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The Influence of Selected Factors on the Perceived Work Readiness of Undergraduate Program Completers at a Research University

Karen Lynne Goodridge

Louisiana State University and Agricultural and Mechanical College, kgoodr2@lsu.edu

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THE INFLUENCE OF SELECTED FACTORS ON THE PERCEIVED WORK
READINESS OF UNDERGRADUATE PROGRAM COMPLETERS AT A
RESEARCH UNIVERSITY

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Agricultural and Extension Education and Evaluation

by

Karen Lynne Goodridge
B.A. Southeastern Louisiana University, 2003
M.Ed. Southeastern Louisiana University, 2005
May 2018

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Karen L. Goodridge

With God all things are possible!

This dissertation is dedicated to those who have walked through this journey with me. First and foremost, to my husband, Larry Goodridge, for your unwavering love, support and believing in me to the very end. To my daughter, Randi Lynne Murphy, I dedicate this dissertation to you and hope to inspire you to be persistent until you reach your aspirations. Know that your love, friendship and encouragement were my strength in times of great weariness. And finally, to my precious grandson, Roman Devall Murphy. My running buddy, my stress reliever, Mimi's side kick. I adore you more than you may ever know. At the age of three, you already know that Mimi is building a legacy that she expects you to build upon. A legacy worth living.

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ABSTRACT

The primary purpose of this study was to determine the influence of selected personal, academic, and employment characteristics on the perceived work readiness of undergraduate program completers at a research university located in the Southern Region of the United States. The target population was undergraduate program completers at research universities in the United States. The accessible population was undergraduate program completers at one selected research university (RU/VH) located in the Southern Region of the United States. The sample comprised 100% of the defined accessible population who completed a graduating student survey administered by the Office of Career Services (OCS) at the selected university.

With IRB approval, the researcher requested data be downloaded from the archived files in the OCS and transferred to a computerized recording form. Descriptive analysis, correlations, and multiple regression were conducted to meet the objectives of the study.

The findings indicated that a higher percentage of program completers were identified as Caucasian and female. Also, females tended to have a higher score of perceived WR when compared to males. The program completers perceived WR was measured by responses to six items selected from the graduating student survey. The item that was scored highest was “Working with people different from yourself.” The factor analysis showed all six variables loading into a single factor, with loadings that ranged from .876 to .776. This single factor explained 70.5% of the total variance. Students completing an internship for course credit tended to have a higher score on perceived WR than the students who did not complete an internship for course credit. Overall, program completers perceived themselves to have a moderate level of WR. The mean overall WR scale score was 3.85 on the five-point response scale.

The researcher concluded, participants had a moderate level of WR. Recommendations by the researcher included a follow up study to ascertain if WR after 3 months on the job differs from WR at the time of degree completion.

The researcher also recommends that a longitudinal study of students entering an undergraduate program be conducted each year through their program and into their first job experience.

CHAPTER 1. INTRODUCTION

The virtues of men are of more consequence to society than their abilities; and for this reason, the heart should be cultivated with more assiduity than the head.
—Noah Webster, 1788

Work readiness is an important factor in determining the ability of recent graduates to compete in national and global job markets (Buhler, 2015). A well-prepared workforce is crucial to virtually all organizations today; therefore, the lack of readiness displayed by recent graduates is a serious and growing problem. This lack has implications not only for the individual but also for the school from which the individual graduates, the organization that chooses to hire the individual, and the economy. Employers have maintained that, although college graduates today are technically prepared, they lack readiness for the job, especially in the area of soft skills (Clark & ACT Inc., 2013; 2015; Bentley University Preparedness Study, 2014; NACE, 2017). The economy is likewise affected, as work readiness affects the employment rate of recent graduates. And as Gloria Larson, president of Bentley University, has said, “Colleges and universities are only as successful as their graduates” (2015, p. 1).

This chapter begins with a discussion of the overarching problem of work readiness and its impact on students, educational institutions, employers, and the economy. The chapter then presents the objectives of this study as well as its significance.

Overarching Problem

There are more college graduates now than ever, with over 4,800,000 degrees conferred annually. Of those, 1.9 million are bachelor’s degrees (National Center for Education Statistics (NCES, 2018). In the state of Louisiana alone, there were 19,218 bachelor’s degrees conferred in 2017 (NCES, 2018). The number of bachelor’s degrees rose each school year between 2000-2001 and 2015-2016, increasing by a total of 54 percent (from 1.2 million to 1.9 million) (NCES,

2018). According to NACE, "Among the Class of 2017, 70.8 percent of students planned to enter the workforce and 23.2 percent planned to continue their education" (2017, p. 1). Despite the high number of recent college graduates, they have struggled with unemployment rates for nearly six years and account for half of the 10.9 million unemployed Americans (Pianin, 2014). Yet college enrollment is expected to set new records from Fall 2020 through Fall 2026 (NCES, 2018).

Lack of Work Readiness

The problem employers have faced is filling job openings with candidates who are “perceived to possess the attitudes and attributes that make them prepared or ready for success in the workforce” (Caballero, C. & Walker, A., 2010, p. 42). In other words, employers have been seeking college graduates who are work ready. Work readiness, as perceived by employers, is the expectation that job candidates possess a level of skills “indicative of potential in terms of job performance, success, and potential for promotion and career advancement” (Atley & Harris, 2000; Casner-Lotto & Barrington, 2006; Gardner & Liu, 1997; Hambur, Rowe, & Luc, 2002; Hart, 2008). Higher education institutions, in turn, have felt pressured to meet federal funding transparency guidelines that require that graduates be prepared with the technical and nontechnical skills necessary to be considered work ready. Equipping students with the technical and nontechnical skills needed relies heavily on services often provided by an office of student affairs, such as career services. Colleges play an important role in helping bridge the preparedness gap between what colleges teach and what employers need, as well as bringing about the changes necessary to develop work-ready graduates for the workforce (Bentley University Preparedness Study, 2014; Caballero, Walker, & Fuller-Tyszkiewicz, 2011).

Implications of the Lack of Work Readiness

As stated earlier, a lack of work readiness has implications for the individual, the educational institution, the employer, and the economy. With respect to the individual, a lack of the foundational skills needed to be minimally qualified for the workforce (Clark & ACT Inc., 2013; Tugend, 2013) ultimately results in not being employed, being underemployed, or being overlooked for promotions (Vedder, Denhart, & Robe, 2013). Colleges are impacted by federal transparency guidelines that require the provision of annual reports, in reasonable formats that are easy to read, for future students and families on graduation rates, first destination jobs, beginning salaries, and senior college (NACE, 2017). Furthermore, organizations base budgeting for future college investments on previous hiring, perceived quality of programs, past recruiting experiences with a college, and relationships with faculty and staff (NACE, 2017). The impact on employers is that available positions are left unfilled due to a lack of work readiness, especially in the area of soft skills (Lippman, Ryberg, Carney, & Moore, 2015). Finally, the lack of work readiness of recent graduates affects the level of student loan debt and the rate of default, ultimately impacting the economy (Cilluffo, 2017).

College graduates today are technically prepared; what they lack are soft skills (Clark & ACT Inc., 2013; Lippman, Ryberg, Carney, & Moore, 2015; Bentley University Preparedness Study, 2014; NACE, 2017). Employers are seeking recent graduates who are prepared for the workforce. The idea of workforce preparedness, as used by employers here, refers to the possession of a combination of technical skills, often referred to as ‘hard skills,’ and nontechnical skills, often referred to as ‘soft skills.’ Hard skills are “those skills acquired through training and education or learned on the job and are specific to each work setting” (Litecky, Arnett, & Prabhakar, 2004, p. 69). Whereas soft skills, as defined by Lippman, Ryberg, Carney, & Moore, “refer to a broad set of skills, competencies, behaviors, attitudes, and personal

qualities that enable people to effectively navigate their environment, work well with others, perform well, and achieve their goals. These skills are broadly applicable and complement other skills such as technical, vocational, and academic skills” (2015, p. 4). Both skills are necessary to be successful in the workforce. Individuals are graduating with the technical skills needed to face the competitive job market; however, these same individuals lack the complementary nontechnical skills (Bentley University Preparedness Study, 2014). College graduates lack preparedness, not technically, but in regards to nontechnical soft skills.

Terms Related to Work Readiness

A relatively new term, the phrase ‘work readiness’ “has emerged in the literature as a selection criterion for predicting graduate potential” (ACNielsen Research Services, 2000; Casner-Lotto & Barrington, 2006; Gardner & Liu, 1997; Hart, 2008). The issue of work readiness is far more broad and complex than one might expect. An extensive literature review of factors that influence the work readiness of college graduates reveals the lack of consistency in the usage of the terminology by stakeholder groups. Related terms that are used interchangeably include the following: (a) work readiness, career readiness, workforce preparedness; (b) foundational skills, workforce skills, hard skills and soft skills, competencies, employability skills; (c) hard skills, cognitive skills, technical skills; (d) soft skills, non-cognitive skills, non-technical skills; and (e) preparedness gap, work readiness gap, skills gap. For the sake of clarity and for the purpose of this study, the following terminology will be used: (a) work readiness; (b) foundational skills; (c) hard skills, technical skills; (d) soft skills, non-technical skills; and (e) preparedness gap.

Description of the Study

Purpose of the Study

The primary purpose of this quantitative study was to determine the influence of selected personal, academic, and employment characteristics on the perceived work readiness of undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States.

Dependent Variable

The dependent variable of this study was the perceived work readiness of undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States

Objectives of the Study

The following specific objectives were formulated to guide the researcher in accomplishing the purpose of this study:

1. To describe undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States using the following personal demographic characteristics:

- a) Age;
- b) Race;
- c) Gender;
- d) Whether they were classified by the study institution as “In-State” or “Out-of-State”.

2. To describe undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States using the following academic and employment characteristics:

- a) Senior college/school at the time of degree completion;
- b) Whether or not student completed an internship;
- c) Whether or not a paid internship was completed;
- d) Whether or not an internship was completed for course credit;
- e) Whether or not student is currently employed/has job offer.

3. To determine the perceptions of undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States on their work readiness as measured by responses to selected items on a Graduating Student Survey:

- a) Connecting what you learned to other knowledge, ideas, and experiences;
- b) Relating knowledge learned to daily life;
- c) Determining your future career;
- d) Building meaningful relationships;
- e) Collaborating with others;
- f) Working with people different from yourself.

4. To determine if a relationship exists between perceived work readiness and the following selected personal, academic, and employment characteristics among undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States:

- a) Age;
- b) Race;
- c) Gender;
- d) Whether they were classified by the study institution as “In-State” or “Out-of-State”;

- e) Senior college/school at the time of degree completion;
- f) Whether or not student completed an internship;
- g) Whether or not a paid internship was completed;
- h) Whether or not an internship was completed for course credit;
- i) Whether or not student is currently employed/has job offer.

5. To determine if a model exists explaining a significant portion of the variance in perceived work readiness among undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States from the following selected personal, academic, and employment characteristics:

- a) Age;
- b) Race;
- c) Gender;
- d) Whether they were classified by the study institution as “In-State” or “Out-of-State”;
- e) Senior college/school at time of degree completion;
- f) Whether or not student completed an internship;
- g) Whether or not a paid internship was completed;
- h) Whether or not an internship was completed for course credit;
- i) Whether or not student is currently employed/has job offer.

Significance of the Study

This study examined the chief complaint of employers, namely, that recent graduates lack work readiness skills, more specifically, soft skills. Because colleges fill the nation’s job market with recent graduates, it is imperative to determine the influence of selected academic, personal, and employment characteristics on the perceived work readiness of undergraduate program

completers in the competitive job market, where employers are seeking high-quality, work-ready future employees (Hopkins, Raymond, & Carlson, 2011).

In addition, this research study is useful for employers, researchers, and professional faculty and staff specializing in the area of work readiness of college students. Specifically, the results of this study makes a significant contribution to understanding and narrowing the gap between employers' needs and students' soft skills as developed by higher education (Bridwell-Bowles, Powell & Choplin 2009).

This chapter introduced the problem of work readiness and its impact on students, educational institutions, employers, and the economy. The purpose, objectives, and significance of the study were then described. The literature review in the next chapter provides an extensive discussion on the overarching problem employer's face on a daily basis: There are job openings but no fully qualified and work ready (technically and non-technically) candidates.

Definitions of Terms

For the purpose of this study, the following definitions are used.

DoL Competency Model: The Competency Model was established by the Employment and Training Administration, U.S. Department of Labor (DoL) (2015, p. 2), which,

Convenes industry partners and representatives of the workforce system, education, and labor, and related subject matter experts from relevant associations to develop models that lay out the full array of cross-cutting competencies in an industry or sector from foundational to industry-wide, to technical competencies within a specific sub-sector.

DoL Generic Competency Model: The generic model is comprised of personal effectiveness (non-technical skills), academic (technical skills), and workplace competencies (both non-

technical and technical skills), which are defined as the foundational knowledge, skills, and abilities needed to be successful in the workplace (DoL, 2015).

Work Readiness: Readiness is defined as “the extent to which graduates are perceived to possess the attitudes and attributes that make them prepared or ready for success in the work environment” (Caballero, & Walker, 2010, p. 42).

Extent of Work Readiness: The extent to which graduates are work ready is seen as indicative of potential in terms of job performance, success, and potential for promotion and career advancement (Atley & Harris, 2000; Casner-Lotto & Barrington, 2006; Gardner & Liu, 1997; Hambur, Rowe, & Luc, 2002; Hart, 2008).

Soft Skills: As defined by Lippman, Ryberg, Carney, & Moore, “Soft skills refer to a broad set of skills, competencies, behaviors, attitudes, and personal qualities that enable people to effectively navigate their environment, work well with others, perform well, and achieve their goals. These skills are broadly applicable and complement other skills such as technical, vocational, and academic skills” (2015, p. 4).

The Readiness Gap: As defined by Clark & ACT Inc., “A gap between the skills needed for a job requiring a given level of education versus those skills possessed by workers for a similar level of education” (2013, p. 15).

Undergraduate Program Completers (UPC): For the purpose of this study, Undergraduate Program Completers are defined as undergraduate students who meet the undergraduate senior school degree requirements.

Hiring Decision Makers: Hiring Decision Makers are those who decide whom to hire. They are also referred to as business decision makers, corporate recruiters, and business leaders.

Stakeholders: Stakeholders, or those affected by an issue, include leaders in higher education and business, corporate recruiters, current college students, recent college graduates, and the public at large (Bentley University Study, 2014).

CHAPTER 2. REVIEW OF LITERATURE

Failure to prepare is preparing to fail.

— John Wooden

The purpose of this study was to explore the characteristics that influence perceptions of work readiness by undergraduate program completers. Employers report that a lack of work readiness, especially with respect to soft skills, is a critical issue because of the negative impact and financial burden that it places on hiring and retaining new employees (Grasgreen, 2014). This issue is critical enough that the U.S. Department of Labor has developed a competency model for colleges and employers that defines and describes key personal effectiveness, academic, and workplace competencies necessary for individuals to succeed in the workforce.

This chapter provides an overview of the literature used to guide this study. A wide array of different perspectives on work readiness are provided as well as related definitions. The identification, investigation, and implications of the work readiness gap are then discussed, followed by a review of the theoretical competency framework underlying the study and student development of competencies. The chapter ends with a short description of limitations in the literature.

Work Readiness

Employers have reported that recent graduates have the technical skills needed for the workforce but lack the non-technical, soft skills necessary to succeed in the workplace (Bentley University Preparedness Study 2014). A study by Bentley University showed that the top soft skills needed for success in the workplace include professionalism, communication skills, and teamwork (2014). Employers have contended that colleges should place more emphasis on learning outcomes that demonstrate critical thinking, problem-solving, communication skills, and applied knowledge in a real-world setting (Hart Research Associates, 2015). Furthermore, human

resources professionals have stated that most college graduates lack professionalism and interpersonal skills (Schramm, 2015). According to Hult Labs,

Students would be better served by an educational experience that helps students understand themselves more deeply, and pushes them to struggle with their personal development in a more intense way. Executives felt students would be better prepared for the world of “real work” if they could experience more of it in a classroom environment – especially if those experiences included more self-reflection, more chances to give and receive feedback with team members and finally, more chances to understand why team dynamics occur the way they do. (Hult Labs, 2013, p. 2)

Colleges also play an important role in helping bridge the work readiness gap by situating students for success in their careers. Students preparing for the competitive job market must receive high-quality work readiness training. A review of the literature reveals common factors influencing work readiness, including the program of study, course requirements, and participation in career services (internships, experiential learning, group projects, etc.) (NACE, 2017).

Defining Work Readiness and Soft Skills

Across a vast array of surveys, employers and hiring managers consistently report that recent college graduates lack work readiness, especially the soft skills needed to be successful in the workforce. However, their definitions of those concepts are far from consistent (Lippman, Ryberg, Carney, & Moore, 2015; Caballero, Walker, & Tyszkiewicz, 2011). For the purpose of this study, ‘work readiness’ is defined as “The extent to which graduates are perceived to possess the attitudes and attributes that make them prepared or ready for success in the work environment” (Caballero, & Walker, 2010, p. 42). Also for the purpose of this study, ‘soft skills’ is understood to refer to a broad set of skills, competencies, behaviors, attitudes, and personal qualities that enable people to effectively navigate their environment, work well with others, perform well, and achieve their goals. These skills are broadly applicable and complement other

skills such as technical, vocational, and academic skills (Lippman, Ryberg, Carney, & Moore, 2015, p. 4).

Work readiness is an important factor in determining the ability of recent graduates to compete for jobs both nationally and globally (Buhler, 2015). The requirements of those job markets are determined by employers, as they know the skills needed to make their organizations profitable and successful. According to Grasgreen, employers maintain that the lack of work readiness found in recent graduates harms an organization's day-to-day productivity (2014). As a result, leading organizations are emphasizing the need for universities and colleges to embed soft skills development into students' college experiences (Robles, 2012).

Work Readiness Gap

One cause of the unemployment rate is that employers increasingly view recent graduates as unprepared. As suggested by Tugend (2013), this problem could be due to a disconnect between what colleges are teaching to and what employers need from recent graduates. Mara Swan, the executive vice president of global strategy and talent at Manpower Group, states, "There's always been a gap between what colleges produce and what employers want," going on to say, "But now it's widening" (Tugend, 2013, p. 2). The lack of work readiness exhibited by recent graduates is becoming more evident.

Identifying the Gap

One manifestation of the preparedness gap is the unemployment and underemployment of college graduates (Vedder, Denhart, & Robe, 2013). According to the Economic Policy Institute, in 2012, unemployment rates among young college graduates aged 21 to 24 had fallen to just under nine percent. However, this percentage is still higher than that in 2000, when unemployment rates were under five percent (Bentley University Preparedness Study, 2014). In 2018, the unemployment rate (5.3%) of college graduates has barely fallen to a pre-recession

level of 2007 (5.4%); however, the underemployment rate still remains higher (11.1%) than it was during the great recession of 2007 (9.4%) (Gould, Mokhiber, & Wolfe, 2018). The impact of the lack of work readiness of recent graduates is broad and substantial, with serious implications for recent college graduates, their alma maters, hiring organizations, and the economy.

Investigating the Gap

To investigate the preparedness gap, Bentley University conducted the Bentley University Preparedness Study (2014), reported to be the most comprehensive study on this subject. The primary goals of the study were (1) to survey key stakeholders to determine how they defined preparedness and how they rated the level of preparedness of recent graduates and (2) to determine solutions to ensure that recent graduates are prepared for success in the workforce. Administered in 2013, the online preparedness survey consisted of 307 questions, reached stakeholder audiences, and had 3,149 total respondents. Results showed that a wide range of businesspeople, corporate recruiters, academics, and others agree that recent college graduates deserve a grade of “C” or lower for their preparedness for their first job. For some time now, employers have been expressing concerns about a preparedness gap. Nearly two-thirds of those surveyed consider this lack of preparedness a “real problem,” while 62% of business decision makers and recruiters say that unpreparedness harms the day-to-day productivity of their businesses (Bentley University Preparedness Study, 2014).

According to the Bentley study (2014), the preparedness gap is multidimensional, including stakeholders in business and higher education as well as students. The final report of the study explains that all stakeholders have roles in closing the preparedness gap. Specifically, businesses should work with colleges/universities to improve career services; colleges need to combine academics with hands-on-learning; and students must commit to being life-long learners both within the classroom and beyond (2014). The Bentley study concluded,

To address the preparedness gap, Bentley University is convening a national dialogue through the PreparedU Project, a workforce preparedness initiative supported by Bentley's research study, so that all stakeholder audiences can review the results of the study and develop solutions to help close the skills gap. (Bentley University Preparedness Study, 2014, p. 21)

To further investigate the skills gap challenges business leaders are facing, BRT surveyed 177 member companies on workforce talent. Approximately 50 percent of member companies participated in the survey. The most interesting results of the 2016 BRT Education and Workforce Survey and Analysis include the following:

- “Over half of members believe that skills shortages are problematic or very problematic for both their company and their industry” (p. 5).
- “To mitigate skills shortages, respondents conduct internal training, recruit for specific workforce segment, and partner with 4-year colleges and universities” (p. 17).
- “Most respondents (96%) leverage public-private partnerships to remediate talent gaps, predominantly through internship and co-op programs” (p. 18).

Similarly, the Business Roundtable Organization's Work in Progress Study (2017) reported,

America's CEOs, through their own efforts and through Business Roundtable and other national organizations, are partnering with academia and government at all levels to close the skills gap and meet our nation's workforce needs. Business recognizes that it has a role to play in addressing the challenges, and it seeks a strong partnership with America's educational institutions at all levels in developing scalable solutions. We are collaborating with our nation's academic and government leaders to recast our educational programs according to today's and tomorrow's needs – from the earliest grades through college, career training and beyond. This effort must be nationwide and involve all levels of government, the private sector, educational institutions and training providers. This report provides some data to direct these most important efforts. (BRT, 2017, p. 12)

Implications of the Gap

As previously stated, the lack of work readiness has implications for the individual, the school from which the individual graduates, the organization that chooses to hire the individual, and the economy. Measures to close the work readiness gap are vital to higher education

institutions. A study by the National Association of Colleges and Employers (NACE) highlights several areas of special concern related to the skills gap: affordability of higher education and funding the student, graduate outcomes data, and institutional performance metrics (2017).

As the cost of higher education increases, financial support for individuals to attend college is also on the rise. According to a Pew Research analysis of data released from the Federal Reserve Board's 2016 Survey of Household Economics and Decision-Making, Americans owe more than \$1.3 trillion in student loans (Cilluffo, 2017). By the end of June 2016, the amount of student loan debt owed had more than doubled what was owed a decade earlier. During this time, the outstanding student loan debt for a bachelor's or more advanced degree has risen 53% (Cilluffo, 2017). To put the cost into perspective, four in 10 adults aged 18 to 29 with a bachelor's or more advanced degree have an average student loan debt of \$25,000 (Cilluffo, 2017). Increases in the cost of higher education, the rise in the number of high school graduates attending college, and the staggering amount of student loan debt, explains the demand for college graduates who are prepared for work.

Despite the rising costs of post-secondary education, important information needed by students and their families concerning whether a particular college or major pays off is currently incomplete. Therefore, public policy on higher education is making efforts to better track outcomes data for college graduates (NACE, 2017). For example, the U. S. Department of Education's College Affordability and Transparency Center (CATC) provides an online tool for potential students and families to generate reports on the highest (top 5%) and lowest (bottom 10%) academic year charges for each sector of higher education (2017). Additionally, in May 2017, Senators Orrin Hatch (R-UT), Elizabeth Warren (D-MA), Bill Cassidy (R-LA), and Sheldon Whitehouse (D-RI) proposed Bill S. 1121, known as The College Transparency Act,

“To establish a postsecondary student data system [to] provide more accurate, complete, and customizable information for students and families making decisions about postsecondary education” (Authenticated U.S. Government Information, GPO, 2017, p. 2).

Higher education institutions are under pressure to provide reliable, valid outcomes of college graduates in a form of measurement that clearly communicates to future students and parents the benefits of attending higher education institutions of interest. Outcomes should demonstrate the affordability of attending the college, the successful equipment of students with the skills necessary for the workforce, and the institutional performance metrics of the institution. According to NACE,

The implicit call for transparency in outcomes reporting was the need for commonly applied definitions detailing results; commonly applied methods for data collection; and a uniform timeframe for collecting and reporting data so that university officials, consumers, and public policy analysts could assess the results with the understanding that the results were consistent and comparable. (2016, p. 1)

The NACE report continues, “A position statement called for colleges and universities to collect and report on a comprehensive set of outcomes – not only employment outcomes but also continuing education and public and private service results” (2016, p. 1).

Department of Labor Competency Model

In response to the needs articulated by employers, the U.S. Department of Labor (DoL) has developed a Competency Model to guide higher education institutions in developing the soft skills of students. The DoL describes the benefits of the Competency Model Development as follows:

The Industry competency models on the Competency Model Clearinghouse are developed and maintained in partnership with industry leaders to promote an understanding of the skill sets and competencies that are essential to educate and train a globally competitive workforce. The models serve as a resource to inform discussions among industry leaders, educators, economic developers, and public workforce investment professionals as they collaborate to: Identify specific

employer skill needs; Define career pathways and stackable credentials; Develop competency-based curricula and training models; Develop industry-defined performance indicators and certifications; and Develop resources for career exploration and guidance. (2015)

The DoL’s competency model is built on a series of tiers (see Figure 1). According to the DoL, competency refers to:

A competency is the capability to apply a set of related knowledge, skills, and abilities to successfully perform functions or tasks in a defined work setting. Competencies often serve as the basis for skill standards that specify the level of knowledge, skills, and abilities needed for success, as well as potential measurement criteria for assessing competency attainment. (2018, p. 1)

Correspondingly, the DoL’s Generic Competency Model is comprised of personal effectiveness, academic, and workplace competencies, which are defined as the foundational knowledge, skills, and abilities needed to be successful in the workplace (DoL, 2015).

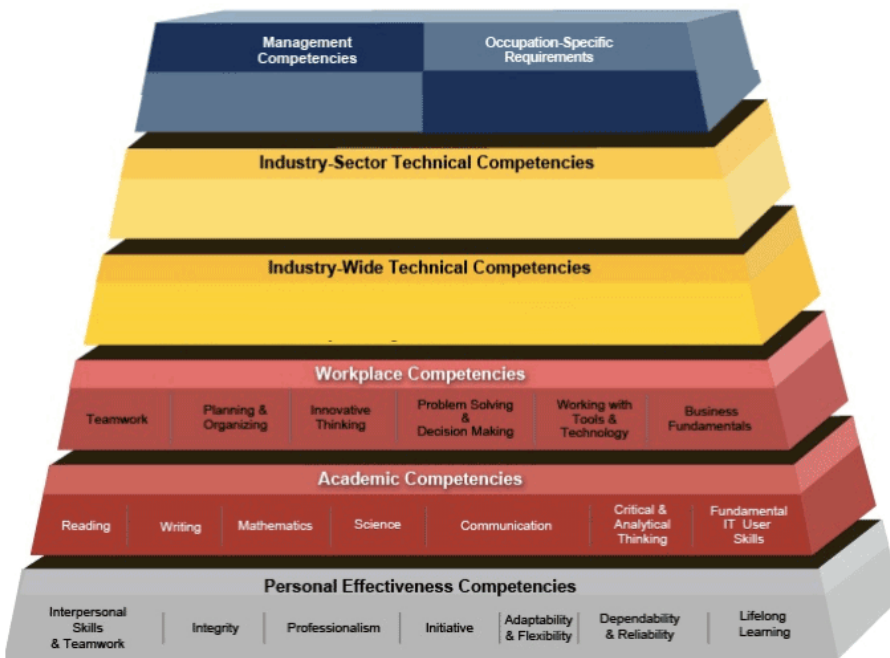


Figure 1. U.S. Department of Labor Competency Model

The Personal Effectiveness Competencies include the following non-technical, soft skills: interpersonal skills, integrity, professionalism, initiative, dependability and reliability, and

lifelong learning. The Academic Competencies consist of the following technical skills: science, basic computer skills, databases, mathematics, reading, writing, communication, critical and analytical thinking, and information literacy. Finally, the Workplace Competencies include both non-technical and technical skills, as follows: business fundamentals; teamwork; adaptability/flexibility; marketing and customer focus; planning and organizing; problem solving and decision making; working with tools and technology; and checking, examining, and recording sustainable practices (Nunn, 2013; DoL, 2015).

Educational institutions are beginning to integrate the DoL's competencies into their programs. According to Nunn, tier one of the competency model consists of Personal Effectiveness Competencies, which are generally learned in the home or community and reinforced and honed at school and in the workplace. They represent personal attributes that may present some challenges to teach or assess (2013). Within the context of school, these competencies are developed and reinforced through associations both inside and outside of the classroom (DoL, 2015). Tier two consists of Academic Competencies, which are critical competencies primarily learned in a school setting. These competencies include technical and non-technical skills that are likely to apply to most industries and occupations (DoL, 2010, 2015). Tier three lists the Workplace Competencies, which represent motives and traits as well as interpersonal and self-management styles. These competencies are generally applicable to a large number of occupations and industries (DoL, 2010, 2015).

Student Development of Competencies

One way that students can develop their competencies is by enrolling in courses or programs that include an emphasis on personal and/or professional development. Although college courses may include an experiential learning component, most often it is student affairs offices, primarily career service offices that provide personal and professional development

resources. For years, college career services have offered skills building opportunities for students. College career centers are the central resource office visited by college students beginning their job search and by business partners hoping to hire. In the class of 2017, 85.6% of college students who had begun their job search had visited the career center (NACE, 2017). Career centers partner with employers to help the recruiters meet their objectives (Vaidian, 2015).

Yet operating budgets for career centers have experienced significant budget cuts. The 2016-2017 Career Services Benchmark Survey Report for Colleges and Universities reported that, on average, the ratio of Baccalaureate students to professional staff members is 1765 to 1. According to that same survey, operating budgets and staffing for career centers have fallen to 2007 pre-recession levels. For example, the budgets for colleges with an enrollment size of “more than 20,000” have decreased by an average of 29.8% (\$166,007). The number of full-time professional staff members at colleges with an enrollment size of “more than 20,000” have also fallen, by an average of 3.4% (NACE, 2017).

According to NACE, “De-regulation is impacting virtually every sector of the economy, including higher education, where the Department of Education has loosened its oversight of the for-profit sector through the gainful employment regulations” (requiring programs at for-profit higher education institutions to meet minimum thresholds with respect to debt-to-income ratios of their graduates) (NACE, 2017, p. 2). NACE Environmental Scan 2017-2018 reports show that state funding for higher education has been decreasing since 1980 (2017). On average, state funding has declined 18% per student in all but nine states. In those nine states, per student funding was down by more than 30%. The state university used for this study is located in one of those nine states.

Therefore, although skill-building opportunities exist, providing those opportunities for students to successfully transition from college to career can be challenging. To meet this challenge, a group of national leaders from a variety of disciplines, including employers and 74 premiere higher education institutions, came together to examine ideas for change in college career offices. The one point commonly agreed upon by the leaders was that “schools must reexamine their existing models and construct new methods to help students successfully enter the world of work” (Chan & Derry, 2013, p. 2). The goal of the assessment was to elicit the perceptions of undergraduates who have recently graduated regarding their work readiness.

Ideally, students going through college will value and enhance their competitive advantage by effectively communicating and demonstrating that they are work ready while engaging with employers and hiring managers seeking to hire work-ready graduates (Hopkins, Raymond, & Carlson, 2011).

CHAPTER 3. METHODOLOGY

The aim of this study was to determine the influence of selected personal, academic, and employment characteristics on the perceived work readiness of college graduates. This chapter discussed the research design, instrumentation, and data analysis of the study.

Research Design

This study uses a quantitative research design in which a survey was administered to the sample. A survey design research method “provides a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a sample of that population. From sample results, the researcher generalizes or draws inferences to the population” (Creswell, 2014, p. 13). The dependent variable, perceived work readiness of undergraduate program completers, was measured using an anchored response scale. A composite score was computed, and means and standard deviations were calculated.

Population and Sample

The target population was undergraduate program completers at research universities in the U.S. The accessible population was undergraduate program completers at one selected research university (RU/VH) located in the Southern Region of the United States. The sample comprised 100% of the defined accessible population who completed a graduating student survey administered by the Office of Career Services at the selected university.

Instrumentation and Data Collection

The instrument used to collect data for this study consisted of a computerized recording form. Upon receiving approval from the Institutional Review Board, the researcher requested that the data be downloaded from the archived files in the Office of Career Services. To maintain

the anonymity of the respondents, the researcher requested that all personal identifiable markers that could compromise student confidentiality be excluded prior to the data being downloaded.

Data Analysis

The data analysis procedures for each research objective are described below.

Objectives 1 and 2

The first two objectives of this study were to describe the graduates on selected demographic, academic, and employment characteristics. As these characteristics are descriptive in nature, they were analyzed using descriptive statistics. The following demographic variables were measured as categorical data: “race,” “gender,” and “in- or out-of-state.” The following academic variables were also measured as categorical data: “senior college/school,” “internship or not,” “internship for credit,” and “internship for payment.” Finally, the employment variable “currently employed/job offer” was measured via categories. All of the categorical data were summarized using frequencies and percentages to describe the characteristics of the undergraduate program completers. The final demographic variable, “age,” was measured as continuous data and therefore summarized using means and standard deviations.

Objective 3

The third objective of the study was to determine the perceptions of undergraduate program completers of their work readiness as measured by their responses to selected items on the graduating study survey. The variable “perceived work readiness” was measured using six anchored scale items. Undergraduate program completers were asked how helpful their experiences at the research university were in developing these six skills. The response scale was a five-item scale ranging from 1=not at all helpful, to 2=not very helpful, 3=moderately helpful, 4=very helpful, and 5=extremely helpful. Individual item responses were summarized using

means and standard deviations. In addition, a composite score was computed and summarized using means and standard deviations to describe their overall perceived work readiness.

Objective 4

The fourth objective was to determine if a relationship exists between the perceptions of the undergraduate program completers and their demographic, academic, or employment characteristics. An independent t-test statistical procedure was used to compare the dependent variable, “perceived work readiness,” to each of the following dichotomous independent variables: “gender,” whether the student was classified as “in-state or out-of-state” by the study institution, whether or not student completed an internship, whether or not a paid internship was completed, whether or not an internship was completed for course credit, and whether or not the student was employed/had a job offer. A one-way ANOVA statistical procedure was used to compare the dependent variable, “perceived work readiness,” by categories of each of the following independent variables: race and senior college/school. A Pearson’s r was used to measure the relationship between work readiness and age.

Objective 5

Finally, the fifth objective of this study was to determine if a model exists that explained a significant portion of the variance in the dependent variable, perceived work readiness of undergraduate program completers, from the independent variables. Multiple regression analysis was used to accomplish this objective. Independent variables were entered into the analysis using a step-wise procedure because the study was exploratory in nature. Variables were then entered that contributed one percent or more to the explained variance as long as the overall model remained significant.

The Research Institution IRB Approval

Permission for the study was requested and received from the Institutional Review Board (IRB) at the research institution. The approved application can be found in Appendix A.

CHAPTER 4. RESULTS

This study was conducted to determine the influence of selected personal, academic, and employment characteristics on the perceived work readiness of undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States. The dependent variable in this study was perceived work readiness.

Objective One Results

Objective one of this study was to describe undergraduate program completers at a research university (RU/VH) in the Southern Region of the United States on the following personal demographic characteristics:

- a) Age;
- b) Race;
- c) Gender;
- d) Whether they were classified by the study institution as “In-State” or “Out-of-State”.

Age

The first variable used to describe the undergraduate program completers was age. Of the 1,894 undergraduate program completers in the study, data were available regarding age for 1,876. The mean age of the undergraduate program completers was 22.99 ($SD = 4.22$), with a range of 18.63 to 64.16. To further summarize this data, students were categorized into one of five age groups (18-19, 20-21, 22-24, 25-29, and 30 or more). When this data were examined in these categories, the majority of undergraduate program completers fell in the 20-21 age group ($n = 1,094$; 58.3%) (See Table 1).

Table 1. Age of Undergraduate Program Completers at a Research University (RU/VH) in the Southern Region of the United States

Age Category	Frequency	Percent
18-19	14	.7
20-21	1,094	58.3
22-24	530	28.3
25-29	133	7.1
30 or more	105	5.6
Total	1,876 ^a	100.00

Note. Mean = 22.99, SD = 4.22, Range = 18.63 - 64.16. Age Category determined by National Center for Education Statistics (NCES), 2016

^aThere were 18 subjects for whom information was not available regarding age.

Race

The second variable used to describe the students was race. The study subjects were classified into one of the following seven categories: American Indian or Alaskan Native, Asian, African American, Hispanic, Multi-Racial, Native Hawaiian or Other Pacific Islander, and Caucasian. Of the 1,894 undergraduate program completers, information regarding race was available for 1,870. The majority identified as Caucasian ($n = 1,461$, 78.1%), and the second largest group identified as African American ($n = 172$, 9.2%) (See Table 2).

Table 2. Race of Undergraduate Program Completers at a Research University (RU/VH) in the Southern Region of the United States

Race	Frequency	Percent
Caucasian	1,461	78.1
African American	172	9.2
Hispanic	114	6.1
Asian	70	3.7
Multi-Racial	38	2.0
American Indian or Alaskan Native	14	.8
Native Hawaiian or Other Pacific Islander	1	.1
Total	1,870 ^a	100.0

^aThere were 24 subjects for whom information was not available regarding race.

Gender

Of the 1,894 undergraduate program completers, 847 (45.1%) were male and 1,029 (54.9%) were female. There were 18 subjects for whom information was not available regarding their gender.

In-State or Out-of-State

Of the 1,894 undergraduate program completers, the study institution classified 1,835 as in- or out-of-state. The majority of students ($n = 1,505$, 82.0%) were classified as in-state residents, and 330 (18.0%) were classified as out-of-state residents. There were 59 subjects for whom information was not available regarding their in- or out-of-state status.

Objective Two Results

The second objective was to describe undergraduate program completers at a research university (RU/VH) in the Southern Region of the United States on the following academic and employment characteristics:

- a) Senior college/school at the time of degree completion;
- b) Whether or not student completed an internship;
- c) Whether or not a paid internship was completed;
- d) Whether or not an internship was completed for course credit;
- e) Whether or not student is currently employed/has job offer.

Senior College/School at the Time of Degree Completion

The first variable for objective two concerned which senior colleges/schools the undergraduate program completers attended when their degrees were completed. Each subject was classified into one of ten possible categories. Eight of the categories referred to colleges (Agriculture, Art and Design, Business, Engineering, Human Sciences and Education, Humanities and Social Sciences, Music and Dramatic Arts, Science) and two referred to schools

(Mass Communication, Coast and Environment). Of the 1,894 students, 1,876 were classified on senior college/school. The largest group of students was enrolled in the College of Business ($n = 493$; 26.3%), the second largest group in the College of Engineering ($n = 392$; 20.9%), and the third largest group in the College of Humanities and Social Sciences ($n = 329$; 17.5%). The college/school in which the smallest group was enrolled was the School of Coast and Environment ($n = 11$; .6%). Complete data regarding the undergraduate program completers' senior colleges/schools when they completed their degrees are presented in Table 3. There were 18 students for whom information was not available regarding senior college/school at the time of degree completion.

Table 3. Senior College/School at the Time of Degree Completion of Undergraduate Program Completers at a Research University (RU/VH) in the Southern Region of the United States

College/School	Frequency	Percent
Business	493	26.3
Engineering	392	20.9
Humanities and Social Sciences	329	17.5
Human Sciences and Education	282	15.0
Science	150	8.0
Agriculture	79	4.2
Mass Communication	74	3.9
Art and Design	39	2.1
Music and Dramatic Arts	27	1.4
Coast and Environment	11	.6
Total	1,876 ^a	100

^aThere were 18 subjects for whom information was not available regarding College/School.

Whether or Not Student Completed an Internship

Another variable in which the undergraduate program completers were described was whether or not they had completed an internship. Of the 1,894 students, data were available for 1,791 regarding whether or not an internship was completed. A total of 854 (47.7%) students had completed an internship. The remainder of the students ($n = 937$; 52.3%) had not completed an

internship. There were 103 students for whom information was not available regarding whether or not an internship was completed.

Whether or Not a Paid Internship Was Completed

The next variable on which undergraduate program completers were described was whether or not a paid internship had been completed. Of the 854 students who had completed an internship, data were available for 766 regarding whether or not a paid internship was completed. A total of 607 (79.2%) of the students who had completed an internship, had completed a paid internship. The remainder of the students ($n = 159$, 20.8%) had not completed a paid internship. There were 88 students for whom information was not available regarding whether or not a paid internship was completed.

Whether or Not an Internship Was Completed for Course Credit

Additionally, undergraduate program completers were described based on whether or not they had completed an internship for course credit. Of the 854 undergraduate program completers who completed an internship, data were available for 766 regarding whether or not the internship was for course credit. A total of 318 (41.5%) of the students who had completed an internship had completed an internship for course credit. The remainder of the students ($n = 448$, 58.5%) had not received course credit for an internship. There were 88 students for whom information was not available regarding whether or not an internship was completed for course credit.

Whether or Not Student Was Employed/Had Job Offer

The last variable on which the undergraduate program completers were described was whether or not the student was employed/had a job offer at the time of degree completion. Of the 1,894 undergraduate program completers, data were available for 1,873 regarding whether or not the student was employed/had a job offer. A total of 945 (50.5%) of the undergraduate program

completers were employed/had a job offer at the time of degree completion. The remaining students were not employed/did not have a job offer ($n = 928$, 49.5%). There were 21 students for whom information was not available regarding whether or not they were employed/had a job offer.

Objective Three Results

The third objective was to determine the perceptions of undergraduate program completers at a research university (RU/VH) in the Southern Region of the United States on their work readiness as measured by responses to the following selected items on a Graduating Student Survey:

- a) Connecting what you learned to other knowledge, ideas, and experiences;
- b) Relating knowledge learned to daily life;
- c) Determining your future career;
- d) Building meaningful relationships;
- e) Collaborating with others;
- f) Working with people different from yourself.

Perceived Work Readiness Items

The response scale for the six items included the following options: 1 = Not at All Helpful, 2 = Not Very Helpful, 3 = Moderately Helpful, 4 = Very Helpful, and 5 = Extremely Helpful. The item receiving the highest mean score ($M = 3.95$; $SD = .93$) was “Working with people different from yourself” and the item receiving the lowest mean score ($M = 3.73$; $SD = 1.08$) was “Determining your future career.” To aid in reporting the results of the responses to these items, the researcher established an Interpretive Scale with the following descriptors: 1.00-1.50 = Not at All Helpful (NAH), 1.51-2.50 = Not Very Helpful (NVH), 2.51-3.49 = Moderately

Helpful (MH), 3.50-4.49 = Very Helpful (VH), 4.5-5.00 = Extremely Helpful (EH). When this interpretive scale was applied to the mean responses, all six of the items were classified in the “Very Helpful” interpretive category (See Table 4).

Table 4. Perceived Work Readiness of Undergraduate Program Completers at a Research University (RU/VH) in the Southern Region of the United States

Work Readiness Items	M ^{a, b}	SD	Interpretive Category ^c
Working with people different from yourself	3.95	0.93	VH
Collaboration with others	3.92	0.92	VH
Building meaningful relationships	3.88	0.99	VH
Connecting what you learned to other knowledge, ideas, and experiences	3.87	0.90	VH
Relating knowledge learned to daily life	3.75	0.95	VH
Determining your future career	3.73	1.08	VH

Note. $N = 1,583$. There were 311 subjects for whom information was not available regarding perceived work readiness.

^a The *Mean* values for all six items ranged from a low of 1.00 to a high of 5.00.

^b The response scale ranges were as follows: 1 = Not at All Helpful, 2 = Not Very Helpful, 3 = Moderately Helpful, 4 = Very Helpful, 5 = Extremely Helpful.

^c The interpretive scale established by the researcher includes the following descriptors: 1.00-1.50 = Not at All Helpful (NAH); 1.51-2.50 score = Not Very Helpful (NVH); 2.51-3.49 = Moderately Helpful (MH); 3.50-4.49 = Very Helpful (VH); 4.50-5.00 = Extremely Helpful (EH).

To further examine the perceived work readiness of undergraduate program completers, the researcher conducted a factor analysis to determine if underlying constructs existed in the scale. The researcher first examined the items for degree of deviation from normality using the Shapiro-Wilks test. In addition, the measure of sampling adequacy was examined for both the individual items and the overall scale. All data met the assumptions for the use of factor analysis. The factor analysis was conducted using a principal components analysis with varimax rotation.

To determine the number of factors to be extracted from the response scale, the researcher used a combination of the Latent Root criterion and the Scree Plot procedure. Initially, the factor analysis was conducted without restriction on the number of factors extracted, with the default minimum value of 1.0 on the latent root measure. The optimum number of factors to be

extracted was determined by identifying the most pronounced bend in the scree plot curve. The optimum number of factors was determined to be two, plus or minus one. However, since the initial analysis loaded all six of the items into a single factor (Eigenvalue = 4.233), with loadings that ranged from .876 to .776 (see Table 5), no underlying constructs were found in this scale. Additionally, according to Hair et al. (2006), “Loadings exceeding +/- .70 are considered indicative of a well-defined structure and are the goal of any factor analysis” (p. 128); therefore, no further investigation into the factor structure of the scale was necessary. This single factor explained 70.5% of the variability in the scale responses.

Table 5. Factor Loadings Resulting From Factor Analysis of “Perceived Work Readiness” of Undergraduate Program Completers at a Research University (RU/VH) in the Southern Region of the United States

Scale Item	Factor Loading
Collaboration with others	.876
Connecting what you learned to other knowledge, ideas, and experiences	.857
Working with people different from yourself	.854
Building meaningful relationships	.843
Relating knowledge learned to daily life	.831
Determining your future career	.776

Note. Eigenvalue = 4.233 with loadings ranging from .876 to .766. The single factor explained 70.5% of the variability in the scale responses.

Based on the results of the factor analysis, an overall work readiness score was computed as the mean of the six items in the scale. The mean of this overall work readiness score was 3.85 ($SD = .808$), and the values ranged from a low of 1.00 to a high of 5.00. When the overall work readiness score was examined based on the researcher-developed interpretive scale, the mean score fell in the “Very Helpful” category.

Objective Four Results

The fourth objective was to determine if a relationship exists between perceived work readiness and the following selected personal, academic, and employment characteristics among

undergraduate program completers at a research university (RU/VH) in the Southern Region of the United States:

- a) Age;
- b) Race;
- c) Gender;
- d) Whether they were classified by the study institution as “In-State” or “Out-of-State”;
- e) Senior college/school at the time of degree completion;
- f) Whether or not student completed an internship;
- g) Whether or not a paid internship was completed;
- h) Whether or not an internship was completed for course credit;
- i) Whether or not student was employed/had a job offer at the time of degree completion.

To determine if relationships existed between undergraduate program completers’ perceived work readiness and the selected characteristics that were measured as dichotomous variables, the researcher used the independent t-test statistical procedure for analysis. This procedure was chosen for ease of interpretation. A total of six dichotomous variables were included in this analysis.

The perceived work readiness scores of the undergraduate program completers were compared with the two categories of each of the six dichotomous independent variables. Perceived work readiness was found to be significantly different based on three of the six variables analyzed. The greatest degree of difference in work readiness was found for the variable “gender.” The mean perceived work readiness score for the 847 females ($M = 3.96$; $SD = .77$) was significantly higher ($t(1,507.399) = 5.927$; $p < .001$) than the mean perceived work

readiness score for the 733 males ($M = 3.72$; $SD = .83$). The next variable for which a significant difference was found in perceived work readiness was “whether or not an internship was completed for course credit.” The mean perceived work readiness score for the 296 students who completed an internship for course credit ($M = 3.99$; $SD = .76$) was significantly higher ($t(666.239) = 2.889$; $p = .004$) than the perceived work readiness score for the 416 students who did not complete an internship ($M = 3.82$; $SD = .82$). The final variable for which a significant difference was found in perceived work readiness was “whether or not a paid internship was completed.” The mean perceived work readiness score for the 151 students who did not complete a paid internship ($M = 4.05$; $SD = .75$) was significantly higher ($t(251.178) = 2.928$; $p = .004$) than the mean perceived work readiness score for the 561 students who did complete a paid internship ($M = 3.84$; $SD = .81$). There were no significant differences found when comparing work readiness by the two categories of the other three variables (see Table 6).

Table 6. Comparison of Perceived Work Readiness Scores by Categories of Selected Demographic Characteristics of Undergraduate Program Completers at a Research University (RU/VH) in the Southern Region of the United States

Variable	Response Options	N	M	SD	t	df	p
Gender					5.927	1,507.399	<.001
	Female	847	3.96	.77			
	Male	733	3.72	.83			
Internship Course Credit					2.889	666.239	.004
	Yes	296	3.99	.76			
	No	416	3.82	.82			
Internship Paid					2.928	251.178	.004
	Yes	561	3.84	.81			
	No	151	4.05	.75			
Internship Completed					1.746	1,581	.081
	Yes	712	3.89	.80			
	No	871	3.82	.80			
Job Offer					.777	1,574	.437
	Yes	777	3.83	.80			
	No	799	3.87	.81			
In-State/Out-of-State					.621	1,541	.535
	In-State	1,271	3.85	.80			
	Out-of-State	272	3.88	.79			

Race and Senior College

To determine if relationships existed between the perceived work readiness of the undergraduate program completers and the categorical variables with more than two categories, the researcher used the One-way Analysis of Variance (ANOVA) procedure for analysis. This procedure was chosen for ease of interpretation of the results. Two variables were analyzed using ANOVA: 1) race and 2) senior college/school at time of degree completion. For this analysis, the categories chosen by 10 or fewer students were omitted. Of the two variables, perceived work readiness scores were found to be significantly different based on the categories of senior college/school (see Table 7).

Table 7. Comparison of Perceived Work Readiness Scale Scores by Race and Senior College/School at time of DegrCompletion of Undergraduate Program Completers at a Research University (RU/VH) in the Southern Region of the United States

Variable	N	df	F	p
Senior College/School ^a	1,580	9, 1,570	6.007	<.001
Race ^b	1,574	5, 1,568	.776	.567

^a Senior College/School options: Business, Engineering, Humanities and Social Sciences, Human Sciences and Education, Science, Agriculture, Mass Communication, Art and Design, Music and Dramatic Arts, Coast and Environment

^b Race options: Caucasian, African American, Hispanic, Asian, Multi-Racial, American Indian or Alaskan Native

Perceived work readiness scores were found to be significantly different between the categories of the variable senior college/school at the time of degree completion ($F(9, 1570) = 6.007$; $p < .001$). The specific group differences were determined using the Tukey's Post Hoc Multiple Comparison procedure. Undergraduate program completers in the College of Engineering were found to have significantly lower work readiness scores ($M = 3.60$; $SD = .80$) than undergraduate program completers in the College of Human Science and Education ($M = 4.01$; $SD = .81$), the School of Mass Communication ($M = 3.98$; $SD = .95$), the College of

Science (M = 3.93; SD = .74), the College of Business (M = 3.92; SD = .77), and the College of Human and Social Sciences (M = 3.87; SD = .78) (see Table 8).

Table 8. Comparison of “Perceived Work Readiness” Scores by Students’ Senior College/School at the Time of Degree Completion of Undergraduate Program Completers at a Research University (RU/VH) in the Southern Region of the United States

Source	df	Mean Square	F	p
Between Groups	9	3.814	6.007	<.001
Within Groups	1,570	.635		
Total	1,579			
Senior College/School	n	M	SD	Group Differences ^a
Human Sciences and Education	235	4.01	.81	A
Mass Communication	57	3.99	.95	A
Music and Dramatic Arts	24	3.94	.83	A, B
Art and Design	30	3.94	.52	A, B
Science	118	3.93	.74	A
Business	408	3.92	.77	A
Humanities and Social Sciences	279	3.87	.78	A
Agriculture	65	3.76	.89	A, B
Engineering	353	3.60	.80	B
Coast and Environment	11	3.50	.94	A, B
Total	1,580	3.85	.80	

Note. ^aGroups that do not have a common letter are significantly different. Post-hoc comparisons completed using the Tukey procedure.

Age

Finally, a Pearson Product Moment Correlation Coefficient was used to determine if a relationship existed between the perceived work readiness of undergraduate program completers and their age. Results of the correlational analysis revealed that, at the time of degree completion, there was no significant relationship between the perceived work readiness of undergraduate program completers and their age ($r(1,580) = -.026$; $p = .300$).

Objective Five Results

The fifth objective was to determine if a model exists explaining a significant portion of the variance in perceived work readiness among undergraduate program completers at a research

university (RU/VH) in the Southern Region of the United States from the following selected personal, academic, and employment demographic characteristics:

- a) Age;
- b) Race;
- c) Gender;
- d) Whether they were classified by the study institution as “In-State” or “Out-of-State”;
- e) Senior college/school at the time of degree completion;
- f) Whether or not student completed an internship;
- g) Whether or not a paid internship was completed;
- h) Whether or not an internship was completed for course credit;
- i) Whether or not student was employed/had a job offer at the time of degree completion.

To accomplish this objective, a multiple regression analysis was performed using students’ perceived work readiness scores as the dependent variable. The other variables were treated as independent variables and stepwise entry of the variables was used due to the exploratory nature of the study. In this regression analysis, variables were added that increased the explained variance by one percent or more, as long as the overall regression model remained significant.

In the multiple regression analysis, two of the variables treated as independent variables were categorical and had to be prepared as dichotomous variables for entry into the analysis. These variables were race and senior college/school at the time of degree completion. Four other variables: gender, in-state, internship completed, and job or offer, were also categorical. However, these four variables were dichotomous and did not need to be restructured.

The variable race originally had the following seven categories: Caucasian, African American, Hispanic, Asian, Multi-Racial, American Indian or Alaskan, and Native Hawaiian or Other Pacific Islander. Two of these categories had frequencies that were not adequate for use as separate variables of investigation. The two categories were Native Hawaiian or Other Pacific Islander ($n = 1$) and American Indian or Alaskan ($n = 14$). Because of the low frequencies, these categories were removed before the variable race was entered into the analysis. Therefore, each of the five categories of Race (Caucasian, African American, Hispanic, Asian, and Multi-Racial) was used to create a dichotomous variable (member of the category or not). It was in this format that the variable race was entered into the analysis.

The next variable, senior college/school at the time of degree completion originally had the following categories: Business, Engineering, Humanities and Social Sciences, Human Sciences and Education, Science, Agriculture, Mass Communication, Art and Design, Music and Dramatic Arts, and Coast and Environment. Each of the colleges/schools were classified as STEM (Engineering, Science, Agriculture, Coast and Environment) or non-STEM (Business, Art and Design, Music and Dramatic Arts, Mass Communication, Human Sciences and Education, Humanities and Social Sciences). It was in this format that the variable senior college/school at the time of degree completion was entered into the analysis.

The first step of the regression analysis was to examine the bivariate correlations. Two-way correlations between factors used as independent variables and perceived work readiness scores are presented in Table 9. Two of the 11 correlations were found to be statistically significant. The restructured variable STEM or non-STEM ($r = -.155$; $p < .001$), for the variable senior college/school, had the highest correlation with the perceived work readiness scores. The nature of this relationship was such that non-STEM tended to have higher work readiness scores

than STEM. Additionally, the second highest correlation was found for the variable gender ($r = -.153$; $p < .001$). The nature of this relationship was such that females tended to have higher work readiness scores than males.

To ensure that the variables entered into the regression analysis did not have excessive collinearity or that any combination of the independent variable formed a singularity, the variance inflation factor (VIF) was examined. According to Hair et al. (2006), “A common cutoff threshold is a tolerance value of .10 which corresponds to a VIF value of 10” (p. 230). The VIF values for this analysis ranged from 1.000 – 1.012. Therefore, no excess multicollinearity was present in the data.

Table 9. Relationship Between Selected Characteristics and Perceived Work Readiness Scores Among Undergraduate Program Completers at a Research University (RU/VH) in the Southern Region of the United States

Independent Variable	r	p
STEM	-.155	<.001
Gender	-.153	<.001
Internship Completed	.040	.059
Multi-Racial	-.039	.066
African American	.034	.092
Age	-.027	.146
Hispanic	-.024	.176
Job/Offer	-.018	.236
In-State	-.012	.315
Caucasian	.007	.391
Asian	-.001	.477

Note. $N = 1,535$

Table 10 presents the results of the multiple regression analysis utilizing the perceived work readiness score as the dependent variable. The variable that entered the regression model first was STEM/Non-STEM. Considered alone, this variable explained 2.4% of the variance in the perceived work readiness scores of undergraduate program completers.

Table 10. Multiple Regression Analysis of Perceived Work Readiness Scores on Selected Personal, Academic, and Employment Characteristics of Undergraduate Program Completers at a Research University (RU/VH) in the Southern Region of the United States

ANOVA					
Source of Variation	df	Mean Square	F	p	
Regression	2	18.093	28.908	<.001	
Residual	1532	.626			
Total	1534				
Model Summary					
Model	R Square	R Square Change	F Change	Significant F Change	Standardized Coefficients Beta
STEM	.024	.024	37.822	<.001	-.120
Gender	.036	.012	19.537	<.001	-.116
Variables not in the Equation					
Variables		t	P		
Multi-Racial		-1.729	.084		
Internship Completed		1.724	.085		
Hispanic		-.971	.332		
In-State		-.701	.484		
Caucasian		.671	.503		
Job Offer		-.593	.553		
Age		-.581	.561		
African American		.545	.586		
Asian		.387	.699		

CHAPTER 5. SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Summary

Purpose of the Study

The primary purpose of this quantitative study was to determine the influence of selected personal, academic, and employment characteristics on the perceived work readiness of undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States.

Objectives of the Study

The following specific objectives were formulated to guide the researcher in accomplishing the purpose of this study:

1. To describe undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States using the following personal demographic characteristics:
 - a) Age;
 - b) Race;
 - c) Gender;
 - d) Whether they were classified by the study institution as “In-State” or “Out-of-State”.

2. To describe undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States using the following academic and employment characteristics:
 - a) Senior college/school at the time of degree completion;
 - b) Whether or not student completed an internship;

- c) Whether or not a paid internship was completed;
- d) Whether or not an internship was completed for course credit;
- e) Whether or not student is currently employed/has job offer.

3. To determine the perceptions of undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States on their work readiness as measured by responses to selected items on a Graduating Student Survey.

- a) Connecting what you learned to other knowledge, ideas, and experiences;
- b) Relating knowledge learned to daily life;
- c) Determining your future career;
- d) Building meaningful relationships;
- e) Collaborating with others;
- f) Working with people different from yourself.

4. To determine if a relationship exists between perceived work readiness and the following selected personal, academic, and employment characteristics among undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States:

- a) Age;
- b) Race;
- c) Gender;
- d) Whether they were classified by the study institution as “In-State” or “Out-of-State”;
- e) Senior college/school at the time of degree completion;
- f) Whether or not student completed an internship;

- g) Whether or not a paid internship was completed;
- h) Whether or not an internship was completed for course credit;
- i) Whether or not student is currently employed/has job offer.

5. To determine if a model exists explaining a significant portion of the variance in perceived work readiness among undergraduate program completers at a research university (RU/VH) located in the Southern Region of the United States from the following selected personal, academic, and employment demographic characteristics:

- a) Age;
- b) Race;
- c) Gender;
- d) Whether they were classified by the study institution as “In-State” or “Out-of-State”;
- e) Senior college/school at time of degree completion;
- f) Whether or not student completed an internship;
- g) Whether or not a paid internship was completed ;
- h) Whether or not an internship was completed for course credit;
- i) Whether or not student is currently employed/has job offer.

Methodology

The target population for this study was undergraduate program completers at research universities in the U.S. The accessible population was undergraduate program completers at a single research university (RU/VH) located in the Southern Region of the United States. The sample used in this study was 100% of the accessible population who completed a graduating student survey administered by the office of career services at the selected university. The survey

examined personal, academic, and employment characteristics of undergraduate program completers (independent variable) and six items that measured perceived work readiness (dependent variables) using a 5-point anchored response scale. Permission for this study was requested and received from the Institutional Review Board (IRB) at the Research University. Data from this survey were downloaded into a researcher designed computer recording form.

Major Findings

Objective One

The first objective of the study was to describe undergraduate program completers using personal demographic characteristics. The ages of the undergraduate program completers ranged from 18.63 to 64.16 years. The mean age was 22.99 (SD = 4.22). The majority of undergraduate program completers fell in the 20-21 age group ($n = 1,094$; 58.3%). The majority of the program completers in this population were Caucasian ($n = 1,461$; 78.1%), with African American ($n = 172$; 9.2%) running a distant second among the race groups. The remaining race groups totaled less than 13%. Of the 1,894 undergraduate program completers, the majority (1,029; 54.9%) were female and 847 (45.1%) were male. An overwhelming majority of the undergraduate program completers were “In-State” residents ($n = 1,505$; 82%).

Objective Two

The second objective of the study was to describe the undergraduate program completers based on their academic and employment characteristics. Of the 1,894 students, 1,876 were classified by senior college/school. Of the 10 categories, the college/school in which the largest group was enrolled was the College of Business ($n = 493$, 26.3%); the second largest group was the College of Engineering ($n = 392$; 20.9%); and the third largest group was the College of Humanities and Social Sciences ($n = 329$; 17.5%). The college/school in which the smallest group was enrolled was the School of Coast and Environment ($n = 11$; .6%).

Of the 1,894 undergraduate program completers, data were available for 1,791 regarding whether or not an internship was completed. A total of 854 (47.7%) students had completed an internship; the remaining 937 (52.3%) students had not. Of the 854 undergraduate program completers who had completed an internship, data were available for 766 regarding whether or not a paid internship was completed. A total of 607 (79.2%) of students who had completed an internship had also completed a paid internship. The remainder of these students (159; 20.8%) had not completed a paid internship. For the 854 undergraduate program completers who completed an internship, data were available for 766 regarding whether or not an internship was completed for course credit. A total of 318 (41.5%) of the students who completed an internship had also completed an internship for course credit. The remainder of these students (448; 58.5%) had not completed an internship for course credit. Of the 1,894 undergraduate program completers, data were available for 1,873 regarding whether or not the student was employed or had a job offer. A total of 945 (50.5%) of the undergraduate program completers were employed or had a job offer at the time of degree completion. The remaining students were not employed and did not have a job offer (928; 49.5%).

Objective Three

The third objective of the study was to determine the perceptions of undergraduate program completers of their work readiness as measured by responses to six items selected from the graduating student survey. The item that was rated highest was “Working with people different from yourself” ($M = 3.95$; $SD = .93$) and the item rated lowest was “Determining your future career” ($M = 3.73$; $SD = 1.08$). The results of a factor analysis showed all six variables loading onto a single factor, with loadings that ranged from .876 to .776. This single factor explained 70.5% of the total variance. The mean score of overall work readiness for undergraduate program completers was 3.85 ($SD = .808$), with values ranging from a low of 1.00

to a high of 5.00. When the overall work readiness score was examined based on the researcher-developed interpretive scale, the mean score fell in the “Very Helpful” category.

Objective Four

The fourth objective was to determine if a relationship exists between perceived work readiness and the personal, academic, and employment characteristics surveyed. Perceived work readiness was found to be significantly different based on the values of three of the six variables analyzed. The greatest degree of difference in perceived work readiness was found for the gender variable. The mean perceived work readiness score for the 847 females ($M = 3.96$; $SD = .77$) was significantly higher ($t(1,580) = 5.92$; $p = .039$) than the mean perceived work readiness score for the 733 males ($M = 3.72$; $SD = .83$). The second variable with a significant difference in perceived work readiness was whether or not an internship was completed for course credit.

The mean perceived work readiness score for the 296 students who completed an internship for course credit ($M = 3.99$; $SD = .76$) was significantly higher ($t(666.239) = 2.889$; $p = .004$) than the perceived work readiness score for the 416 students who did not complete an internship for course credit ($M = 3.82$; $SD = .82$). The final variable with a significant difference in perceived work readiness was whether or not a paid internship was completed. The mean perceived work readiness score for the 151 students who did not complete a paid internship ($M = 4.05$; $SD = .75$) was significantly higher ($t(251.178) = 2.928$; $p = .004$) than the mean perceived work readiness score for the 561 students who had completed a paid internship ($M = 3.84$; $SD = .81$). There were no significant differences found when comparing work readiness with the other three variables.

Perceived work readiness scores were found to be significantly different based on the variable senior college/school at the time of degree completion ($F(9, 1570) = 6.007$; $p < .001$).

Undergraduate program completers in the College of Engineering were found to have

significantly lower work readiness scores ($M = 3.60$; $SD = .80$) than undergraduate program completers in the College of Human Science Education ($M = 4.01$; $SD = .81$), the School of Mass Communication ($M = 3.98$; $SD = .95$), the College of Science ($M = 3.93$; $SD = .74$), the College of Business ($M = 3.92$; $SD = .77$), and the College of Human and Social Sciences ($M = 3.87$; $SD = .78$).

Objective Five

The fifth objective was to determine if a model existed that explained a significant portion of the variance in perceived work readiness among undergraduate program completers with selected demographic characteristics. The characteristics were analyzed using multiple stepwise regression to determine variance and predictor variables. The results of the regression indicated that three predictors explained 07% of the variance ($R^2 = .068$; $F(3, 693) = 16.761$; $p < .01$). A statistically significant difference was found for three predictor variables of perceived work readiness. The variable that had the biggest effect on the model was Science, Technology, Engineering, Mathematics (STEM) ($B = -.164$; $p < .001$), followed by Gender ($B = -.136$; $p < .001$), and, lastly, Multiracial ($B = -.073$; $p < .048$), with criterion for significance set at the .05 level.

Conclusions, Implications and Recommendations

Conclusion One

The race of the most prevalent group of undergraduate program completers was Caucasian. Of the 1,870 undergraduate program completers for whom information regarding race was provided, 78% identified as Caucasian and 9.2% identified as African American. One possible implication is that this institution has been ineffective at recruiting minorities, especially African Americans. In the metropolitan area of the study university, the two largest populations, based on race, are Caucasian (48.1%) and African American (46.5%), with a gap of only 1.6%.

In contrast, the study university is comprised of 78% Caucasian and 9.2% African American, a gap of 69%. This gap between the two largest populations based on race is substantial.

Based on this finding, the researcher recommends that the administration place an emphasis on minority recruitment if one of the university's goals is to serve the population of the state. There are several actions that could be taken to improve minority recruitment, such as installing a diverse undergraduate recruiting staff. While the gap between Caucasians and African Americans is perhaps the most pronounced, it is very conceivable that other minority groups (Hispanic, Asian, etc.) are also underrepresented. The researcher further recommends that additional research be conducted to determine the representation of various minority groups in specific colleges and majors. For example, it is clear that female students are not underrepresented overall since they make up the majority of the students in the study (54.9%).

However, the question is whether the gender make-up of programs that have historically been male (or female) is similar. All programs should strive for appropriate representation of various minority groups. In order to be effective in minority recruiting, that minority group must be represented in the recruiting staff. Another action that could be taken to improve minority recruiting would be to place additional emphasis on hiring a diverse faculty. Representation of minority groups at all levels of an institution, from staff through administration, could have a dramatic impact on the overall environment.

One factor that may have a direct impact on minority recruitment in the study institution is the existence of a historically black university (HBCU) in the same metropolitan area. It could reasonably be speculated that many African American students would be attracted to the HBCU because of the sense of belonging it would offer. However, this sense of belonging can be achieved at the study institution with appropriate programs and efforts. For example, the

institution could establish a program that highlights the accomplishments and increases the visibility of high-achieving minority students. Additionally, the researcher recommends the development and/or expansion of academic support programs designed to assist students who struggle academically, especially during their first two years of enrollment. These programs should be available to all students (not just minorities), but they are critical for students who struggle during their early stages of their academic programs. These programs should be accompanied by strong faculty support to help identify and refer students who need assistance.

Additionally, the researcher recommends that the administration of the institution provide funding for programs that are designed to improve the personal and leadership skills of students and that have diverse representation among the student participants and the faculty leaders. One potential program in which students could learn leadership skills and gain greater self-awareness would be a personal branding program. A personal branding program provided in a university setting would help students gain confidence via self-awareness exercises and experiential learning. Such experiences provide opportunities for students to learn their personalities and strengths, develop personal tag-lines, design personal brand symbols, and learn leadership skills.

In addition, the program could encourage students to participate in new student organizations that help them maximize their personal and leadership development in venues that allow them to excel as minority students attending a predominately white university.

Conclusion Two

Completing an internship did not have an impact on students' perceived work readiness. Of the 1,870 undergraduate program completers for whom information regarding internships was provided, there was no significant difference in perceived work readiness between the students who had an internship (47.7%) and those who did not have an internship (52.3%). This conclusion is inconsistent with much of the literature on internships. Employers report that they

are more likely to hire recent graduates with internship experience, believing that it is one of the factors that influence work readiness (NACE, 2017).

However, further examination showed a positive impact on perceived work readiness for those undergraduate program completers (41.5%) who completed an internship for course credit. Additionally, a negative impact on perceived work readiness was found for those students (79.2%) who completed a paid internship. The conflicting results of the two types of internship experiences could have resulted in the overall finding that the completion of an internship was non-significant. It is important to point out that this study measured the “self-perceived” work readiness of undergraduate program completers. Therefore, the researcher is not suggesting that internships are not effective in developing students’ readiness skills for the workforce but that the type of internship is an important factor in its effectiveness. It may be that students view a paid internship as nothing more than a part-time job, while an internship for course credit may be viewed and treated as an academic accomplishment. Correspondingly, the latter type of internship is an experience that contributes directly to their education, which they ultimately view as preparing them for their career and their future.

The data for this study were collected before the undergraduate program completers were actually on the job, unless they held the job during college. Therefore, the researcher recommends that a follow-up study be conducted with the undergraduate program completers six months after they start their jobs. The goal of the follow-up study would be to determine if the students have the same perceptions of their work readiness after gaining a more experiential view of the extent to which they were actually work ready.

Ultimately, students who completed internships for course credit had higher scores of perceived work readiness. Completing an internship has been proven to impart great value to a

student's personal, academic, and professional development during college. The researcher recommends that, where feasible, academic departments require that students complete internships. Some academic programs have more flexibility to incorporate internships, such as establishing elective courses. Other academic programs have little to no flexibility. For the latter, the researcher suggests incorporating short-term field experiences in multiple courses within the academic program. Although internships and field experiences are not exactly the same, the researcher recommends that future research be conducted to determine whether these short-term field experiences affect students' perceptions of their work readiness.

Finally, this study did not examine the impact of an internship on actual work readiness. Therefore, the researcher also recommends a future study that follows up with employers regarding the level of work readiness of recent graduates as perceived by their employment supervisor.

Conclusion Three

Students have diverse experiences while they are attending college. This conclusion is based on the finding that, of the six items on the perceived work readiness scale, the item "Working with people different from yourself" had the highest mean score (3.95; SD = 0.93). One possible implication is that, even though the population in the study institution was not as diverse as might have been expected given the population statistics of the surrounding area, students are receiving the kinds of experiences that enable them to broaden their horizons and increase their comfort level when working with diverse groups. According to Schramm, the top soft skills needed for success in the workplace include the professional and interpersonal skills needed to work within teams (2015), one of which is being comfortable with diverse individuals.

This finding conflicts with the literature regarding the skills that employers feel recent graduates lack. Specifically, employers have reported team dynamics as one of the foundational

soft skills that recent graduates do not have. One possible explanation is that these findings positively reflect on the effectiveness of the study institution.

Based on this conclusion, the researcher recommends that additional research be conducted to determine the specific experiences that contribute to students' perceptions of their preparation for working with diverse groups. This study could be designed as a qualitative study using focused interviews in which students would be asked to reflect on their specific experiences with diverse audiences and settings.

Conclusion Four

Undergraduate program completers feel only moderately prepared with respect to determining their future careers. This conclusion is based on the finding that of the six items on the perceived work readiness scale, the item "Determining your future career" received the lowest response. Of the 1,870 undergraduate program completers, information was provided the 1,583 regarding their preparation in the area of "Determining your future career." On a five-point scale (5 = Extremely Helpful – 1 = Not at All Helpful), ($M = 3.73$; $SD = 1.08$) of the students scored this item three or lower, which falls in the moderate range.

One implication of this finding is that students who lack the skills and/or the confidence to make effective career decisions are likely to pursue/accept jobs after graduation that are incompatible with their long-term career goals. This perception of unpreparedness may be due to pressure from families and peers or to financial needs (insurance, student loans, etc.) to find work regardless of the nature of that work. Unfortunately, in many instances, the individuals become "trapped" in a job/position due to a number of life factors. Although not specifically related to this conclusion, the students who had an internship (especially one for course credit) tended to score this item higher. Therefore, the researcher recommends further research to determine which specific experiences impacted students' perceptions of "Determining their

future career.” The researcher also recommends further research to determine whether or not students are employed in a position related to their program of student at the time of graduation.

There are a number of services available to students on university campuses that may improve their career- and decision-making skills. Based on the literature regarding the college experiences most likely to impact students’ perceptions, they should take courses that include communication-intensive, capstone, service-learning, and internship components.

One possible approach that could help students prepare for the work force and, more specifically, impact their abilities in the area of determining their future careers would be to provide a specialized program, such as a personal branding program. This type of program would provide students with opportunities to develop personal and professional skills that prepare them for the work environment. According to Hult Labs,

Students would be better served by an educational experience that helps students understand themselves more deeply, and pushes them to struggle with their personal development in a more intense way. Executives felt students would be better prepared for the world of “real work” if they could experience more of it in a classroom environment – especially if those experiences included more self-reflection, more chances to give and receive feedback with team members and finally, more chances to understand why team dynamics occur the way they do (Hult Labs, 2013, p. 2).

If students do not have an understanding of their values and beliefs, they can easily find themselves in compromising situations in which they allow their surroundings or the system to make decisions for them.

More specifically, a personal branding program provided in a university setting would help students gain self-confidence via self-awareness exercises and experiential learning experiences. Such experiences would provide them with opportunities to learn about their personalities (personal tendencies), strengths, and values. Students could develop a personal tag-line, design a personal brand symbol, receive career exploration resources, learn leadership

skills, and participate in new student organizations that help them maximize their personal and leadership development.

These experiences could take place in venues that allow them to excel as college students and, furthermore, to be more likely to pursue their chosen future career.

Although the researcher believes the personal branding experience would be beneficial for all students, the researcher recommends that this technique be offered to incoming students in settings such as freshmen seminar courses. Additionally, a similar personal branding technique should be designed and incorporated into capstone courses to prepare advanced-level students to transition into the work environment.

Conclusion Five

Undergraduate program completers perceived themselves to have a moderate level of work readiness. The mean overall work readiness scale score was 3.85 on the five-point scale used by respondents. This score equates to 77% of the possible value of overall work readiness. This score is consistent with an online preparedness survey summarized in the literature review, which found that a wide range of businesspeople, corporate recruiters, and others agreed that recent college graduates deserved a grade of “C” or lower on their preparedness for their first job (Bentley University Preparedness Study, 2014). One potential implication is that this group of undergraduate program completers does feel prepared to enter the work environment. However, the items in this work readiness scale focus primarily on an area that would be classified as “soft” skills, which are most often identified as the greatest deficiency of college graduates. Employers maintain that, although college graduates today are technically prepared, they lack readiness for the job, especially in the area of soft skills (Clark & ACT Inc., 2013; et al).

Nevertheless, it should be noted that self-perceived work readiness, while clearly important, may not be a true indicator of actual level of preparedness for the workplace.

Therefore, the researcher recommends that additional research be conducted to determine the relationship between self-perceived work readiness and other measures of work readiness such as: 1) An assessment provided by the graduate's work supervisor at some point early in their employment (perhaps after three months on the job) and/or 2) A self-assessment after a short period of time on the job when graduates may have a different perspective of their work readiness. This self-assessment should not be conducted too soon after beginning the new job, as adjusting to the new environment may make it difficult for the graduate to accurately assess their work readiness.

Another implication is that there is room for improvement in the level of perceived work readiness of undergraduate program completers. The level of readiness measured in this study would most likely be classified as average or moderate. The researcher feels strongly that with the right undergraduate experiences, graduates could begin their first post-graduation jobs with a higher level of perceived work readiness.

Certain characteristics were found to have an influence on student's readiness. For example, those who had academic internships tended to feel more work ready than those who did not. Also, those who completed paid internships tended to feel less work ready than those who did not. DoL's Competency Model (2015), correlates related knowledge, skills, and abilities of one's job (a role of responsibility) with performance on the job, which can be measured against well-accepted standards. Therefore, the researcher recommends that longitudinal research be conducted in which students assess their self-perceived work readiness upon matriculation. Then the progression of the students could be assessed on an annual basis by means of a detailed record of their experiences to determine more precisely which factors influence their perceived work readiness. This assessment could be framed by the DoL's Generic Competency Model,

which is comprised of personal effectiveness, academic, and workplace competencies, the foundational knowledge, skills, and abilities needed to be successful in the workplace (DoL, 2015).

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APPENDIX A. INSTITUTIONAL REVIEW BOARD APPROVAL



ACTION ON EXEMPTION APPROVAL REQUEST

TO: Karen Goodridge
Dept. of Ag & Extension Education and Evaluation

Institutional Review Board
Dr. Dennis Landin, Chair
130 David Boyd Hall
Baton Rouge, LA 70803
P: 225.578.8692
F: 225.578.5983
irb@lsu.edu
lsu.edu/research

FROM: Dennis Landin
Chair, Institutional Review Board

DATE: May 17, 2018

RE: IRB# E11079

TITLE: The Influence of Selected Factors on the Work Readiness of Undergraduate Program Completers at a Research University

New Protocol/Modification/Continuation: New Protocol

Review Date: 5/17/2018

Approved X Disapproved _____

Approval Date: 5/17/2018 Approval Expiration Date: 5/16/2021

Exemption Category/Paragraph: 4a

Signed Consent Waived?: N/A

Re-review frequency: (three years unless otherwise stated)

LSU Proposal Number (if applicable):

Protocol Matches Scope of Work in Grant proposal: (if applicable)

By: Dennis Landin, Chairman 

PRINCIPAL INVESTIGATOR: PLEASE READ THE FOLLOWING –
Continuing approval is **CONDITIONAL** on:

1. Adherence to the approved protocol, familiarity with, and adherence to the ethical standards of the Belmont Report, and LSU's Assurance of Compliance with DHHS regulations for the protection of human subjects*
2. Prior approval of a change in protocol, including revision of the consent documents or an increase in the number of subjects over that approved.
3. Obtaining renewed approval (or submittal of a termination report), prior to the approval expiration date, upon request by the IRB office (irrespective of when the project actually begins); notification of project termination.
4. Retention of documentation of informed consent and study records for at least 3 years after the study ends.
5. Continuing attention to the physical and psychological well-being and informed consent of the individual participants, including notification of new information that might affect consent.
6. A prompt report to the IRB of any adverse event affecting a participant potentially arising from the study.
7. Notification of the IRB of a serious compliance failure.
8. **SPECIAL NOTE:** When emailing more than one recipient, make sure you use bcc. Approvals will automatically be closed by the IRB on the expiration date unless the PI requests a continuation.

* All investigators and support staff have access to copies of the Belmont Report, LSU's Assurance with DHHS, DHHS (45 CFR 46) and FDA regulations governing use of human subjects, and other relevant documents in print in this office or on our World Wide Web site at <http://www.lsu.edu/irb>

APPENDIX B. GRADUATING STUDENT SURVEY

Graduating Student Survey

Results of the Graduating Student Survey are reported by the Study Institution Career Center in aggregate form only. Information identifiable to you will not be released publicly; data will only be used for purposes officially sanctioned by the University. Much of this information is used for University assessment, accreditation, and ranking purposes.

Note. This Graduating Student Survey (First Destination Survey) was designed by the study institutions career center, according to the National Association of Colleges and Employers (NACE) standards and is intended for all graduating students to complete at time of degree completion.

1. What is your senior college/school?

Agriculture, College of; Art and Design, College of; Business, E.J. Ourso College of;
Coast and Environment, College of the; Engineering, College of; Human Sciences and
Education, College of; Humanities and Social Sciences, College of; Mass
Communication, Manship School of; Music and Dramatic Arts, College of; Science,
College of; Veterinary Medicine, School of

Required answers: (0) ... Allowed answers: (1)

2. Have you received a job offer?

Yes (1) ... No (2)

3. Are you currently employed?

Yes (1) ... No (2)

4. Did you have an internship?

Yes (1) ... No (2)

5. Did you receive academic credit?

Yes (1) ... No (2)

6. Was your internship paid?

Yes (1) ... No (2)

7. What is your gender?

Female (1) ... Male (2)

8. What is your race?

Caucasian

African American

Hispanic

Asian

Multi-Racial

American Indian or Alaskan Native

Native Hawaiian or Other Pacific Islander

9. What is your age?

Month, Day, Year

10. Undergraduate Program Completers, at the time of degree completion as classified by the study institution based on the following demographic characteristic:

Whether student was classified by the student institution as “In-State” or “Out-of-State”

11. How helpful were your experiences at LSU in developing the following skills?

	Extremely Helpful (1)	Very helpful (2)	Moderately helpful (3)	Not very helpful (4)	Not at all helpful (5)
Connecting what you learned to other knowledge, ideas, and experiences (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relating knowledge learned to daily life (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determining your future career (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Building meaningful relationships (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collaborating with others (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working with people different from yourself (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

VITA

Karen L. Goodridge is an experienced professional in high school, public, private and community college institutions, with over 15 years of higher education experience, providing services to faculty, staff, undergraduate and graduate level students in leadership development, academic planning, Freshman Year Experience, career exploration, personal, career and mental health counseling. In addition, managed student programs and budgets for each Student Development Department.

Strong, motivational and inspirational leader with a talent for change management, organizational design, strategic planning, contract negotiator, problem solver, recruiter and volunteer manager. Equally skilled at motivating the university community at every level, community partners and key decision makers towards unified goals and new concepts through visionary leadership and tactical execution toward goals.

She earned a Bachelor of Arts, Sociology and Master of Education from Southeastern Louisiana University, and is a candidate to receive a Ph.D. in Agriculture and Extension Education and Evaluation in May 2019.