). They surveyed 687 undergraduate students and found that individuals of a racial/ethnic minority had lower career decision-making self-efficacy than White individuals (Gloria & Hird,

1999). The findings from these studies indicate that culture and race may impact career decision-making.

Other researchers considered the impact of family variables on career decision-making self-efficacy. Larson and Wilson (1998) surveyed 1,006 college students. They considered the influence of family concepts of intimidation (rigid expectations and excessive control over children), fusion (too emotionally reactive to one another), and triangulation (a third party becomes the focus of tension) on anxiety in young adults which they hypothesized would lead to career decision problems. The researchers found a clear connection for anxiety mediating the influence of fusion on career decision-making. They also found that intimidation related to problems with career decisions, while triangulation was not related. These findings indicate that negative interactions in the family generalized to anxiety in the individual which led to problems with career decision-making. In another study, Hargrove, Creagh, and Burgess (2002) looked at the ability of family interaction patterns or quality of family relationships to predict career decision-making self-efficacy and vocational identity scores for 210 undergraduate students. They found the more students perceived conflict among family, the less confidence they had in career decision-making tasks. The researchers (Hargrove, Creagh, & Burgess, 2002) also found that the more open and encouraging family members were, the more confidence they had in career decisions.

Research considered the impact of attachment to parents on career decision-making self-efficacy and career decision-making. Germeijs and Verschueren (2009) looked at the relationship of parental attachment to the career decision-making process of adolescents and the role of career decision-making self-efficacy. In a longitudinal study of 748 adolescents, they found higher levels of security with parent relationships predicted better coping in future career

decision-making tasks. In terms of career decision-making self-efficacy, the authors found higher levels of security with parental attachment were related to higher levels of career decision-making self-efficacy. This also appeared to lead to higher levels of decision-making tasks. Thus, a secure attachment with parents seems to impact career decision-making self-efficacy and, in turn, career decision-making behavior. Additionally, Wolfe and Betz (2004) considered insecure attachment to parents and its relationship with career decision-making self-efficacy and career indecisiveness. They surveyed 304 undergraduate students and found both career decision-making self-efficacy and career indecisiveness were related to the quality of attachment bonds. For example, career decision-making self-efficacy negatively related to a dismissive attachment style. They also found some evidence linking higher career decision-making self-efficacy to secure attachment. Therefore, more positive attachments to parents led to higher career decision-making self-efficacy (Wolfe & Betz, 2004). The findings from these studies indicate that attachment does influence career decision-making self-efficacy with higher or more positive attachments related to higher scores of career decision-making self-efficacy.

Qualitative research indicated that relationships with others play a part in the career decision-making process. Phillips, Christopher-Sisk, and Gravino (2001) considered career decision-making from a relational standpoint using qualitative methods. They interviewed 58 unemployed and employed young adults ranging in age from 18 to 29. They looked specifically at mention of others and found three themes: Actions of Others, Recruitment of Others, and Pushing Others Away. In terms of decision-making, the researchers (Phillips, Christopher-Sisk, & Gravino, 2001) concluded that career decision-making is much more complex of a concept than considered in the past. Thus, decision-making included others as active participants in the process rather than passive or intrusive.

In another qualitative study, researchers attempted to better understand how relationships impact career decisions. Schultheiss, Kress, Manzi, and Glasscock (2001) explored how relationships are used in the career decision-making process. The researchers interviewed 14 undergraduate students and identified multiple themes within the responses. The first theme was the influence of emotional support provided by family during career decision-making. A second theme was social integration, in which individuals had a relationship with someone who they could talk to about personal issues. The researchers also found themes of support of success by family members and receipt of career information from family members. The final themes reported were tangible career and academic assistance from family and receiving help from others in making difficult career decisions. Overall, career decision-making was framed by relational connections.

Some research linked family and career decision-making self-efficacy. Whitson (1996) looked at career indecision related to the family environment. She surveyed 214 undergraduates and found some dimensions of the family environment were related to career indecision and career decision-making self-efficacy. She also considered the impact of gender on these constructs. Findings from this study (Whitson, 1996) indicated the dimension of system maintenance, or the amount of organization in the family, related to career indecision for women. She also found that the more the family encouraged independence, the higher the levels of career decision-making for both men and women (Whitson, 1996). In another study, Nawaz and Gilani (2011) looked at the relationship between parental bonds and career decision-making self-efficacy in 550 undergraduate students. They also considered differences between males and females on scores of career decision-making self-efficacy. Findings indicated a positive relationship between parental attachment and career decision-making self-efficacy. However, no

differences in gender were found in career decision-making self-efficacy. While research indicates a relationship between attachment and career decision-making self-efficacy, it also seems to indicate few gender differences in career decision-making.

Career decision-making self-efficacy refers to the belief that an individual can successfully make career decisions. While this construct has its roots in cognitive career development theories, it clearly has a place in Relational Career Theory. Research demonstrates that attachment to parents and family influences career decision-making self-efficacy with more positive relationships indicating higher levels of self-efficacy (Germeijs & Verschueren, 2009; Hargrove, Creagh, & Burgess, 2002; Wolfe & Betz, 2004). Relational theorists (Duffy & Dik, 2009) propose that these social constructs serve as moderators to career decision-making rather than barriers or supports as cognitive theorists (Lent, Brown, & Hackett, 1994) believe. Further research investigating the relationship between family and career decision-making self-efficacy can better define Relational Career Theory.

Underprepared College Students and Relational Career Theory

Many students enter college unprepared to take college-level coursework (Aud et al., 2011). Underprepared college students must take remedial courses in math, reading, and English, to prepare them to take college-level courses. While remedial coursework is intended to better prepare students for college, the courses have some negative consequences. Remediation appears to be successful in preparing students in some instances (Attewell et al., 2006; Bahr, 2010; Bettinger & Long, 2009; Goldrick-Rab, 2010). However, other studies indicate that remediated students may not complete remediation (Horn, McCoy, Campbell, & Brock, 2009), may be less likely to graduate (Hoyt, 1999) or take significantly longer to graduate (Attewell et al., 2006; Bettinger & Long, 2009). Additionally, underprepared college students are also more

likely to be a minority race or ethnicity, from a low SES, and be a first-generation college student (Adams et al., 2012; Radford et al., 2010). Students who are underprepared but also a minority, from a low SES, or a first-generation college student are more likely to drop out than underprepared college student who do not possess these other characteristics. Underprepared college students are a population at risk for not graduating or taking additional time to graduate from college.

Underprepared college students indicate that family and culture play a significant role in their academic and career development. Underprepared college students may make decisions about college based on proximity to home and family (Kern, 2000). Additionally, students may consider family to be a support system (Barbatis, 2010; Byrd & MacDonald, 2005; Kern, 2000) that contributes to their success, while disengagement from family may be related to a lack of success (Barbatis, 2010). Identification with race and culture as well as support from a larger community also seems to be related to student success (Barbatis, 2010; Reid & Moore, 2008). While the research on this population is limited, it appears that family, community, and culture are factors in the academic and career development of underprepared college students.

Relational Career Theory seeks to address the social aspects that influence career development. While other career theories include family and culture in their descriptions of career development, most consider these factors to moderate the development of the individual (Blustein, 2011). Relational career theories believe that family and culture are part of an individual's career development in that they help construct the language and knowledge an individual possesses about career (Bassot, 2012). Rather than serve as moderators, social aspects are an integral part of the process. Additionally, this theory seeks to address the career development of underserved populations that may have limited choice in their career

(Richardson, 1993). By considering the role of the family in career development, specifically on constructs such as locus of control and career decision-making self-efficacy, researchers can better understand these populations. Because underprepared students are an underserved population with less choice than traditional college students, Relational Career Theory provides a useful lens through which researchers and practitioners can better understand this population. This study sought to further the research on Relational Career Theory as well as provide a better understanding of the career development of underprepared college students.

Chapter Three

Method

The purpose of this chapter is to describe the research questions, procedure, participants, instruments, and data analysis of the study. Little research has focused on this population of at-risk college students and their career development. This research adds to the literature on underprepared college students as well as increases understanding of Relational Career Theory. This study uses a quantitative design to report relationships and multiple interactions between the constructs of family influence, locus of control, career decision-making self-efficacy, and perceived success in college. Additionally, this study reports gender differences on the various constructs.

Research Questions

- 1) What are the typical levels of family influence, locus of control, career decision-making self-efficacy, and perceived success in underprepared college students?
- 2) How does family influence, locus of control, and career decision-making self-efficacy relate to perceived success in school among underprepared college students?
- 3) What are the differences by gender on family influence, locus of control, and career decision-making self-efficacy of underprepared college students?

Participants

This study was conducted at the University of Southern Indiana (USI) in Evansville, Indiana. USI is a mid-sized, public university, home to about 10,000 undergraduate and graduate students in 70 undergraduate majors and 11 graduate programs (USI, 2012). USI sits just outside of Evansville, Indiana. Evansville is the third largest city in Indiana with a population of about 120,000 and is located in the southwestern corner of the state bordering Kentucky and Illinois

(U.S. Census Bureau, 2010). The university consists of 62% women and 38% men, with 9% of students from a minority ethnic group. Of the student population, 25% live on campus, while 75% commute. USI has an open admission policy in which most in-state students with a high school diploma or GED are admitted without regard for high school grades or test scores (USI, 2011a). Admission is more selective for out-of-state students.

Before registering for classes at the university, students must take a placement exam to determine college ability level in math, English, and reading courses (USI, 2012). Math placement at USI is determined by the student's test score from the ACCUPLACER test (College Board, 2012). Students may be exempt from math placement if they enter the university with a math ACT above 29 or SAT score above 640 or if they have a high school grade point average of at least 3.0 and a math ACT score above 26 or math SAT score above 600. Students may also be exempt if they transfer into the university a college-level Algebra course.

Depending on their placement test scores, students may place into GENS 097 (Algebra Review), MATH 100 (Intermediate Algebra), MATH 111 (College Algebra), MATH 115 (Pre-Calculus), or MATH 230 (Calculus I). GENS 097 and MATH 100 are remedial courses. English placement at USI is determined by the student's high school rank percentile and critical reading and writing SAT or equivalent ACT scores. Students with a high school rank percentile of 51 percent or above and have an SAT critical reading score of 450 or above or have an SAT writing score of 450 or above will be placed into ENG 101 (Rhetoric and Composition I). In cases where ACT scores are submitted, the equivalent ACT scores will be used. If students do not place into ENG 101, students must take a written placement exam. English faculty members review the written placement exam to determine student placement into remedial courses.

Students may be placed into GENS 098 (Strategies for Writers) or ENG 100 (Introduction to Rhetoric and Composition). Reading placement is determined by ACT or SAT reading scores. Students are exempt from taking a remedial reading course if they have an ACT reading score above 17 or SAT reading score above 420. Students who transfer in 10 or more credit hours from another university or high school Advanced Placement courses are exempt from reading placement. Students who place into remedial reading courses must take one of two remedial reading courses: GENS 099 (Skills for College Reading) or GENS 151 (Academic Reading Strategies). All student placement into math, reading, and English courses is mandatory. Students must pass one course before taking the next. Therefore, students who place into GENS 097, 098, or 099 must pass these courses before moving on to MATH 100, ENG 100, or GENS 151. Once students pass these courses, they are considered ready for college-level work. The GENS 097, 098, and 099 courses do not count for college credit, but do count for financial aid and housing purposes. MATH 100, ENG 100, and GENS 151 all count as elective credits for students.

A total of 705 first-year students placed into at least one of the developmental courses of GENS 097, GENS 098, GENS 099, or GENS 151 during the spring of 2013. This number is a total of students who placed into one or more courses and accounts for the fact that many students placed into multiple developmental courses. All students who placed into at least one developmental course were considered part of the underprepared student population. These courses were chosen because they are housed within the University Division at the University of Southern Indiana, a department that granted me permission to survey students within these courses.

Procedure

All first-year freshmen who placed into the developmental classes of GENS 097, GENS 098, GENS 099, and GENS 151 were given the opportunity to complete the surveys. The researcher chose to limit the participants to first-year students who placed into remedial courses during the spring of 2013 due to ease of tracking and contacting these students. An a priori power analysis was conducted using G*Power 3.1.5 (Institut für Experimentelle Psychologie, 2012) using a conservative hypothesized squared multiple correlation of .1, and alpha of .05, and a statistical power of .80. It was found that a total of 90 participants would be needed to detect the effect. However, due to the access of this population, the researcher decided to collect a larger sample to make more generalizable inferences.

The researcher reproduced all surveys onto an online survey system. All participants took the surveys in the following order: Family Influence Scale (Fouad et al., 2010), Internality, Powerful Others, and Chance Scales (Levenson, 1981), Career Decision-Making Self-Efficacy Scale (Betz, Klein, & Taylor, 1996), and demographic questionnaire. The researcher chose to separate the Family Influence Scale and the Career Decision-Making Self-Efficacy Scale because both scales contain career-related questions. The demographic questionnaire was placed last because students may be fatigued at the end of the survey. The researcher visited GENS 097, GENS 098, GENS 099, and GENS 151 classes to explain the survey, invite students to participate, and explain that by participating they will be entered into a raffle to win one of two \$50 gift cards. Students in GENS 099 and GENS 151 classes had the opportunity to complete the surveys in class. Students in GENS 097 and GENS 098 classes completed the surveys outside of class on their own time. The survey took approximately 20 minutes for students to complete. When instructors allowed students to take the surveys in class,

the researcher e-mailed a link to the survey to the students prior to the class visit. For these classes, students had the option of taking the survey or working on other homework if they chose not to participate. For classes where this was not an option, the researcher sent an e-mail with a link to the survey to students after the class visit. Because students are not required to take the remedial courses they place into, the researcher sent an e-mail to all first-year students who placed into a remedial course. A total of three e-mails were sent to all students over a three-week period inviting students to participate in the survey. Participation in this study was voluntary, and students were made aware of this information. Students were not penalized or rewarded for participation choice.

Informed consent was obtained online at the start of the survey. At this time, students either agreed to participate and take the survey or did not agree and were directed away from the survey. Upon completion of the survey, participants were invited to enter their e-mail address to be entered into a raffle for one of two \$50 gift cards. No identifying information other than the e-mail address was collected from the participants. However, participants may be identified by their e-mail address. Thus, surveys are kept in a secure server through the University of Tennessee. Once data was downloaded by the researcher for analysis, e-mail addresses were separated from the survey data. Two participants were randomly chosen to receive the gift card and contacted via e-mail. After the winners received the gift cards, all e-mail addresses were deleted.

Instrumentation

Participants were asked to complete three surveys: the Family Influence Scale (Fouad et al., 2010), the Internality, Powerful Others, and Chance Scales (Levenson, 1981), and the Career

Decision-Making Self-Efficacy Scale – Short Form (Betz, Klein, & Taylor, 1996). Participants also completed a brief demographic scale.

Demographic Scale

The researcher created a demographic questionnaire (see Appendix A) to gather student information. Questions included those to determine the age and race/ethnicity of the student. The researcher chose to ask students what year (1st, 2nd, 3rd, 4th) they were in college rather than ask their status (freshmen, sophomore, junior, senior). Because status is determined by credit hours, students may not be aware of their exact status if they are on track to graduate in longer than four years. The researcher also included questions to determine if students were undecided or had a major and if they were transfer students. Additionally, students were asked to identify the individuals they primarily lived with during K-12 school and the educational attainment of their mother and father. The researcher also included a question to determine the number of developmental courses the students had taken or were taking. Finally, participants answered questions to determine their levels of perceived success in their current remedial course and in their ability to graduate with a four-year degree.

Family Influence Scale

According to Relational Career Theory (Blustein, 2011), family members and relationships influence an individual's career development. The Family Influence Scale (FIS, Fouad et al., 2010) was created to measure this influence. While other researchers created scales to measure family influence (e.g. Parent Support Scale and Sibling Support Scale), the FIS has some benefits. First, the FIS considers the influence of a larger range of family members than other scales, such as grandparents and siblings (Fouad et al., 2010). Additionally, this scale was created to be used with a range of age groups, from adolescents to adults.

The FIS (see Appendix B; Fouad et al., 2010) includes 22 items answered using a five-point Likert-type scale (1 = Strongly Disagree, 5 = Strongly Agree). Examples of scale items include: “My family expects me to select a career that has a certain status,” “My family discussed career issues with me at an early age.” Scoring requires reverse-scoring of two items (15 and 17), and includes four subscales: family expectations, emotional support, financial support, informational support. For this scale, family expectations means narrowed career choices based on family, culture, religion, or gender. Emotional support refers to support provided by family. Financial support means times when family provided material or money to support the individual’s education or career. Finally, the information support subscale refers to work and career information provided by family members. The scale also provides a total scale for family influence. Higher scores indicate a higher level of family influence on career development (Fouad et al., 2010).

Researchers developed the FIS in multiple stages (Fouad et al., 2010). First, they created an initial set of items based on a review of the literature. From this review of qualitative studies, the researchers developed a list of more than 10 themes related to family influence on career. Next, the researchers collapsed similar themes together and narrowed these themes down to five. The researchers then developed a 57-item questionnaire using a six-point Likert scale. They also included 14 reverse-scored questions within the 57-item total. The researchers piloted the assessment with 205 undergraduate students. Based on this pilot study, the authors retained 32 items: 10 informational support items with an internal consistency reliability of .79, eight emotional support items with an internal consistency reliability of .90, five financial support items with an internal consistency reliability of .79, and nine family expectations items with an internal consistency reliability of .85 (Fouad et al., 2010). Using a factor analysis, the authors

(Fouad et al., 2010) retained four of the five themes. The fifth theme, role models, was not presented as a distinctive theme.

In a second study to refine the FIS (Fouad et al., 2010), the researchers surveyed 537 individuals from a university, a technical college, a private university, and community centers that provide career services. The authors utilized the FIS in addition to the following scales to establish convergent and divergent validity: a career decision-making self-efficacy scale, a scale to assess life satisfaction, a parental attachment scale, and a scale assessing cultural individualism or collectivism. This second study resulted in an elimination of 10 more items, reducing the scale to 22 items. The researchers compared questions from the FIS with the appropriate scales and found that the scale correlated in expected ways demonstrating convergent validity. Fouad et al. (2010) found a Cronbach's alpha ranging from .82 to .89 on the various subscales showing appropriate reliability. For this study, internal reliability for the scale was .87. For the Informational Support subscale it was .90, for Family Expectation it was .47, for Financial Support it was .88, and Values/ Beliefs was .83.

Internality, Powerful Others, and Control Scale

The Internality, Powerful Others, and Control Scale (IPC) was created to measure internal locus of control and two dimensions of external locus of control. The IPC (Levenson, 1981) consists of 24 items and three subscales: Internality, Powerful Others, and Chance. The Internality subscale measures the extent to which individuals believe they have control over their lives. The Powerful Others subscale considers the extent to which individuals believe powerful others influence their lives. The Chance subscale measures the extent to which individuals believe chance influences their lives. The items are scored on a six-point Likert-type scale (Strongly Disagree to Strongly Agree). Examples of items include "I feel like what happens in

life is mostly determined by powerful people” and “When I get what I want, it’s usually because I’m lucky.” Scoring for the scale is based on the following system: -3 for *Strongly Disagree*, -2 for *Disagree*, -1 for *Slightly Disagree*, +1 for *Slightly Agree*, +2 for *Agree*, and +3 for *Strongly Agree*. For each scale, total scores are added to a constant of 24 to eliminate negative sums. The scale results in three scores ranging from 0-48 on each subscale. High scores indicate a belief in the source of control designated by the appropriate subscale. Individuals may score high or low on any of the subscales (Levenson, 1981).

The IPC Scale was created to further develop a scale based on the Rotter’s (1966) assessment of locus of control. While the scale created by Rotter (1966) is a one-dimensional scale ranging from external to internal locus of control, the scale created by Levenson (1981) added a second dimension of external locus of control that does not consider external control to be undesirable or maladjusted. The items were created based on adaptations from Rotter’s scale and other items created intentionally to tap beliefs about the operations measured by the three subscales. Levenson (1981) described five factors that distinguish the IPC from Rotter’s scale. First, the IPC uses a Likert-type scale rather than a forced-choice format which provides cleaner data. The IPC asks participants about their personal experiences rather than guessing the experiences of the general population. The IPC uses less ambiguous wording than Rotter’s scale. The IPC is set up so the items in one subscale are worded similarly to items in another subscale. Finally, the IPC has low social desirability bias (Levenson, 1981).

Levenson (1973) surveyed 165 individuals admitted to a state mental hospital. He surveyed participants within five days of their arrival at the hospital and then at monthly intervals during a seven-month period. Based on the sample, Levenson (1973) found a moderately high reliability for the scale. The coefficient alpha was .67 for the Internal subscale,

.82 for the Powerful Others subscale, and .79 for the Chance subscale. Other researchers also utilized Levenson's scale. Wilkinson (2007) surveyed 241 undergraduates and found a Chronbach's alpha of .55 (Internal), .75 (Powerful Others), and .72 (Chance). Finally, Hoffman, Novak, and Schlosser (2003) surveyed 2,100 individuals and found a Chronbach's alpha of .618 (Internal), .712 (Powerful Others), and .799 (Chance). In all studies and for all subscales, researchers found a Chronbach's alpha of above .5 indicating that the IPC is reliable. In this study, internal reliability was run for each scale. The Internality scale had a Cronbach's alpha of .55, Powerful Others a Cronbach's alpha of .79, and Chance had a Cronbach's alpha of .75.

Career Decision-Making Self-Efficacy Scale

Career decision-making self-efficacy refers to an individual's feeling of confidence in his or her ability to make a career decision. The CDSE-SF consists of 25 items and five subscales: Self-Appraisal, Occupational Information, Goal Selection, Planning, and Problem-Solving (Betz, Klein, & Taylor, 1996). Examples of scale items include "How much confidence do you have that you could use the internet to find information about occupations that interest you" and "How much confidence do you have that you could accurately assess your abilities." Responses are answered using a 5-level confidence continuum ranging from 1 (no confidence at all) to 5 (complete confidence). The score is determined by the sum total of all 25 items. Higher scores indicate higher levels of career decision-making self-efficacy.

Taylor and Betz (1983) created the original, 50-item Career Decision-Making Self-Efficacy Scale (CDSE) as an instrument to use for both counseling and research. From the CDSE, Betz, Klein, and Taylor (1996) created the Career Decision-Making Self-Efficacy Scale – Short Form (CDSE-SF). This short form was found to be as reliable as the longer assessment, but more useful for intervention and research purposes. The authors began the development of the

short form of the CDSE by deciding to eliminate five of the 10 items for each of the five subscales. They used the following criteria to determine if an item should be kept: substantive generality, item-own scale correlation above .50, loading on appropriate factor only, and recommendation for retention on a previously conducted split-scale analysis.

To determine reliability and validity for the scale, the researchers surveyed 81 male and 103 female students using the CDSE-SF, the Career Decision Scale (CDS, Osipow, 1987) and the My Vocational Situation Scale (MVS, Holland, Daiger, & Power, 1980). The coefficient alpha for the scale is .94, which indicated the scale has strong internal consistency reliability. Concurrent validity correlations with the comparison scales were mostly statistically significant with comparisons between the CDSE-SF and the CDSE producing as high or higher scores for the CDSE-SF.

The CDSE-SF was tested with other at-risk populations of undergraduate students. Chaney, Hammond, Betz, and Multon (2007) examined the reliability of the scale with African-American undergraduates. Using a sample of 220 students, the researchers found an internal consistency reliability for the five subscales of .81 (self-appraisal), .79 (occupational information), .85 (goal selection), .83 (planning), and .78 (problem solving). Gloria and Hird (1999) surveyed 687 undergraduate students using the CDSE-SF. They found a Cronbach's alpha of .95 for White participants and .97 for Racial and Ethnic minority students. These findings indicate that the scale is reliable for use with underprepared college students. For this study, internal reliability for the scale was a Cronbach's alpha of .95.

Data Analysis

Research Question 1: What are the typical levels of family influence, locus of control, career decision-making self-efficacy, and perceived success in underprepared college students?

For the first research question, descriptive statistics and frequencies were reported. For the FIS, both the scores from the subscales and the total scores were analyzed. For the IPC, the scores for the subscales were analyzed. For the CDSE-SF, the total score from the scale was analyzed.

For perceived success, two variables were reported: perceived success in courses and perceived success in college. Students answered questions about their perceived success in their remedial courses. Scores for this variable were reported per course. For the second variable, perceived success in college, scores for two questions were reported: likelihood to graduate from USI and likelihood to graduate from a 4-year college.

Research Question 2: How does family influence, locus of control, and career decision-making self-efficacy relate to perceived success in school among underprepared college students?

For the second research question, a stepwise multiple regression was run to see how family influence, locus of control, and career decision-making self-efficacy related to perceived success in graduating from USI and in graduating with a four-year degree. First-generation status was correlated with both questions assessing perceived success in college to determine a significant relationship. First-generation status was determined through two questions: one for mother or female adult in the household and one for father or male adult in household. If students answered that the adult did not graduate from high school nor had a high school

diploma, they were considered first generation. No significant relationship was found between first-generation status and the dependent variables. Therefore, first-generation status was not included into the regression model as a covariate in a stepwise multiple regression. Correlations were run on all variables.

Research Question 3: What are the differences by gender on family influence, locus of control, and career decision-making self-efficacy of underprepared college students?

Correlations and t-tests between the subscales were run first. A multivariate analysis of variance (MANOVA) was used to answer the third research question to see how males and females differ on the three variables. Three separate MANOVAs were run for each set of dependent variables: FIS, IPC, and CDSE-SF.

Chapter Four

Results

Chapter Four presents the statistical analysis and results of the study. First, the population is described. This is followed by the results for each of the three research questions.

Description of the Population

All first-year students who placed into GENS 097, 098, 099, and 151 were invited to participate in the survey via e-mail. Additionally, students who were currently enrolled in these courses also were invited to participate. Not all students enrolled were first-year students, thus the total number in the population is estimated to be approximately 705. One hundred and forty-nine students began the survey. Of these, nine were eliminated because they began the survey, but did not complete the majority of it, resulting in 140 completed surveys for a response rate of 19.9%. Of the students who completed the survey, 45.4% (59) were male and 54.6% (71) were female. Fifteen (11.5%) students were 18 years old, 45 (34.6%) students were 19 years old, 24 (18.5%) were 20 years old, 11 (8.5%) were 21 years old, 12 (9.2%) were 22 years old, 5 (3.8%) were 23 years old, and 18 (13.8%) were 24 years old or older. One hundred and seventeen (90%) students identified as being not of Hispanic origin. Four (3.1%) students identified as Mexican, Mexican American, or Chicano. One (.8%) student identified as Puerto Rican and two (1.5%) students were Cuban. Six (4.6%) students identified as being of another Hispanic, Latino, or Spanish origin. Of those who specified that origin, one wrote in Brazilian, two Saudi Arabia, one Arab, and one Guatemalan. Eighty-five (65.4%) students were White, 18 (13.8%) were African American, three (2.3%) were American Indian/ Alaska Native, five (3.8%) were Asian Indian, two (1.5%) were Chinese, eight (6.2%) identified as Other Asian, one (.8%) was Korean, and 24 (18.5%) identified as Other Ethnicity. Of the students who specified their race,

13 identified as Saudi Arabian, Arabic, or Middle Eastern, three identified as being of a mixed race, one Native American, one Mexican, one Indonesian, and one South American. Table 1 presents the gender, age, and race of the participants.

Table 1
Participant Descriptions

		<i>N</i>	%
Gender	Male	59	45.4
	Female	71	54.6
Age	18	15	11.5
	19	45	34.6
	20	24	18.5
	21	11	8.5
	22	12	9.2
	23	5	3.8
	24+	18	13.8
Race	White	85	65.4
	Black, African American, or Negro	18	13.8
	American Indian/ Alaska Native	3	2.3
	Asian Indian	5	3.8
	Chinese	2	1.5
	Other Asian	8	6.2
	Korean	1	.8
	Other	24	18.5
	Hispanic, Latino, or Spanish Origin	Mexican, Mexican American, or Chicano	4
Puerto Rican		1	.8
Cuban		2	1.5
Other		6	4.6

Eighty (57.1%) participants were in their first year in college, 28 (21.5%) were in their second year, nine (6.4%) were in their third year, 10 (7.7%) were in their fourth year, and three (2.3%) identified as being in another year. One hundred and four (80%) students claimed to have a major while 26 (20%) students claimed to not have a major. Twenty-three (18%) students transferred to USI. Eighty (60%) students reported living with both parents from kindergarten to

high school graduation, 10 (7.5%) students lived with a parent and stepparent, 32 (24%) lived with one parent, and 12 (9%) lived with a non-parent guardian. When asked to identify who they live with now, 36 (27%) identified living with both parents, 18 (13.4%) identified a single parent, 3 (2.2%) identified a parent and stepparent, 31 (23.8%) identified friends, eight (6.2%) identified living with a significant other, 23 (17.7%) lived alone, and 14 (10.8%) identified other. Fifty-six (43.4%) students indicated living on campus. Finally, students reported on the education attained by both their mother or the female adult in their home and their father or the male adult in their home. Of these, 45 (37%) of students had mothers who did not attend college and 54 (44.6%) of students had fathers who did not attend college. First-generation college students, as defined by neither parent attending college, consisted of 25 students (18.2%). Forty-eight (35%) students had parents who had some college, but no degree. Table 2 outlines participant descriptions related to education.

Table 2
Educational Descriptive Statistics

		<i>N</i>	%
Year in College	1 st	80	61.5
	2 nd	28	21.5
	3 rd	9	6.4
	4 th	10	7.7
	Other	3	2.3
Major	Yes	104	80
	No	26	20
Transfer to USI	Yes	23	18
	No	105	82
Primarily live with while in K-12 school	Both Parents	80	60
	Parent and Stepparent	10	7.5
	Single Parent	32	24
	Non-parent Guardian	12	9
Primarily live with now	Both Parents	36	27
	Single Parent	18	13.4
	Parent and Stepparent	3	2.2
	Friends	31	23.8
	Significant Other/ Partner	8	6.2
	Alone	23	17.7
	Other	14	10.8
Live on Campus	Yes	56	43.4
	No	73	56.6
No College	Mother	45	37
	Father	54	44.6
First Generation	Neither parent had any college	25	18.2
	Either parent had some college but no degree	48	35

Research Questions

Research Question One: What are the typical levels of family influence, locus of control, career decision-making self-efficacy, and perceived success in underprepared college students?

Descriptive statistics for all subscales and the total score of the Family Influence Scale, all scales of the Internality, Powerful Others, and Chance Scale, and the Career Decision-Making Self-Efficacy Scale – Short Form. For the Family Influence Scale, the mean score was 70.94

($SD= 11.71$). With higher scores indicating higher levels of family influence (110 being the highest), a mean of 70 was slightly above a mid-range score of 55. Scores for the subscales of the FIS were a mean of 29.43 ($SD= 7.62$) for the Informational Support subscale (high score of 48), 19.85 ($SD= 4.06$) for the Family Expectation subscale (high score of 36), 13.3 ($SD= 2.11$) for the Financial Support subscale (high score of 30), and 8.33 ($SD= 3.5$) for the Values/ Beliefs subscale (high score of 18). Based on the results, family appears to have a greater influence on providing informational support, moderate influence on family expectations, and lower influence through financial support and values and beliefs.

The IPC responses range from -3 to +3, with -3 being *Strongly Disagree* and +3 being *Strongly Agree*. To eliminate negative scores, 24 points were added to each. This resulted in scores ranging from 0 to 48 for each subscale with higher scores indicating a stronger belief in the source of power being assessed. Mean scores for the Internality Scale were 32.92 ($SD= 6.43$), 20.45 ($SD= 8.81$) for the Powerful Others Scale, and 21.54 ($SD= 8.7$) for the Chance Subscale. Based on the idea that higher scores indicate a stronger belief in type of control, these scores indicate that students seem to have higher levels of internal locus of control and moderate levels of control attributed to powerful others and chance.

Mean scores for the Career Decision-Making Self-Efficacy Scale – Short Form were 3.74 (.72). For the CDSE-SF, higher scores indicate higher levels of career decision-making self-efficacy with a high score of 5. Based on the idea that higher scores indicate stronger self-efficacy beliefs, underprepared college students appear to be fairly confident in their ability to make career decisions.

Perceived success in courses was measured for each developmental course with a score of 1 being *Very Unlikely*, 2 being *Unlikely*, 3 being *Unsure*, 4 being *Likely*, and 5 being *Very*

Likely to succeed. The mean score for GENS 097 was 4.54 ($SD = .85$), for MATH 100 was 4.19 ($SD = 1.04$), for GENS 098 was 4.41 ($SD = .94$), for ENG 100 was 4.41 ($SD = 1.03$), for GENS 099 was 4.53 ($SD = .8$), and for GENS 151 was 4.58 ($SD = .87$). Overall, students felt they were likely to very likely to successfully complete their remedial coursework. Perceived success in college was measured through the likelihood of the student to return to USI with a mean score of 3.88 ($SD = 1.3$) out of a possible high score of 5 and the likelihood of the student to graduate from a 4-year college with a mean score of 4.2 ($SD = 1.14$) with a possible high score of 5. For both measures of perceived success in college, descriptive statistics were also run for only first- and second-year students. For first- and second-year students, students scored a mean of 3.81 on likelihood of graduating from USI and a mean of 4.16 for likelihood of graduating from a four-year college. Thus, scores were not influenced significantly by the presence of older students in the sample. Generally, students felt likely to graduate from college. However, students scored slightly lower in their perceived likelihood to graduate from USI than from a four-year college. Table 3 contains the means and standard deviations for each of the measures.

Table 3
Descriptive Statistics

	<i>N</i>	<i>M</i>	<i>SD</i>
Family Influence Scale	117	70.94	11.71
Informational Support	132	29.43	7.62
Family Expectations	130	19.85	4.06
Financial Support	132	13.3	2.11
Values/ Beliefs	133	8.33	3.5
Internality	119	32.92	6.43
Powerful Others	117	20.45	8.81
Chance	125	21.54	8.7
Career Decision-Making Self-Efficacy	115	3.74	.72
Perceived Success in Courses			
GENS 097	89	4.54	.85
MATH 100	85	4.19	1.04
GENS 098	71	4.41	.94
ENG 100	80	4.41	1.03
GENS 099	74	4.53	.8
GENS 151	102	4.58	.87
Perceived Success in College			
Likely to Graduate from USI	130	3.88	1.3
Likely to Graduate from 4-year College	130	4.2	1.14

Research Question Two: How does family influence, locus of control, and career decision-making self-efficacy relate to perceived success in school among underprepared college students?

A stepwise statistical multiple regression was completed to determine how the independent variables of family influence, locus of control, and career decision-making self-efficacy related to the dependent variable of perceived success in school. Subscales and the total score for the FIS, all scales of the IPC, and the total score for the CDSE-SF were included in the analysis. For the first measure of perceived success, likelihood of graduating from USI, no significant relationships were found. For the second measure of perceived success, likelihood of graduating from a 4-year college, no significant relationships were found.

In the multiple regression, correlations for all variables were run to determine if there were any significant relationships. Several significant relationships were found between the different scales of the IPC and the subscales of the FIS. Powerful Others was related to Family Expectations ($r = .217$), Financial Support ($r = .491$), and Values/ Beliefs ($r = .288$). Chance was related to Family Expectations ($r = .185$), Financial Support ($r = .472$), and Values/ Beliefs ($r = .236$). This indicates that higher scores on the scales of Family Expectations, Financial Support, and Values/ Beliefs are related to higher levels of external control by Powerful Others and Chance. Significant relationships were also found with the CDSE-SF. Career decision-making self-efficacy was related to Informational Support ($r = .245$) of the FIS and Internality ($r = .436$) of the IPC. Thus, higher levels of career decision-making self-efficacy are related to higher levels of information support from family and higher levels of internal locus of control. Table 4 displays the Pearson Correlation and significance levels for each relationship.

Table 4
Correlation Matrix

	IS	FE	FS	V/B	FIS	Intern	Power Others	Chanc	CDSE	Grad USI
FE	.501									
FS	.066	.385								
V/B	.107	.313	.663							
FIS	.830	.807	.220	.535						
Intern	.151	.170	-.008	-.018	.115					
Power Others	.136	.217*	.491**	.288**	.272	.091				
Chanc	.035	.185*	.472**	.236**	.176	.148	.637			
CDSE	.245**	.156	-.183	-.132	.173	.436**	-.185	-.178		
Grad USI	.053	.093	.158	-.007	.040	.077	.021	.080	.080	
Grad 4-year	.149	.036	.133	-.063	.063	.085	.019	.051	.051	.530**

Note. ** = Correlation is significant at the .01 level (two-tailed), * = Correlation is significant at the .05 level (two-tailed)

IS = Informational Support subscale; FE = Family Expectation subscale; FS = Financial Support subscale; V/B = Values/Beliefs subscale; FIS = Family Influence Scale; Intern, Power Others, and Chanc = Internality, Powerful Others, and Chance Scales; CDSE = Career Decision-Making Self-Efficacy Scale; Grad USI = Likelihood to graduate from USI; Grad 4-year = Likelihood to graduate in 4 years

First-generation status was considered as a covariate by first running correlations between those students considered first-generation college students and the two questions determining perceived success in college. Based on the results, there were no statistically significant differences and so first-generation college student status was not run as a covariate in the stepwise/ statistical multiple regression.

Research Question Three: What are the differences by gender on family influence, locus of control, and career decision-making self-efficacy of underprepared college students?

To determine differences by gender on the independent variables of FIS, IPC, and CDSE-SF, separate MANOVAs were run. For the FIS, a non-significant main effect between gender groups on FIS subscales was found, $F(4, 106) = 1.95, p = .11, \eta^2 = .07, \text{power} = .57$. Table 5 shows the means and standard deviations for each of the subscales. The means for Informational Support were very similar. For the remaining subscales and the total score, slight differences in the means by gender were found.

Table 5
Descriptive Statistics by Gender for FIS

	Informational Support	Family Experience	Financial Support	Values and Beliefs	Total
Male	29.73(6.7)	20.52(4.4)	13.63(1.6)	8.44(3.5)	71.85(15.05)
Female	29.97(7.9)	19.19(3.7)	12.83(2.2)	7.75(3.4)	67.44(13.33)

Note. FIS = Family Influence Scale

For the IPC, a non-significant main effect was found, $p = .756$. Slight differences in the means were found for the Internality and Powerful Others scales. However, for the Chance scale, means were very similar. Finally, for the CDSE-SF, a non-significant difference was found, $p = .064$. The mean scores of men and women for the CDSE-SF were similar. Table 6 shows the means and standard deviations for the IPC scales and the CDSE-SF. Overall, there were no significant differences by gender on the FIS, IPC, and CDSE-SF.

Table 6
Descriptive Statistics by Gender for IPC and CDSE-SF

	Internality	Powerful Others	Chance	CDSE-SF
Male	32.1(7.67)	22(8.98)	21.81(9.21)	3.6(.79)
Female	33.28(4.97)	19.31(8.73)	21.29(8.27)	3.85(.65)

Note. IPC = Internality, Powerful Others, and Chance Scales; CDSE-SF = Career Decision-Making Self-Efficacy Scale – Short Form

Summary of Findings

For the first research question, descriptive statistics reported demographic information about the population as well as scores for the subscales and total scale of the FIS, subscales of the IPC, and total score of the CDSE-SF. For the second research question, financial support from family, a subscale of the FIS, was the only variable with a significant relationship to perceived success as measured by likelihood to graduate from USI. Finally, for the third research question, no significant effects were found.

Chapter 5

Discussion

This chapter discusses the implications resulting from the data analysis. First, a summary of the research is given. Next, the demographic information is discussed. The results of the analysis of the three research questions are described. Finally, implications of the research and practice, and limitations, are described.

Summary of the Research

The purpose of this study was to explore the career development of underprepared college students using Relational Career Theory as a framework. Specifically, the variables of family influence, locus of control, career decision-making self-efficacy, and perceived success in college were explored. The scales used in the study were the Family Influence Scale (FIS; Fouad et al., 2010), the Internality, Powerful Others, and Chance Scale (IPC; Levenson, 1981), and the Career Decision-Making Self Efficacy Scale – Short Form (CDSE-SF; Betz, Klein, & Taylor, 1996). Additionally, a demographic questionnaire included questions of age, gender, race, who students lived with during kindergarten to high school graduation, who students live with now, first-generation status separated by parent, and perceived success in college.

Because of the limited research on the population and the theory, the first intent of the study was to describe underprepared college students. Therefore, the first research question focused on describing the population through demographic information and reported scores for each scale, and subscales of the FIS and IPC. The second research question sought to add to the understanding of the relationship of family influence, locus of control, and career decision-making self-efficacy to perceived success in college. First-generation status was explored as a covariate, but no relationship was found for perceived success. Finally, the third research

question explored differences by gender on the variables of family influence, locus of control, and career decision-making self-efficacy.

Understanding the Population

Demographic information collected in the survey confirms some information already known about underprepared college students. Research suggests that underprepared college students are more likely to be of a racial or ethnic minority (Adams et al., 2012). The findings from this study are consistent with these reports. The student population at USI consists of 9% of students from an ethnic minority. However, the sample of underprepared college students who participated in this study consisted of 34.6% of students from an ethnic minority. This indicates that students of an ethnic minority are overrepresented in developmental courses at the university. Another finding of note in the demographic data is that of student age. While the majority of students surveyed were of traditional age, 18-23, 13.8% of students were 24 years or older. While not a statistically significant finding, this number is noteworthy for individuals working with underprepared college students.

Finally, 80% of students surveyed reported having a major. In terms of career counseling, this number is significant. Many career counselors and career theories focus on fitting individuals with careers (Pope, 2000). If the majority of underprepared college students have chosen a major or career, then traditional person-environment fit (e.g., Holland, TWA, Super) career theories may not be the best approach to working with decided students in this population. Because underprepared students face others career issues, such as lacking in career information (Ladany et al., 1997), RCT provides a different framework for career counseling practice. RCT provides a lens through which counselors can consider the interaction of locus of control, family, and career. For example, rather than focus specifically on interests and the

individual, career counselors could ask about family and culture. Using the FIS (Fouad et al., 2010) as a guide, counselors could seek out information about financial and information support from family and about family expectations and values. Lower influence of family influence could indicate that counselors might need to assist students in finding financial support or information. Higher levels of family influence could lead counselors to determine how individuals perceive family influence and how this influence is impacting career. Traditional career theories can be included in work with underprepared students who might be undecided. However, including RCT into practice can increase the depth of understanding counselors have of students.

Underprepared college students are likely to also be first-generation college students. For this study, students were asked the education level of each parent. First-generation status was first determined based on no college for each parent. Eighteen percent of students reported that neither parent had attended college. Next, first-generation status was calculated based on neither parent with an earned college degree. Thirty-five percent of students reported that neither parent had a college degree. These findings suggest that many underprepared college students are also first-generation college students. As the literature suggests, underprepared college students are likely to be first-generation college students (Terenzini, Springer, Yaeger, Pascarella, & Nora, 1996) as well as from a lower socioeconomic status and of a racial or ethnic minority (Adams et al., 2012). Based on these demographic results, the participants in this study are similar to underprepared students in general.

In this study, perceived success in courses and in college was measured. Students were asked to score how likely they were to pass their developmental courses. Average student responses on all developmental courses were a four or above, with an overall average of 4.44. A

rating of one indicated very unlikely to pass, while a rating of five indicated very likely to pass. Thus, these underprepared college students seem to feel confident in their abilities to pass their developmental courses. Students were also asked how likely they are to succeed in college. This was measured through a question asking their likelihood to graduate from USI and a question asking their likelihood to graduate from a four-year college. The average score for student responses to the question about their likelihood to graduate from USI was a 3.88 ($SD=1.3$). The average score in response to the question about student likelihood to graduate from a four-year college was a 4.2 ($SD=1.14$). Scores were run with only first- and second-year students to eliminate the possibility that older students close to graduation might have skewed the results. Mean scores remained nearly the same without the older students, indicating that all underprepared college students believe they are likely to graduate from college.

While scores for student's long-term perceived success were still relatively high, these scores were lower than the average score for immediate success in coursework. In particular, students seemed least confident in their likelihood to graduate from USI. Overall, however, students were relatively confident in their ability to pass their classes and graduate. These beliefs differ from the reality. The four-year graduation rate at USI is 14% and the six-year graduation rate is 32% (USI, 2011b). These graduation rates show that the majority of students will not be graduating from USI. Additionally, graduation rates for underprepared college students in general are low with only 35.1% of students graduating in six years (Adams et al., 2012). Based on this information, underprepared college students appear to be unrealistic about their ability to succeed in college. This finding supports qualitative research conducted by Deil-Amen and Rosenbaum (2002). The researchers found that students were unaware of their remedial placement and failed to consider more realistic options. In this study, underprepared students

may be unaware of how remedial coursework impacts their academic progression and, thus, their career development. The students who participated in this study may also be more likely to succeed than students who did not participate. For this study, data was collected midway through spring semester. Students who are attending class and checking their school e-mail accounts at this point are exhibiting behaviors that might make them successful in classes. Additionally, the majority of participants were first-year college students and may be overly confident because they are enrolled in remedial coursework and other introductory classes. Future research might explore perceived success in second-year students who may have a better idea of what college-level coursework entails. When working with underprepared college students with unrealistic beliefs, career counselors could focus on providing accurate information about careers, graduate programs, and academic policies at the university. Counselors might also provide students with information about how remedial coursework can impact their career. Finally, career counselors can work with students on developing alternative or parallel academic and career plans in addition to their potentially unrealistic goals. Underprepared students have high levels of confidence in their ability to succeed, but these beliefs may be unrealistic or uninformed.

Relational Career Theory

Relational Career Theory considers the impact that family has on career development. This theory is the first to view family as part of career development (Richardson, 1993). Theorists view career development as created by language and through social interactions (Blustein, 2011). Thus, family helps to create what individuals know about careers. This new and developing theory has been explored in the literature through various qualitative studies. However, relatively few quantitative studies use a framework of RCT to explore career

development. The Family Influence Scale is the only scale that directly measures the influence of family on careers. The other scales in the study, the Internality, Powerful Others, and Chance scale, and the Career Decision-Making Self-Efficacy Scale – Short Form have a more indirect connection to RCT in the literature. The discussion below seeks to better understand underprepared college students as well as RCT.

Family Influence

The Family Influence Scale (Fouad et al., 2010) measures the influence of family on career development. The scale consists of four subscales: Informational Support, Family Expectations, Financial Support, and Values/ Beliefs. With the FIS, higher scores indicate higher levels of family influence. The highest score would be a 110. In this study, the mean was 70.94 ($SD=11.71$). This score seems to indicate that family plays a slight influence in career development, but not a strong one.

Upon closer look at the four subscales, the influence of family on career gains some clarity. On the subscale of Informational Support, the mean was 20.43($SD=7.62$) out of a possible high score of 48. While a score of 24 would be middle-range, students in this study scored below 24. Thus, underprepared college students do not appear to receive high levels of information from their parents and families about career development. This finding supports research that at-risk college students receive less information about occupations (Ladany et al., 1997). For the Family Expectation subscale, participants averaged a score of 19.85 ($SD=4.06$) out of a possible high score of 36. This score seems to indicate a moderate level of family expectations on career. Whiston and Keller (2004) found that family influences career development. Their findings indicated that positive family expectations influenced career positively and negative expectations influenced career negatively. Though the current results do

not specify positive or negative family expectations, they do indicate that family may have an impact on career development. The third subscale, Financial Support, might indicate a lower than average level of financial support for career development with a mean score of 13.3 ($SD=2.11$) out of 30 possible. Based on the literature, more financial support is related to college retention (Hoyt, 1999). Therefore, underprepared college students may be less likely to graduate from college because of this lack of financial support. Finally, for the Values/ Beliefs subscale, the average score was 8.33 ($SD=3.5$) out of 18. This score was about average, implying that the values and beliefs of parents and family have a moderate impact on career development of underprepared college students. This fits with what research has shown about adolescent development. At this age, adolescents begin to develop and differentiate from their parents (Steinberg & Morris, 2001), thus explaining lower levels of influence from family related to values and beliefs. Based on the results, underprepared college students appear to receive limited support from family for the career development in the areas of information and finances.

Locus of Control

The Internality, Powerful Others, and Chance Scales (Levenson, 1981) measure how an individual perceives control over his or her life. Specifically, the Internality scale measures how much control individuals believe they have in their own lives. In this study, underprepared college students had a mean score of 32.92 ($SD=6.43$) out of a possible 48. With a median of 24, these scores appear to imply that students have higher than average levels of internal locus of control. Research suggests that high levels of an internal locus of control are positively related to career development (Bacanli, 2005; Powell & Luzzo, 1998). These findings differ from the literature on locus of control of underserved groups. Lachman and Weaver (1998) found that individuals from lower social classes exhibited lower internal locus of control than individuals

from higher social classes. Because underprepared college students are likely to be of a lower SES, practitioners might assume they possess lower internal control. However, this study indicates that underprepared college students may have higher than average levels of internal control.

The Powerful Others and Chance scales measure two different aspects of external control. The Powerful Others scale measures control of outside forces, particularly control from outside people, on an individual's life. Underprepared college students scored 20.45 ($SD=8.81$) out of 48 on the Powerful Others scale. The Chance subscale measures how much control an individual thinks that luck or chance has on his or her life. For this study, participants scored 21.54 ($SD=8.7$) out of a possible 48. Therefore, underprepared college students appear to have moderate levels of external control. Previous research demonstrated higher levels of external control in individuals from a lower socioeconomic status (Lachman & Weaver, 1998). Underprepared college students appear to have moderately high levels of internal control and moderate levels of the two types of external control. As mentioned above, internal control has been linked to positive career development in the literature, while external control have been considered as moderators to career (Duffy & Dik, 2009). However, Duffy and Dik (2009) propose that external factors, such as family, may be part of career development rather than negatively impact it. The moderate levels of both external control and the moderately high levels of internal control suggest that underprepared college students may believe they have control over their career, but also seem to be aware of external factors, such as family, that may influence career development.

Career Decision-Making Self-Efficacy

The Career Decision-Making Self-Efficacy Scale – Short Form (Betz, Klein, & Taylor,

1996) measures an individual's level of confidence in making career decisions. Higher scores indicate more confidence with a high score of 5. In this study, underprepared college students had a mean score of 3.74. These scores indicate that underprepared college students score moderately high on career decision-making self-efficacy. For comparison, Chaney, Hammond, Betz, and Multon (2007) reported a mean of 4 for African-American college students and a mean of 3.8 for Caucasian college students. Underprepared college students score similarly to other populations on career decision-making self-efficacy. Based on the results, underprepared college students seem to have confidence in their abilities to make career decisions. Research suggests that higher levels of attachment to parents and family influence may result in higher levels of career decision-making (Germeijs & Verschueren, 2009; Hargrove, Creagh, & Burgess, 2002; Wolfe & Betz, 2004). Relational theorists suggest that family members may be part of the career decision-making process (Duffy & Dik, 2009). Based on the findings from this study, career decision-making self-efficacy related to informational support from family. Thus, when family members provide information to underprepared college students, this may increase their confidence in their ability to make career decisions. When working with underprepared college students, counselors should consider parents to be a resource for career information rather than a barrier to career development.

Explaining Perceived Success

Academic success is related to career choices and career success (United States Bureau of Labor Statistics, 2013). Therefore, understanding how the RCT constructs of family influence, locus of control, and career decision-making self-efficacy interact with perceived success in college can help us better understand underprepared college students. Underprepared college students also are more likely to be from a low SES (Adams et al., 2012), of a racial or ethnic

minority status (Adams et al., 2012), or a first-generation college student (Hoyt, 1999). Therefore, these factors may confound the relationship between the variables and perceived success. Because USI is predominantly white, the research did not consider ethnicity as a covariate. The research did consider first-generation status as a possible covariate in determining the relationship between the RCT variables and perceived success. However, no relationship was found between first-generation status and perceived likelihood to graduate from USI and from a four-year college. Additionally, no relationship was found overall between RCT constructs and perceived success. This lack of relationship could be due to the restricted range of responses for perceived success in college (Bobko, Roth, & Bobko, 2001). Because participants scored similarly on questions of perceived success, the regression analysis could have been affected and, therefore, did not show relationships. Additionally as mentioned above, students who participated in this study might be more likely to succeed than those who did not participate. As data was collected midway through the spring semester, students had successfully completed one semester of courses and were halfway through a second semester. No research has looked specifically at perceived success and Relational Career Theory. However, Whiston and Keller (2004) reported various influences of family on career, including both positive and negative relationships and no relationships. Additionally, this lack of relationship may be due to unrealistic beliefs of perceived success of underprepared college students.

Though RCT was not found to be a predictor of perceived student success, significant findings from the multiple regression do help to better explain RCT. First, external locus of control was related to different aspects of family influence. When students had higher levels of family expectations, financial support, and influence from values and beliefs, they indicated

higher levels of external control attributed to powerful others and chance. One of the main tenets of RCT is that family does impact career development (Blustein, 2011). Duffy and Dik (2009) theorized that family influence may be related to external locus of control and, thus, serve as a moderator for career development. These findings support this suggestion. Additionally, career decision-making self-efficacy was found to be related to informational support from family and internal locus of control. Again, Duffy and Dik (2009) suggested that family may serve as a moderator to career development. By providing information about careers to underprepared college students, family members may be helping their students feel more confident in their ability to make career decisions. Feeling more confident in career decision-making is also related to higher levels of internal control which has been related to positive career development (Bacanli, 2005; Powell & Luzzo, 1998). The findings from this study indicate relationships between the different RCT constructs of family influence, locus of control, and career decision-making self-efficacy.

Influence of Gender

Men and women appear to interact and be affected by family in different ways (Whiston & Keller, 2004). Because of these differences, this research sought to explore how gender differences could be defined in terms of Relational Career Theory. No significant differences were found between men and women on locus of control, family influence, and career decision-making self-efficacy. This differs from research that suggests that in terms of attachment, men and women may exhibit differences (Kenny & Donaldson, 1991; Lopez, Campbell, & Watkins, 1988). Further research could help to better explore this area.

Limitations

The first limitation of this research is the population being studied. Previous research indicates that underprepared college students who attend their developmental classes are successful in them (Goldrick-Rab, 2010). However, many students do not complete their developmental courses (Adams et al., 2012). For this study, students were surveyed in the middle of spring semester in class and via their campus e-mail accounts. So the population is limited to students who have already successfully completed a semester and who are attending their developmental classes or are checking their campus e-mail accounts. Students not attending or enrolled in the developmental classes were not introduced to the study in person and may not know how to access their campus e-mail accounts. Thus, the study is limited to students who are already demonstrating success in their courses. A second limitation of the study is that perceived success in college was measured rather than actual success. Students' perceptions and intentions may be different than what actually happens. Finally, the small number of participants and participants from just one university are limitations. Because of the limited participants, researchers may not be able to generalize the results of this study.

Implications for Practitioners

Career counselors working with underprepared college students can utilize the findings from this study in various ways. First, underprepared college students are likely to be of a racial or ethnic minority and may be of a non-traditional age for a college student. These factors bring about specific considerations for career counselors that might be addressed through RCT. RCT was developed to consider the impact that culture and family has on career (Blustein, 2011). By discussing these factors with clients, career counselors can work with clients to understand how culture and family affects career. Second, based on these results, underprepared college students

may not be undecided. Thus, career counselors may not need to only address career choice in counseling sessions. By utilizing more modern career counseling approaches, counselors can better understand the client's needs and levels of support from family and then work with the client to develop goals for counseling outside of career and major decision-making. For example, through RCT (Blustein, 2011), counselors can address outside influences on career to better understand their clients goals and needs. Another approach, Narrative Theory (Savickas, 2011), can help counselors work with their clients to consider family and cultural influences on past and present decision-making.

Findings from this study indicate that underprepared college students might receive lower levels of financial support from family. Research suggests that students from lower SES backgrounds exhibit less positive career activities in college (Walpole, 2003). Students who receive less support financially from parents may have to work outside of school and focus less on academics. Knowing that underprepared college students are likely to need additional financial assistance, career counselors can help students find part-time employment related to their career interests. Additionally, career professionals might develop partnerships with employers more understanding of students' academic responsibilities. Finally, career counselors can help prepare underprepared college students for professional employment.

In this study, underprepared college students perceived themselves as likely to graduate from college. This differs greatly from the retention rates of USI (USI, 2010) and the graduation rates of underprepared college students (Adams et al., 2012). Therefore, career counselors and other practitioners may need to help underprepared college students understand the reality of their academic situation. According to Deil-Amen and Rosenbaum (2002), underprepared college students may not understand the implications of being remediated. Therefore, career

counselors working with underprepared students should understand remediation and academic policies themselves. They can do this by providing information to students and family members. Also, career counselors may need to provide realistic information about graduation rates, graduate and professional school admissions, and employment opportunities. When meeting with underprepared college students, career counselors should ensure that students understand what remediation means and how this may impact their academic and career development.

This study has some specific implications for the impact of family on career. Relationships were found between external locus of control and family influence. Duffy and Dik (2009) suggested that this influence may moderate career development. Rather than considering family to be a negative influence on career development, career counselors can incorporate this influence into counseling with underprepared college students. By discussing the influence of family on career, counselors can better understand their clients as well as encourage better awareness in their clients. Career counselors and academic advisors could also communicate more openly with parents about academic policies and career development. Because the findings of this study indicate a relationship between information from family and career decision-making self-efficacy, practitioners can strive to ensure that family members provide accurate career information to underprepared college students. Additionally career decision-making self-efficacy was linked to internal locus of control and informational support. Underprepared college students reported high levels of career decision-making self-efficacy as well as internal locus of control. Because this is linked to high levels of career information received from parents, career counselors should be aware of the information received from family and the impact that it has on development. In practice, career counselors can talk about the career information underprepared college students receive from family and ensure that this

information is accurate. Family influence, locus of control, and career decision-making self-efficacy are clearly linked in underprepared college students. By understanding these interactions, practitioners can better work with underprepared college students.

Future Research

This study sought to provide more information about underprepared college students and Relational Career Theory. More research can further support this theory and population. First, underprepared college students indicated high perceptions of success that do not fit with the real graduation rates of this population and of the USI student population. Further research could focus on these high perceptions to better understand where they come from and what they mean. Underprepared college students also reported higher levels of career decision-making self-efficacy. Research exploring the relationship of perceived success and career decision-making self-efficacy in underprepared college students could increase understanding of the beliefs and attitudes of this population. Finally, underprepared college students are likely to be from lower SES backgrounds, first-generation college students, and of a racial minority. These characteristics impact career development. Research further could work to determine specific impacts of remedial courses that are not caused by these co-occurring characteristics. Further research on underprepared college students is necessary to better serve this population.

Relational Career Theory is a new theory with little empirical research to support it. Further research could add to the theory. First, the FIS (Fouad et al., 2010) measures support rather than influence. To better understand how family influences career, research utilizing a measure of influence could add to the literature. The findings of this study indicate a relationship between locus of control and family influence. Further research could elaborate on this relationship to better understand RCT. Additionally, underprepared college students appear

to have higher than mid-range internal control, but also exhibit slightly higher than mid-range levels of external control. Research exploring the impact of external control on career development in terms of its relationship to family influence could increase understanding of locus of control.. Additionally, further research exploring gender differences in the different constructs of RCT would be beneficial. In this study, a low number of participants influenced the results, but indicated there may be a difference.

Summary

This study explored Relational Career Theory as it explains the career development of underprepared college students, the relationship of RCT constructs to perceived success in college, and differences in responses by gender. The reported demographics of the population support previous research in that a large percent of students were of a racial minority and were first-generation college students. Though RCT was not found to be a predictor of perceived student success, significant relationships between the various RCT constructs were found to better support the theory. Finally, no differences in scores by gender were found, possibly due to a low number of participants.

References

- Adams, P., Adams, W., Franklin, D., Gulick, D., Gulick, F., Shearn, E., ... Mireles, S. V. (2012). Remediation: Higher education's bridge to nowhere. Retrieved from http://www.insidehighered.com/sites/default/server_files/files/CCA%20Remediation%20ES%20FINAL.pdf
- Attewell, P., Lavin, D., Domina, T., & Levey, T. (2006). New evidence on college remediation. *The Journal of Higher Education*, 77(5), 886-924. Doi: 10.1353/jhe.2006.0037
- Aud, S., Hussar, W., Kena, G., Bianco, K., Frohlich, L., Kemp, J., & Tahan, K. (2011). *The condition of education 2011 (NCES 2011-033)*. U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Bacanli, F. (2006). Personality characteristics as predictors of personal indecisiveness. *Journal of Career Development*, 32(4), 320-332. Doi: 10.1177/0894845305282941
- Bahr, P.R. (2010). Preparing the underprepared: An analysis of racial disparities in postsecondary mathematics remediation. *The Journal of Higher Education*, 8, 209-237. Doi: 10.1353/jhe.0.0086
- Baiocco, R., Laghi, F., & D'Alessio, M. (2009). Decision-making style among adolescents: Relationship with sensation seeking and locus of control. *Journal of Adolescence*, 32(4), 963-976. Doi: 10.1016/j.adolescence.2008.08.003
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. Retrieved from <http://www.apa.org/pubs/journals/rev/index.aspx>
- Barbatis, P. (2010). Underprepared, ethnically diverse community college students: Factors

contributing to persistence. *Journal of Developmental Education*, 33(3), 14-24.

Retrieved from <http://ncde.appstate.edu/publications/journal-developmental-education-jde>

Bassot, B. (2012). Career learning and development: a social constructivist model for the twenty-first century. *International Journal for Educational and Vocational Guidance*, 12(1), 31-42. Doi: 10.1007/s10775-012-9219-6

Bettinger, E. P. & Long, B. T. (2009). Addressing the needs of underprepared students in higher education: Does college remediation work? *Journal of Human Resources*, 44(3), 736-771. Doi: 10.1353/jhr.2009.0033

Betz, N. E., Klein, K. L., & Taylor, K. M. (1996). Evaluation of a short form of the Career Decision-Making Self-Efficacy Scale. *Journal of Career Assessment*, 4, 47-57. Doi: 10.1177/106907279600400103

Betz, N. E. & Luzzo, D. E. (1996). Career Assessment and the Career Decision-Making Self-Efficacy Scale. *Journal of Career Assessment*, 4(4), 413-428. Doi: 10.1177/106907279600400405

Betz, N. E., Klein, K. L., & Taylor, K. M. (1996). Evaluation of a short form of the career decision-making self-efficacy scale. *Journal of Career Assessment* 4(1), 47-57. Doi: 10.1177/106907279600400103

Betz, N. E. & Voyten, K. K. (1997). Efficacy and outcome expectations influence career exploration and decidedness. *The Career Development Quarterly*, 46(2), 179-189. Doi: 10.1002/j.2161-0045.1997.tb01004.x <http://dx.doi.org/10.1002/j.2161-0045.1997.tb01004.x>

Blustein, D. L. (2001). The interface of work and relationships: Critical knowledge for 21st

- century psychology. *The Counseling Psychology*, 29(2), 179-192. Doi: 10.1177/0011000001292001
- Blustein, D. L. (2011). A relational theory of working. *Journal of Vocational Behavior*, 79(1), 1-17. DOI: 0.1016/j.jvb.2010.10.004
- Blustein, D. L., Fama, L. D., White, S. F., Ketterson, T. U., Schaefer, B. M., Schwam, M. F.,... Skau, M. (2001). A qualitative analysis of counseling case material: Listening to our clients. *The Counseling Psychologist* 29(2), 242-258. Doi: 10.1177/0011000001292004
- Blustein, D. L., Medvide, M. B., & Kozan, S. (2011). A tour of a new paradigm: Relationships and work. *The Counseling Psychologist*, 40(2), 243-254. Doi: 10.1177/0011000011429032
- Blustein, D. L., Schultheiss, D. E. P., & Flum, H. (2004). Toward a relational perspective of the psychology of careers and working: A social constructionist analysis. *Journal of Vocational Behavior*, 64(3), 423-440. Doi:10.1016/j.jvb.2003.12.008
- Blustein, D. L., Walbridge, M. M., Friedlander, M. L., & Palladino, D. E. (1991). Contributions of psychological separation and parental attachment to the career development process. *Journal of Counseling Psychology*, 38(1), 39-50. Doi:10.1037//0022-0167.38.1.39
- Bobko, P., Roth, P. L., & Bobko, C. (2001). Correcting the effect size of *d* for range restriction and unreliability. *Organizational Research Methods*, 4(1), 46-61.
<http://www.sagepub.com/salkind2study/articles/10Article01.pdf>
- Bueschel, A.C. (2009). The landscape of policies and practices that support student preparation and success. *New Directions for Community Colleges*, 145, 1-10. Doi: 10.1002/cc
- Bullers, S. (1999). Selection effects in the relationship between women's work/family status and perceived control. *Family Relations*, 48(2), 181-188. Doi: 10.2307/585082

- Byrd, K. L. & MacDonald, G. (2005). Defining college readiness from the inside out: First-generation college student perspectives. *Community College Review*, 33(1), 22-37. Doi: 10.1177/009155210503300102
- Chaney, D., Hammond, M. S., Betz, N. E., & Multon, K. D. (2007). The reliability and factor structure of the Career Decision Self-Efficacy Scale – SF with African Americans. *Journal of Career Assessment*, 15(2), 194-205. Doi: 10.1177/1069072706298020
- Chen, X. (2005). *First Generation Students in Postsecondary Education: A Look at Their College Transcripts* (NCES 2005–171). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- College Board. (2012). Accuplacer [Computer software]. New York: College Board. Available from <https://www.accuplacer.org/cat/>
- Deil-Amen, R. & Rosenbaum, J. E. (2002). The unintended consequences of stigma-free remediation. *Sociology of Education*, 75(3), 249-268. Doi: 10.2307/3090268
- Duffy, R. D. (2010). Sense of control and career adaptability among undergraduate students. *Journal of Career Assessment*, 18(4), 420-430. Doi: 10.1177/1069072710374587
- Duffy, R. D. & Dik, B. J. (2009). Beyond the self: External influences in the career development process. *The Career Development Quarterly*, 58(1), 29-44. Doi: 10.1002/j.2161-0045.2009.tb00171.x
- Felsman, D. E. & Blustein, D. L. (1999). The role of peer relatedness in late adolescent career development. *Journal of Vocational Behavior*, 54(2), 279-295. Doi: 0.1006/jvbe.1998.1664

- Fouad, N. A. & Byars-Winston, A. M. (2005). Cultural context of career choice: Meta-analysis of race/ethnicity differences. *The Career Development Quarterly*, 53(3), 223-234. Doi: 10.1002/j.2161-0045.2005.tb00992.x
- Fouad, N. A., Cotter, E. W., Fitzpatrick, M. E., Kantamneni, N., Carter, L., & Bernfeld, S. (2010). Development and validation of the family influence scale. *Journal of Career Assessment*, 18(3), 276-291. Doi: 10.1177/1069072710364793
- Fouad, N. A., Kantamneni, N., Smothers, M. K., Chen, Y.-L., Fitzpatrick, M., & Terry, S. (2008). Asian American career development: A qualitative analysis. *Journal of Vocational Behavior*, 72(1), 43-59. Doi: 10.1016/j.jvb.2007.10.002
- Gati, I., Gadassi, R., Saka, N., Hadadi, Y., Ansenberg, N., Friedmann, R., et al. (2011). Emotional and personality-related aspects of career decision-making difficulties: Facets of career indecisiveness. *Journal of Career Assessment*, 19(1), 3-20. Doi: 10.1177/1069072710382525
- Germeijs, V. & Verschueren, K. (2009). Adolescents' career decision-making process: Related to quality of attachment to parents? *Journal of Research on Adolescence*, 19(3), 459-483. Doi: 10.1111/j.1532-7795.2009.00603.x
- Gibbons, M. M., Borders, L. D., Wiles, M. E., Stephan, J. B., & Davis, P. E. (2006). Career and college planning needs of ninth graders—as reported by ninth graders. *Professional School Counseling*, 10(2), 168-178. Retrieved from <http://www.schoolcounselor.org/content.asp?contentid=235>
- Gifford, D. D., Briceno-Perriott, J. & Mianzo, F. (2006). Locus of control: Academic achievement and retention in a sample of university first-year students. *Journal of*

College Admission, 191, 19-25. Retrieved from <http://www.nacacnet.org/research/PublicationsResources/Journal/Pages/Journal-of-College-Admission.aspx>

- Gloria, A. M. & Hird, J. S. (1999). Influences of ethnic and nonethnic variables on the career decision-making self-efficacy of college students. *The Career Development Quarterly*, 48(2), 157-174. Doi: 10.1002/j.2161-0045.1999.tb00282.x
- Goldrick-Rab, S. (2010). Challenges and opportunities for improving community college student success. *Review of Educational Research*, 80(3), 437-469. Doi: 10.3102/0034654310370163
- Goldstein, M. (1997). Financial aid and the developmental student. *New Directions for Community Colleges*, 100, 81-87. Doi: 10.1002/cc.10008
- Gottfredson, L. S. (1981). Circumscription and compromise: A developmental theory of occupational aspirations. *Journal of Counseling Psychology*, 28(6), 545-579. Doi: 10.1037/0022-0167.28.6.545
- Grimes, S. K. (1997). Underprepared community college students: Characteristics, persistence, and academic success. *Community College Journal of Research & Practice*, 21(1), 47-57. Doi: 10.1080/1066892970210105
- Grimes, S. K., & David, K. C. (1999). Underprepared community college students: Implications of attitudinal and experiential differences. *Community College Review*, 27(2), 73-92. Retrieved from <http://crw.sagepub.com/>
- Guba, E. & Lincoln, Y. (1998). Competing paradigms in qualitative research. In N. Denzin & Y. Lincoln (eds.) *The landscape of qualitative research*(pp. 195-220). Thousand Oaks, CA: Sage Publications.

- Hargrove, B. K., Creagh, M. G., & Burgess, B. L. (2002). Family Interaction Patterns as Predictors of Vocational Identity and Career Decision-Making Self-Efficacy. *Journal of Vocational Behavior, 61*(2), 185-201. Doi: 10.1006/jvbe.2001.1848
- Hartung, P. J., Lewis, D. M., May, K. & Niles, S. G. (2002). Family interaction patterns and college student career development. *Journal of Career Assessment, 10*(1), 78–90. Doi:10.1177/1069072702010001005
- Hoffman, D. L., Novak, T. P., & Schlosser, A. E. (2003). Locus of control, web use, and consumer attitudes toward internet regulation. *Journal of Public Policy & Marketing, 22*(1), 41-57. Retrieved from <http://www.marketingpower.com/AboutAMA/Pages/AMA%20Publications/AMA%20Journals/Journal%20of%20Public%20Policy%20Marketing/JournalofPublicPolicyMarketing.aspx>
- Holland, J. L. (1997). *Making vocational choices: A theory of vocational personalities and work environments* (3rd ed.). Odessa, FL: Psychological Assessment Resources.
- Holland, J. L., Daiger, D. C., & Power, P. G. (1980). *My Vocational Situation*. Palo Alto, CA: Consulting Psychologists' Press.
- Horn, C., McCoy, Z., Campbell, L., & Brock, C. (2009). Remedial testing and placement in community colleges. *Community College Journal of Research and Practice, 33*(6), 510-526. Doi: 10.1080/10668920802662412
- Hoyt, J. E. (1999). Remedial education and student attrition. *Community College Review, 27*(2), 51-72. Doi: 10.1177/009155219902700203
- Ignash, J. M. (1997). Who should provide postsecondary remedial/developmental education? *New Directions for Community Colleges, (100)*, 5-20. Doi: 10.1002/cc.10001

- Institut fur Experimentelle Psychologie. (2012). G*Power 3.1.5 [Computer software]. Germany: Department of Psychology. Available from <http://www.softpedia.com/get/Science-CAD/G-Power.shtml>
- Kenny, M. E. & Bledsoe, M. (2005). Contributions of the relational context to career adaptability among urban adolescents. *Journal of Vocational Behavior*, 66(2), 257-272. Doi: 10.1016/j.jvb.2004.10.002
- Kenny, M. E. & Donaldson, G. A. (1991). Contributions of parental attachment and family structure to the social and psychological functioning of first-year college students. *Journal of Counseling Psychology*, 38(4), 479-486. Doi: 10.1037//0022-0167.38.4.479
- Kern, C. W. K. (2000): College choice influences: Urban high school students respond. *Community College Journal of Research and Practice*, 24(6), 487-494. Doi: <http://dx.doi.org/10.1080/10668920050137255>
- Kolajo, E. F. (2004). From developmental education to graduation: A community college experience. *Community College Journal of Research and Practice*, 28(4), 365–371. Doi: 10.1080/10668920490424078
- Lachman, M. E. & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology*, 74(3), 763-773. Doi: 10.1037//0022-3514.74.3.763
- Ladany, N., Melincoff, D. S., Constantine, M. G., & Love, R. (1997). At-Risk Urban High School Students' Commitment to Career Choices. *Journal of Counseling & Development*, 76(1), 45-52. Retrieved from <http://www.counseling.org/publications/journals.aspx>

- Larson, J. H. & Wilson, S. M. (1998). Family of origin influences on young adult career decision problems: A test of Bowenian theory. *The American Journal of Family Therapy*, 26(1), 39-53. Doi: 10.1080/01926189808251085
- Lease, S. H. (2004). Effect of locus of control, work knowledge, and mentoring on career decision-making difficulties: Testing the role of race and academic institution. *Journal of Career Assessment*, 12(3), 239-254. Doi: 10.1177/1069072703261537
- Lease, S. H. & Dahlbeck, D. T. (2009). Parental influences, career decision-making attributions, and self-efficacy: Differences for men and women? *Journal of Career Development* 36,(2), 95-113. DOI: 10.1177/0894845309340794
- Lent, R. W. & Brown, S. D. (1996). Social cognitive approach to career development: An overview. *The Career Development Quarterly*, 44(4), 310-322. Doi: 10.1002/j.2161-0045.1996.tb00448.x
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79-122. Doi: 10.1006/jvbe.1994.1027
- Lerman, R. I., & Schmidt, S. R. (1999). *An overview of economic, social, and demographic trends affecting the US labor market*. Washington, DC: Urban Institute.
- Levenson, H. (1973). Multidimensional locus of control in psychiatric patients. *Journal of Consulting and Clinical Psychology*, 41(3), 397-404. Doi: 10.1037/h0035357
- Levenson, H. (1981). Differentiating among internality, powerful others, and chance. In H. M. Lefcourt (Ed.), *Research with the locus of control construct* (Vol. 1, pp. 15-63). New York: Academic Press.

- Lindstrom, L., Doren, B., Metheny, J., Johnson, P., & Zane, C. (2007). Transition to employment: Role of the family in career development. *Council for Exceptional Children, 73*(3), 348-366. Doi:10.1177/08857288070300030601
- Lopez, F. G. & Andrews, S. (1987). Career indecision: A family systems perspective. *Journal of Counseling and Development, 65*(6), 304-307. Doi: 10.1002/j.1556-6676.1987.tb01291.x
- Lopez, F. G., Campbell, V. L., & Watkins, Jr., C. E. (1988). Family structure, psychological separation, and college adjustment: A canonical analysis and cross-validation. *Journal of Counseling Psychology, 35*(4), 402-409. Doi: 10.1037//0022-0167.35.4.402
- Luzzo, D. A. (1993). Value of career decision-making self-efficacy in predicting career decision-making attitudes and skills. *Journal of Counseling Psychology, 40*(2), 194-199. Doi: 10.1037//0022-0167.40.2.194
- Luzzo, D. A. & Ward, B. E. (1995). The relative contributions of self-efficacy and locus of control to the prediction of vocational congruence. *Journal of Career Development, 21*(4), 307-317. Doi: 10.1177/089484539502100404
- Mercer, N. (2000). *Words and minds*. New York: Routledge.
- Motulsky, S.L. (2010). Relational processes in career transition: Extending theory, research, and practice. *The Counseling Psychologist, 38*(8), 1078-1114. Doi: 10.1177/0011000010376415
- National Center for Education Statistics. (2003). *Remedial education at degree-granting postsecondary institutions in fall 2000* [Data file]. Available from nces.ed.gov.
- National Center for Education Statistics. (2010). *Profile of undergraduate students: Trends from selected years, 1995-1996 to 2007-2008* [Data file]. Available from nces.ed.gov.
- Nawaz, S. & Gilani, N. (2011). Relationship of parental and peer attachment bonds with career

- decision-making self-efficacy among adolescents and post-adolescents. *Journal of Behavioural Sciences*, 21(1), 33-47. Retrieved from <http://pu.edu.pk/home/journal/24>
- Noonan, A. E., Hall, G., & Blustein, D. L. (2007). Urban adolescents' experience of social class in relationships at work. *Journal of Vocational Behavior*, 70(3), 542-560. Doi: 10.1016/j.jvb.2007.01.005
- Osipow, S. H. (1987). *Manual for the Career Decision Scale*. Odessa, FL: Psychological Assessment Resources.
- Palmer, R.T., Davis, R.J., & Hilton, A.A. (2009). Exploring the challenges that threaten to impede the academic success of academically underprepared black males at an HBCU. *Journal of College Student Development*, 50, 429-445. doi: 10.1353/cSD.0.0078
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *The Journal of Higher Education*, 75(3), 249-284. Doi: 10.1353/jhe.2004.0016
- Pearson, S. & Bieschke, K. (2001). Succeeding against the odds: An examination of familial influences on the career development of professional African American women. *Journal of Counseling Psychology*, 48(3), 301-309. Doi:10.1037//0022-0167.48.3.301
- Peterson, S. L. (1993). Career decision-making self-efficacy and institutional integration of underprepared college students. *Research in Higher Education*, 34(6), 659-685. Doi: 0361-0365/93/1200-0659
- Phillips, S. D., Christopher-Sisk, E. K., & Gravino, K. L. (2001). Making career decisions in a relational context. *The Counseling Psychologist*, 29(2), 193-214. Doi: 10.1177/0011000001292002

- Pope, M. (2000). A brief history of career counseling in the United States. *The Career Development Quarterly*, 48(3), 194-211. Doi: 10.1002/j.2161-0045.2000.tb00286.x
- Powell, D. F. & Luzzo, D. A. (1998). Evaluating factors associated with the career maturity of high school students. *The Career Development Quarterly*, 47(2), 145-158. Doi: 10.1002/j.2161-0045.1998.tb00548.x
- Provasnik, S. & Planty, M. (2008). *Community colleges: Special supplement to the condition of education 2008* (NCES 2008-033). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Radford, A. W., Berkner, L., Wheelless, S. C., Shepherd, B., & Hunt-White, T. (2010). *Persistence and attainment of 2003–04 beginning postsecondary students: After 6 years*. U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Reid, M. J., & Moore III, J. L. (2008). College Readiness and Academic Preparation for Postsecondary Education Oral Histories of First-Generation Urban College Students. *Urban Education*, 43(2), 240-261. Retrieved from <http://uex.sagepub.com/>
- Richie, B. S., Fassinger, R. E., Linn, S. G., Johnson, J., Prosser, J., & Robinson, S. (1997). Persistence , connection , and passion : A qualitative study of the career development of highly achieving African American-Black and White women. *Journal of Counseling Psychology*, 44(2), 133-148. Doi:10.1037//0022-0167.44.2.133
- Richardson, M.S. (1993). Work in people's lives: A location for counseling psychologists. *Journal of Counseling Psychology*, 40(4), 425-433. Doi: 10.1037//0022-0167.40.4.425
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of

- reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1-28. Doi: 10.1037/h0092976
- Savickas, M. L. (2011). *Career Counseling*. Washington D.C.: American Psychological Association.
- Schultheiss, D. E. P. (2003). A relational approach to career counseling: Theoretical integration and practical application. *Journal of Counseling & Development*, 81(3), 301-310. Doi: 10.1002/j.1556-6678.2003.tb00257.x
- Schultheiss, D. E. P., Kress, H. M., Manzi, A. J., & Glasscock, J. M. J. (2001). Relational influences in career development: A qualitative inquiry. *The Counseling Psychologist*, 29(2), 216-241. Doi: 10.1177/0011000001292003
- Scott, D. L. & Church, A. T. (2001). Separation/attachment theory and career decidedness and commitment: Effects of parental divorce. *Journal of Vocational Behavior*, 58(3), 328-347. Doi:10.1006/jvbe.2000.1769
- Sharf, R. S. (2002). *Applying career development theory to counseling* (3rd ed.). Pacific Grove, CA: Brooks/Cole.
- Spector, P. E. (1988). Development of the work locus of control scale. *Journal of Occupational Psychology*, 61(4), 335-340. Doi: 10.1111/j.2044-8325.1988.tb00470.x
- Stage, F. K. (1999). Toward higher learning. *The Review of Higher Education*, 22(2), 203-211. Retrieved from http://www.press.jhu.edu/journals/review_of_higher_education/
- Steinberg, L., & Morris, A. S. (2001). Adolescent development. *Journal of Cognitive Education and Psychology*, 2(1), 55-87.
- Super, D. E. (1990). A life-span, life-space, approach to career development. In D. Brown & L.

- Brooks (Eds.), *Career choice and development* (pp. 167-261). San Francisco: Jossey-Bass.
- Tang, M., Fouad, N. A., & Smith, P. L. (1999). Asian Americans' career choices: A path model to examine factors influencing their career choices. *Journal of Vocational Behavior*, *54*(1), 142-157. Doi: 10.1006/jvbe.1998.1651
- 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. Retrieved from <http://www.journals.elsevier.com/journal-of-vocational-behavior/>
- Terenzini, P. T., Springer, L., Yaeger, P. M., Pascarella, E. T., & Nora, A. (1996). First-generation college students: Characteristics, experiences, and cognitive development. *Research in Higher Education*, *37*(1), 1-22. Doi: 10.1007/BF01680039
- United States Bureau of Labor Statistics. (2013). *Education Pays* [Data file]. Retrieved from http://www.bls.gov/emp/ep_chart_001.htm.
- United States Census Bureau. (2010). *Profile of General Population and Housing Characteristics: 2010* [Data file]. Retrieved from http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_DP_DPDP1
- United States Department of Education. (2011). *Percentage of degree-granting institutions offering remedial services, by control and level of institution: 1989-90 through 2010-11* [Data file]. Retrieved from http://nces.ed.gov/programs/digest/d11/tables/dt11_344.asp.
- University of Southern Indiana. (2011a). *Common data set 2010-2011* [Data file]. Retrieved from http://www.usi.edu/opra/pdfs/commondatasets/CDS2010_2011.pdf
- University of Southern Indiana. (2011b). *State University Comparisons: 2010 Academic Year*

- [Data file]. Retrieved from
http://www.usi.edu/opra/pdfs/DashboardSnapshots/BOT_Sept2011_StateFundedUnivyComps-Fall2009.pdf.
- University of Southern Indiana. (2012). University of Southern Indiana. Retrieved from
www.usi.edu.
- Van T. Bui, K. (2002). First-generation college students at a four-year university: Background characteristics, reasons for pursuing higher education, and first-year experiences. *College Student Journal*, 36(1), 3-12. Retrieved from <http://www.projectinnovation.biz/cs.html>
- Walpole, M. (2003). Socioeconomic status and college: How SES affects college experiences and outcomes. *The Review of Higher Education*, 27(1), 45-73. Doi: 10.1353/rhe.2003.0044
- Whitson, S. C. (1996). The relationship among family interaction patterns and career indecision and career decision-making self-efficacy. *Journal of Career Development*, 23(2), 137-149. Retrieved from <http://jcd.sagepub.com/>
- Whiston, S. C. & Keller, B. K. (2004). The influences of the family of origin on career development : A review and analysis. *The Counseling Psychologist*, 32(4), 493-568. Doi: 10.1177/0011000004265660
- Wilkinson, W. W. (2007). The structure of the Levenson locus of control scale in young adults: Comparing item and parcel indicator models. *Personality and Individual Differences*, 43, 1416-1425. Doi: 10.1016/j.paid.2007.04.018
- Wolfe, J. B. & Betz, N. E. (2004). The relationship of attachment variables to career decision-making self-efficacy and fear of commitment. *The Career Development Quarterly*, 52(4), 363-369. Doi: 10.1002/j.2161-0045.2004.tb00952.x

Young, R. A. & Collin, A. (2004). Introduction: Constructivism and social constructionism in the career field. *Journal of Vocational Behavior*, 64(3), 373-388. Doi: 10.1016/j.jvb.2003.12.005

Appendices

Appendix A

Please answer the following questions about your academic plans.

Please check all of the classes you have taken or are currently enrolled in:

GENS 097
 GENS 098
 GENS 099
 MATH 100
 ENG 100
 GENS 151

**Please use the following responses to answer the questions below:
 Very likely, Likely, Not sure, Unlikely, Very unlikely, Not enrolled**

How likely is it you will get a passing grade (A, B, or C) in:

GENS 097
 GENS 098
 GENS 099
 MATH 100
 ENG 100
 GENS 151

How likely are you to graduate from USI?

How likely are you to graduate from a four-year college?

How likely are you to return to USI next semester?

If you do not plan to return to USI next semester, why not?

Please select the answer that best represents you for the demographic questions that follow.

What is your age?

18 19 20 21 22 23 24+

What is your sex? Male Female

Are you of Hispanic, Latino, or Spanish origin?

No, not of Hispanic, Latino, or Spanish origin
 Yes, Mexican, Mexican Am., Chicano
 Yes, Puerto Rican
 Yes, Cuban
 Yes, another Hispanic, Latino, or Spanish origin

What is your race? Check all that apply.

White
 Black, African American, or Negro
 American Indian or Alaskan Native
 Asian Indian
 Chinese
 Filipino
 Other Asian
 Japanese
 Korean
 Vietnamese
 Native Hawaiian
 Guamanian or Chamorro
 Samoan
 Other Pacific Islander
 Other (please specify)

What year in college are you?

1st year 2nd year 3rd year 4th year Other (please specify)

Do you have a major selected? yes no

If yes, what is your major?

Did you transfer to USI from another university or college? yes no

Who did you primarily live with while in K-12 school? Choose all that apply.

Mother
 Father
 Stepmother
 Stepfather
 Grandparent(s)
 Siblings
 Other – Please specify

Who do you primarily live with now? Choose all that apply.

Mother
 Father
 Stepmother
 Stepfather
 Grandparent(s)
 Siblings
 Friends
 Alone
 Significant Other/ Partner
 Other – Please specify

Do you live on campus in USI housing? yes no

What is the highest level of education completed by your parents?

Mother (or female adult in your family):

Less than high school

High school graduate

Vocational school

Some college but no degree

2-year Associate's degree

4-year college degree

Graduate or Advanced degree beyond 4-year college

Unknown

Father (or male adult in your family):

Less than high school

High school graduate

Vocational school

Some college but no degree

2-year Associate's degree

4-year college degree

Graduate or Advanced degree beyond 4-year college

Unknown

Appendix B

Family Influence Scale

(Fouad et al., 2012)

Rate the following on a scale of 1 to 5 with 1 = Strongly Disagree and 5 = Strongly Agree.

1. My family shared information with me about how to obtain a job.
2. My family showed me what was important in choosing a career.
3. My family showed me how to be successful in choosing a career.
4. My family discussed career issues with me at an early age.
5. My family provided guidance on which careers would be best for me.
6. My family has given me information about obtaining education and training.
7. Watching my family work gave me confidence in my career-decisions.
8. My family supported me asking career-related questions.
9. Because my family supports me financially, I can focus on my career development.
10. My family has not been able to support my career decisions.
11. My family expects me to contribute financially to my career education and training.
12. If I wanted to get additional education after high school, my family would provide financial support.
13. If I were to experience a difficult career situation, my family would support me financially.
14. My family expects that my choice of occupation will reflect their wishes.
15. My family expects me to make career decisions so that I do not shame them.
16. My family expects people from our culture to choose certain careers.
17. My family expects me to select a career that has a certain status.
18. My family is only willing to support me financially if I choose a career of which they approve.
19. My family's career expectations for me are based on my gender.
20. My family expects that I consider my religion/spirituality when making career decisions.
21. My family expects my career to match our family's values/beliefs.
22. My family explained how our values and beliefs pertain to my career choices.

Appendix C

Internality, Powerful Others, and Chance Scales

(Levenson, 1981)

Rate the following on a scale of 1 to 6 with 1 = Strongly Disagree and 6 = Strongly Agree.

1. Whether or not I get to be a leader depends mostly on my ability.
2. To a great extent my life is controlled by accidental happenings.
3. I feel like what happens in my life is mostly determined by powerful people.
4. Whether or not I get into a car accident depends mostly on how good a driver I am.
5. When I make plans, I am almost certain to make them work.
6. Often there is no chance of protecting my personal interests from bad luck happenings.
7. When I get what I want, it's usually because I'm lucky.
8. Although I might have good ability, I will not be given leadership responsibility without appealing to those in positions of power.
9. How many friends I have depends on how nice a person I am.
10. I have often found that what is going to happen will happen.
11. My life is chiefly controlled by powerful others.
12. Whether or not I get into a car accident is mostly a matter of luck.
13. People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups.
14. It's not always wise for me to plan too far ahead because many things turn out to be a matter of good or bad fortune.
15. Getting what I want requires pleasing those people above me.
16. Whether or not I get to be a leader depends on whether I'm lucky enough to be in the right place at the right time.
17. If important people were to decide they don't like me, I probably wouldn't make many friends.
18. I can pretty much determine what will happen in my life.
19. I am usually able to protect my personal interests.
20. Whether or not I get into a car accident depends mostly on the other driver.
21. When I get what I want, it's usually because I worked hard for it.
22. In order to have my plans work, I make sure that they fit in with the desires of people who have power over me.
23. My life is determined by my own actions.
24. It's chiefly a matter of fate whether or not I have a few friends or many friends.

Appendix D

Career Decision Self-Efficacy Scale – Short Form

(Betz, Klein, & Taylor, 1996)

Rate the following on a scale of 1-5 with 1 = No Confidence At All and 5 = Complete Confidence.

Sample items:

How Much Confidence Do You Have That You Could:

1. Use the internet to find information about occupations that interest you.
5. Accurately assess your abilities.
10. Find out the employment trends for an occupation in the next decade.
15. Find out about the average yearly earnings of people in an occupation.
20. Choose a major or career that will fit your interests.

Appendix E

Understanding the Career Development of Underprepared College Students through Relational Theory**Informed Consent Document**

You are invited to participate in a research study to better understand the career development of college students who must take one or more developmental courses. This study is being conducted by Amber Hughes, Doctoral Candidate in Counselor Education at the University of Tennessee in Knoxville. Amber Hughes can be reached by e-mail, ahughe18@utk.edu, or by phone, 812-881-9915. If you have any questions or concerns, you may also contact Mr. Michael "Brody" Broshears by e-mail, mbroshears@usi.edu, or phone, 812-465-1606.

This study will take about 20 minutes of your time. You will be asked to complete an online survey about your family, your career decisions, and your beliefs about control in your life.

Once you complete the survey, you will have the chance to enter your e-mail address to be entered into a raffle for one of two \$50 gift cards. If you win the gift card, you will receive an e-mail before the end of the semester letting you know that you have won. Once the survey is completed, e-mail addresses will be separated from the surveys. Therefore, your responses will not be connected to your identity. After the gift cards are distributed, all e-mail addresses will be permanently deleted.

Your decision to participate or to not participate in this study is completely up to you, and you have the right to stop taking the survey at any time without penalty. You may skip any questions you do not wish to answer. If you do not want to complete the survey, simply close your browser. The survey is not related to your grade in your classes in any way. If you choose not to participate, your grade will not be affected. If you take the survey and then decide you do not want me to use your responses, e-mail me your request. If I have not separated your e-mail address from your survey, I will then delete your answers right away. The survey will be stored for up to three years on a password-protected computer program at the University of Tennessee, Knoxville and on a thumb drive locked in a file cabinet in my office.

Your participation in this research will be completely confidential. Your academic advisors or instructors will not know if you completed the survey or if you chose not to complete the survey. There are no risks to you for taking the survey.

Please print a copy of this consent form for your records, if you so desire.

I have read the above information. I agree to participate in this study.

Your participation in the study is voluntary. Clicking "I agree" and completing the survey constitutes your consent to participate.

I agree and choose to participate.

I do not wish to take this survey.

Vita

Amber Hughes was born in Vincennes, Indiana on March 27, 1981 to the parents of Brenda and David Hughes. Amber has five younger siblings: Aaron, Mikah, Seth, Shayla, and Caleb. She attended Flaget Elementary School and Rivet Middle and High School in Vincennes, Indiana. Amber earned her Bachelor of Arts degree with a double major in Psychology and Journalism and Computer Publishing from the University of Southern Indiana in 2003. In 2006, she graduated from Vanderbilt University with a Master of Education in Human Development Counseling with a concentration in School Counseling. In 2013, Amber completed her Ph.D. in Counselor Education from the University of Tennessee.