

EFFECTS OF DIFFERENTIATION OF SELF AND PROACTIVE BEHAVIORS ON
CAREER DECISION-MAKING OF COLLEGE STUDENTS

A Dissertation

by

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This dissertation meets the standards for scope and quality of
Texas A&M University-Corpus Christi and is hereby approved.

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ABSTRACT

We live in a world of increasing modernization which has led to a rise in the number of occupational paths, specializations, trainings, and job types (Gati & Levin, 2014). Given the importance of career and work in an individual's life, it is prudent to understand as fully as possible the characteristics that can influence one's career development process. Understanding the impact of differentiation of self and proactivity may lay the groundwork for future interventions with secondary and post-secondary students as well as those already in the workforce. The primary purpose of this multiple regression investigation was to determine how differentiation of self and proactive personality predict career decidedness.

The sample for this study consisted of 164 college students enrolled in undergraduate level courses at a Hispanic serving institution in South Texas. All participants were provided a sealed envelope that included a (a) demographic form, (b) Proactive Personality Scale, (c) Differentiation of Self Inventory, and (d) Career Decision Scale. A correlation design was used to predict criterion variables with knowledge of other variables (Gay & Airasian, 2011). More specifically, the method of data analysis used for this study was a multiple regression.

The findings of the multiple regression indicated proactive personality and differentiation of self were statistically significant predictors of career decidedness. Three of the differentiation of self subscales, Emotional Reactivity, Emotional Cutoff, and Fusion with Others, were significant predictors of career decidedness. Results suggest elements from each of the differentiation of self and proactive personality measures significantly predicted career decision-making.

The findings from this study are valuable to career counselors, students attempting to decide which career to pursue, and family members and friends who influence the career

decision-making of students. Directions for future research are: including greater diversity in ethnicity and gender, sampling young adults who are not in college, and researching how the quality of relationships within the family affects one's career decision-making.

DEDICATION

To everyone in the midst of deciding which career to choose, no matter what age. Please know that it is acceptable to change your mind and decide to pursue multiple careers throughout your life. Your vocation or “calling” is a journey in itself with several destinations along the way. Enjoy the ride.

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CHAPTER I: INTRODUCTION

Many factors contribute to the difficulties and complexities involved in the career decision-making process (Gati, 1986; Sauermann, 2005). Some of these include the large number of jobs to choose from, decision-making, uncertainty about the world of work, social barriers, and fear of making the wrong decision (Gati & Levin, 2014). Barriers also include personal characteristics and circumstances of the individual searching for work (Sampson Jr., McClain, Musch, & Reardon, 2013). These include verbal aptitude, life experiences, and negative thoughts and feelings (Sampson Jr. et al., 2013).

According to Bowen (1978), differentiation of self is a very important process where the individual begins to feel, think, and act on his or her own behalf. Individuals come to see themselves as distinct human beings who are different from others. When the person becomes emotionally separate with a higher level of differentiation there is the possibility of healthier functioning within the family. Kerr and Bowen (1988) believed that a person who has a high level of differentiation could distinguish their feelings and thoughts from those of their family of origin. This would enable the individual to interact with their environment in a more responsive manner (Kerr & Bowen, 1988).

Additionally, Kerr and Bowen (1988) indicated the family unit has emotional ties and responds in similar ways with each other and society. In a family that has a lower level of differentiation, members have struggles related to autonomy and feel pressure to stay together. With a family that has a higher level of differentiation, members are often able to gain autonomy of self and maintain effective intimacy with other family members (Kerr & Bowen, 1988).

Research indicates a relationship between differentiation of self and career development (Johnson, Schamuhn, Nelson, & Buboltz 2014). There is some evidence that a balance of

physiological security and healthy levels of attachment to the caregiver may aid career development and decision-making (Lee & Hughey, 2001; Rainey & Borders, 1997). Lease and Dahlbeck (2009) found that higher perceived quality of and the positive relationship between college students and their mothers fostered students' independence and elevated their degrees of career decision self-efficacy. Research findings support a positive correlation between mothers who facilitated their student's college independence and high levels of self-efficacy (Lease & Dahlbeck, 2009).

According to Johnson, Schamuhn, Nelson, and Buboltz (2014), differentiation of self has an effect on the career development of college students. In a study conducted with 231 college students using the Differentiation of Self Inventory (Skowron & Friedlander, 1998), My Vocational Situation (Holland, Daiger, & Power, 1980), and the Career Decision Profile (Jones & Lohmann, 1998), results indicated that individuals who were more differentiated would be more likely to have higher levels of vocational identity and career decidedness (Johnson et al., 2014). This means that differentiation predicted healthy career development, which includes decidedness, comfort, and knowledge of career.

Proactive personality refers to a stable disposition in which an individual takes initiative in a wide-range of activities and circumstances (Bateman & Crant, 1993). Individuals viewed as being proactive are not constrained by the situation they find themselves in and are more likely to act on opportunities (Bateman & Crant, 1993). Individuals deemed highly proactive are able to "identify opportunities and act on them, show initiative, and persevere until they bring about meaningful change" (Seibert, Crant, & Kraimer, 1999, p. 417). Those viewed as less proactive are deemed passive and adapt to their situation rather than trying to change it (Siebert et al., 1999).

There is a link between a proactive personality trait and career variables such as career success and career initiative (Fuller & Marler, 2009). According to a meta-analysis conducted by Fuller and Marler (2009), individuals with a proactive personality are more likely to experience greater career success and job satisfaction than individuals who are more passive. According to Hsieh and Huang (2014), socioeconomic status and proactive personality were positively connected with career decision self-efficacy, the belief that one can complete tasks important for career decision-making.

Statement of the Problem

Previous research has found that the differentiation level of an individual affects emotional, physical, and social health (Kerr & Bowen, 1988). Skowron and Friedlander (1998) found that individuals with lower levels of differentiation of self have higher levels of symptomatic distress and long-lasting anxiety. Johnson et al. (2014) found that higher differentiation of self predicted higher levels of vocational identity and higher levels of career decidedness. Proactive personality has been linked to career success and career initiative (Fuller & Marler, 2009) as well as to career decision self-efficacy (Hsieh & Huang, 2014). Research studies have not explored the relationship between differentiation of self, proactive personality, and career decision-making.

Purpose of the Study

The purpose of this multiple regression study is to find how differentiation of self and proactive personality predict career decidedness. The results of this study will add to the literature concerning career development.

Research Questions

The primary research questions are:

1. To what extent does proactive personality predict career indecision?
2. To what extent does differentiation of self predict career indecision?
3. To what extent do proactive personality and differentiation of self predict career indecision?

Significance of Study

Deciding one's future career is challenging to most college students (Kim et al., 2014). Career paths are becoming less predictable and individuals are required to be more flexible (Krumboltz & Levin, 2010). Due to this phenomenon, work experiences across the lifespan includes multiple employers and work arrangements (Hall, 1996). When individuals are transitioning between jobs, they are usually overwhelmed and struggle to plan their career path. They are more likely to seek help from professionals to assist with the decision to choose a career that will fit their desires (Illouz, 2008).

For most students, the search for a job and exploring different vocations is one of the most significant responsibilities of an individual (Kim et al., 2014). Individuals engaged in the process of exploring career goals appear to be more prepared for work and satisfied in their careers (Cox, Rasmussen, & Conrad, 2007). By engaging in career-exploration activities, the individual can enhance his or her confidence that a good career decision will be made (Zunker, 2001).

Given the importance of career and work in an individual's life, it is prudent to understand as fully as possible various characteristics that can influence the career development process. Understanding the impact of differentiation of self and proactivity may lay the

groundwork for interventions with secondary and post-secondary students as well as those already in the workforce.

Methodology

This study employed multiple regression to investigate whether proactive personality and differentiation of self would predict career decidedness. The institutional review board of the affiliated university attended by the author approved this study.

Population and Sample

Instructors in the College of Liberal Arts at a university in the Southwest were contacted and permission was requested to solicit their students' as participants in this study. After obtaining the instructors' permission, the researcher met with approved classes. The study was explained to students who were then provided the opportunity to ask questions. Additionally, students were informed that participation was both voluntary and anonymous (i.e., although they were asked for demographic data, they were not asked to provide identifying information on the protocol that would connect them to the study).

Participants of this study included 164 college students enrolled in undergraduate level courses at a Hispanic serving institution. The sample included students attending undergraduate courses registered as freshmen, sophomores, juniors, or seniors. Participants were enrolled as full-time or part-time students at the time of the administration of the assessments. The classes in which assessments were distributed were selected conveniently from the College of Liberal Arts. The researcher distributed the assessments to classes of freshman, sophomores, juniors, and seniors. These classes included a variety of different classifications of students and the researcher obtained a sample which included all levels of undergraduate students.

Data Collection

The researcher introduced the study to each class and responded to questions. Once questions were addressed, the researcher provided students with a packet containing the information sheet, demographic form, and three instruments. The demographic form and three instruments in each packet were marked with an identifying number. The information sheet was not marked. Thus, in the first envelope, the demographic form and the three instruments had the numeral 1 placed in the top right corner. The researcher explained the contents and asked that students willing to participate in the study review the information sheet included in the packet and proceed to completing the instruments. Those who did not participate sat quietly or left while those who participated completed the instruments. The researcher left the classroom while those who agreed to participate completed the protocol. Once protocols were completed, the researcher returned to the classroom and collected all packets. All students were thanked for their participation. The researcher left the class and moved to a secure area and separated any protocols not completed. Envelopes were stored inside a locked cabinet in the researcher's home in a locked closet. The demographic questionnaire and three assessments required less than 20 minutes to complete.

Instrumentation

Proactive personality was measured using a shortened version of Bateman and Crant's (1993) original Proactive Personality Scale (PPS) which contains ten items as compared to the original scale which contains seventeen items (Seibert et al., 1999). The shortened version was created by Seibert, Crant, and Kraimer (1999) by selecting ten items with the highest average factor loadings with Cronbach's alpha at .86. Two sample items are "If I see something I don't like, I fix it" and "I can spot a good opportunity long before others can." Individuals responding

to the assessment indicated their agreement with each statement on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree).

The Differentiation of Self Inventory (DSI) by Skowron and Friedlander (1998) has 43 items which are rated on a 6-point scale generating a total differentiation score and four subscale scores. By using a factor analysis, the authors of this instrument were able to support the four subscales as being distinct factors of the single construct differentiation of self. The first subscale is Emotional Reactivity which relates to how an individual responds to external stimuli with emotional lability, flooding, or hypersensitivity. The second subscale is I Position which reflects a clearly defined sense of self and ability to adhere to one's beliefs despite opposing action. The third subscale is Emotional Cutoff and reflects the individual's level of being threatened by intimacy and feeling vulnerable in relationships with others. The fourth subscale is Fusion With Others which measures emotional over involvement with others. Individuals who have elevated scores on the DSI are more differentiated which means they are less fused with others, are less emotionally cutoff from others, are less emotionally reactive, and have a clearly defined sense of self.

The Career Decision Scale (CDS; Osipow, 1987) is a 19-item instrument that measures career indecision with each item rated on a 1 (not at all like me) to 4 (exactly like me) scale. Higher scores reflect greater indecision. The assessment includes two items that measure career certainty, sixteen items that measure indecision, and one item that is open-ended which allows the participant to provide further information about career decidedness if none of the items described him or her. Cumulative scores are obtained, with higher scores reflecting less certainty and greater indecision (Osipow, 1987).

Data Analysis

The method of data analysis the researcher employed for this study was multiple regression. Multiple regression is a statistical tool used to understand the relationship between two or more variables (Dimitrov, 2009). Further, one dependent variable is predicted from two or more independent variables (Dimitrov, 2009). Multiple regression appears to be the best fit due to the number of variables involved when attempting to predict the type of relationship between differentiation of self, proactive personality, and career decision-making. The researcher wanted to learn more about the relationship between the predictor variables (proactive personality and differentiation of self) and the criterion variable (career decidedness). An a priori power analysis was conducted utilizing G*Power 3.1 (Faul, Erdfelder, Buchner, & Lang, 2009) to identify the necessary sample size for a multiple regression. With a small effect size of $f^2 = .15$, (Cohen, 1988), an alpha level of .05, and adequate power ($1-\beta = .95$; Cohen, 1988), a sample size of 146 was considered necessary.

Basic Assumptions

There are three main assumptions related to this study. The first assumption is that the subjects provided truthful responses when completing the assessments to measure proactive personality, career decision-making, and differentiation of self. In addition, it is assumed that participants provided honest responses to each one of the three assessments. Furthermore, the researcher assumed that participants completed the surveys without help.

Limitations

A limitation to the study is that the multiple regression design does not indicate a causal relationship. The author can discuss relationships among the variables but cannot assume that variables are causal. In addition, because the sample was convenient, there is a possibility that

individuals who chose to participate may be different in meaningful ways from those participants who chose not to participate. Thus, the findings cannot be generalized to other groups that do not match the sample's characteristics.

Another limitation of this study is that all measures were self-reported by the respondents. Thus, the researcher had to rely on the honest and candid responses provided by the subjects. A number of factors when completing the assessment including motivation to begin their scheduled class, interest in the research topic, pressure to participate, and environmental variables could have influenced the respondents.

Definition of Terms

Career Decision-Making: Refers to where the individual is in the process of career development and where they want to go next (Jones & Lohmann, 1998).

Career Decidedness: Relates to the overall career decision status of the individual and how decided they are about their career choice.

College Students: Are individuals who are enrolled in a four year university and taking college coursework.

Differentiation of Self: Refers to how differentiated an individual is from their family of origin. This includes the degree to which an individual is able to balance their intellectual and emotional functioning along with intimacy and autonomy in relationships (Bowen, 1978). Differentiation of self includes the ability an individual has to distinguish thoughts from feelings and be more flexible.

Proactive Personality: Refers to a stable disposition in which an individual takes initiative in a wide-range of activities and circumstances (Bateman & Crant, 1993). Individuals who

are viewed as being proactive are not constrained by the situation they find themselves in and are more likely to act on opportunities (Bateman & Crant, 1993).

Organization of Remaining Chapters

The remaining chapters of this dissertation include a review of the literature in chapter two, description of methods used in chapter three, results in chapter four, and a discussion in chapter five. The discussion includes recommendations for future studies and implications for career counselors.

CHAPTER II: THE LITERATURE REVIEW

Career Exploration

Contrary to the past, career decision-making is not as simple as matching individuals to jobs and expecting them to remain in the same job until retirement (Tolentino et al., 2014).

According to the United States Bureau of Labor Statistics (2010), workers age 18 to 46 average ten different jobs during their lifetime. This average increases to 11 jobs or more for individuals with some college education and above (United States Bureau of Labor Statistics, 2010).

Today, individuals live in a world of increasing modernization, which has led to a rise in the number of occupational paths, specializations, trainings, and types of jobs (Gati & Levin, 2014). At the same time, career paths of individuals are less predictable and require more flexibility (Krumboltz & Levin, 2010). Now, individuals find themselves struggling to plan their future, feel overwhelmed with all the possibilities of career choices, and seek help from professionals to assist them with deciding on a career choice that is best suited for them (Illouz, 2008). This also has a profound effect on graduating students who are experiencing severe employment pressure due to the global financial crisis (Tolentino et al., 2014).

For most students, the search for a job and exploring different vocations is one of the most significant responsibilities of an individual (Kim et al., 2014). Individuals engaged in the process of exploring career goals appear to be more prepared for work and satisfied in their careers (Cox, Rasmussen, & Conrad, 2007). By engaging in career-exploration activities, the individual can enhance his or her confidence that a good career decision will be made (Zunker, 2001).

Given the importance of career and work in an individual's life, it is prudent to understand as fully as possible various characteristics that can impact the career development

process. Understanding the impact of differentiation of self and proactivity may lay the groundwork for interventions with secondary and post-secondary students as well as those already in the workforce.

Career Indecision

Career indecision was defined by Callanan and Greenhaus (1990) as “an inability of a person to choose a specific occupation to pursue” (p. 80) and was a status they intended to refer to students. Ashby, Wall, & Osipow (1966) defined being decided or undecided by whether or not students had committed to a field of occupation. Fuqua and Hartman (1983) also targeted their definition of career indecision to students, but outlined a more complex view, which was composed of different subtypes of career indecision. According to the definition by Fuqua and Hartman (1983), career indecision is multidimensional and includes developmental, situational, and chronic psychological concerns, which affect career decisions of students. Fuqua and Hartman (1983) posited that by categorizing the students in one of these three dimensions, remediation could be provided to assist students with making a decision about their career choice.

The definition of career indecision was expanded to include adults currently in the workforce (Callanan & Greenhaus, 1990). Callanan and Greenhaus (1990) proposed that career indecision is composed of two variables, which are status and sources of career indecision. Status refers to the inability to choose a career goal or having chosen a career goal but feeling uncertain about the choice. Sources refer to the factors that highlight why individuals are undecided about their career choices (Callanan & Greenhaus, 1990). With the definition of career indecision expanding, the focus of career indecision is on career goals, not solely occupations, and the factors that lead to individuals being decided about their career.

According to research by Callanan and Greenhaus (1992), career indecision emphasizes the differences between students who were undecided and decided in their career in order to understand those factors that may explain the student's failure to choose a major in college or occupation. Callanan and Greenhaus examined career indecision subtypes among 397 manager and professionals working for a banking firm. The researchers, utilizing factor analysis, identified four subtypes for career undecided and decided employees. Two subtypes were for career undecided employees (chronic and developmental), and the two other subtypes were for career decided employees (vigilant and hyper vigilant). The employees who were undecided in their careers experienced greater anxiety and lacked self-confidence as compared with those who were decided in their career (Callanan & Greenhaus, 1992). This anxiety related to career indecision prevented individuals from seeking information about careers or distorted the information they did receive about careers (Sugalski & Greenhaus, 1986).

Theoretical Model of Career Development

A number of theoretical foundations explain career development. Social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994) is one conceptually sound paradigm according to meta-analyses conducted by Brown et al. (2008) and Robbins et al. (2004) which provide empirical support for the SCCT model in general. In this paradigm, social and cognitive influences are understood to play an integral role in career development. It is presented to provide a starting point and background in which to consider when discussing career development.

Social Cognitive Theory

To gain a better understanding of SCCT, an understanding of social cognitive theory must first be explored. Bandura's (1986) social cognitive theory is prominent among models of

social cognition. Social cognitive theory provides a theoretical framework for explaining why individuals attain and maintain beneficial behaviors. According to Bandura (1986), human behavior is the product of the dynamic connection between environmental, personal, and behavioral factors, also referred to as reciprocal determinism. The term reciprocal determinism refers to how each of these three factors may affect or be affected by one another.

The central determinant of social cognitive theory is considered to be self-efficacy because it influences behavior in a direct and indirect manner (Dewar et al., 2013). This behavioral influence is displayed through goals, expectations of outcome, perceived facilitators, and perceived impediments (Dewar et al., 2013). Further, the term self-efficacy denotes a person's belief in their capability to implement control over their behavior (Dewar et al., 2013). The personal belief of the individual is vital in change because it offers inspiration and reward to overcome obstacles to change, and it arouses feelings of empowerment to enact change (Dewar et al., 2013).

A basic tenant of social cognitive theory is that the individual learns what he/she observes (Bandura, 1986). Individuals learn by observing the consequences of their own behaviors or by observing others experiencing consequences from their behaviors (Bandura, 1986). This is understood in terms of the effects of direct or vicarious reinforcement and punishment (Bandura, 1986). Learning is viewed as a continuous process that allows individuals to translate what they have learned into performance when they are rewarded to engage in certain behaviors (Bandura, 1986). Thus, through observation, humans are conditioned to engage in a variety of behaviors.

According to Bandura (1986), attentional processes, retentional processes, motor reproduction processes, and motivational processes influence learning via observation. Attentional processes can assist with determining what individuals can and cannot do; retentional

processes determine how experiences are encoded in memory; motor reproduction processes determine which behaviors can be performed; and motivational processes determine the circumstances in which learning is transformed into performance (Bandura, 1986).

Bandura (2004) presented a model that specifies a core set of determinants and mechanisms, which are operationalized to influence health-promoting behavior. More specifically, these determinants are self-efficacy goals, knowledge, outcome expectations, perceived facilitators, and perceived impediments (Bandura, 2004). Bandura's model posits that knowledge and benefits of a particular health-related issue is a precondition for behavior change, but to aid individuals to overcome possible energy needed to change, self-influences are critical.

Social Cognitive Career Theory

Social cognitive career theory (SCCT) offers a useful framework for understanding career decision-making and self-efficacy of undergraduate students. Based on Bandura's (1986) social cognitive theory, SCCT focuses on the relationship among the individual, the environment, and behavioral influences during career development (Lent et al., 1994). According to SCCT, the interaction among people, the environment, and behavioral effects influence how individuals develop their career interests, revise their career and academic plans, and perform in their pursuit of a career and academics (Lent, Brown, & Hackett, 2000). The central tenet of this theory is that variables from the environment are interpreted by the individual, which leads to differences in self-efficacy, career goals, and outcome expectations within the individual (Lent et al., 1994). However, the effects of environmental affordances on career progress are equally emphasized in this theory (Jiang & Zhang, 2012). Also, other individuals and environmental factors in an individual's life influence career development (Jiang & Zhang, 2012).

One focus of SCCT is the important role of self-efficacy beliefs in career development. Self-efficacy beliefs signify how the individual views her or his capabilities to perform an action (Bandura, 1977). Further, variables in the environment that rest outside the individual may affect confidence in one's ability to succeed at a task or performing an action (Lent et al., 1994). In addition, this model suggests that self-efficacy is affected through different person inputs and learning experiences (Lent et al., 1994). As defined by Lent et al. (1994), person inputs are individual variables such as personality dispositions, ethnicity, gender, or other personal factors that may influence career development. For example, men and women choose different types of careers based on traditional or nontraditional gender roles.

Within the SCCT model, the assumption is that an individual's self-efficacy beliefs influence outcome expectation (Lent et al., 1994). Outcome expectations are negative or positive experiences related to career that are anticipated to occur in the future in a specified domain (Lent et al., 2008). In addition, outcome expectations and self-efficacy are anticipated to contribute to the individual becoming interested in a specific occupation or career choice. If an individual believes he/she can succeed at tasks associated with their career and obtain the desired outcomes from performing these actions, then the individual will be more likely to form interests in the career of their choice.

(Bandura, 2011).

There are a number of studies in the literature that have made use of SCCT to examine self-efficacy beliefs and career decision-making progress of the individual. Lent et al. (2003) tested two alternative models of the paths by which environmental supports and barriers relate to choice behavior. The researchers utilized 328 participants who completed measures related to SCCT's person input and contextual variables with students pursuing a major in engineering

(Lent et al., 2003). The results of this study empirically demonstrated that when individuals perceive others as supportive and recognize few career obstacles, self-efficacy and career decision-making are increased (Lent et al., 2003). Additionally, attachment styles can affect the SCCT variables of these supports and barriers (Lent et al., 2003).

The research by Lent et al (2003) aligns with research by Quimby & O'Brien (2004) which related social support with career decision self-efficacy. In this study, 354 nontraditional college women were surveyed with self-efficacy, career barriers, and perceived social support assessments to measure their level of confidence in their ability to pursue career related tasks and manage their roles as students (Quimby & O'Brien, 2004). Findings suggest that the study's participants felt confident in completing the tasks necessary to develop their career and perceived that they were receiving strong levels of social support (Quimby & O'Brien, 2004).

Further, a similar study found that attachment was positively related to the perception of college students' academic capability (Wright, Perrone-McGovern, Boo & White, 2014). In this study, 486 participants were surveyed regarding their perceived support and career barriers (Wright et al., 2014). Wright, Perrone-McGovern, Boo, and White (2014) wanted to see if these factors mediated the relationship between attachment and self-efficacy in students. The findings support that individuals who are more securely attached perceived greater support socially, fewer barriers in their career, and had higher self-efficacy in their academic and career efforts (Wright et al., 2014).

Jiang and Zhang (2012) conducted a study to research students' academic self-efficacy, goals, interests, and perceptions of social supports and barriers to see if these factors influenced their career development. SCCT was utilized with 578 Chinese vocational school students to predict their academic interests and goals (Jiang & Zhang, 2012). The results suggested that

academic interests were predicted by self-efficacy and outcome expectations (Jiang & Zhang, 2012). In addition, academic goals were linked to interests and social support, and barriers predicted self-efficacy and social supports (Jiang & Zhang, 2012). Finally, outcome expectations and self-efficacy did not predict academic goals (Jiang & Zhang, 2012).

A study conducted by Ali and Menke (2014) utilized SCCT to investigate high school students career development. In this study, 94 participants living in rural communities with a large population of Latino immigrants completed assessments related to career skills self-efficacy, career aspirations, barriers to postsecondary education, and career decision outcome expectations (Ali & Menke, 2014). The findings indicated Latino students held higher self-efficacy beliefs and perceived barriers than White students in the same community (Ali & Menke, 2014).

Finally, Conklin, Dahling, and Garcia (2013), investigated the satisfaction model of SCCT to question whether college students' affective commitment to their major was linked to career decision self-efficacy. Conklin et al. (2013) utilized 200 students from a small college in the United States. Findings suggested that self-efficacy acts as a mediating factor between outcome expectations and affective commitment to major (Conklin, Dahling, & Garcia, 2013).

Career Decision-Making

According to Gati and Asher (2001), career decision-making has been prevalent in the literature for many years. Swanson and D'Achiardi (2005) designated the process of career decision-making as how individuals make career and education decisions. Career decision-making refers to where the individual is in the process of career development and where they want to go next (Jones & Lohmann, 1998). According to Gati (1986), career decision-making involves a process which is objective, logical, and systematic. Gati and Levin (2014) proposed

that “career decision making requires gathering information about one’s preferences and abilities and the various occupational alternatives and training tracks, as well as the subsequent processing of this information” (p. 99-100). Further, Esters (2007) indicated that career decision-making looks at how people make decisions and their beliefs that they can successfully achieve actions that will lead to anticipated outcomes. On the other hand, Krieshok (1998) theorized that career decision-making was not systematic and processes of decision-making are partially unconscious and not readily available.

According to Blustein (1992), one essential component in career decision-making is career exploration. Career exploration refers to the activities an individual engages in that are meant to enhance knowledge of the self and the external environment to foster progress in the development of a career (Blustein, 1992). Career exploration also involves “the appraisal of internal attributes and exploration of external options and constraints from relevant educational, vocational, and relational contexts” (Flum & Blustein, 2000; p. 381). Flum and Bluestein (2000) accentuated that the exploration of a career does not merely result in the attainment of information, but also how an individual makes sense of his or her life and career. According to Bluestein et al. (1994), career exploration was found to be related to career decision-making process in terms of manifestation of self-concept and commitment to vocation.

Another factor that can assist an individual’s career decision-making is figuring out the way that he/she normally makes decisions related to career (Gati, Landman, Davidovitch, Asulin-Peretz, & Gadassi, 2010). According to these authors, the career decision-making profile of an individual focuses on reliance on others, approaches used to make career decisions, locus of control, and type of engagement when collecting information related to career (Gati et al., 2010). From this perspective, when investigating the career decision-making profile of an

individual it is crucial to become familiar with the individual's typical decision-making behavior so assistance can be provided to the unique way each person makes career decisions (Gati et al., 2010).

Another component in career decision-making is exploring the career goals of the individual. The career searching process and development of goals are critical components in career decision-making (Cox et al., 2007). Cox, Rasmussen, and Conrad (2007) stated that individuals who are actively engaged in the career decision-making process and creation of goals are more prepared for the world of work. These individuals are also more gratified and fulfilled in the career they choose (Cox et al., 2007).

Satisfaction with career path is an important part of the career decision-making process because it directly influences quality of life of individuals in the world of work (Lent & Brown, 2008). In contemporary culture, careers carry great economic and social significance; however, careers also carry psychological value related to satisfaction (Song & Park, 2005). Furthermore, de Botton (2009) maintained that the main principles for choosing a career have changed from objective to subjective values, i.e. moving from a focus on salary to a focus on feelings of achievement.

Rational Models of Career Decision-Making

Rational models of career decision-making have emerged from the literature. These models suggest "that individuals identify an optimal outcome by multiplying the probability and perceived value of different options, and selecting the option that yields the highest product" (Murtagh, Lopes, & Lyons, 2011; p.250). Gelatt (1962) extended the expected utility model to career decision-making by offering a model which was sequential, logical, and methodical. Gelatt (1962) believed that all decisions had fundamentally the same characteristics in which

there is a person who needs to make a decision and there are two or more possible outcomes to act on. The individual's decision will be made based on information known to the individual. According to Gestalt (1962), the decision made by the individual will be one of two types either a terminal decision which is final or an investigatory decision which requires additional information until it can become a final decision.

Katz (1966) proposed a rational model of career decision-making with a requirement that all possible alternatives be considered with career choices beginning with the examination of values for the individual. Katz (1966) indicated that values contain these three properties: dimension, magnitude, and importance. After these components are explored, the individual can identify several options to choose from and the final decision is made based on a statistical procedure which looks at the strength of the return for making this decision (Katz, 1966).

According to Gati and Asher (2001), both the model proposed by Gelatt and that proposed by Katz are considered the norm for stating how decisions should be made; however, problems have been identified with the career decision-making process in each. There are a variety of ways individuals fail to follow the process proposed by these models, including failing to contemplate all options and invalidly assessing the probability of future events (Kahneman, Slovic, and Tversky, 1982). It has been argued that individuals do not have the cognitive capability to quantify probability to calculate alternatives for several outcomes and finally ascertain a final career decision based on this procedure (Gati, 1986). Gati and Asher (2001) proposed a sequential elimination model which was aimed at overcoming quantification and statistical procedures by utilizing a strategy of early removal of alternatives that did not match characteristics of the desired outcome for the individual. Further, this model suggests how

decision-making can be improved by improving the cognitive processes of the individual (Gati & Asher, 2001).

Other-Than-Rational Models of Career Decision-Making

Other models focusing on nonsequential and nonsystematic processes of decision-making have challenged rational models of career decision-making (Gelatt, 1989). Research on these other-than-rational models of career decision-making have found that systematically making decisions about career choices was not possible (Krieshok, 1998). In comparison to the models which assumed that individuals could have access to prominent self-knowledge on which to base their career decision-making, Krieshok (1998) theorized that this information was not readily available and was partially unconscious. The anti-introspective model challenges the idea that a majority of the processing completed by an individual's mind is conducted consciously, and believes that utilizing these conscious and logical career decision processes may be counterproductive in making good decisions (Krieshok, 1998). An example of these career decision-making processes is utilizing heuristic devices to decipher large amounts of information (Krieshok, 1998).

Murtagh, Lopes, and Lyons (2011) added to the framework of other-than-rational models of career decision-making by researching voluntary career change. A qualitative study was completed with eight women who had changed careers. Their research provided support for the role of emotions and the importance of self-regulation when making career decisions (Murtagh, Lopes, & Lyons, 2011). This research highlights a model that is an action-affect-cognition framework for making decisions.

Career Decision-Making Assessments

There are a number of assessments used to assist psychologists, counselors, and researchers understand career decision-making (Betz, Klein, & Taylor, 1996; Gati et al., 1996; Osipow, 1987). These assessments attempt to evaluate the ways individuals decide about careers, career decision-making profiles, and how decided they are on their career choices. For example, some people are influenced by significant others to make career decisions while others are more independent in their career choice (Gati & Levin, 2014). A discussion of three different assessments used to measure career decision-making follows.

The Career Decision-Making Self-Efficacy Scale-Short Form (CDSE-SF; Betz, Klein, & Taylor, 1996) is a 25-item assessment containing five items from five different domains: accurate self-appraisal, gathering occupational information, goal selection, making plans for the future, and problem solving. The scales of this assessment are utilized to measure the self-efficacy of individuals as related to their career decision-making. The CDSE-SF is scored utilizing a Likert scale ranging from 1 to 10 indicating no confidence (1) to complete confidence (10) (Betz, Klein, & Taylor, 1996). Multiple studies have provided support for the validation and reliability of this scale (Chung, 2002; Hampton, 2005; Osipow & Gati, 1998).

The Career Decision-Making Difficulties Questionnaire (CDDQ; Gati et al., 1996) is a 44-item assessment designed to assess for career decision-making difficulties among three subscales: lack of readiness, lack of information, and inconsistent information related to the process of decision-making. There is also a score of total difficulty which is ascertained by scores on all three domains (Gati et al., 1996). The authors reported sound reliability for lack of information, inconsistent information, and total score ranging from .89 to .95 but found low

reliability for the lack of readiness scale (.63) (Gati et al., 1996) which was confirmed by Albion and Fogarty (2002).

The Career Decision Scale (CDS; Osipow, 1987) is a 19-item instrument that measures career indecision with each item rated on a 1 (not at all like me) to 4 (exactly like me) scale. Higher scores reflect greater indecision. The assessment includes two items that measure career certainty, sixteen items that measure indecision, and one item that is open-ended which allows the participant to clarify or provide additional information about his or her career decision-making (Osipow, 1987). Cumulative scores are obtained with higher scores reflecting less certainty and greater indecision (Osipow, 1987). According to Osipow (1987), Cronbach's alpha for the entire scale was in the range from .82 to .90.

In summary, by assessing the difficulties clients' experience with career decision-making, counselors gain a deeper understanding of why these individuals pursued counseling. There are a number of reasons clients sought assistance with career decision-making. These reasons include not being ready to start a career, limited information about careers to pursue, not being able to use the skill they have at work, or a combination of these factors (Gati & Levin, 2014). By using this information, counselors can have the clients focus on the reasons they cannot make a career decision on their own and find an attainable solution.

Career Decision-Making and College Students

During college, students encounter an assortment of developmental changes, trials, and milestones in their early adulthood years (Rowell, Mobley, Kemer, & Giordano, 2014). A number of these challenges are related to exploration, defining, and forming goals and plans related to their career. Research supports the view that students are charged with the task of finalizing specified objectives and goals before they graduate college (Johnson, Nichols,

Buboltz, & Riedesel, 2002). In a study conducted by Johnson, Nichols, Buboltz, and Riedesel (2002), the researchers asked 209 participants enrolled in career and life planning courses how these courses impacted their career decision-making. According to the results of this study, taking these career planning courses significantly increased the students' career decision-making self-efficacy and career identity while there was a decrease in career indecision (Johnson et al., 2002).

In contrast, the task of deciding on a career is not grasped without effort or complexity. A number of difficulties related to deciding on a career have been recognized, including lack of information about self, career choices, ways of gaining information about career, and indecision about career (Gati, Krausz, & Osipow, 1996). Gati, Krausz, and Osipow (1996) found students had difficulty with preparedness for entering a career and internal/external conflicts. Further, Swain (1984) found how unresolved career planning influenced future areas including satisfaction with job, salary, relationships with others, and self-esteem.

Kelly and Hatcher (2013) explored differences between career barriers and career decision-making self-efficacy of college students. The researchers utilized 787 students at a community college enrolled in applied technology programs and college transfers (Kelly & Hatcher, 2013). The findings indicated that applied technology students had higher career decision-making self-efficacy than transfer students and college transfer students perceived more career barriers (Kelly & Hatcher, 2013). These findings also suggested that the applied technology students were older than the transfer students were and this maturity could have influenced their perceived self-efficacy (Kelly & Hatcher, 2013).

An exploration was conducted by Esters (2007) to determine the level of career indecision of college students enrolled in agriculture classes. The researcher looked at identity

diffusion, positive choice conflict, and tentative decision to explore the construct of career indecision of 310 students (Esters, 2007). Findings indicated that students in this study had moderate levels of career indecision across all three of the factors (Esters, 2007). Therefore, the results suggested students were experiencing uncertainty about their career direction, questioning how to implement their career decision, and difficulty selecting one career from a number of attractive alternatives (Esters, 2007).

There are differences in career decision-making self-efficacy, trait, anxiety, and ethnic identity for college students (Gloria & Hird, 1999). Gloria and Hird (1999) surveyed 687 students and found significant differences by race and declared or undeclared majors. Findings indicated that White students and declared students had higher career decision-making self-efficacy and lower trait anxiety than ethnic minorities in this study (Gloria & Hird, 1999). In addition, for ethnic minorities, ethnic identity was a more significant predictor of career decision-making self-efficacy and lower trait anxiety than White students (Gloria & Hird, 1999).

In a similar study, Mau (2000) investigated the cultural significance of career decision-making style and career decision-making self-efficacy. The researcher utilized both American and Taiwanese college students (Mau, 2000). Findings indicated that there are significant differences in career decision-making style and career decision-making self-efficacy among gender and culture (Mau, 2000). More specifically, Taiwanese students had lower levels of self-efficacy as compared to their American counterparts and females, regardless of nationality, were more likely than males to endorse a dependent style of decision-making (Mau, 2000).

Differentiation of Self

According to Bowlby (1988), secure attachment with the parental figure is associated with healthy psychosocial development of the individual. According to attachment theory, a

child with a secure attachment feels safe to explore their surroundings when they know their parent is available and receptive when needed (Bowlby, 1988). Further, this attachment style is connected with the individual's ability to make connections with other people and cope with stressful situations (Ketterson & Blustein, 1997). In addition, it is necessary for individuals to become autonomous from their parent to develop their own functional and productive identity (Lee & Hughey, 2001; Tokar et al., 2003).

The need for balancing appropriate attachment from an individual's parental figures is explained by differentiation of self, a concept from family system's theory. According to Bowen (1976), for each individual, there is an internal force or drive to become emotionally separate from their parents and family of origin and a force that drives them to remain connected to their family. The term differentiation of self is defined as a person's skill to function in a self-directed and autonomous way without being controlled by their family or other significant individuals in their life and, at the same time, not being emotionally cut off from these important relationships (Johnson & Waldo, 1998). Thus, a differentiated individual can create their own individual sense of self while remaining in contact with other individuals. An undifferentiated individual will remain fused or cut off from their significant relationships (Johnson & Waldo, 1998). According to Johnson and Waldo (1998), "people who are fused do not have a clear sense of self and operate from an emotionally reactive style, particularly under stress" (p. 406). They are emotionally tied to others and their thought processes are often overwhelmed by emotions (Kerr & Bowen, 1988). This is also true of individuals who are cut off from significant others, although they cope with this fusion by being reactive and dissolving significant relationships (Johnson & Waldo, 1998).

Carter and McGoldrick (1989) also supported the concept of differentiation by stating the differentiation process of an individual from their family of origin begins in childhood and becomes even more prevalent in young adulthood. The process continues when the individual is well into their thirties (Lawson, Gaushell, & Karst, 1993). This process affects her or his social, physical, and emotional health (Kerr & Bowen, 1988).

Bowen's (1978) theory of family systems was intended to be a universal theory to guide interventions in therapy, but has been criticized for overvaluing stereotypically male characteristics (Ault-Riche, 1986; Luepnitz, 1988). According to Ault-Riche (1986), the definition of development is viewed as developing a separate and distinct sense of self which disregards the female experience who find themselves through their interactions with other people. Research has found that women develop a sense of who they are through their attachments to others around them (Knudson-Martin, 1994; Patterson, Sochting, & Marcia, 1992).

In contrast to Bowen's theory of differentiation of self, Josselson (1987) contends formation of identity for females is not whether or not they describe themselves in the context of relationships but how interactions are used in that process. Some women use relationships for security while others use relationships for self-validation and support (Josselson, 1987). Further, some females understand who they are by comparing themselves to others, while others do not (Josselson, 1987).

The ultimate challenge for women is becoming differentiated while trying to maintain connection to others simultaneously and eventually being able to be present with another person and feel a connection with that person despite vast differences (Knudson-Martin, 1994). Therefore, the formation of their identity is a balance of multiple commitments and goals in all

aspects of their life (Belenky, Clinchy, Goldberger, & Tarule, 1986). Since females understand their identity through their relationships with others, deciding to whom one is attached is an important instrument for development of identity for females (Belenky et al., 1986).

According to Knudson-Martin (1994), “even though Bowen's theory utilizes interactions with others in the process of differentiation, the importance of connections to others in defining a sense of self is not well articulated. The focus on overcoming togetherness, rationality, and autonomy in Bowen's theory resulted in a masculine model of relationships composed of separate, autonomous selves which tended to obscure the value of connections” (p. 35). Thus, to improve Bowen’s model of differentiation, there should be a focus on connectedness to others in defining one’s self to include the feminine perspective (Knudson-Martin, 1994).

Components of Differentiation of Self

According to Kerr and Bowen (1988), differentiation of self is composed of four patterns of emotion which include emotional reactivity, emotional cutoff, fusion with others, and I-position. A central tenant of being differentiated from others is the level of the individual’s emotional reactivity (Bowen, 1978). Bowen viewed emotional reactivity as the ability of the individual to separate thoughts from feelings. A differentiated individual is not overwhelmed by their emotions at the expense of their thoughts. On the other hand, an undifferentiated individual is overwhelmed by their emotions and unable to remain calm in stressful situations. According to Kerr and Bowen, a differentiated person directed internally can see themselves as a separate person rather than experiencing emotional reactivity to external activities and others’ emotions.

Another tenant of being differentiated from others is the level of the individual’s emotional cutoff (Bowen, 1978). Spencer and Brown (2007) define emotional cutoff as “a way of disagreeing with others by removing oneself psychologically or physically” (p. 258). Further,

Kerr and Bowen (1988) explain emotional cutoff as an individual's response to coping with an anxiety filled system by separating from it. These individual responses to intense emotions include being insubordinate and isolating themselves physically and emotionally from the system (Kott, 2014). An individual emotionally cutoff from others feels vulnerable in intimate relationships and threatened to expose their emotions to others (Kerr & Bowen, 1988). Due to this vulnerability, individuals experience fears of engulfment and exhibit defensive actions, including distancing themselves from others and denying emotions. On the other hand, individuals who are not emotionally cutoff have the ability to express their emotions to others and gain intimacy with others by remaining open.

An additional tenant of differentiation of self is an individual's level of fusion with others (Bowen, 1978). Fusion is the incapability of upholding a personal opinion that is different when in the presence of others and usually displayed by strong obedience (Spencer & Brown, 2007). Individuals with higher levels of fusion continue to be emotionally trapped in the dominant beliefs instilled in their families of origin (Kerr & Bowen, 1988). These individuals have few opinions of their own and seek acceptance and approval from others above any other objective (Kerr & Bowen, 1988). In contrast, people with lower levels of fusion can form their own beliefs and separate from their family of origin without needing approval from others.

The final tenant for being differentiated with others is taking the I-position (Bowen, 1978). The I-position is defined as the individual having a clear sense of self and the capability to follow to his or her beliefs when pressured to act in opposition to their beliefs (Kerr & Bowen, 1988). Individuals with a high level of differentiation have the ability to take an I-position with others while maintaining a clearly defined sense of self (Bowen, 1978). Further, they are able to evaluate their beliefs despite pressured from others to behave differently.

Differentiation of Self and Career Development

Some research indicates a relationship between differentiation of self and career development (Johnson et al., 2014). There is some evidence that a balance of physiological security and healthy levels of attachment to the caregiver may aid career development and decision-making (Lee & Hughey, 2001; Rainey & Borders, 1997). Lease and Dahlbeck (2009) found that if college students perceived that they had a high quality relationship with their mothers, it would foster their independence. This positive relationship would lead to elevated degrees of career decision self-efficacy (Lease & Dahlbeck, 2009). This finding supports a positive correlation between mothers who facilitated their student's college independence and high levels of self-efficacy (Lease & Dahlbeck, 2009).

According to Johnson et al. (2014), differentiation of self was found to have an effect on the career development of college students. In a study conducted with 231 college students using the Differentiation of Self Inventory (Skowron & Friedlander, 1998), My Vocational Situation (Holland, Daiger, & Power, 1980), and the Career Decision Profile (Jones & Lohmann, 1998), results indicated that higher levels of differentiation of self predicted higher levels of vocational identity and higher levels of career decidedness (Johnson et al., 2014). This means that differentiation predicted healthy career development which includes decidedness, comfort, and knowledge of career.

Nauta and Kahn (2007) investigated the relationships among the reliability and variation of their career interests, status of identity, and self-efficacy of career decision-making of 111 students in college. The researchers found that status of identity is related to variation of interests and making career decisions (Nauta & Kahn, 2007). Thus, the researchers found that an

individual with an advanced identity status would be more decided in their career and be more differentiated interests than others.

Proactive Personality

Proactive personality is defined as a temperament toward changing an individual's surroundings or environment (Bateman & Crant, 1993). According to Bateman and Crant (1993), the exemplar of an individual with a proactive personality is an individual who is not controlled by situational forces and who can instill environmental change. The proactive individual actively seeks opportunities to show initiative and take action to bring about change. According to Leavitt (1988), these individuals are pathfinders who can identify and solve problems. They take initiative to make an impression on the world around them.

Individuals with a high proactive personality seek to improve their present situation by identifying opportunities and taking action to until meaningful changes happen (Crant, 2000). In contrast, people who are less proactive passively adapt to their surroundings and do not identify opportunities to take action (Zhang, Wang, & Shi, 2012). They also display minimal initiative and rely on others to bring about change (Bateman & Crant, 1993).

The proactive aspect of behavior is engrained in an individual's need to influence and control their environment (White, 1959). Buss (1987) asserts that individuals are not passive receivers of environmental cues but are actively engaged with their surroundings. Researchers consider the interaction process to be dynamic and the relationship between the person and the environment is categorized by reciprocal causal links (Magnusson and Endler, 1977). Therefore, as proposed by Bandura (1986), the person, environment, and behaviors constantly influence one another.

Researchers have identified the types of behaviors in which proactive individuals engage (Bateman and Crant 1993). According to Parker and Collins (2010), proactive behaviors include the individual initiating and taking control to bring future oriented change. These proactive behaviors are designed to improve the relationship between the individual and the environment by changing the person or the environment to fit a situation best suited for the individual (Parker & Collins, 2010). Ashford and Black (1996) identified several proactive behaviors which included seeking information, seeking feedback, socializing with others, networking, relationship building, and positive framing.

Research has focused on what individuals with proactive personality do, but little research has focused on why they do it (Thompson, 2005). According to Morrison (1994), one mediating factor is perceived role breadth, which is the degree to which people consider certain activities to be within their role at work. Further, Coyle-Shapiro, Kessler, and Purcell (2004) found that perceived role breadth is related positively with performing actual job duties.

Presently, most of the research of proactive personality has fixated on the positive and career-enhancing benefits of having this disposition (Seibert et al., 1999). Meta analyses have confirmed that people higher in proactive personality have more success in terms of subjective and objective career outcomes (Fuller and Marler 2009). However, Erdogan and Bauer (2005) found that proactive personality was positively associated with job and career satisfaction only for people who were highly matched with the organization's environment. Detrimental effects of proactive personality have been neglected in the literature, but two recent empirical studies have showed that proactive personality can lead to poorer work performance when the individual has low situational judgment effectiveness (Chan, 2006) and image cost as a potential downside of proactivity (De Stobbeleir, Ashford, & de Luque, 2010).

Chan (2006) conducted a study to find how proactive personality relates to work performance. The researcher utilized a sample of 139 employees from a rehabilitation agency and administered measures of proactive personality, situation judgment effectiveness at work, and procedural justice perception (Chan, 2006). Findings indicated proactive personality positively predicted work perceptions and work outcomes among participants with higher levels of situational judgment effectiveness and a negative association for those with low situational judgment effectiveness (Chan, 2006). Thus, having a more proactive personality could be adaptive or maladaptive, depending on an individual's level of situational judgment effectiveness.

De Stobbeleir, Ashford, and de Luque (2010) investigated image cost as a potential disadvantage of proactivity. These researchers utilized attribution theory to examine how 319 current and former MBA students construct subjective evaluations of feedback seeking behavior (De Stobbeleir et al., 2010). The findings suggest that general personality characteristics of an individual serve as a sign that shapes managers' appraisals of the individual's proactivity (De Stobbeleir et al., 2010). Therefore, an individual's performance history shapes how they are evaluated.

Proactive Personality and Career Development

There is a link between a proactive personality trait and career variables such as career success and career initiative (Fuller & Marler, 2009). According to a meta-analysis conducted by Fuller and Marler (2009), individuals with a proactive personality are more likely to experience greater career success and job satisfaction than individuals who are more passive.

In a study conducted by Hsieh and Huang (2014), the researchers examined a relationship between socioeconomic status of the family and proactive personality as it related to career

decision self-efficacy. The researchers utilized a sample of 336 Taiwanese college students and found that proactive personality and socioeconomic status were positively related to career decision self-efficacy (Hsieh and Huang, 2014). According to Hsieh and Huang, the higher the socioeconomic status and proactive personality of an individual, the stronger their belief would be that they could complete tasks important for career decision-making.

Hou, Wu, and Liu (2014) studied the effect of career decision-making self-efficacy and proactive personality on career adaptability while being under employment pressure. The researchers utilized 810 Chinese graduate students and participants completed assessments related to these measures (Hou, Wu, & Liu, 2014). The results revealed participants with higher levels of proactive personality were more likely to be influenced by the negative effects of employment pressure when establishing career decision-making self-efficacy than those with lower levels of proactive personality (Hou et al., 2014).

Summary

Given the importance of career and work in an individual's life, it is prudent to understand as fully as possible various characteristics that can influence the career development process. Understanding the impact of differentiation of self and proactivity may lay the groundwork for interventions with secondary and post-secondary students as well as those already in the workforce.

CHAPTER III: METHODOLOGY

Purpose of Study

The purpose of this study was to investigate the relationship between differentiation of self, proactive personality, and career decidedness. The results of this study add to the literature concerning career development.

Research Questions

The following questions were used in this investigation:

1. To what extent does proactive personality predict career indecision?
2. To what extent does differentiation of self predict career indecision?
3. To what extent do proactive personality and differentiation of self predict career indecision?

Sample

The sample consisted of college students enrolled in undergraduate level courses at a Hispanic serving institution in South Texas. All participants provided information about age, sex, ethnicity, major, and year in college.

One hundred sixty four students enrolled as full-time or part-time participated in the study. This sample included 127 females (77%) and 37 males (23%). In addition, the sample was identified by year in college which was represented by 45 seniors (27%), 38 juniors (23%), 21 sophomores (13%), and 60 freshman (37%). Further, participants were ages 17 to 58 with an average age of 21. Ethnicity of the sample included 76 Latino/Hispanic (46%), 14 Black/African American (Non-Hispanic) (9%), 61 Caucasian/White (37%), 5 Asian or Pacific Islander (3%), 1 Native American (1%), and 7 participants classified as Other (4%). The participants were selected conveniently since they were college students enrolled at a university. Large

undergraduate courses in the College of Liberal Arts were identified to recruit participants for the current study. The courses were selected from a pool of classes taught by instructors in the College of Liberal Arts.

Measures

All participants were given a packet that included a demographic form (see Appendix A), Proactive Personality Scale (Seibert et al. 1999; see Appendix B), Differentiation of Self Inventory (Skowron and Friedlander, 1998; see Appendix C), Career Decision Scale (CDS; Osipow, 1987), and information regarding IRB approval (see Appendix D). The demographic form focused on students' sex, year in college, age, and ethnicity.

Proactive personality was measured using a shortened version of Bateman and Crant's (1993) original Proactive Personality Scale (PPS), which contains ten items as compared to the original scale that had seventeen items (Seibert et al., 1999). Seibert et al. (1999) created the shortened version by selecting ten items with the highest average factor loadings with Cronbach's alpha at .86. Two sample items are "If I see something I don't like, I fix it" and "I can spot a good opportunity long before others can." Individuals responding to the assessment indicated their agreement with each statement on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). The higher the total average score of the ten items on this measure, the more proactive the participant is. In contrast, the lower the score, the less proactive the participant is.

The creation of the shortened version of Bateman and Crant's (1993) original Proactive Personality Scale (PPS) (Seibert et al., 1999) was established using 181 MBA and undergraduate students who completed the original 17-item PPS scale. The shortened version was created by selecting the 10 items with the highest average factor loadings from the original scale (Seibert et

al., 1999). The correlation between the original scale and the shortened version was .96, and deleting the seven items had minimal effect on the reliability of the shortened scale (original 17-items $\alpha = .88$ and 10-items $\alpha = .86$) (Seibert et al., 1999).

Research by Baba, Tourigny, Wang, and Liu (2009) demonstrated the reliability and validity of the Proactive Personality Scale when used with a Chinese sample. The researchers found Cronbach's alpha to be .87 (Baba et al., 2009). Hou, Wu, and Liu (2014) found $\alpha = .80$ in a study regarding proactive personality and decision-making self-efficacy on career adaptability among Chinese graduate students. Further support for the reliability of this measure was found by Hsieh and Huang (2014) with a Cronbach's alpha of .76 in a study about the effects of socioeconomic status and proactive personality on career decision self-efficacy.

In addition, Bateman and Crant (1993) found discriminant validity for the original proactive scale with neuroticism, openness, agreeableness, intelligence, private self-consciousness, locus of control, age, sex, and years of work experience. Criterion validity was established by proactive personality being positively related to extracurricular activities aimed at constructive change, personal achievements reflecting change, and peer nominations of transformational leadership with all variables being significant at $p < 0.05$ (Bateman & Crant, 1993).

The Differentiation of Self Inventory (DSI) (Skowron and Friedlander, 1998) has 43 items which are rated on a 6-point scale generating a total differentiation score and four subscale scores. By using a factor analysis, the authors of this instrument were able to support the four subscales as being distinct factors of the single construct differentiation of self. The first subscale is Emotional Reactivity which relates to how an individual responds to external stimuli with emotional lability, flooding, or hypersensitivity (Skowron & Friedlander, 1998). Two

sample items are “I feel things more intensely than others” and “When someone close to me disappoints me, I withdraw from him or her for a time.” The second subscale is I Position which reflects a clearly defined sense of self and ability to adhere to one’s beliefs despite opposing action (Skowron & Friedlander, 1998). Two sample items are “I tend to remain pretty calm even under stress” and “I tend to feel pretty stable under stress.” The third subscale is Emotional Cutoff and reflects the individual’s level of being threatened by intimacy and feeling vulnerable in relationships with others (Skowron & Friedlander, 1998). Two sample items are “Our relationship might be better if my spouse or partner would give me the space I need” and “I have difficulty expressing my feelings to people I care for.” The fourth subscale is Fusion with Others which measures emotional over involvement with others (Skowron & Friedlander, 1998). Two sample items are “I worry about people close to me getting sick, hurt, or upset” and “It’s important for me to keep in touch with my parents regularly.” Individuals who have elevated scores on the DSI are more differentiated which means they are less fused with others, are less emotionally cutoff from others, are less emotionally reactive, and have a clearly defined sense of self.

Previous research by Skowron and Friedlander (1998) provided initial information about the psychometric properties of the Differentiation of Self Inventory based on three different studies. The researchers utilized more than 600 participants with different sexes and ethnicities within these three studies. Using internal consistency coefficients, the results of the study supported moderate to high reliability for the measure with regards to the total score and four subscales. Cronbach’s alpha was .88 for the total score, .88 for Emotional Reactivity, .79 for Emotional Cutoff, .70 for Fusion With Others, and .85 for I Position (Skowron & Friedlander, 1998). In a study by Johnson, Schamuhn, Nelson, and Buboltz Jr. (2014), the alpha coefficients

for the were: total score = .75, Emotional Reactivity = .67, Emotional Cutoff = .83, Fusion With Others = .50, and I Position = .75.

Support for the validity of the Differentiation of Self Inventory was found by the researchers through construct validity of the four subscales and various tenants of Bowen's theory (Skowron & Friedlander, 1998). Lack of differentiation was equated with chronic anxiety, and the moderate, significant intercorrelations of the scales support their validity based on theory (Skowron & Friedlander, 1998). In addition, each of the subscales was found to be related but not identical, which supports the validity of each subscale to be analyzed individually (Skowron & Friedlander, 1998).

The Career Decision Scale (CDS; Osipow, 1987) is a 19-item instrument that measures career indecision with each item rated on a Likert scale ranging from 1 (not at all like me) to 4 (exactly like me). Higher scores reflect greater indecision. The assessment includes two items that measure career certainty, sixteen items that measure indecision, and one item that is open-ended which allows the participant to clarify or provide additional information about his or her career decision-making (Osipow, 1987). Two sample items measuring indecision are "Several careers have equal appeal to me. I'm having a difficult time deciding among them" and "I know I will have to go to work eventually, but none of the careers I know about appeal to me." Cumulative scores were obtained with the sixteen items measuring indecision in which higher scores reflected less certainty and greater indecision (Osipow, 1987).

The norm group for the CDS includes all levels of undergraduate and high school students with a sample size larger than 700 participants (Osipow, 1987). This includes 268 undecided college freshmen, over 100 college students at all levels, and over 350 high school students which were equally represented by year and sex (Osipow, 1987). Osipow (1987) found

total CDS scores among the participants did not differ by sex, year in school, age, or school of enrollment.

Osipow (1987) described test–retest reliabilities of the Career Decision Scale ranging from .82 to .90. White and Tracey (2011) found Cronbach’s alpha to be .68 in a study researching the relationship between authenticity and career. Further, Johnson, Nichols, Buboltz Jr., and Riedesel (2002) determined a reliability coefficient of .87 for this scale when they assessed a holistic trait and factor approach to career development of college students.

Validity was proven by the fact that a number of studies show more decidedness after being exposed to career planning interventions (Osipow, 1987). Scores on the CDS have also been found to be related to constructs such as locus of control, career maturity, grade level, ability, anxiety level, fear of success, sex, and other measures of career decidedness (Osipow, 1987).

Procedures

The university was selected based on several factors, including accessibility and convenience. After permission was granted by the IRB, professors in the College of Liberal Arts were contacted, and permission was granted to solicit students’ participation in this study. After obtaining permission from the professors, the researcher met with students in the approved classes. At this point, students were informed that participation was voluntary and anonymous, the study was explained to them, and students were provided the opportunity to ask questions. Informed consent was obtained from all of the students who participated in this study, which affirmed their willingness to participate without obtaining their name or other identifying information. Finally, all of the students were given a sealed envelope that included a (a) demographic form, (b) Proactive Personality Scale, (c) Differentiation of Self Inventory, and (d)

Career Decision Scale. The researcher explained the contents and asked that students willing to participate in the study review the information sheet included in the packet and proceed to completing the instruments. Those who did not participate sat quietly while those who participated completed the instruments. The researcher left the classroom while those who agreed to participate completed the protocol. Once protocols were completed, the researcher returned to the classroom and collected all packets. All students were thanked for their participation. The researcher left the class, moved to a secure area, and separated any protocols not completed. Envelopes are stored inside a locked cabinet in the researcher's home in a locked closet. The demographic questionnaire and three assessments required less than 20 minutes to complete.

Research Design

A correlation design was used to predict criterion variables with knowledge of other variables (Gay & Airasian, 2011). According to Gay and Airasian (2011), the reason for using a correlational study is to find the relationships between variables or to use these relationships to make further predictions. While a traditional correlational design describes the relationship between two variables, a multiple regression is used describe the relationship among more than two variables (Heppner, Wampold, & Kivlighan, 2008). A multiple regression is "a statistical method for studying the separate and collective contributions of one or more predictor variables to the variation of a dependent variable" (Heppner et al., 2008; p. 247). In this current study, I sought to investigate the extent to which proactive personality and differentiation of self predict career decidedness.

According to Heppner et al. (2008), there are three basic methods for entering the predictor variables when conducting a multiple regression: simultaneous, stepwise, and

hierarchical regression. A simultaneous regression was used for this study which means all of the predictor variables were entered concurrently (Heppner et al., 2008). This type of regression is utilized when there is no foundation for entering the variables in a certain order and the researcher wants to find how each predictor variable contributes to predicting the criterion variable (Heppner et al., 2008). Thus, when I entered proactive personality and differentiation of self in the regression equation, there was no order to follow.

When conducting a multiple regression, one of the biggest limitations is that the results of the analysis is based on correlational data and cannot delineate causation (Heppner et al., 2008). The results are merely relational and predictive rather than determining causation (Heppner et al., 2008). Therefore, the results of this study will predict the relationship between career decidedness and the predictor variables of proactive personality and differentiation of self.

Data Analysis

Data were coded and entered into the computer by the researcher using the Statistical Package for the Social Sciences, Version 22. This statistical software was used for the purpose of data entry and analysis. Descriptive statistics including mean, standard deviation, and sample size were used to summarize and organize the data. The missing data were replaced with mean calculation. A calculation of the means using available data was used to estimate the missing values.

The method of data analysis used for this study was a multiple regression. Multiple regression is a statistical tool used to understand the relationship between two or more variables (Dimitrov, 2009). Further, one dependent variable is predicted from two or more independent variables (Dimitrov, 2009). A multiple regression was the best method of statistical analysis given the research questions and the number of variables involved to predict the type of

relationship between differentiation of self, proactive personality, and career decision-making. The researcher wanted to learn more about this relationship between the predictor variables (proactive personality and differentiation of self) and the criterion variable (career decidedness).

There are two sets of assumptions for when conducting a multiple regression. The first set of assumptions is about the raw score variables (Mertler & Vannatta, 2013). These assumptions include the independent variables are fixed and the same values would need to be used if the study was replicated, the independent variables are measured without error, and the relationship between the independent variables and the dependent variable is linear (Mertler & Vannatta, 2013). The second set of assumptions is about the residuals or prediction errors that are the scores not accounted for during the analysis (Mertler & Vannatta, 2013). These assumptions include the mean of the residuals for each observation on the dependent variable over multiple replications is zero and errors associated with any observation on the dependent variable are not correlated with errors associated with any other observation on the dependent variable. Further, the errors are not correlated with the independent variables, the errors are normally distributed, and homoscedasticity of the variance of the residuals are assumed (Mertler & Vannatta, 2013).

To ensure that the data for this study met the assumptions of a multiple regression, I took an approach that utilized routine pre-analysis data-screening procedures (Mertler & Vannatta, 2013). This included examining linearity through examination of the bivariate scatterplots, examining normality through the values for skewness, kurtosis, and Kolmogorov-Smirnov statistics (Merlatta & Vanatta, 2013). Finally, homoscedasticity was examined by interpreting the test results of Box's test (Merlatta & Vannatta, 2013).

An a priori power analysis was conducted utilizing G*Power 3.1 statistical power analysis program (Faul, et al., 2009) to identify the necessary sample size for a multiple regression. With a small effect size of $f^2 = .15$, (Cohen, 1988), an alpha level of .05, and adequate power ($1-\beta = .95$; Cohen, 1988), a sample size of 146 was considered necessary to detect a moderate effect of the predictor variables for estimating career indecision. Given the sample of 164 participants in this study, the results of this analysis are robust enough to make predictive inferences about the relationships between predictor and criterion variables.

CHAPTER IV: RESULTS

Introduction

In this chapter, I discuss this study's results based on quantitative analysis. The purpose of this study was to examine the relationship between proactive personality, differentiation of self, and career indecision. A multiple regression analysis was conducted to explore the three research questions:

1. To what extent does proactive personality predict career indecision?
2. To what extent does differentiation of self predict career indecision?
3. To what extent do proactive personality and differentiation of self predict career indecision?

Demographics

One hundred sixty four students enrolled as full-time or part-time students participated in the study. This sample included 127 females (77%) and 37 males (23%). In addition, the sample was identified by year in college which was represented by 45 seniors (27%), 38 juniors (23%), 21 sophomores (13%), and 60 freshman (37%). Further, participants were ages 17 to 58 with an average age of 21. Ethnicity of the sample included 76 Latino/Hispanic (46%), 14 Black/African American (Non-Hispanic) (9%), 61 Caucasian/White (37%), 5 Asian or Pacific Islander (3%), 1 Native American (1%), and 7 participants classified as Other (4%). See Table 1 for descriptive statistics of these demographics.

Table 1.

Descriptive Statistics for Participant Demographics

Demographic Variables		N	Percentage
Gender	Female	127	77%
	Male	37	23%
		164	100%
Ethnicity	Latino/Hispanic	76	46%
	Caucasian/White	61	37%
	Black/African American	14	9%
	Asian/Pacific Islander	5	3%
	Native American	1	1%
	Other	7	4%
		164	100%
Year in College	Senior	45	27%
	Junior	38	23%
	Sophomore	21	13%
	Freshman	60	37%
		164	100%

Data Analysis

Relationships between the predictor and criterion variables were modeled using a simultaneous multiple regression model to evaluate the research questions. A multiple regression analysis using block entry was conducted on career indecision based on proactive personality and differentiation of self. An alpha level of .05 was utilized during all analyses and missing data was replaced by mean calculation. All outliers were included in the analysis. Descriptive statistics are reported in Table 2 which include mean, standard deviation (SD), and population size (N) of each of the variables.

Table 2.

Descriptive Statistics

Variable	Mean	SD	N
Career Indecision	1.86	.60	164
Proactive Personality	5.36	.88	164
Emotional Reactivity	3.56	.78	164
I Position	4.43	.77	164
Emotional Cutoff	4.19	.76	164
Fusion with Others	2.99	.72	164

The Pearson correlations among all variables with significant interactions noted are included in Table 3. An alpha level of .05 was utilized during analysis. Results indicate a significant negative relationship between career indecision and proactive personality, ($r = -0.22$, $p < .01$), career indecision and emotional reactivity ($r = -0.32$, $p < .01$), career indecision and I-position ($r = -0.21$, $p < .01$), career indecision and emotional cutoff ($r = -0.18$, $p < .05$), and career indecision and fusion with others ($r = -0.21$, $p < .01$). Findings indicate a significant

positive relationship between proactive personality and I-position ($r = 0.52, p < 0.01$), emotional reactivity and I-position ($r = 0.49, p < .01$), emotional reactivity and emotional cutoff ($r = 0.25, p < .01$), emotional reactivity and fusion with others ($r = 0.25, p < .01$), and emotional cutoff and I-position ($r = 0.19, p < .05$). There was also a significant negative relationship between emotional cutoff and fusion with others ($r = -0.16, p < .05$).

Table 3.

Pearson Correlations

Variable	Career Indecision	Proactive Personality	Emotional Reactivity	I Position	Emotional Cutoff	Fusion with Others
Career Indecision	--	-0.22**	-0.32**	-0.21**	-0.18*	-0.21**
Proactive Personality		--	0.1	0.52**	0.03	-0.1
Emotional Reactivity			--	0.49**	0.25**	0.25**
I Position				--	0.19*	0.11
Emotional Cutoff					--	-0.16*
Fusion with Others						--

* = significant at the .05 level

** = Significant at the .01 level

A summary of variables predicting career indecision are in Table 4. This table includes the nonstandardized regression coefficients (B), the standard error of B ($SE B$), the beta coefficient (β), the squared semipartial correlation coefficient (sr^2), and the sum of the squared correlations between each predictor variable to the criterion variable (R^2).

Table 4.

Summary of Variables Predicting Career Indecision

Variable	B	$SE B$	β	t	sr^2	F	R^2
<i>Career Indecision</i>						7.93	.20
Proactive Personality	-.19	.06	-.28	3.19**	.05		
Emotional Reactivity	-.19	.07	-.25	-2.83**	.04		
I Position	.06	.08	.07	.716	< .01		
Emotional Cutoff	-.13	.06	-.16	-2.09*	.02		
Fusion with Others	-.17	.06	-.20	-2.60**	.03		

* = significant at the .05 level

** = significant at the .01 level

Career indecision scores and standardized residuals were normally distributed. Career indecision had a skewness of .607 ($SE=.190$) and kurtosis of -.699 ($SE=.377$). Scatterplots were analyzed, and no curvilinear relationships between the criterion variable and the predictor variables or heteroscedascity were evident. There was no evidence of multicollinearity (see Table 5).

Table 5.

Collinearity Statistics

Variable	Tolerance	VIF
Proactive Personality	0.68	1.48
Emotional Reactivity	0.66	1.51
I Position	0.52	1.92
Emotional Cutoff	0.87	1.15
Fusion with Others	0.86	1.16

Measures

Reliability of the present sample for scores on the shortened version of Bateman and Crant's Proactive Personality Scale (1993) were measured using Cronbach's alpha. Scores on this scale had a reliability coefficient of .89. Additionally, reliability of the scores on the total score for Differentiation of Self (DSI) by Skowron and Friedlander (1998) were measured using Cronbach's alpha which was .78 for this sample. For each of the individual subscales of differentiation of self using Cronbach's alpha the reliability coefficients were as follows: Emotional Reactivity = .65, I Position = .77, Emotional Cutoff = .70, and Fusion with Others = .51. Finally, scores on the Career Decision Scale (CDS; Osipow, 1987) were measured using Cronbach's Alpha and had a reliability coefficient of .82.

Analysis

Research Question 1: To what extent does proactive personality predict career indecision?

Proactive personality was a statistically significant predictor of career indecision (see Table 4) uniquely accounting for approximately 5% of the variance. Nearly 35% of the predicted model was accounted for by proactive personality, $rs = -.59$. When the variables

measuring differentiation of self were controlled for, the relationship between proactive personality and career indecision revealed the following partial correlation, $r = -.180, p = .021$. Therefore, individuals who have lower levels of proactive personality are more likely to have higher levels of career indecision.

Research Question 2: To what extent does differentiation of self predict career indecision?

Differentiation of self was a statistically significant predictor of career indecision (see Table 4) uniquely accounting for approximately 10% of the variance. Nearly 84% of the predicted model was accounted for by differentiation of self, $rs = -.92$. When proactive personality was controlled for, the relationship between differentiation of self and career indecision revealed the following partial correlation, $r = -.346, p < .001$. Therefore, individuals who are less differentiated from others are likely to have higher levels of career indecision

Research Question 3: To what extent do proactive personality and differentiation of self predict career indecision?

The regression analysis yielded a statistically significant relationship between career indecision, proactive personality, and differentiation of self, $F(5, 158) = 7.93, p < .001$. A moderate effect size was noted with approximately twenty percent of the variance accounted for in the model, $R^2 = .20$ (see Table 4). Within the model, proactive personality was a significant predictor of career indecision ($\beta = -.19, p < .01, sr^2 = .05$) with a small effect size (Cohen, 1988). Emotional reactivity was negatively correlated with scores related to career indecision ($\beta = -.19, p < .01, sr^2 = .04$), as well as emotional cutoff ($\beta = -.13, p < .05, sr^2 = .02$), both with small effect sizes. Thus, an individual with a low level of emotional reactivity and emotional cutoff is going to be more decided in their career. Among the two variables fusion with others and I position, fusion with others was negatively correlated with scores related to career

indecision ($\beta = -.17, p = .06, sr^2 = .03$), indicative of a small effect size, while I position was not significantly related ($\beta = .06, p = .48, sr^2 < .01$).

CHAPTER V: DISCUSSION

Today, individuals live in a world of increasing modernization which has led to a rise in the number of occupational paths, specializations, trainings, and job types (Gati & Levin, 2014). Given the importance of career and work in an individual's life, it is prudent to understand as fully as possible various characteristics that can influence the career development process. Understanding the impact of differentiation of self and proactivity may lay the groundwork for interventions with secondary and post-secondary students as well as those already in the workforce. The primary purpose of this multiple regression study was to find how differentiation of self and proactive personality predict career decidedness. The review of the literature focused on the career decision-making process, differentiation of self, and proactive personality.

The results of this study indicated that there is a significant and negative relationship between proactive personality and career indecision. These findings suggest that college students who are more proactive tend to display initiative to resolve problems related to career and are opportunistic to advance their current circumstances when deciding on a career. Overall, students may feel confident and be more active during the career decision-making process when compared to less proactive others. These findings are consistent with and support literature that assumes an individual's personality traits affect how self-efficacy develops (Hsieh & Huang, 2014; Jin, Watkins, & Yuen, 2009; Rogers, Creed, & Glendon, 2008; Wang, Jome, Haase, & Bruch, 2006).

The findings of this study suggest that a college students' overall identity is related to career decision-making. This is supported by previous research by Blustein (1992), Lucas (1997), and Schmitt-Rodermund and Vondracek (1999) which indicated the process of making a

career decision is related to the process college students use to commit to a holistic identity. Thus, the same procedures used to decide on a career are used to discover their identity and gain a deeper understanding of self.

The four components of differentiation of self seem to affect career decision-making of college students. The results of this study suggest high levels of emotional cutoff predict high levels of career indecision. Thus, career development is negatively affected by emotional cutoff. This finding supports previous research that suggests separation from others can lead to unfavorable career decision-making for young adults (Downing & Nauta, 2010; Hartung, Lewis, May, & Niles, 2002; Lee & Hughey, 2001).

Another component of differentiation is emotional reactivity. In this study, the results indicated higher levels of emotional reactivity predicted higher levels of career indecision. The level of emotional reactivity associated with the process of separation may have a major impact on the career development process. These findings support Bowen's (1976) contention that individuals with high emotional reactivity are led by their emotions and place less emphasis on intellectual processes. Therefore, an individual who is emotionally reactive will likely have poor career decision-making skills. These results also support findings by Johnson et al. (2014) which indicated that higher levels of emotional reactivity predicted less difficulty making career decisions and higher levels of vocational identity.

A third component of differentiation of self is fusion with others. Another finding from this study is that an individual with high levels of fusion is likely to have high levels of career indecision. This suggests the individual is more dependent on others to make career related decisions. This is similar to Kerr and Bowen's (1998) ideas which assert that individuals who are highly fused with others have few opinions of their own and seek approval from others rather

than intrinsic values. These results also support findings by Johnson et al. (2014) which indicated higher levels of fusion predicted lower levels of career decidedness.

There were no significant findings related to I-position but there was a negative relationship with career indecision. The findings are similar to those of Johnson et al. (2014), which indicated higher levels of I-position significantly predicted higher levels of career decidedness. Results suggest that college students who have an identity set apart from others will be more likely to be decided in their career. This means individuals who take the I-position are more engaged in the career decision-making process and less focused on opinions from others.

A unique finding of this study is that college students who are more proactive demonstrated higher levels of differentiation. This means that highly differentiated individuals are more proactive in their behaviors. Results indicated that these young adults are not likely to be controlled by situational and social forces to complete a task which benefits them and/or others.

Another unique finding is that differentiation of self and proactive personality predicted career decision-making of college students in this study. This means that young adults who are differentiated from others and proactive are more likely to be decided on their career. In addition, the opposite may be true; individuals who are less differentiated and proactive may be less decided on their career.

Limitations

The present study contributes to the empirical literature on career development; however, the findings from this study may have been impacted by certain limitations and therefore may

obstruct the generalizability of the results. The limitations associated with multiple regression analysis generally relate to obtaining information and the sample utilized in the investigation.

A limitation to the study is that the multiple regression design does not indicate a causal relationship. The author can discuss relationships among the variables but cannot assume that variables are causal. In addition, there is a possibility that individuals who chose to participate may be different in meaningful ways from those participants who chose not to participate. Thus, the findings cannot be generalized to other groups that do not match the sample's characteristics.

The second limitation of this study is that all measures were self-reported by the respondent. Thus, the researcher had to rely on the honest and candid responses provided by the subjects. A number of factors when completing the assessment including motivation to begin their scheduled class, interest in the research topic, pressure to participate, and environmental factors could have influenced the respondents.

A third limitation is that the sample collection is restricted to students at one university; therefore, the cross-cultural generalizability of the results may be a concern. The majority of the students were female (77%) and enrolled in undergraduate classes in the College of Liberal Arts. The demographic group represented in this study is not consistent with the national norms. The demographic makeup of the sample and instrumentation used in this study limit the generalizability of ethnic differences. Those in the norming samples used in the development of the Proactive Personality Scale, Differentiation of Self Inventory, and Career Decision Scale largely consisted of Caucasians/Anglo Americans, while the sample of this study was 46% Latino/Hispanic.

A fourth limitation is the use of convenient sampling in this study. This technique of sampling is less effective as compared to random sampling because participants are chosen due

to convenience and accessibility for the researcher. Since convenience sampling was utilized, there may be a bias in sampling and the participants used may not be representative of the population. By utilizing a convenience sample, the results of this study may be skewed.

A fifth limitation in this study is the focus on the college students. As noted by Johnson et al. (2014) in their research concerning differentiation and career decision-making abilities of college students, a demographic of college students is not representative of all young adults struggling with career choice, the developmental task of differentiation, and being proactive. The college student population is an important demographic but not the only one to consider.

Implications

The findings from this study have implications for counselors who work directly with college students. The results of this study suggest that the relationship the individual has with their family affects career development. This offers a rationale for counselors to explore the dynamics of the family when exploring career decision-making with college students. As recommended by Brown and Brooks (1991), the counselor could use genograms and lifelines to generate discussions with clients about family dynamics.

A second implication for counselors is that the positive relationship found between proactive personality and career decidedness suggests that counselors can assist college students' career decision-making by encouraging them engage in behaviors that are more proactive. In line with this assertion, Kirby, Kirby, and Lewis (2002) indicated that an individuals' proactivity does not remain stable throughout the lifespan and can be amplified with trainings and interventions. Thus, it might be useful for career counselors to develop interventions related to career decision-making to increase college students' levels of proactivity.

In this study, having a high level of differentiation of self was significantly and positively correlated with high levels of career decision-making. This finding emphasizes the importance of helping clients construct a sense of self and identity that is distinct from their family of origin. As reported by Jenkins, Buboltz, Schwartz, and Johnson (2005), for clients struggling with building a clearly defined identity, the emphasis of counseling could be assisting them with creating a sense of self that is based on intrinsic motivation and not extrinsic factors. As discussed by McGoldrick and Carter (2001), this could include utilizing counseling strategies with clients to examine how they affect their family dynamics.

The findings suggest that being decided on a career is negatively related to emotional cutoff. Counselors need to be more aware of how being emotionally cut off from others negatively affects the career decision-making process. As mentioned by Johnson and Waldo (1998), when counseling clients, the counselor needs to help the client with any unresolved emotions that are aroused due to cutting off relationships with significant others. Further, before focusing on career decision-making, it may be beneficial for the counselor to help the client resolve the motivation and cause of these emotional cutoffs. By addressing this issue first, the client could develop healthier relationships with significant others and coworkers in the present and address any cutoff relationships from the past.

Another finding of this study suggests that college students who are highly proactive are more differentiated from others. Counselors can assist college students with becoming more differentiated from others by focusing on activities that will make them more proactive. By encourage students to engage in proactive activities, the counselor can assist the client with becoming more independent, making their own decisions, and improving their overall self-worth.

In this study, differentiation of self and proactivity predicted career decision-making of college students. This finding emphasizes the importance of integrating all three constructs in the counseling session to improve the overall functioning of the client. By focusing on the individuality of the client and empowering the client to show initiative, this can improve their decision making. This will provide a secure base for the client to safely explore different careers and make a practical decision.

Future Directions for Research

In this study, a majority of the participants were Latino/Hispanic (46%) and Caucasian/White (37%). Future directions for research include greater ethnic/racial diversity. This could include utilizing a larger sample size for each of the ethnic groups represented in this study to discover the differences between these groups with regards to proactive personality, career decision-making, and differentiation. Research that includes more diversity of perspectives and values could provide important additional information concerning differentiation of self, proactivity, and career decidedness.

This study researched the career decision-making process of undergraduate college students. Future research could include young adults from outside the college environment. This could include individuals a high school diploma, those who did not graduate from high school, individuals with a GED, those with a Bachelor's or graduate degree, and individuals currently in the workforce in varying positions (e.g. cashier, sales associate, director). By investigating individuals at different points in their education or career, it would make the findings more generalizable and could address cultural differences related to ideas of differentiation.

In this study, there was no data analysis to examine gender differences. Future research could include an examination that considers male and female college students to see if there is a difference between the constructs utilized in this study by gender. An examination of differences by gender related to differentiation of self and proactivity might reveal important differences in career decision-making by males and females.

This study discussed current differentiation levels of college students and not the process of how they attained their differentiation levels. Research concerning how an individual becomes differentiated from childhood to adulthood could be helpful in understanding the relationship between differentiation and career decision-making. Future research could focus on how the career decision-making process is affected by the interactions with family members.

In this study, there was no socioeconomic status (SES) data collected. Previous research by Hsieh and Huang (2014) found that college students who reported higher levels of SES had greater confidence in their career decision-making skills. Future research perhaps could focus on how SES might relate to differentiation, proactive personality, and career decision-making.

Conclusions

The primary purpose of this multiple regression study was to discover whether differentiation of self and proactive personality predicted career decidedness. The Proactive Personality Scale, Differentiation of Self Inventory, and Career Decision Scale were assessed to examine research questions. Results suggest elements from each of the measures of differentiation of self and proactive personality significantly predict career decision-making. The results of this investigation can be of value to individuals who influence the career decision-making process of students, including career counselors, students themselves, family members, and friends.

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APPENDICES

Appendix A: Demographic Form

DEMOGRAPHIC FORM

Please do not write your name on this form.

For the following items, please select the *one* response that is most descriptive of you.

Sex (Circle One): Male Female

Age: _____

Ethnicity (Circle One): Latino/Hispanic Black/African American (Non-Hispanic)
 Caucasian/White Asian or Pacific Islander
 Native American Other: _____

Major (s): _____

Minor (s): _____

Year in College (Circle One): Freshman Sophomore
 Junior Senior

Appendix B: Shortened Version of Bateman and Crant's (1993) Proactive Personality Scale

Shortened Version of Bateman and Crant's (1993) Proactive Personality Scale

Responses are made on a scale ranging from 1 (*Strongly Disagree*) to 7 (*Strongly Agree*)

1. I am constantly on the lookout for new ways to improve my life.

1 2 3 4 5 6 7

2. Wherever I have been, I have been a powerful force for constructive change.

1 2 3 4 5 6 7

3. Nothing is more exciting than seeing my ideas turn into reality.

1 2 3 4 5 6 7

4. If I see something I don't like, I fix it.

1 2 3 4 5 6 7

5. No matter what the odds, if I believe in something I will make it happen.

1 2 3 4 5 6 7

6. I love being a champion for my ideas, even against others' opposition.

1 2 3 4 5 6 7

7. I excel at identifying opportunities.

1 2 3 4 5 6 7

8. I am always looking for better way to do things.

1 2 3 4 5 6 7

9. If I believe in an idea, no obstacle will prevent me from making it happen.

1 2 3 4 5 6 7

10. I can spot a good opportunity long before others can.

1 2 3 4 5 6 7

Appendix C: Differentiation of Self Inventory

Differentiation of Self Inventory

These are questions concerning your thoughts and feelings about yourself and relationships with others. Please read each statement carefully and decide how much the statement is *generally true* of you on a **1 (not at all true of me)** to **6 (very true of me)** scale. If you believe that an item does not pertain to you (e.g., you are not currently married or in a committed relationship, or one or both of your parents are deceased), please answer the item according to your best guess about what your thoughts and feelings would be in that situation. Be sure to answer every item and try to be as honest and accurate as possible in your responses.

1. People have remarked that I'm overly emotional.

1 2 3 4 5 6

2. I have difficulty expressing my feelings to people I care for.

1 2 3 4 5 6

3. I often feel inhibited around my family.

1 2 3 4 5 6

4. I tend to remain pretty calm even under stress.

1 2 3 4 5 6

5. I'm likely to smooth over or settle conflicts between two people whom I care about.

1 2 3 4 5 6

6. When someone close to me disappoints me, I withdraw from him or her for a time.

1 2 3 4 5 6

7. No matter what happens in my life, I know that I'll never lose my sense of who I am.

1 2 3 4 5 6

8. I tend to distance myself when people get too close to me.

1 2 3 4 5 6

9. It has been said (or could be said) of me that I am still very attached to my parent(s).

1 2 3 4 5 6

10. I wish that I weren't so emotional.

1 2 3 4 5 6

11. I usually do not change my behavior simply to please another person.

1 2 3 4 5 6

12. My spouse or partner could not tolerate it if I were to express to him or her my true feelings about some things.

1 2 3 4 5 6

13. Whenever there is a problem in my relationship, I'm anxious to get it settled right away.

1 2 3 4 5 6

14. At times my feelings get the best of me and I have trouble thinking clearly.

1 2 3 4 5 6

15. When I am having an argument with someone, I can separate my thoughts about the issue from my feelings about the person.

1 2 3 4 5 6

16. I'm often uncomfortable when people get too close to me.

1 2 3 4 5 6

17. It's important for me to keep in touch with my parents regularly.

1 2 3 4 5 6

18. At times, I feel as if I'm riding an emotional roller coaster.

1 2 3 4 5 6

19. There's no point in getting upset about things I cannot change.

1 2 3 4 5 6

20. I'm concerned about losing my independence in intimate relationships.

1 2 3 4 5 6

21. I'm overly sensitive to criticism.

1 2 3 4 5 6

22. When my spouse or partner is away for too long, I feel like I am missing a part of me.

1 2 3 4 5 6

23. I'm fairly self-accepting.

1 2 3 4 5 6

24. I often feel that my spouse or partner wants too much from me.

1 2 3 4 5 6

25. I try to live up to my parents' expectations.

1 2 3 4 5 6

26. If I have had an argument with my spouse or partner, I tend to think about it all day.

1 2 3 4 5 6

27. I am able to say no to others even when I feel pressured by them.

1 2 3 4 5 6

28. When one of my relationships becomes very intense, I feel the urge to run away from it

1 2 3 4 5 6

29. Arguments with my parent(s) or sibling(s) can still make me feel awful.

1 2 3 4 5 6

30. If someone is upset with me, I can't seem to let it go easily.

1 2 3 4 5 6

31. I'm less concerned that others approve of me than I am about doing what I think is right.

1 2 3 4 5 6

32. I would never consider turning to any of my family members for emotional support.

1 2 3 4 5 6

33. I find myself thinking a lot about my relationship with my spouse or partner.

1 2 3 4 5 6

34. I'm very sensitive to being hurt by others.

1 2 3 4 5 6

35. My self-esteem really depends on how others think of me.

1 2 3 4 5 6

36. When I'm with my spouse or partner, I often feel smothered.

1 2 3 4 5 6

37. I worry about people close to me getting sick, hurt, or upset.

1 2 3 4 5 6

38. I often wonder about the kind of impression I create.

1 2 3 4 5 6

39. When things go wrong, talking about them usually makes it worse.

1 2 3 4 5 6

40. I feel things more intensely than others do.

1 2 3 4 5 6

41. I usually do what I believe is right regardless of what others say.

1 2 3 4 5 6

42. Our relationship might be better if my spouse or partner would give me the space I need.

1 2 3 4 5 6

43. I tend to feel pretty stable under stress.

1 2 3 4 5 6

Appendix D: IRB Approval Letter



OFFICE OF RESEARCH COMPLIANCE
Division of Research, Commercialization and Outreach

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Human Subjects Protection Program**Institutional Review Board**

APPROVAL DATE: August 6, 2014
TO: Mr. Wayne Smith
CC: Dr. Marvarene Oliver
FROM: Office of Research Compliance
Institutional Review Board
SUBJECT: Initial Approval

Protocol Number: 88-14
Title: Career decision making of college students: effects on differentiation levels and proactive behaviors
Review Category: Qualifies for Exemption

Approval determination was based on the following Code of Federal Regulations:

Eligible for Exemption (45 CFR 46.101)

Criteria for exemption has been met (45 CFR 46.101) - The criteria for exemption listed in 45 CFR 46.101 have been met (or if previously met, have not changed).

- (2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Provisions:

Comments: The TAMUCC Human Subjects Protections Program has implemented a post-approval monitoring program. All protocols are subject to selection for post-approval monitoring.

This research project has been granted the above exemption. As principal investigator, you assume the following responsibilities:

1. Informed Consent: Information must be presented to enable persons to voluntarily decide whether or not to participate in the research project unless otherwise waived.
2. Amendments: Changes to the protocol must be requested by submitting an Amendment Application to the Research Compliance Office for review. The Amendment must be approved before being implemented.
3. Completion Report: Upon completion of the research project (including data analysis and final written papers), a Completion Report must be submitted to the Research Compliance Office.
4. Records Retention: All research related records must be retained for three years beyond the completion date of the study in a secure location. At a minimum these documents include: the research protocol, all questionnaires, survey instruments, interview questions and/or data collection instruments associated with this research protocol, recruiting or advertising materials, any consent forms or information sheets given to participants, all correspondence to or from the IRB or Office of Research Compliance, and any other pertinent documents.

5. Adverse Events: Adverse events must be reported to the Research Compliance Office immediately.
6. Post-approval monitoring: Requested materials for post-approval monitoring must be provided by dates requested.

