

2014

The Impact of First Year Seminar Courses Career Development Component on the Career Decision Making Process of Undecided College Students

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THE IMPACT OF FIRST YEAR SEMINAR COURSES CAREER DEVELOPMENT
COMPONENT ON THE CAREER DECISION MAKING PROCESS OF UNDECIDED
COLLEGE STUDENTS

A thesis submitted in partial fulfillment of the
requirements for the degree of
Master of Arts

By

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2014
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WRIGHT STATE UNIVERSITY
GRADUATE SCHOOL

April 24, 2014

I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER MY SUPERVISION BY Rashica Lenice Ward ENTITLED The Impact of First Year Seminar Courses Career Development Component on the Career Decision Making Process of Undecided College Students BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF Master of Arts.

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Abstract

Ward, Rashica Lenice. M.A. Department of Leadership Studies in Education and Organizations, Wright State University, 2014. The Impact of First Year Seminar Courses Career Development Component on the Career Decision Making Process of Undecided College Students.

The purpose of this study was to explore the impact of a career development component in a first year seminar course on the dysfunctional career thoughts of undecided first year college students, as measured by the Career Thoughts Inventory (CTI). The intent was to determine if there was a statistically significant difference in students exposed to the career development component in First Year Seminar courses as compared to students who were not by comparing the means of their CTI total scores. Also, for those students who were exposed to career development in a first year seminar course the study aimed to determine if there were statistically significant differences in the means of the CTI total scores based on gender. The *t*-test analysis from the data of the primary research question did not determine significant differences in the means of the CTI total scores of students who were exposed to the career development component and students who were not. Analysis from the data of the sub-research question did not determine significant differences in the means of CTI total scores of students exposed to the career development component by gender. Limitations as well as recommendations for future research included securing a larger sample and examining the construct scales within the CTI total score as opposed to only examining the total CTI score.

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Acknowledgements

I would like to acknowledge and thank all of my committee members: Dr. Patitu for her guidance, encouraging words and bright spirit during the times I felt overwhelmed and to Dr. Risacher and Dr. Graham for their encouragement and support throughout this journey. Also, a special thanks to the Office of First Year Programs, especially Catherine A. Queener and Jennifer Lobo for their support with this research study and their confidence in me as a First Year Seminar Instructor.

Dedication

I dedicate this research study mainly to my husband who has always been one of my biggest supporters in life and to my son and daughter for your love, patience and kind words you offer to me every day. Also, to my mother and sister as well as my mother-in-law, thanks for your unconditional love and inspiration. They along with my faith have been my total inspiration throughout this graduate studies journey.

I love you all very much.

Chapter 1 – Introduction

An increasing percentage of new students report that their number-one goal for attending college is “preparing for an occupation” (Pryor, Hurtado, Saenz, Santos, & Korn, 2007). In order to accomplish this goal, it is clearly important for students to develop a viable plan, either prior to or early on in college that identifies a college major and related career compatible with their abilities, interests and values (Cuseo, 2005). Institutions need to assist students in a proactive effort that strongly encourages career development at the start of a student’s college journey, and do so in an economical and effective manner. The first year seminar course, which over 75% universities are currently offering (National Resource Center for the First Year Experience and Students in Transition, 2009) is an ideal opportunity to influence career development along with its already established purpose of assisting students’ with academic and social development and transition to college.

Purpose of the Study

The purpose of this study was to explore the impact of a career development component in a first year seminar course on the dysfunctional career thoughts of undecided first year college students. Studies have been done on the effectiveness of independent career development, planning and exploration courses on the career decision making process of undecided students (Hansen & Pedersen, 2012; Miller & Reese, 2006; Taylor, 2009). These studies resulted in statistically significant findings regarding the

effectiveness of early career planning and exploration. There were also several limitations discovered in three of these studies concerning the sample sizes used, types of interventions, lack of ethnic diversity, length of course being too short to allow for true student development, the need for a theoretical framework and the need for a control group for comparison purposes (Hansen & Pedersen, 2012; Reese & Miller, 2006; Taylor, 2009). It is evident career development is an essential component for student success.

Similarly, studies have been done on the effectiveness of career interventions and career development modules within first year seminars as opposed to being taught independently. The courses examined in some of these studies were actually theoretically based on the Cognitive Information Processing approach and were shown to have been successful in improving dysfunctional career thoughts and career decision self-efficacy (Hansen & Pedersen, 2012; Henderson, 2009; Pickett, Gore, Swanson, & Rinella, V., 2009). In Hansen & Pedersen's (2012) study in particular it was suggested that additional data from multiple institutions over time be investigated before any definitive conclusion can be drawn.

The career development component for this study was recently developed over the prior school term and incorporated into the instructor training as a guide for instructors to use for lesson planning focused on career planning and it possess some commonalities of the CIP approach or theory to career decision making (Sampson, Jr., Peterson, Lenz, & Reardon, (1992)). The career development component used in this study and the CIP approach intend to "foster learning and improve decision-making skills" (Sampson, Peterson, Reardon, & Lenz, 2003).

After further review of the literature relating particularly to the effectiveness of career development components embedded within First Year Seminar courses, it appears this practice is growing, yet rarely examined causing a need for additional research. Cuseo (2005) added that it may be time to engage in research focusing on the process of students deciding on a major and the point in time at which students actually reach these decisions during their college experience. Therefore, the need to study the impact of career development component within the first year seminar courses has on the career decision making process of undecided students is essential to institutions knowing how best to assist undecided first year students struggling to select or confirm a major.

Statement of the Problem

This research study investigated and added to the current efforts of previous studies to help determine the impact of a first year seminar course's career development component on the career decision making process of undecided students. The independent variable in this study is whether the group of students has had the career development component or not. The dependent variable is the Career Thoughts Inventory (CTI) total score of individual students in the eight first year seminar themed learning community course's designed for undecided students.

Definition of Terms

The following terms were operationally defined for this study:

Career decision making- According to Peterson, Sampson, Reardon, and Lenz it is defined as the thought processes by which an individual integrates self-knowledge and occupational knowledge to arrive at an occupational choice (as cited in Henderson, 2009) as measured by CTI.

Career development- The factors and the processes influencing individual career behavior
(Herr, 2001)

Career Thoughts- Outcomes of one's thinking about assumptions, attitudes, behaviors, beliefs, feelings, plans, and/or strategies related to career problem solving and decision making (Sampson, Jr., Peterson, Lenz, Reardon, & Saunders, 1996a). These can be dysfunctional or functional.

Career Thoughts Inventory (CTI) – A theory-based assessment and intervention resource intended to improve the quality of career decisions made by adults, college students, and high school students...(Sampson, Jr., Peterson, Lenz, Reardon, & Saunders, 1996c).

Cognitive Information Processing (CIP) approach – It applies the CIP theory to the acquisition of career problem solving and decision making skills with an intention to foster learning and improve their decision making skills that will help students with making future career choices.

Dysfunctional career thinking- A perceptual way of viewing oneself in a manner that “inhibits career problem solving and decision making” (Sampson et al., 1996a, p. 2).

First year seminar- A college course designed to transition students academically and socially (Wright State University (WSU), 2013). It facilitates learning about a subject or combination of topics, learning about the institution, learning about the diversity within campus communities, and learning about oneself and one's abilities (Hunter & Linder, 2005).

Impact – To have a direct effect or major influence on someone or something

(Encyclopedia Britannica, 2013)

Learning Communities (LC)- A small group of first-year students who take First Year Seminar and a core class together, typically 20 to 25 students who share similar interests or majors and receive personal attention from peer mentors, advisors, and instructors as part of a supportive community (WSU, 2013). According to the National Resource Center for Learning Communities at Evergreen State College (Washington Center, n.d.), learning communities at minimum need to include these three components: 1) a strategically-defined cohort of students taking courses together which have been identified through a review of institutional data 2) robust, collaborative partnerships between academic affairs and student affairs, and 3) explicitly designed opportunities to practice integrative and interdisciplinary learning

Peer Mentor Instructors- Paraprofessional staff members who teach First Year Seminar courses for new students as part of the Learning Communities (LC) Program. Peer Mentors are current graduate or undergraduate upper-class students who serve as teachers, role models, sources of information for new students, and representatives of the institution (WSU, 2013).

University College Instructors (UVC Instructors) - Consist of Peer Mentor Instructors, University Staff or Faculty who teach First Year Seminar courses (WSU, 2013).

Undecided College Students- Unwilling or unable to make appropriate educational and vocational decisions (Gordon, 2007). For this given study they are first year

undecided college students participating in the following learning communities: Completely Undecided, Undecided and Taking Math, Undecided and Living on Campus, Undecided Considering Business, Undecided Considering Education, Undecided Considering Liberal Arts, Undecided Considering Nursing, and Undecided Considering Science & Math.

Research Questions

The following research questions were used as a guide to focus this study:

Primary Research Question: Is there a difference in the mean total Career Thoughts Inventory (CTI) scores of undecided college students in First Year Seminar courses with the embedded career development component and undecided college students in First Year Seminar courses without the embedded career development component?

Sub-Research Question: Is there a difference in the mean total CTI scores of undecided college students in First Year Seminar courses with the embedded career development component by gender?

Scope

The scope of this research study was limited to first year students who were considered undecided about their major and who were enrolled in first year seminar courses at a medium size, public, four-year, state university located in the Midwest. This study did not look at all first year students enrolled in first year seminar courses being offered, only those first year students enrolled in the eight first year seminar courses within learning communities that are specifically geared for undecided college students

which included: Completely Undecided, Undecided and Taking Math, Undecided and Living on Campus, Undecided Considering Business, Undecided Considering Education, Undecided Considering Liberal Arts, Undecided Considering Nursing, and Undecided Considering Science & Math. This study hopes to investigate the impact the career development component in these First Year Seminar courses has on the career decision making process of undecided college students.

Assumptions

The following assumptions were identified and were accepted as true in this study:

1. The researcher assumed undecided college students may not have the ability to make well-informed decisions with respect to their future careers and selecting a major.
2. The researcher assumed that the students enrolled in the first year seminar courses within the particular Learning Communities investigated in this study are students who are actually undecided about their major.
3. All First Year Seminar instructors were given and have access to the first year seminar training materials for the execution of the career development component within their respective first year seminar courses. They were also trained to use the training materials. The researcher assumed all instructors used the career development component appropriately and as trained.
4. All first year seminar instructors were required to go through instructor training and are also given a master syllabus to use as a guide to base their syllabi on. Therefore, the researcher assumed the overall content of the first year seminar learning communities are executed and taught similarly, equally and adequately.

5. The researcher assumed the students will respond to the Career Thoughts Inventory (CTI) honestly.

Positioning, Biases and Ethical Issues

The researcher had one bias that could have potentially affect opinions. A bias could have existed since the researcher was a Peer Mentor Instructor for one of the aforementioned first year seminar course within a learning community geared for undecided students.

Significance of the Study

The job market and career decision making demands placed on students are changing continually (Miller & Reese, 2006). New careers are up and coming while others no longer relevant in this world due to many reasons especially the advancement of technology. This demand can potentially have a profound impact on students' career decision making. Therefore, it is extremely important for not only parents, but also higher education to realize the presence of this demand and act accordingly. Higher education institutions should be proactive in determining what influences college students to make decisions related to selecting a career and major.

According to the literature (Hansen & Pedersen, 2012; Henderson, 2009; Osborn, Howard, & Leierer, 2007; Miller & Reese, 2006; Reed, Reardon, Lenz, & Leierer, 2001), career courses and career interventions can be a valuable and effective means of service delivery because many studies have shown its usefulness on many dimensions particularly career decision making, which is the focus of this study. Utilizing opportunities like the first year seminar course to integrate career development is ideal because it is the first interaction with students in their first year at the time they are

interpreting expectations and establishing goals. Embedding components of career development into first year seminar courses would be an avenue in which students got exposure to career development early on and the knowledge they need in order to have the ability and comfort to make a career decision. Considering college is a pivotal time for career decision making; many career interventions are seen as a way to enhance career decision making among college students (Scott & Ciani, 2008).

This study was designed to help determine whether such interventions like a career development component in first year seminar are indeed effective. It explored the impact of a first year seminar career development component on undecided first year college students as determined by measuring their level of dysfunctional career thinking using the CTI questionnaire (Sampson et al., 1996c). Comparing the level of dysfunctional thinking in first year students exposed to career development within first year seminar to students who have not been exposed to career development in first year seminar will add to the efforts of previous research seeking to determine the impact of career development on first year students. Additionally, it could help to determine whether career interventions are effective in helping undecided first year students to successfully select a major and decide upon a career early on in college.

Chapter 2 – Literature Review

This chapter reviewed the current literature and gave an overview of the research that exists related to undecided college students in postsecondary institutions. The overview looked at the career decision-making process of college students deciding upon a major, aspects of career development, and its effectiveness and value within higher education, particularly within first year seminar courses.

Undecided College Students: Who are they?

In higher education undecided college students can often be seen as one of the least likely group to persist through college because they appear to have no focus, direction or goals. They are seen as procrastinators and at times assumed to be “at risk” for attrition (Cuseo, 2005), which was indicated in a recent study on underprepared student populations (Henderson, 2009; Taylor, 2009). Undecided students can be seen as individuals who have entered college without selecting an official major of study with the academic advising office because many institutions simply define decided or declared students as those who have actually selected and declared a major of study with the academic advising office (Ohio University, 2013; The Ohio State University, 2010; University of Toledo, 2013).

Another way to define these students could be as individuals who are unwilling or unable to make appropriate educational and vocational decisions (Gordon, 2007). Other researchers go further in-depth with their definition suggesting that there are several types

of undecided college students. Sampson, Peterson, Reardon & Lenz (2003) define their first type of undecided college students as individuals who are unable to make a choice because they have no interest in making one, so they defer that decision. Their second type are individuals who need to make a choice but cannot commit to one, and they lack self, occupational, and/or decision-making knowledge necessary to make a choice. And the third type is defined as individuals who have the characteristics of someone who is undecided, with the addition of having an overabundance of talents, interests and opportunities. According to Peterson et al., (2003), these individuals, potentially those with a high GPA or honor students, are often overwhelmed with the diversity of available options and may experience pressure from significant others, including family members, for high levels of achievement.

Undecided college students, as defined above, have become more prominent on campuses in the U.S particularly first year students also known as freshmen students. In 2001, 8.5 percent of entering freshmen were considered unsure of their career path, up from 1.7 percent in 1966, according to a survey by the Higher Education Research Institute at the University of California at Los Angeles (as cited in Berger, 2003). At the University of Toledo (2013), their Department of Exploratory Studies comments that the undecided major is considered “one of the biggest majors on campus” (FAQ section, para. 1). Comments have also been made that one out of four or five students enter college as undecided (Ohio University, 2013; University of Toledo, 2013).

Research suggested that the question of whether students are decided or undecided about a major may be less important than questions about when and how students actually make a decision on a major (Cuseo, 2005). Being aware of this

information can be essential to higher educational institutions, suggesting that they become more proactive in their efforts with helping undecided first year students in choosing a major and career choice. Some Midwestern institutions like Miami University (Hauptmann, 2010), Ohio University (Hauptmann, 2010), and the Ohio State University (OSU, 2010) have reported an increase of students identifying as undecided.

Approximately 20-25% is a truer depiction of students who are undecided on their respective campuses causing these institutions to move forward with developing programming and interventions in support of undecided students or exploratory students.

College Students Career Decision-Making Process

Deciding on a career and college major can be a daunting task for a college student and providing assistance to these students can likewise be daunting for the institution they attend. National survey data showed that most institutions adopt a laissez faire position with respect to first year students selecting a major and some Baccalaureate-liberal arts colleges even postpone official major selection until after the first year (Policy Center on The First Year of College Year, 2003). In a more recent survey conducted in 2005 (National Resource Center for the First Year Experience and Students in Transition), it was found that over 70% of the participating 4-year institutions stated that their most common “sophomore initiatives” were career planning and major selection. One can only assume that the sophomore initiatives identified were the result of the laissez-faire position many institutions take during the first year. This may be causing little opportunity for students to begin the career development process at the start of college, which may be more effective in better preparing students to make this decision much sooner.

Otherwise, students are required in their sophomore year to make this difficult decision of selecting a major, even though many have not had the opportunity to explore any career options in their first year in or prior to college. Unlike what the national survey shows, not all institutions are taking this kind of laid back approach; increasingly more institutions are proactively requiring students to engage in various activities and/or courses to explore academic majors and careers. Two such institutions are West Virginia University (WVU) (2013) and Southern Illinois University at Carbondale (SIUC) (2013). As of recent, WVU has made their first year seminar course a graduation requirement for their students which is rather uncommon in higher education. One of the main learning outcomes of their first year seminar is that students will have engaged in career planning and major/career exploration upon the end of their first semester (WVU, 2013). SIUC has a program housed within their University College, Exploratory Student Advisement, whose goal is to support undecided students while they take the time to explore their major choice (SIUC, 2013). Ideally, considering these proactive steps, these students will be more prepared and comfortable with declaring a major by the end of their second semester. Students who don't feel they have a goal, who cannot see the connection between their courses and what they plan to do, are at the greatest risk of dropping out (Berger, 2003).

Understanding there may be several determining factors that influence college students' selection of a major and career, how can one make a decision without the opportunity to explore career options during their first year? According to the 2012 National Survey of Student Engagement (NSSE) in which 21,000 students at 42 U.S. institutions were surveyed, it was learned that the top two influential factors of college

students choosing a major were because of their “academic interest or passion for the topic” and “a fit of talents and strengths.” The next most influential factors were available job opportunities and students’ concern with the ability to find a job, particularly amongst non-white groups of students (NSSE, 2012). Additionally, studies have shown parental occupations having some influence (Williams, Leppel, & Waldauer, 2005).

Importance of Career Development within Higher Education

Students lacking career development in college not only affects the individual student and their career decision-making process, but can also be impactful to institutions of higher education. The variables that may affect the institution include overall student retention, completion rates, and ultimately an indirect effect on the institutions’ federal funding (Cuseo, 2005; Gore, 2004; Sternberg, 2006; Upcraft, Gardner, & Barefoot, 2005). While national survey data currently shows only a stable college first-to-second year retention rate of 66.5% and completion rate of 45.4% as compared to 65.9% and 45% respectively in 2009 (ACT, 2013), other research studies indicate that some factors do show a more positive impact on individual campuses. For example, Sternberg (2006) looked at the impact of career exploration and career focus on retention at the University of Texas at San Antonio because for several years the institution was averaging a retention rate of 28% with students in their Coordinated Admission Program (CAP) (University of Texas San Antonio, 2012). After much research it was found that students who had been exposed to some level of career exploration were in fact being retained higher than 50% of the average retention rate (University of Texas San Antonio, 2012).

A more recent study done by Hansen & Pedersen (2012) looked at the effects of career development courses on career decision-making and some other focus areas as it

pertained to undecided students. This study consisted of 236 first-time, full-time undecided students from a large, four-year, urban, public, commuter university in the Midwest over a period of four semesters. They ultimately found that undecided students (61%) had significantly higher one-year retention rates compared to undecided students (43%) not participating in career development courses. Results also suggested that undecided students in career development courses (56%) had significantly higher second-year retention rates compared to undecided students (40%) not participating in career development courses (Hansen & Pedersen, 2012).

Not only can retention potentially be affected, but eventually an institution's federal funding may be reduced. Institutions should consider the proposal from the Obama Administration to allocate federal aid to institutions based upon access, affordability, and student outcomes, particularly graduation/completion rates (Field, 2013). The measures within this proposal are much different than the enrollment figures for which institutions are currently measured by. If an institution's completion and/or retention rates drop, the implications of less federal aid and penalties could be detrimental to its existence. Again, this shows a critical reflection of the importance of career development within higher education.

Recommendations by pioneers in the field such as Joe Cuseo and Paul Gore have since formulated to increase awareness and exposure to career development with particularly first year students. In fact, the NSSE survey data showed that approximately 40-50 percent of first-year college students did not use career planning services during college (as cited in Kuh, 2007). In other words, almost 50% of first year college students obviously did not take advantage of their respective institutions career resources, if any,

typically housed within the career services office. This has become an area of concern to many professionals in and researchers of higher education (Cuseo, 2005; Gore, 2002; Henderson, 2009; Osborn et al., 2007; Pickett et al., 2009).

Career Development within First Year Seminar

More than 87% of institutions in the U.S. now offer first year seminars (National Resource Center for the First Year Experience and Students in Transition, 2009) in comparison to 68% when national data were first collected in 1988 (Hunter & Linder, 2005). The purpose of most first year seminars is to assist students in their academic and social development and transition to college (Hunter & Linder, 2005). Over the years, institutions have further developed and integrated their first year seminars to include other aspects to create more variation in the types of seminars and to enhance first year students' college experience. Examples included using a common text, establishing service-learning projects, and a more recent movement towards discipline-specific content which addresses college success topics but also introduces students with similar interests to a particular program of study or career field (Hunter & Linder, 2005), very pertinent to the career development process.

It is essential for first year seminars to incorporate a career development component into the course to aid first year students in their decision-making process of selecting a career and major program of study during college. With this in mind, Paul Gore (2002), a professor of psychology, a known researcher, and advocate of both first year experience and career development, notes that students should be responsible for their career development to compete and be successful in this changing global economy. He further stated “professionals involved in First Year Experience.....are in a unique

position to provide students with meaningful career development and exploration experiences” (Gore, 2002, para. 2). Considering his number of years developing, implementing, and assessing outcomes on specifically the inclusion of a career development module within first year seminars, Gore (2002) found that his career modules promote outcomes similar to other studies of college self-efficacy, encourages higher levels of career exploratory behavior, results in fewer perceived career barriers, and promotes decision-making efficacy (Hansen & Pedersen, 2012; Henderson, 2009; Miller & Reese, 2006), and vocational identity (Pickett et al., 2009; Toman & Savickas, 1997). He believes that providing early and developmentally appropriate career interventions for first year students assures that they have the skills necessary to make educational and career decisions in college and beyond (Gore, 2002).

Similarly, Cuseo (2005) suggested promotion of early academic and career planning by infusing it into the first-year curriculum. Two recommendations were to either offer career development as an independent course in first year programs or include the topic as a component of the First Year Seminar curriculum (Cuseo, 2005; Gore, 2002). Cuseo (2005) believed either option will assist in connecting students’ present college experience to their future goals and aspirations. Cuseo (2005) described several institutions that utilize their first year seminars in this fashion, including Norwich University in Vermont, Marymount College, Southern Illinois University at Carbondale, and West Virginia University to mention a few. Moreover, John Gardner, a pioneer in this area of first year experience, stated “the working relationship among service-learning programs and units responsible for providing career planning needs to be strengthened and made more intentional” (as cited in Cuseo, 2005, Strategies section, para. 6).

Therefore, intentionally structured interventions, like the inclusion of career development within the strategically designed and theory based first year seminar course may be essential to improve the effectiveness of first-year students' academic and career decision making.

Summary

This chapter presented an overview of the current literature that relates to undecided students' career decisions in their first year of college. The sections included learning about the undecided college students in postsecondary institutions, understanding the career decision-making process of college students deciding upon a major, aspects of career development, and its effectiveness and value within higher education and particularly within first year seminar courses. This literature offers evidence that there is a sense of urgency to effectively integrate career development as early as possible in a student's college journey to assist him or her with the challenging decisions upon entering college and deciding on a career and major. Inclusion of career development within first year seminar is the ideal economical and effective path institutions should take in accomplishing this task.

Conceptual Framework

The conceptual framework for this study was based on the Cognitive Information Processing Approach (referred to hereafter as the CIP approach) to career development and services. This approach evolved at Florida State University campus in 1971. It applies the Cognitive Information Processing Theory to the acquisition of career problem solving and decision making skills and builds upon the self-directed career service delivery strategies developed at Florida State University (Sampson et al., 2003). The

purpose of the CIP approach is to help students with making current career choices, but also to foster learning and improve decision-making skills that will help students with making future career choices, which is all part of career development (Sampson et. al, 2003) and is the focus of this study.

Several researchers have used the CIP approach as a career theory for the framework of their studies with college students (Henderson, 2009; Osborn et al., 2007; Reed et al., 2001). Reed, Reardon, Lenz, and Leierer (2001) study on college students enrolled in a 3 credit hour career development course was based on CIP theory. Their study found that a career course did influence the students' career thoughts indicating a reduction of dysfunctional thinking about career problem solving and decision making. Also similar, was Osborn, Howard, and Leierer's (2007) study of a more "racially and ethnically" diverse group of college freshmen within a career course which revealed a statistically significant reduction of dysfunctional thinking related to career problem solving and decision making. And a more recent study found that underprepared college students dysfunctional career thoughts improved significantly following a career intervention and was maintained four weeks after the intervention that was based on the CIP career theory (Henderson, 2009). The popularity of understanding this emerging theory on undecided college students is of particular interest to this researcher.

This researcher's study looked at the CIP approach as it pertains to career decision-making, the application of the CIP theory and its two core constructs, the pyramid and CASVE (communication, analysis, synthesis, valuing, execution) cycle which were adapted by Sampson, Peterson, Lenz, and Reardon in 1992 and then used to teach clients about the components and process of career choice. The pyramid of

information processing domains is considered to be the content of career problem solving and decision-making while the CASVE cycle is considered the process of career problem solving and decision-making (Sampson et. al, 2003). Collectively this career theory helps individuals understand the content of career decision-making (what individuals need to know) and the process of career decision making (what individuals need to do) (Sampson et al., 2003).

One of the first decisions upon arriving at college frequently is selection of a major. An undecided first year college student who is unable or unwilling to make this decision can find this process very challenging. For these reasons starting the career decision-making process in a student's first year is essential. Allowing the opportunity for undecided first year students in a first year seminar course to gain Self-Knowledge and Occupational Knowledge at the first level (lower domain) of the pyramid is a crucial starting point. At this domain on the pyramid, an undecided first year college student learns about their values, interests, skills, employment preferences as well as their options from direct experiences or observations. In this study, one of the ways undecided first year college students attain this level is through their participation in the Party Exercise, based upon Dr. John Holland's Career Typology Theory that classifies personality types into six categories which correlate with certain jobs or work environments (Hammock, Lobo & Queener, 2013). The Party Exercise allowed students to explore their own personality types and the potential careers that reflect each type. Another way this level is attained is through the investigation of majors and career options via online career services tools and program websites or other webpages as well as in-class discussions on the topics of career exploration.

The next domain in the pyramid construct of this career theory is the Decision-Making Skills domain. This is where the students begin to understand how they make decisions, particularly as it relates to selecting a career and major. The CIP approach uses the CASVE cycle for this domain whereby students would move through the respective five stages of the cycle to process information for making career decisions, applicable for this study as well. In the CASVE cycle the process of career problem solving and decision making involves phases starting with communication, analysis, synthesis, valuing, execution and back around again to communication to repeat the process every time a decision needs to be made. In simpler concepts translated by Sampson, Peterson, Reardon, & Lenz (2003) for students to comprehend, the phases involve communication (knowing I need to make a choice), analysis (understanding myself and my options), synthesis (expanding and narrowing my list of options), valuing (choosing an occupation program of study or job), execution (implementing my choice) and back around to communication (knowing I made a good choice).

This domain can be attained many ways including structured class activities, events, assignments, class discussions, out of class learning experiences, assessment instruments, and/or computer-assisted career guidance systems. Examples of attaining this domain in the first year seminar courses of this study could be the exposure to guest speakers from various programs of study (e.g. Academic Advising, Career Services, Professors), introduction to work-study, co-op, internship or volunteer opportunities, participation in service-learning projects, and out of class informational interview or shadowing experience assignments within their potential field of interest requiring a written reflection. Also, the participation of co-curricular activities on campus requiring

first year students to participate, observe or join a club, organization or event on-campus could also help for attaining this domain. Reflecting independently in a written format as well as discussing these experiences in a class discussion environment could also be impactful while students are in this domain.

The top domain of the pyramid is the Executive Processing Domain where it is mentioned that meta-cognitions take place. Where self-talk (positive and negative), self-awareness, and monitoring and control of oneself is occurring (Sampson et al., 2003). In this domain, an undecided first year student could now be at the point where they are thinking and reflecting on their decision-making, their choice and the plan they have committed to implementing, which could be their selected major. So this is where the cognitively restructuring, advocacy, advising, networking, and support groups on campus may be helpful to them. Instructors could take this opportunity to regularly refer undecided first year students to seek out the guidance of their academic advisor to implement their chosen program of study and also refer the students to career services for additional resources and advising with respect to their processing of the decision they have made about their chosen career path.

This overall approach can help individuals create a cognitive framework for career choice that reduces ambiguity in the career choice process, better manage the overwhelming amount of career choice information available, and can provide clear criteria for self-monitoring of progress in decision-making (Sampson et al., 2003).

Illustrations depicting the Pyramid of Information Processing Domain In Career Decision Making and the Five Stages of the CASVE Cycle of Information Processing Skills Use in

Career Decision Making as adapted by Sampson et al., 2003 can be found in Appendix A and B respectively.

This researcher attempted to show the impact of first year seminar courses career development component which appears to be similar to the CIP approach on the career decision-making process of undecided first year college students.

Chapter 3 - Methods

Target Population

This study took place at a medium-size, public, four-year, Midwestern state university. The participants for this study were drawn from the roster of the first year students enrolled in the university's fall 2013 semester first year seminar courses. There were 121 students registered for the sections designed for undecided students, therefore all were extended the invitation to participate in this study in the spring 2014 term. The gender for all 121 students invited to participate in this study could not be fully retrieved by the researcher, therefore it is assumed this sample is similarly proportionate to the demographical sketch of the research institution as a whole as of fall 2012 which can be found in Appendix C.

The UVC first year seminar course was a one credit hour course. It was an optional course for students, not required to be taken. The eight first year seminar themed learning community courses selected for investigation in this study are as follows: Completely Undecided, Undecided and Taking Math, Undecided and Living on Campus, Undecided Considering Business, Undecided Considering Education, Undecided Considering Liberal Arts, Undecided Considering Nursing, and Undecided Considering Science & Math (WSU University College, 2013). These particular courses were developed for students who consider themselves undecided college students, or unsure about considering a particular career or major and want to start the career exploration and career development process. The participants in this study enrolled

in the aforementioned first year seminar themed learning community courses in fall 2013.

The first year seminar courses were taught by UVC Instructors also known as Peer Mentor Instructors (current graduate or undergraduate upper-class students), university staff or university faculty. Peer Mentor Instructors were required to go through a structured instructor training with the First Year programs office. All instructors were given a master's syllabus to use as a guide and were required to adhere to shared first year seminar learning community goals which are to 1) connect with professors, 2) achieve academic success, 3) confirm their major and connect with a degree-granting college, and 4) transition and connect to college. Main topics typically covered by the instructors of first year seminar include time management, academic integrity, student & campus life, diversity appreciation, and study skills. Classes were taught using lectures, quizzes, group activities, reflective homework assignments, in class and out of class activities and reading assignments.

Career Development Component

The intent of this study is to assess the impact of the first year seminar courses career development component on the career decision making process of undecided college students. The career development component was optional for instructors to use (see Appendix D: Career Planning Roadmap, a guide for instructors to use when adding career development to their classes). The instructors of the eight learning communities investigated in this study were asked if they intended to include a career development component to their classes during fall 2013 term. Four of the eight did indicate their intended use, while the remaining four did not. Of the 121 undecided first year students

invited to participate in this study, 62 were exposed to a career development component while 59 were not. Therefore, the study investigated the students exposed to career development as compared to the students who were not exposed. The instructors were also asked to inform their students about the study during the last week of their classes fall term and inform them about the invitation to participate in a survey along with incentives which were to be distributed in the spring 2014 term.

The career development component was designed as a guide for instructors incorporating career development into their class to help engage their students in exploring and identifying the following: their personal characteristics/interests, the campus career resources, their personal characteristics and career goals in relation to academic majors and also to learn about their interested program of study's admission requirements. All of this may be done through lectures, individual or group activities, reflective homework assignments, in or out of class activities, service learning opportunities or reading assignments. The career development component learning outcomes are the aforementioned First Year Seminar learning communities' goals. The career development component has more of an emphasis on the third learning community goal-- confirm a major and connect with a degree-granting college.

Instrument

In order to investigate the career decision-making process of undecided first-year students, one must consider determining their dysfunctional career thinking, a perceptual way of viewing oneself in a manner that inhibits career problem solving and decision making (Sampson et al., 1996b). For example, a dysfunctional career thought might be "I get so overwhelmed with making a career decision that I just can't get started" or "I'm

never good at making decisions” (Sampson et. al, 1996b). By reducing dysfunctional career thinking, students are more likely to effectively process information needed for exploration, problem solving, and decision-making (Vernick, 2001). For this study, the dysfunctional career thinking of the participants was measured using the Career Thoughts Inventory (CTI) by Sampson, Peterson, Reardon, Lenz, & Saunders (1996c) which is a self-administered, objectively scored measure that has been effectively used in similar studies (Henderson, 2009; Osborn et al., 2007; Reed et al., 2001). The CTI instrument is a theory-based assessment based on the CIP theoretical approach to career development and career services. It consists of 48-items that yield a CTI total score (a single global indicator of dysfunctional thinking in career problem solving and decision making) and scores on three construct scales: Decision Making Confusion (DMC), Commitment Anxiety (CA), and External Conflict (EC). The DMC scale measures an inability to initiate or to continue the decision-making process because of disabling emotions or lack of understanding the process of decision making. The CA scale reflects an inability to commit to a specific career choice and the presence of generalized anxiety about the consequences of making a career decision causing indecision. The EC scale reflects an inability to balance the importance of one’s own self-perceptions with the importance of input from significant others, resulting in a reluctance to assume responsibility for decision making (Sampson et al., 1996c).

Items are rated on the CTI using a 4-point rating scale (*strongly disagree, disagree, agree, and strongly agree*). The raw score range is from 0 to 144 which is the highest score that an individual can obtain. The Inventory can be completed in 7 to 15 minutes and can be scored and profiled in 5 to 8 minutes. It has been shown to be a

reliable and valid measure of dysfunctional career thinking of high school students, college students, and adults. The reliability of the scales of the CTI are internally consistent with coefficient alphas for the total score ranging from .93 to .97, for the DMC scale ranging from .90 to .94, for the CA scale ranging from .79 to .91, and for the EC scale ranging from .74 to .81 (Sampson et al., 1996c). The CTI items and scales also possess content, construct, convergent and criterion-related validity and utility (Sampson et al., 1996c).

In this research the CTI was used to measure dysfunctional thinking of first year undecided college students in relation to primarily career decision making (Sampson et al., 1996c). The researcher calculated each student's CTI total score and compared the means between the two described comparison groups, particularly the difference of the level of dysfunctional thinking which will indicate if the career development component had an impact on it or lack thereof. The higher the CTI score then the greater the level of dysfunctional career thinking.

Data Collection Procedure

The researcher took the appropriate precautionary measures and requirements which resulted in approval from the Institutional Review Board (IRB) to conduct the research study involving human subjects at this research institution. The requirements included going through the proper CITI training as well as submitting a petition for approval to do research involving human subjects. The documents were all submitted to the Office of Research and Sponsored Programs of the research institution according to the appropriate deadline dates.

Upon receiving official IRB approval, the researcher requested from the Office of First Year Programs, the university email addresses of the college students who participated in the aforementioned eight first year seminar themed learning community courses during the fall 2013 term and were enrolled for the spring 2014 term at the research institution. It is the researcher's understanding that if a student did not enroll in the spring 2014 term, then the individual would not be considered a current student at the research institution and unable to be reached via their university email address.

In the month of February spring 2014 term, the researcher individually emailed each participant through their university email address a consent form (Appendix E) that briefly explained the purpose of the study and their involvement and requested permission to confidentially use their responses for the research study. In the email was a direct link to "The Career Thoughts Inventory" on SurveyMonkey for each participant to complete as a post-questionnaire in an electronic form. As an added incentive to help with recruiting participants, upon receipt of a completed questionnaire, the participants' university email addresses were placed in a drawing for the opportunity to win one of two \$50 Visa gift cards, to be held at the conclusion of the study. The researcher was only in need of the email addresses of each participant to contact the gift card winners pertaining to the drawing. The researcher sent out the questionnaires to each participant using a unique coding only known to the researcher to distinguish between the two groups being compared in the study. After seven days and only nine participant responses, the researcher sent out a reminder email message with the CTI questionnaire link via SurveyMonkey to those invitees initially emailed, but had not yet responded. In consideration of the one week spring break vacation at the research institution the

researcher also felt it necessary to send out reminder email messages four more times to only those invitees who had not yet responded over the course of 15 days to ensure all were well-informed of the invitation to participate. The researcher also reached out to the Director and Coordinator of First Year Programs via email asking for advice on contacting first year students, however, both the director and coordinator said it would be best to reach first year students through their former instructors. So the researcher reached out to each of the eight former instructors of the undecided learning communities from the fall 2013 term requesting their assistance to encourage their former students to participate in the study. No response was received from any of the eight former instructors; therefore, it was assumed no assistance was provided.

The results of the questionnaires were received by the researcher from each participant via email; the dataset was stored initially in Survey Monkey's secured database, which the researcher retrieved for analyses purposes throughout the study. Finally, the unidentifiable dataset was transferred onto a secured flash drive which was kept securely locked in a file cabinet until the conclusion of the study.

Hypotheses

The following research hypotheses were addressed by this study:

Null Hypothesis:

H_0 = There will be no differences in the mean of total CTI scores of undecided college students in First Year Seminar courses with the embedded career development component and undecided college students in First Year Seminar courses without the embedded career development component.

H_1 = There will be differences in the mean of total CTI scores of undecided college students in First Year Seminar courses with the embedded career

development component and undecided college students in First Year Seminar courses without the embedded career development component.

Null Hypothesis:

H_0 = There will be no differences in the mean of total CTI scores of undecided college students in First Year Seminar courses with the embedded career development component by gender.

H_2 = There will be differences in the mean of total CTI scores of undecided college students in First Year Seminar courses with the embedded career development component by gender.

Data Analysis

Using the Cognitive Information Processing (CIP) career theory approach as a framework and the Career Thoughts Inventory which is based upon the approach allowed the researcher to look critically using a quantitative method into the career decision making process of undecided students as it related to choosing a major and career to see if there was, in fact, an impact. In a quantitative study by Kilk, (as cited in Vernick, 2001, Subsequent Research section, para. 3) dysfunctional career thoughts were found to be positively correlated with the inability to choose a major field of study for undecided college students. Dysfunctional thinking in any of the dimensions of the CIP approach could impair an individual's ability to make career decisions and solve career problems (Sampson, Jr., Peterson, Lenz, Reardon, & Saunders, 1996b).

The primary research question for this study sought to examine the difference in the CTI scores of undecided college students in first year seminar courses with the embedded career development component and undecided college students in first year seminar courses without the embedded career development component. The researcher

calculated the student's total score from the CTI. The data were categorized into the two comparison groups by a unique code to ensure for accuracy and confidentiality. It was analyzed for the level of dysfunctional thinking as assessed by the CTI and by the *t*-test analysis to compare the means of the dependent variables. Previous studies of undecided college students exposed to career development early on have statistically shown to have lower total CTI post-test scores, in other words a reduced level of dysfunctional career thinking. In this study it was expected that the comparison group (treatment group) would have a substantially lower level of dysfunctional thinking upon analysis of the *t*-test as compared to the other (control group) positing that by reducing dysfunctional career thinking they are more likely to effectively process information needed for exploration, problem solving, and most pertinent to this study career decision making (Sampson et al., 1996c).

Chapter 4 - Results

The purpose of this study was to examine the impact of a career development component in a first year seminar course on the dysfunctional career thoughts of undecided first year college students. In this study the Career Thoughts Inventory (CTI) questionnaire was distributed via email to 121 undecided first year college students who had completed the First Year Seminar course the semester prior. The student's CTI total scores were used to measure their dysfunctional thinking in relation to primarily career decision making (Sampson et al., 1996c); so the higher the CTI score, the greater the level of dysfunctional career thinking and the lower the CTI score, the lower the level of dysfunctional career thinking. Items were rated on the CTI using a 4-point rating scale (*strongly disagree, disagree, agree, and strongly agree*). The raw score range was from 0 to 144 which is the highest score that an individual could obtain.

Analysis of the data was conducted using Microsoft Excel 2010 and the Data Analysis Toolpak within it. The researcher calculated each student's CTI total score and compiled the information, finding that a total of 22 students completed the questionnaire which included 4 males and 18 females. And of the 22 completed questionnaires, 12 (2 males and 10 females) were from the group who were exposed to the career development component, while the other 10 (2 males and 8 females) were from the group who were not exposed to the career development component. The analysis used was a *t*-test analysis to compare the means of the groups. Using the total CTI scores of the students, the researcher conducted a two-tailed *t*-test, specifically a two-sample assuming equal

variances analysis in the Microsoft Excel Analysis Toolpak. The researcher attempted to determine if there was a significant statistical difference that would indicate whether or not if the career development component had an impact. The results presented in this chapter offer a preliminary view. Results are provided following each research question.

Primary Research Question

Is there a difference in the total CTI scores of undecided college students in First Year Seminar courses with the embedded career development component and undecided college students in First Year Seminar courses without the embedded career development component?

Null Hypothesis: There will be no differences in the mean of total CTI scores of undecided college students in First Year Seminar courses with the embedded career development component and undecided college students in First Year Seminar courses without the embedded career development component.

Results

The findings of the *t*-test analysis were as follows: $t(20) = .06, p > .05$. The absolute *t* value for the two-tailed test was .06, with an associated *p* value of .95. The null hypothesis was not rejected. In order to reject the null hypothesis the obtained *t* value needed to be equal to or greater than the critical value of 2.08 (*df*=20) at the .05 level. There was no significant difference found in the means of CTI total scores of undecided college students in First Year Seminar courses with the embedded career development component ($M = 60, SD = 30.74$) and undecided college students in First Year Seminar courses without the embedded career development component ($M = 60.8, SD = 27.89$).

Sub-Research Question

Is there a difference in the total CTI scores of undecided college students in First Year Seminar courses with the embedded career development component by gender?

Null Hypothesis: There will be no differences in the mean of total CTI scores of undecided college students in First Year Seminar courses with the embedded career development component by gender.

Results

The sample for the group exposed to the career development component consisted of 12 participants, 2 males and 10 females. The findings of the *t*-test analysis were as follows: $t(10) = 1.95, p > .05$. The obtained *t* value for the two-tailed test was 1.95, with an associated *p* value of .08. The null hypothesis was not rejected. In order to reject the null hypothesis the obtained *t* value needed to be equal to or greater than the critical value of 2.23 (df=10) at the .05 level. The analysis revealed no significant differences in the means of CTI total scores of undecided college students in First Year Seminar courses with the embedded career development component between the male students ($M = 25.5, SD = 13.44$) and the female students ($M = 66.9, SD = 28.59$).

Chapter 5 – Summary, Conclusions and Recommendations

The purpose of this study was to determine if a career development component in a first year seminar course has a statistically significant impact on the career decision-making process of undecided first year college students. The researcher examined the effect the career development component had on the dysfunctional career thoughts of the students, as measured by the Career Thoughts Inventory (CTI). Dysfunctional career thinking has been defined as a perceptual way of viewing oneself in a manner that “inhibits career problem solving and decision making” (Sampson et al., 1996c, p. 2). The researcher was to determine if there was a significant difference in students exposed to the career development component in their respective First Year Seminar courses as compared to students who were not by comparing the means of their CTI total scores through *t*-test analysis. Also, for those students who had been exposed to career development in a first year seminar course the study aimed to determine if there were differences in the means of the CTI total scores by gender.

The *t*-test results revealed no significant difference in the means of the CTI total scores between students exposed and students who were not exposed to the career development component. Also, no significant difference was found by gender amongst the group of students exposed to the career development component. Following are conclusions and recommendations for both the primary research question and sub-research question.

Conclusion for Primary Research Question

Is there a difference in the total CTI scores of undecided college students in First Year Seminar courses with the embedded career development component and undecided college students in First Year Seminar courses without the embedded career development component?

The results for the primary research question demonstrated that a statistically significant difference did not exist in the means of the CTI total scores of students who were exposed to the career development component and students who were not. In other words, the *t*-test results indicated that the career development component was not effective in significantly reducing overall dysfunctional career thoughts in first year students. These findings contradict the findings of Osborn, Howard, and Leierer (2007) as well as Henderson (2009) who both reported a significant impact of dysfunctional career thoughts of college freshmen exposed to a career intervention or course. Specifically in these studies, the students CTI scores showed a reduced level of dysfunctional career thoughts upon the completion of the career intervention or course. Henderson and Osborn, Howard, and Leierer also used research designs that consisted of a pre-test which enabled them to more easily detect a reduction in dysfunctional thinking.

The results of the analysis for the primary research question in this study did not show a significant difference; however, the researcher believes that the analyses depicted in Figure 1 and 2 along with the literature provides some evidence to support the need for future research. Considering the raw score range for the CTI total score is from 0 to 144, in Figure 1, the majority of the students exposed to career development did trend lower CTI total scores ranging from 19 to 79, indicating a lower level of dysfunctional career

thinking. Whereas the majority students of the group that were not exposed to career development seem to trend higher CTI total scores ranging from 59 to 100, shown in Figure 2. This supports the findings of Henderson (2009) who posited that students exposed to the career intervention, as measured by the CTI, significantly decreased their dysfunctional career thinking by way of a lower CTI total score from pretest to posttest.

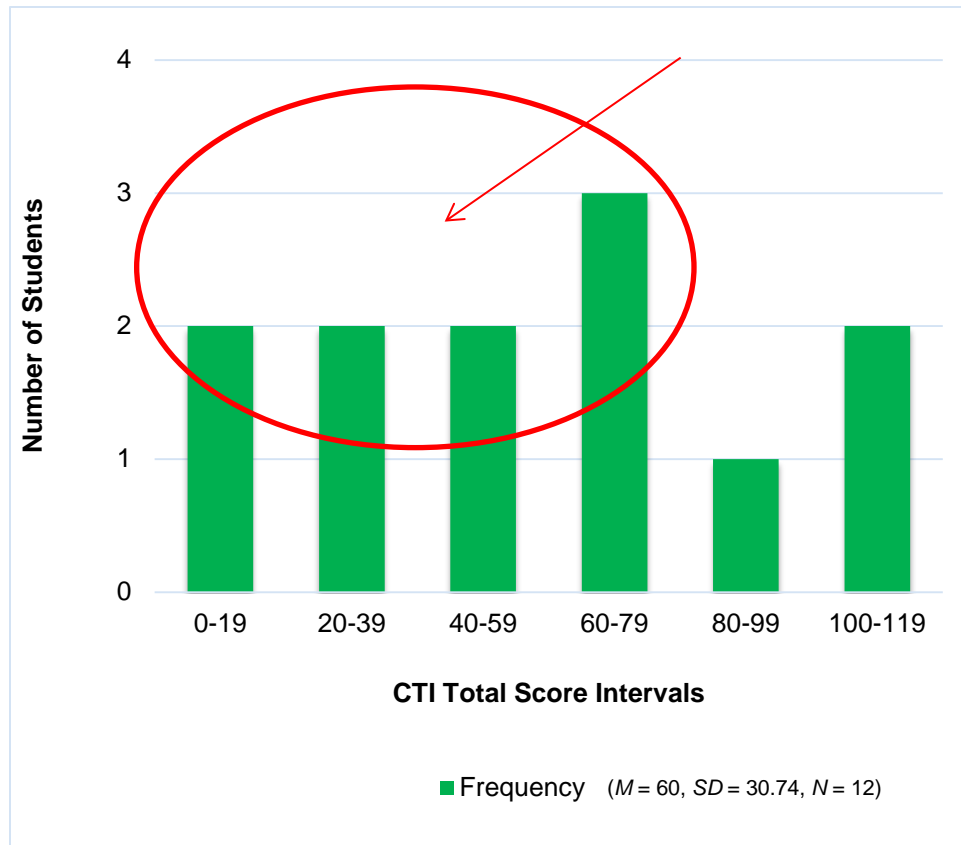


Figure 1. CTI scores of students in First Year Seminars with the career development component. Bar graph showing the number of students for each CTI score interval.

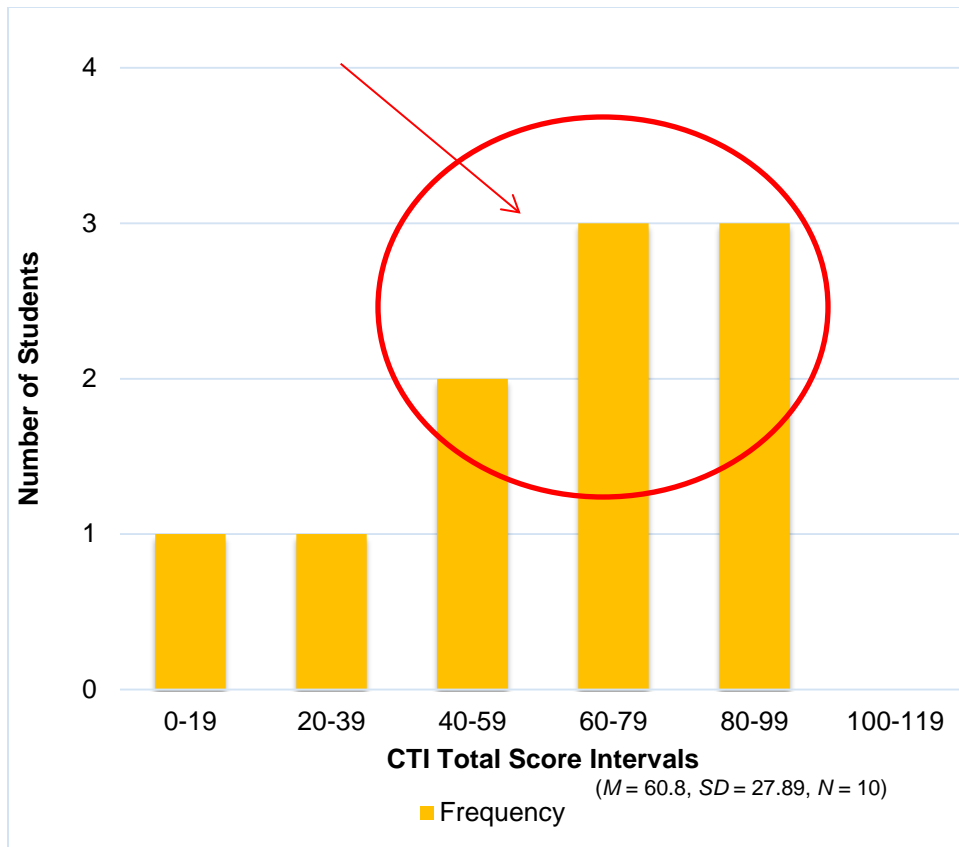


Figure 2. CTI scores of students in First Year Seminars with the career development component. Bar graph showing the number of students for each CTI score interval.

With this said, one factor the researcher believes may have contributed to the lack of a significant difference being identified could have been due to the low response rate of questionnaires which led to a small data sample. It is possible that a higher response rate would have allowed for a larger data set to be analyzed perhaps yielding a significant difference, if one did exist.

Reasoning for such a low response rate also might be contributed to the timing and/or method used to distribute the CTI questionnaires to first year college students. The CTI was distributed via an electronic method that notified the student participant via email at the beginning of the spring semester following the fall term for which the

students actually took the First Year Seminar course. According to a study done by Carini, Hayek, Kuh, Kennedy, and Ouimet (2003) college students favor surveys conducted on the Web versus on paper. So the method of distributing the questionnaire electronically via email appears to have been a viable method, except that there are some students who seldom use their school email accounts so perhaps they were unaware they were invited to participate (Carini et al., 2003) which may have been the case in this study, therefore affecting the response rate. Also, the timing of the distribution of the electronic questionnaire may not have been ideal. Distributing the questionnaire in the following semester rather than immediately following completion of the students First Year Seminar course or in the last day of the course may not have been the best route for distribution considering the students had all just begun a new semester of courses. Additionally, the varied methods instructors may have used to implement the component, for example instructors may have used the component incorrectly or not in its entirety, could have been a contributing factor in these findings.

Conclusion for Sub-research Question

Is there a difference in the total CTI scores of undecided college students in First Year Seminar courses with the embedded career development component by gender?

The results for the sub-research question demonstrated that a significant difference did not exist in the means of CTI total scores of students exposed to the career development component by gender. Although the male students had lower CTI scores than the female students, the score was not significantly different nor a reasonable measure given the extremely small data set representing males. The sample of students

exposed to the career development component consisted of only 2 male students out of the 12 total that were analyzed in that group. It is possible that a significant difference was inhibited due to the small sample size representing male students. In consideration of this information and considering the conflicting results in literature concerning an impact as it relates to gender (Henderson, 2009; Osborn et al., 2007; Scott and Ciani, 2008), more data are needed in order to determine if gender is even a factor.

To further investigate, recommendations for future research pertaining to gender differences of students exposed to career development includes securing a larger sample more closely representing the gender dynamic of the student population at the research institution. Also, consideration should be given to not only examining differences in the CTI total score, but also examining differences on the three construct scales scores that make-up the total score: Decision Making Confusion (DMC), Commitment Anxiety (CA), and External Conflict (EC). The DMC scale measures an inability to initiate or to continue the decision-making process because of disabling emotions or lack of understanding the process of decision making. The CA scale reflects an inability to commit to a specific career choice and the presence of generalized anxiety about the consequences of making a career decision causing indecision. The EC scale reflects an inability to balance the importance of one's own self-perceptions with the importance of input from significant others, resulting in a reluctance to assume responsibility for decision making (Sampson et al., 1996c). The reliability of the scales of the CTI were internally consistent with coefficient alphas for the total score ranging from .93 to .97, for the DMC scale ranging from .90 to .94, for the CA scale ranging from .79 to .91, and for

the EC scale ranging from .74 to .81 (Sampson et al., 1996c). The CTI items and scales also possess content, construct, convergent and criterion-related validity and utility (Sampson et al., 1996c). Perhaps significant differences in gender could have been found had the researcher examined the individual construct scales as opposed to only examining the overall total score in addition to having a larger sample size.

Limitations

The following limitations were identified in this study:

1. Students voluntarily enrolled into the first year seminar courses and selected a learning community of their interest.
2. Data were only gathered at a medium size, public, four-year, state university located in the Midwest, so the result of the research cannot be generalized beyond this study.
3. The researcher was unable to control for the varied method of the UVC instructors; however, all instructors received the master syllabus to use as a guide to develop their syllabi and all instructors adhered to the same aforementioned LC goals, so students should have received similar main aspects of the curriculum.
4. The number of survey responses in the sample size was smaller than the researcher anticipated which could have minimized the validity of the study because statistical tests typically require a larger sample size.
5. There was a lack of a pre-test in this study that would have allowed for additional outcome comparisons.

Recommendation for Future Research

In light of the findings of this study, additional research is suggested in the following areas:

1. This study should be replicated with another group of undecided first year college students in First Year Seminar courses.
2. Conducting a study utilizing a larger sample size that more closely represents the true population could yield more information regarding the impact of the career development component on first year students and possibly yield more information on any significant gender differences.
3. A similar study is also needed that also examines gender differences looking at the scores on the construct scales that make-up the total score: Decision Making Confusion (DMC), Commitment Anxiety (CA), and External Conflict (EC).
4. Distribute the CTI questionnaire electronically in a computer lab on a day during the final week of the course to allow for a higher response rate, in turn a larger sample size.
5. A longitudinal research design could be ideally conducted to examine the impact of the career development component on undecided first year college students over time.
6. A similar study that utilizes pre-test scores to compare the post-test findings could allow for a better understanding of results going forward.

Summary

Although the study did not reveal a significant difference between undecided first year students exposed to a career development component in a First Year Seminar course

and undecided first year students who were not exposed, it is a topic that should be further examined to understand why the results were not significant and what institutions of higher education might do to improve the results of this type of intervention.

The job market and career decision making demands placed on students are changing continually (Miller & Reese, 2006). This demand can potentially have a profound impact on students' career decision making. It is extremely important for higher education to realize the presence of this demand and provide support to students that will enhance their readiness to make career decisions in a timelier manner. Higher education institutions should be proactive in determining what influences college students to make decisions related to selecting a career and major and at what point in their college career does this occur. By examining the factors that influence and impact college students career decision-making process such as a career development component (intervention) particularly in the first year of college as this study did, institutions will be able to provide early and developmentally appropriate career interventions for first year students that assures they have the skills necessary to make sound educational and career decisions in college and beyond (Gore, 2002).

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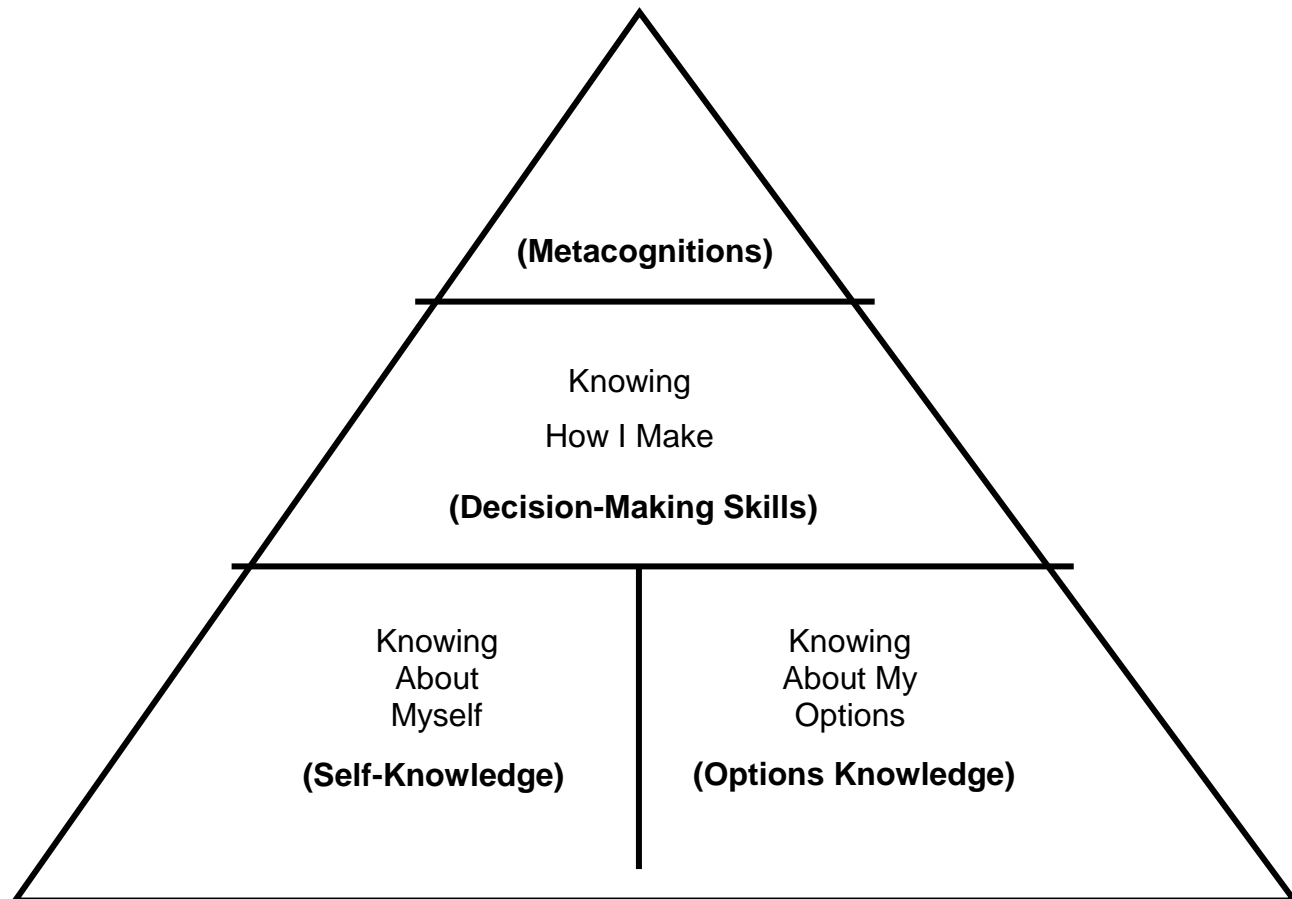
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Appendix A

Pyramid of Information Processing Domain In Career Decision Making

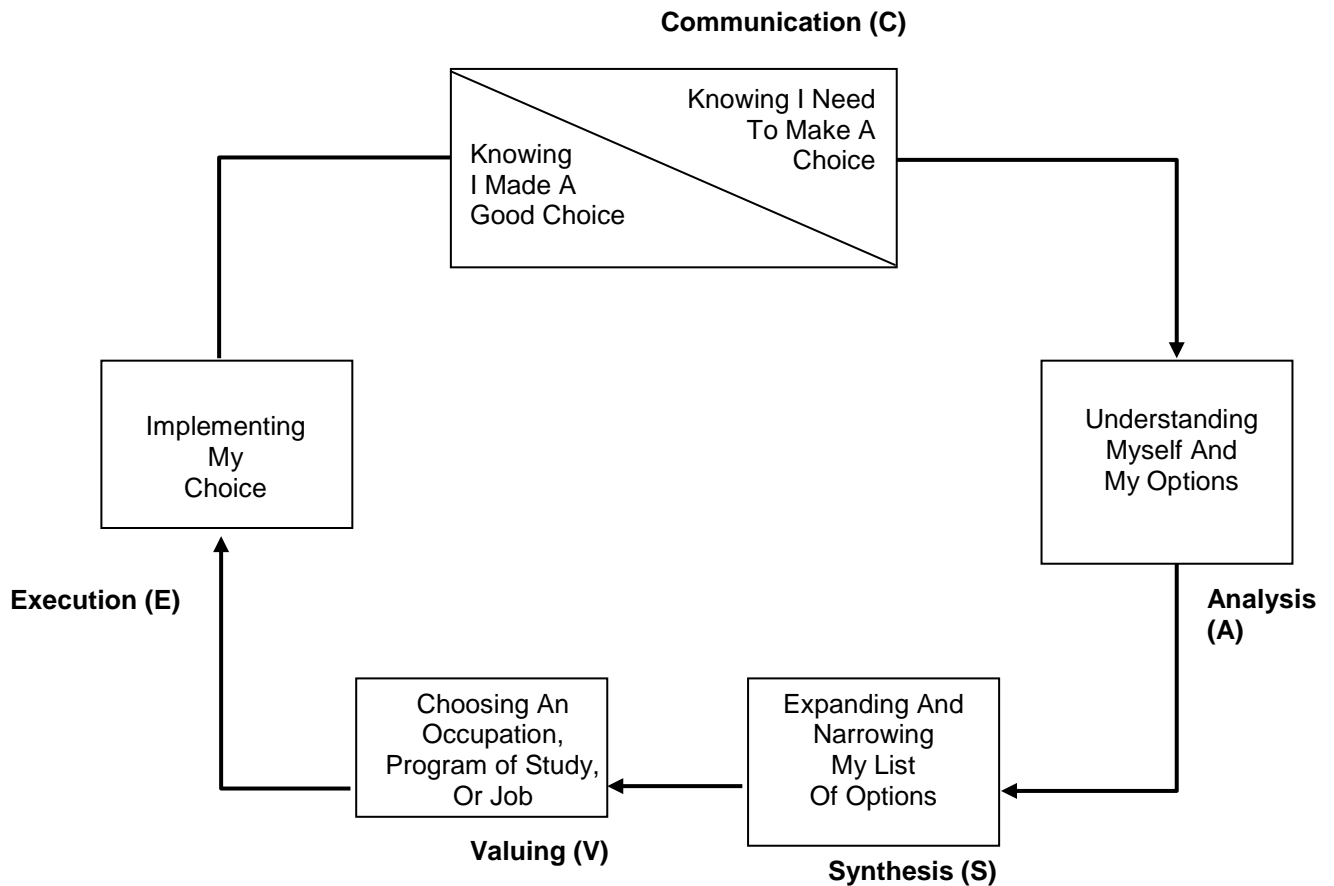


Adapted from:

Sampson, J. P., Jr., Peterson, G. W., Lenz, J. G., & Reardon, R. C. (1992). A cognitive approach to career services: Translating concepts into practice. *Career Development Quarterly*, 41, 67-74. Used with permission.

Appendix B

The Five Stages of the CASVE
(Communication, Analysis, Synthesis, Valuing, Execution)
Cycle of Information Processing Skills Use in Career Decision-Making



Adapted from:

Sampson, J. P., Jr., Peterson, G. W., Lenz, J. G., & Reardon, R. C. (1992). A cognitive approach to career services: Translating concepts into practice. *Career Development Quarterly*, 41, 67-74. Used with permission.

Appendix C

Research Institution's Student Demographics Enrollment, fall 2012

Group	Number of Students	Percent of Student Body
Men	8,314	46.7%
Women	9,475	53.3%
Full-time	13,626	76.6%
Part-time	4,163	23.4%
Undergraduates	14,127	79.4%
Graduate Students (master's degrees)	2,513	14.1%
Doctoral/Professional Students	848	4.8%
Out-of-State Students	1,728	9.7%
International Students	1,060	5.6%
Countries Represented		66
Mean Age of All Students		24.5
Students 25 and Over	5,565	31.3%

Wright State University (2013). Fact Sheet. Retrieved from

<http://webapp2.wright.edu/web1/newsroom/for-the-media/factsheet>

Appendix D

Career Planning Roadmap

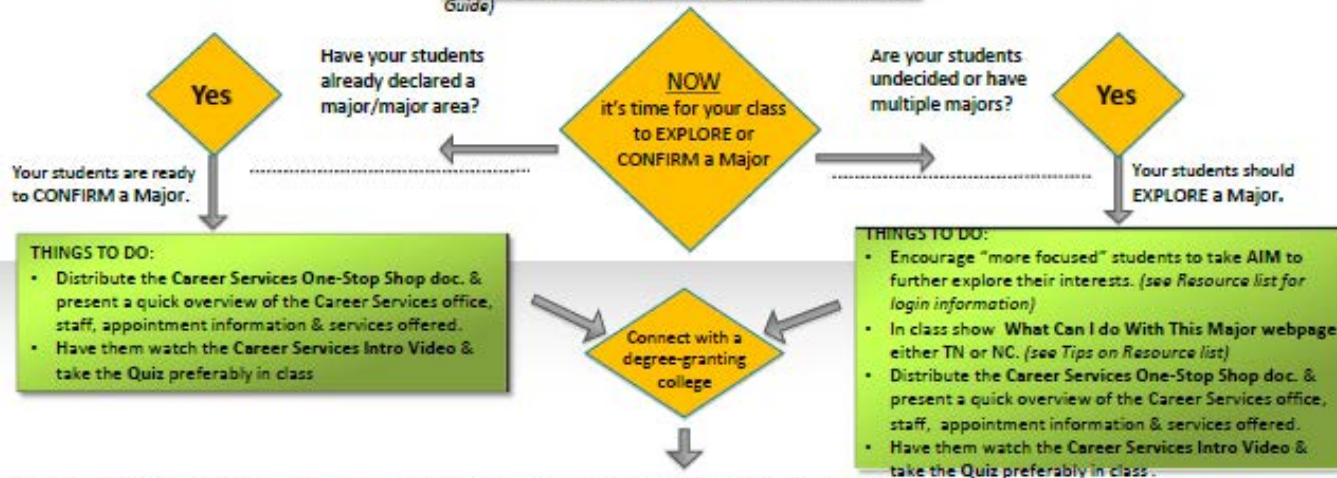
CAREER PLANNING ROADMAP

*Items in **BOLD** are on Career Services Resource list

TO START ALL LC Instructors should review Career Choices: Career Exploration & Decision-Making Process webpages prior to class

THEN have ALL of your students reference Making Effective Career Decisions page A-22 in the Step-by-Step with Connections Text. This doc is a stair step process—so start your class discussion from the bottom step "Know Yourself" on up to the top step "Evaluate Your Choice". (See Tips on Resource List)

NEXT ALL instructors do the Holland Personality Type Exercise in class, it is on page A-21 in the Step-by-Step Connections Text & have students reflect on what they discovered (use the Holland Personality Type Exercise Facilitator Guide in the Step-by-Step Connections Instructor's Guide)



ALL INSTRUCTORS distribute & go over the Summary of Program Admission Requirements document on University College website <https://www.wright.edu/sites/default/files/page/attachments/admission-reqs.pdf>. This will assist students with selecting an "attainable major". Then the following are suggested for you to use to accomplish this LC Goal: Invite guest speakers from one or more colleges, discuss the Regular Student Work-Study, Federal Work-Study, Co-op/Internship programs, discuss how to get involved in service learning projects, introduce informational interviewing, shadowing, volunteering, and even joining campus clubs or organizations of interest (see Resource List & Guest Speakers list for Tips). *Always direct students to their Academic Advisor for most current information.

Appendix E
Informed Consent Form/Cover letter

Project Title: The impact of First Year Seminar courses career development component on the career decision making process of undecided college students

Dear Potential Participant,

My name is Rashica Ward, and I am a graduate student in the Department of Leadership Studies in Education and Organization. As part of my graduate research, I am seeking your participation in my research study, which is described below. You are being asked to participate in this research because you participated in one of the WSU Learning Communities during the fall 2013 term.

Purposes of the study: To collect information on the career thoughts of undecided first-year students upon completion of their First Year Seminar courses. This research data will help me gain further insight and understanding of the undecided first year students' decision making process as it relates to selecting a major. Hopefully, at the conclusion of this research, it will bring forth enlightening information for program staff as well as academic and career advisors regarding the challenges they face every year as it pertains to the major selection process of undecided first year students.

Methods used for this study: This project is research. Data will be collected from you via an on-line questionnaire sent through your university email address. The on-line questionnaire should take approximately 7-15 minutes to complete. Questionnaire results will be emailed directly to me and placed on a flash drive stored securely in a locked file cabinet at Wright State University to ensure confidentiality. The results will be used for research purposes. Your information will be assigned a code that is unique to this study. The list linking your email address to the study will be kept on the same flash drive where only the principal investigators listed below will have access. Upon completion of the study, the list linking participant's email addresses to the study will be destroyed and your name will not be used in any reports or publications resulting from this study. There are no foreseeable risks involved. There are no direct benefits to you for participating in this study. Upon completion of the questionnaire, your university email address will be placed in a drawing for the opportunity to win one of two \$50 Visa gift cards, to be held at the conclusion of the study. Your chance of winning one of the Visa gift cards is approximately 1 in 121.

Rights as a participant: Your participation is voluntary. Refusal to participate or withdrawal of consent at any time without explanation will involve no penalty or loss of benefits or actions affecting academic standing. By completing the on-line questionnaire you are indicating your consent to participate in this study.

If you have any questions about this study please contact the principal investigator, Rashica Ward (ward.65@wright.edu), Committee Chair/Advisor Carol Patitu Ph.D. (937-

775-4148; carol.patitu@wright.edu), or Committee Co-Chair/Advisor Joanne Risacher Ph.D. (937-775-2680; joanne.risacher@wright.edu). For further questions regarding your rights as a research participant, contact WSU Institutional Review Board 937-775-4462 or robyn.wilks@wright.edu.

THIS FORM SERVES AS YOUR COPY WHETHER OR NOT YOU AGREE TO PARTICIPATE

Appendix F
Career Thoughts Inventory (CTI)

Publishing the instrument is not permissible.