The perception of career readiness skill development in college seniors

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The Perception of Career Readiness Skill Development in College Seniors

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Dedication

I dedicate this body of work to my family with life and love.

I am grateful that I have you all on my side.

I am because you are.
Acknowledgments

I would like to express my deep gratitude to two wonderful women. Dr. Noorie Brantmeier for her guidance and support. Thanks for helping me to laugh when I felt stressed and for believing in my ability to get it done. Dr. Oris Griffin for her useful recommendations to help me get started. You each pushed me forward when I felt like I was spinning around in a circle. Thank you for the hours you put in editing my work. I admire what you have both accomplished professionally. You may never know just how powerful of an experience it is to be in spaces with and to be taught by strong women of color.

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Abstract

As universities and colleges around the world strive to provide rigorous academic instruction, they are also preparing their students to enter into the world of work. According to research conducted by American College Test (ACT), Americans value education because they believe it will provide economic benefit to those that participate in the system. By the year 2018, the majority of newly created jobs in the United States of America (U.S.) are likely to require a college degree (Matter, Burrus, Camara, O’Connor, Hansen, Gambrell, Casillas, & Bobek, 2014). This fact suggests that in order for students to be prepared to enter the world of work they must possess the competencies and skills needed to be successful. This study explores student’s perceptions of their career readiness development in relation to their engagement with career resources and programming. A mixed methods approach was used to assess undergraduate seniors at a four-year public institution. This study provides insight regarding which of the eight competencies as defined by the National Association of Colleges and Employers (NACE) students feel they have the most development in preparation for their future career paths. The findings revealed that students that utilized career services during their senior year felt more confident in their career readiness skill development. This survey has important implications for career offices that want to assess programming and services to develop a competency-based framework.

Keywords: competencies, skills, college and career readiness, National Association of College and Employers, employability, higher education
Chapter 1: Introduction

When we look at the labor market and trends that will define the future of work, we can see an ever-growing interest in determining what skills students need in order to be successful after graduation. According to Foucar-Szocki (1992), the traditional recognized skills of reading, writing and arithmetic are no longer the main skills needed in the workforce. Workers now need to be able to communicate, solve problems, be collaborative team members and willing to seek opportunities to improve. College and Career readiness are terms that have been utilized in the K-12 educational system for research and assessment over the past ten years and are now being used in higher education. In the K-12 system, students are evaluated starting in high school using standardized assessments and other indicators to determine if they are college and career ready (Aalderink, 2017). Educators are continuously looking for ways to redefine and broaden the idea of what constitutes a successful student (Obrien, 2017). The way educators in K-12 engage in these concepts in order to increase classroom experiences for high school students directly influences the attitudes and perceptions of students as they matriculate into college and the workforce. The current educational paradigm for K-12 is the Common Core State Standard Initiative. It was launched in 2009 for the 48 states, two territories and the District of Columbia to ensure that all students would be prepared for college, career, and life by the time they graduate (“Common core”, n.d.). Within this system, educators measure standards of learning through a systematic approach to teaching. In theory this system design should provide access to resources and processes in which learning is consistent and available to all students in K-12 across the United States. What the educational system has continued to experience is the challenge of system
accountability and unequal student access to learning and resources. For example, some school districts have more funds, adequate classroom spaces, more engaged educators or better access to experiential learning opportunities and the list goes on (Darling-Hammond, Wilhoit, & Pittenger, 2014). As students matriculate into college or directly into the workforce, they do not enter with the same skill development as peers from more affluent schools. It could be expected that employers and colleges would be aware of and understand that all students are not equally prepared due to privilege gaps. The historical development of education in the U.S. has normalized disparities that center on facets of racism, power, privilege and oppression, where those with elite status in society were and are afforded access. Many students may not have had experiences to hone critical thinking or to seek further skill development in order to be successful in college or in the world of work (Darling-Hammond et. al., 2014).

Career offices engage students with opportunities, services, and resources, leading to informed decisions for academic and career success at JMU and beyond (Morsch, 2017). These offices also help students explore academic majors and career paths, while also preparing college students for all aspects of the job search process. In order to be competitive in today’s labor market a person has to be able to connect their learning to their practice. Conversations around this topic have lead organizations such as the National Association of Colleges and Employers (NACE) to create a task force including constituents from higher education and corporations to look critically at this topic. The task force on career readiness first defined career readiness as, “the attainment and demonstration of requisite competencies that broadly prepare college graduates for a successful transition into the workplace” (“NACE Career Competencies,” 2017). Along
with the help of Human resources (HR)/staffing professionals, eight competencies were identified. The goal of creating definitions and associated competencies served the purpose of instituting a framework of thought and common vocabulary to discuss career competencies across industry and education. The eight competencies include: communication, critical thinking/problem solving, oral/written communication, teamwork/collaboration, digital technology, leadership, professionalism/work ethic, career management and global/intercultural fluency.

In December of 2014, 606 representatives from organizations that hire for their workforce at colleges and universities participated in a survey and were asked to “indicate the extent to which they view the competencies as essential to new college hire success when considering new college graduate candidates for their workplaces” (“Career Readiness Competencies,” 2017). Survey results indicated that professionalism, critical thinking/problem solving and oral/written communications and teamwork/collaboration were ranked as the top four most essential competencies. The employers also provided qualitative feedback to provide recommendations on how students can become more competitive.

One expectation of this framework is that it would be used during academic and career advising on college campuses as well as during the recruitment process for employers to identify and discuss experiences in which the competencies had been developed.

**Purpose of the Study**

The purpose of this study is to understand how students in their senior year of undergraduate education perceive their career readiness. The study asked students to
consider their competency development as defined by the National Association of College and Employers (NACE) and how other factors such as their engagement with career programming, events and/or resources at the university may have attributed to any perceived development.

**Statement of the Problem**

As more colleges compete for student enrollment and student dollars, they have to consider the return on investment for students. Students are consumers that are shopping around for the best experience and place to obtain the skills they feel will make them competitive in the workforce. There are several complexities with this concept including that each industry has its own set of technical expertise they require for their employees. Employers expect that new hires to their organization will understand the key concepts of their field and industry (Hora, 2017). In creating the career readiness competencies, NACE considered that a student may have questions about the importance and differences between an industry’s technical competencies and NACE career readiness competencies. NACE defined the career readiness competencies in a broader scope so that they would encompass a person’s habits, how they think, and how they apply learned knowledge in any setting. This broad scope makes the competencies applicable to all industries and transferable. Using the word competencies was also deliberate as it provides a specific way for students, educators and employers to discuss concepts of learning and the application of that learning and how both are connected to experiences versus using the word skill (Hora, 2017).

According to the ACT report, *Broadening the Definition of College and Career Readiness: A Holistic Approach*, Americans value education because they connect it to
economic benefits for themselves and for the country. As the world becomes more of a global market place and competition for jobs increases, the labor market is creating more jobs that require, at minimum, a four-year college degree. Although students are graduating with four-year degrees employers are suggesting that many students are not prepared adequately for the world of work (Mattern, Burrus, Camara, O’Connor, Hansen, Gambrell, Casillas, & Bobek, 2014). Employers also state that there is an existing gap between workforce demands and the skill of workers. Hora (2017) points out several factors that may influence the gap. The first is that higher education fails to prepare students in certain industries and therefore employers are left without skilled labor. Second, he stated that the issue is that there are too many students graduating with majors that do not have a direct industry link, such as arts and humanities academic programs. The last thing he shares is that the strategy of creating more programs for high demand industries is short sighted because the question of how to best prepare students to obtain career readiness skills is never addressed (Hora, 2017). Hora made several good points that draw out some of the expectations that students, parents, employers, educators, and even politicians have for schools in how they prepare the next generation to enter the world of work. Below, you will find the research questions that drive the current study.

**Research Questions**

RQ1: Is there a relationship between how often students used in office CAP services and their competency development?

RQ2: Is there a relationship between how often students used online CAP services and their competency development?
RQ3: Is there a correlation between use of CAP services and confidence in being prepared to be successful in chosen career field?

RQ4: Is there a relationship between having an internship and confidence in being prepared to be successful in chosen career field?

RQ5: Is there a difference between genders in confidence of academic field of study preparation?

RQ6: To what extent does CAP career programming influence confidence in career preparation among first generation students.

Hypotheses:

In addition to the research questions stated above, the following hypotheses were investigated:

H1: Undergraduate seniors who have participated in CAP career related workshops and events will feel more confident with their skills in the job search process.

H2: Undergraduate seniors who have utilized career related resources will feel more confident with their skills in the job search process.

These hypotheses assume that participation in career related workshop and event or contact with career resources will increase student confidence.

**Assumptions, Limitation, Scope and Delimitations**

For this study, I chose to target undergraduate seniors at James Madison University. There was an assumption that students would be able to self-assess, understand the competencies, and provide complete honest responses to the survey. This study may also be impacted by social desirability bias where students may be inclined to represent themselves as being more competent than they are in their responses.
Limitations may also include other individual bias resulting in errors in that student’s ability to recall information may be inaccurate.

Lower than expected sample size that is insufficient for statistical measurement can also be a factor that limits generalizability. Generalizability is hampered in the current study because this study focuses on responses for undergraduate seniors at JMU’s population and this data is unique to this particular context. The senior student population for this survey represents both genders across all academic colleges. The student population of JMU students are 20,798 undergraduate students with 5,636 of those classified as seniors. A survey approach was considered the most appropriate method in order to collect data and provide respondents with the opportunity to share their individual perspectives. In this study, the data was collected in JMU Qualtrics and provided anonymous response for the respondents. Limitations to the survey method include survey fatigue of respondents and low motivation to respond accurately. Other impacts include technology errors such as ineffective survey delivery, errors in opening the survey, or an inability to understand how to utilize the online platform.

**Research Significance**

While career readiness is a term that was been utilized in the K-12 educational system for research and assessment for the past ten years, research on career competencies, in higher education has lagged behind. Primary educational systems routinely consider new methods and ways to assess for learning while putting in place nationwide mandates and assessments. However, there is a separation between how the measures for assessing career and college readiness in primary education connect to skill
development for success in secondary education as well as the world of work. Below, I will provide the key terms and definitions that will be used throughout this study.

**Key Terms and Definitions**

Table 1.

*Career Readiness Key Terms and Definitions*

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Career Readiness</td>
<td>“Is the attainment and demonstration of requisite competencies that broadly prepare college graduates for a successful transition into the workplace” (NACE Career Competencies, 2017).</td>
</tr>
<tr>
<td>Career Office Programming</td>
<td>“Programming and events that are designed through or in partnership with the career office to provide the student with learning and resources that they can use in their recruitment and job search process” (Miller, 2019).</td>
</tr>
<tr>
<td>Career Success</td>
<td>“the positive psychological or work-related outcomes or achievements one accumulates as a result of work experiences” (Seibert, Crant, &amp; Krimer, 1999, p.417)</td>
</tr>
<tr>
<td>CoCurricular</td>
<td>“Being outside of but usually complementing the regular curriculum” (Cocurricular, n.d.)</td>
</tr>
<tr>
<td>Competency</td>
<td>The ability “to perform certain task or skills with a required level of proficiency” (Lasse, 2015).</td>
</tr>
<tr>
<td>Employers</td>
<td>“A person or company that provides a job paying wages or salary to one or more people” (Employer, n.d.).</td>
</tr>
<tr>
<td>Employability</td>
<td>“Set of achievements which constitute a necessary but not sufficient condition for the gaining of employment” (Yorke, n.d.).</td>
</tr>
<tr>
<td>High Impact Practices</td>
<td>“enriching educational experiences that facilitate learning outside of the classroom, require meaningful interactions with faculty and other students, encourage collaboration with diverse others, and provide frequent and substantive feedback” (Engagement Indicators, 2018)</td>
</tr>
<tr>
<td>NACE Career Competencies</td>
<td>Eight identified competencies that were identified by a task group to be the most important for a graduate to have in order to be successful in the workplace. (NACE Career Competencies, 2017).</td>
</tr>
<tr>
<td>Soft Skills</td>
<td>“Generic, discrete, context-free, and universally applicable skills that can be easily obtained” (Hora, Benbow, &amp; Smolarek, 2018).</td>
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The study’s purpose and significance have been presented along with key terms to clarify content. In the literature review to follow, current studies that are pertinent to understanding the concepts as well as conceptual and theoretical frameworks that apply are discussed.
Chapter 2: Literature Review

The following literature review examines the current research as it pertains to college and career readiness, employment, career readiness competencies and soft skill development. The literature review methodology involved utilizing multiple databases, including: Education Resources Information Center (ERIC), Google Scholar, and EBSCO Combined Search to locate scholarly, peer-reviewed research.

When using these databases, the following descriptors were included, but not limited to: “Competencies”, “College and Career readiness”, “Soft Skills”, “Career”, “Future of Work”, and “Employability”. Within the databases, several journals were reviewed, such as the Social and Behavioral Sciences, Journal of Economic Issues, Human Resources Development International, Labour Economics, Procedia - Social and Behavioral Sciences and Global Business and Management Research: An International Journal. Most of the literature included was from the past decade. To provide a multitude of perspectives on these themes, other references such as reports provided by the National Center for Innovation in Education, the American Institutes for Research, Hartford Research Group, Gallup, The Higher Education Academy, and the Bureau of Labor Statistics were reviewed. NACE was referenced to define career readiness and define the eight core competencies necessary for a college student.

The literature review of the “The Perception of Career Readiness Skill Development in College Seniors” research study begins with an in-depth explanation of the study’s conceptual and theoretical frameworks. The frameworks will then provide an overview of the study’s themes, research questions, and hypotheses. The conceptual framework comprises five defining aspects that affect College and Career Readiness:
theory, the future of the U. S workforce, curriculum, and instruction in academic settings, co-curricular learning opportunities, career services resources, and programming. Figure 1 represents the conceptual framework for this study along with learning and career theories to support this study. The literature review also discusses how theory shapes student’s self-perception through developmental phases. A review of previous literature is presented to support the framework and to identify gaps in the current literature. There were overlapping themes that emerged in the review of current literature, which highlighted the importance of soft skill development in and out of the classroom, the challenges of preparing high school and college students for the world of work and the need for additional studies regarding career readiness for students that matriculate through college.

Figure 1. Conceptual Framework
Conceptual and Theoretical Framework

The conceptual framework that guides this study can be viewed as an integrated process that will describe relationships among concepts and constructs. The successful integration of conceptual and theoretical ideas depends on the engagement and development of all aspects of the frameworks. Using a common framework provides a way to communicate understanding among professionals by use of a common language (Komives, Woodard & Associates, 2003). This study begins by reviewing several theories that guide the practice of how a student learns in their environment. It is important to adopt a multiple theory process that pulls relevant and meaningful information from several sources and combines them into a stronger holistic perspective of understanding. Educators use theories as part of the holistic measurement for teaching. Research suggests that the development and obtainment of soft skill development prepare students to integrate successfully into the world of work after high school and college graduation (Achieve, 2012).

The researcher chose four theories for this study based on her experience working in Student Affairs at several colleges in the U.S. Based on the fact that educational institutions can be spaces where diverse interactions happen, she has been able to observe students in spaces such as academic, residential and co-curricular settings. Through these observations she has learned that social interactions impact not only learning but perceptions of self-efficacy. The Social Learning Theory and Constructivism Theory help to create interpretations and understandings of how a student’s behavior is constructed (Komives et al., 2003). Student affairs theories focus on how college students develop and grow during their time in the collegiate setting and at various stages
in their maturity into adulthood. Specific student affairs career related theories focus on the processes of career development and career decision making. Two prominent career theories are Donald Super’s theory of Life Span and Life-Space theory, and John Holland’s theory of the Holland Type Theory (Komives et al., 2003). These career theories are considered foundation theories for career practitioners. The career office at JMU ensure that staff members understand these theories by reviewing them with new hires and using career assessments based on these theories to aid students in decision making. The researcher believes all four theories serve as a significant focal point for student learning, especially in context of self-perception and self-efficacy.

**Social Learning Theory**

This study demonstrates that learning occurs in social spaces through observation and modeling. Social learning theory incorporates the social cognitive theory by Albert Bandura to understand the relationship between the influences of reinforcement theory, cognitive information processing and classical behaviorism on human behavior (Hughey, Nelson, Damminger, McCalla-Wriggins, & Associates, 2009). Social learning theory assumes that people’s personalities and behaviors are explained by understanding their learning experience and their developmental role in the processes. Social learning also considers that humans strive at all times to understand the world around them and control their environments to suit their own needs and purposes (Hughey et al., 2009). Like the participants in the current study, skill development is constructed through learned experiences in various environments. Students have experiences such as joining clubs and organizations, project work in academic spaces and career activities such as internships. Because these experiences happen in social spaces the student’s behaviors can grow and
change. Students develop competencies and may become more comfortable with problem solving or written communication. As competencies are developed through immersion and involvement students have a more positive perception of their career readiness.

**Constructivism**

This study connects to the idea that students ‘construct’ meaning through their own experiences (Ertmer & Newby, 1993). Constructivism is a theory that examines how people think and reflect about experiences as a way to understand them and apply meaning (Komives, Woodard & Associates, 2003). We do not transfer this learning from the educator to the student, instead the student must use their own unique reality to find what they believe (Caruana & Mcpherson, 2015; Ertmer & Newby, 1993). This theory aids the learner in exploring, analyzing and evaluating topics from their own point of view. In considering, Blooms Taxonomy (Huit, 2000), this model requires a higher-level thinking in order for the student to build their interpretations of the material and apply it in real-world situations. In this study, students constructed meaning about their experiences in academic and co-curricular spaces. The responsibility of learning transfer belongs to the student and they have to explore things from their own lens. The survey questions in this study require a level of reflection and critical thinking in order for the students to determine their level of career readiness proficiency with each competency.

**Super’s Theory of Life-Span, Life-Space Career Theory**

The aim of this study is to understand the ways in which students have engaged with career programming and resources to develop their self-perceptions of career readiness. Super’s Theory of Life-Span, Life Space provides a framework for shaping
and understanding how a person experiences a series of developmental tasks while attempting to manage them to become the person they want to become (Komives et al., 2003; Hughey et al., 2009). A life span career theory explains how students develop competency through life stages which encompass various social and environmental factors which in turn influence role development and growth. Environmental factors include the economy, status of natural resources, family, community and peer groups (Komives et al., 2003). Growth through this model includes fantasy, interest, and capacity throughout five stages of development. During the Growth stage, which is 0-14, career development is homogeneous as most students are studying the same subjects; they understand what work is and learn about careers. During the Exploration state between the ages of 14-24 students, are encouraged to explore their environments and develop curiosity about occupations (Komives et al., 2003). As students move through the educational system they have to decide on their educational and career plans. At this stage, they have a basic understanding of their interests and career fantasies and now have to connect them to their future path. It is easy for a student to become disengaged in the career process at this point, if they have had few activities to learn about themselves (Komives et al., 2003). Another factor of disengagement is the inability to maintain a sustained curiosity about career and educational opportunities. During this stage, those students that matriculate to college interact with student affairs practitioners who use theory to help them develop. When students become disengaged they often seek help from the career office due to a failure to get accepted into their major because of poor grades. This can be a sign that there is a disconnection between a student’s interests and their program of study. In stage three, the Establishment stage (24-44), the student
matriculates into the world of work and they enter the next stage of the theory, which is the Life Space (Komives et al., 2003). During Life Space, they are earning a living and becoming competent in a career. They may seek opportunities for professional development or new job duties (Komives et al., 2003). The next stage is one of Maintenance. Between the ages of 45-64, the individual is now working to remain productive and prepares to retire from the world of work in their sixties (Komives et al., 2003). In the final stage, Decline, which is age 65 and up, the individual is now adjusting to a slower pace of work, or retirement and works to maintain financial and physical resources to live independently (Komives et al., 2003). During the life span of a career, the roles a person has in life changes and that affects how they view career. Super identifies nine major roles in chronological order these roles are (a) son (b) student, (c) leisurite, (d) citizen, (e) worker, (f) spouse or partner, (g) homemaker, (h) parent, and (i) pensioner. Life roles are generally played out in specific areas referred to as theatres (Komives et al., 2003; Hughey et al., 2009). These theatres are (a) the home, (b) the school, (c) the workplace, and (d) the community. This model helps career practitioners work with students to identify appropriate career goals based on the students own self-concept of interests (Komives et al., 2003; Hughey et al., 2009). This theory is grounded in the premise that individuals could be happy in a variety of occupations and environments if they clearly understood their abilities, interests and other personal qualities (Komives et al., 2003). Just like the students in this survey, they began their career development in early childhood and it develops based on environment and social interactions. In the collegiate environment students are encouraged to learn from one
another and those influences will impact how they make decisions about their life path. Life role modeling will continue in some extent until death.

**John Holland Theory: Holland Theory of Vocational Choice**

A crucial point discussed in this theory is the idea of self-perception. In order for a student to connect to their major and future career goals they must understand their choices. Holland’s Theory of Vocational Choice focuses on ways to describe individual differences in personality types. It seeks to find congruence between a person’s personality characteristics and occupational environments. One assumption of the theory is that people seek environments in which they can exercise their skills and abilities and express their values (Komives et al., 2003; Hughey et al., 2009). This trait and factor theory has six environments that it categorizes a person into: realistic, investigative, artistic, social, enterprising, or conventional based on interests and characteristics.

**Hollands Personality Types (Komives et al., 2003; Hughey et al., 2009).**

Realistic. People in this category have an interest in physical activities that require motor skills and strengths. They prefer concrete rather than abstract tasks.

Investigative. People in this category have an interest in scholarly, analytic and inquisitive activities. They prefer thinking to acting and they enjoy the world of ideas more than working with people or things.

Social. People in this category have an interest in work with people more than things. They enjoy close interpersonal contact. They like to be friendly, helpful, cooperative and sensitive to others.

Conventional. People in this category have an interest in working with numbers, records, and data. They like order and structure and work well within a system. They are conscientious, efficient, and practical.

Enterprising. People in this category prefer to work with people in more of a managerial versus a helping role. They like to lead and organize others. People in
this category are verbally skilled, persuasive, confident and concerned with status.

Artistic. People in this category have an interest in work that involves creativity and artistic expression. They prefer innovative assignments and dislike structure. They are expressive, imaginative and creative.

People find their career interests as a matter of the expression of their individual personality. College students around the world like students in this study must have an academic major in order to graduate with a degree. Choosing an academic program or career path is an important part of career success. This student affairs theory focuses on how a person could find their best career fit based on their personality and work environment interests. For students that used CAP services and took the Holland Personality Types test, they were able to create connection between their own values and make informed decisions about education and employment (Komives et al., 2003; Hughey et al., 2009).

The Future of the United States (U.S.) Workforce

While theory helps us to understand the complexities of human behavior, interaction and learning it is important to consider the environments in which they will demonstrate their learning. The idea of the world of work has existed in many institutionalized forms such as agriculture, industrial, service and digital throughout each of those evolutions the role of the employee changes (Hodgson, 2016). In the twenty-first century, we again see shifting workforce demographics, in particular age. Those in the baby boomer generation (1946-1964) are retiring and those in the millennial generation (1977-1995) are entering the workforce. The workforce now has older employees staying employed longer before they retire because they either want or need to stay employed, resulting in workplaces with five generations working side-by-side. The
changes in industries include new ones developing and some exploding such as new positions in health care, while others begin to fade such as agriculture. Globalization will also present significant challenges and opportunities for the workforce.

The skill gap concern is another challenge for the economy; increasingly, today’s jobs require higher order thinking skills such as problem solving, critical thinking, and synthesis skills (Balestreri, Sambolt, Duhon, Smerdon, & Harris, 2014). According to Hora (2017), during the 2008 recession higher education inadequately prepared students for workforce demands. The market was saturated with graduates and many found themselves without a clear link to the labor market and lacked transferable skills. Employers did not see the skill level of students entering the workforce in the same way as educators. Research continues to show that employers find that new high school graduates lack appropriate preparation for the workforce with the skills they need to be successful in the world of work (Mattern et al., 2014; Achieve, 2012; Caruana & Mcpherson, 2015). Compounding this issue is about 20% of US students do not earn a high school degree (Mattern et al., 2014), which increases the skills gap for these students that enter the workforce.

According to the Future of the U.S. Workforce Lifelong report, about 80% of current jobs in the workforce are considered “middle skills” or “high skills” job (Achieve, 2012). That means these jobs require skill development beyond high school. Over the past decade, more job openings in the U.S. are requiring workforce training or post-secondary education (Mattern et al., 2014; Employment Projections, 2017). According to Carnevale and Smith (2013), there is an increase of new jobs being created that require a college degree. With an increase in needed skilled labor, the gap in workers with those
skills for specific industries grows. The Bureau of Labor Statistics (2017) projected that by the year 2026 the labor force will increase from 156.1 to 167.6 million. Within that growth, 30 industries will grow the fastest and at least 18 of them will require a level of post-secondary education. Students that enter into low-skill jobs will have fewer opportunities for advancement and leadership while employment will be less secure (Achieve, 2012). Like the students in this study, many people are faced with the reality of increasing changes in work environments and the need to increase skill attainment and ability to demonstrate them in the workplace.

**The Importance of Curriculum and Instruction in Academic Settings**

The mission of the Department of Education is to, “promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access” (U. S. department of education, n.d.). The educational system provides opportunities for students to pursue a primary education, which is K-12. Parents are expected to be the main supporters of education and enroll their children into the local school system or home school them until they reach a certain age. Compulsory attendance laws are set individually by each state for children between 5 and 18 for mandatory school attendance (What are Compulsory Attendance Laws, n.d.). These laws were initially instituted to decrease unethical use of children for labor which historically was a common practice.

The goal of ensuring that all children within the ages of 5-18 years of age attend K-12 schooling, influences how the laws and regulations of student learning from primary to secondary education in the U.S. are created and assessed. Many educational institutions, embrace the purpose of teaching students so that they graduate with the skills
and knowledge to move into the next phase of their life (College and Career Ready Students, n.d.). Many states have implemented strategies and initiatives to increase state standards and assessments to define and measure what their students should know. This means that each state has a set of core subjects, proficiency levels and an assessment process to measure each school’s progress toward math and literacy (College and Career Ready Students, n. d.). Most state standards use the Common Core State Standards in English language arts (ELA), mathematics, and Common Career Technical Core (College and Career Ready Students, n. d.). While school systems are designed as a place of learning, for many students the burden of navigating the educational system to obtain opportunities, financial support, and other aspects that will help get them to the next level is up to them. Each aspect of the primary and secondary educational process is a different environment with its own set of expectations and standards, which produce various barriers to success and achievement (Erikson & Sidhu, 2015). Students must identify their own career paths, set goals, and achieve expectations (Balestreri et al., 2014). What this looks like in the educational system is that some students do not graduate from high school or they graduate ill prepared for the next step in their career path (Mattern et al., n.d.). Although each state has a set of educational standards that determines what subjects are taught, these standards may not have direct correlation to what students need to know in college or in the workplace in order to be successful (Balestreri et al., 2014). In many cases, students are learning in environments that lack consistent equity throughout the district with some schools receiving the funding they need to purchase new technology and books while other schools go without. Another issue is that within the individual school students are not all getting the same access to
what resources are provided. This lack of access may be based on issues of power and privilege including ethnicity and language barriers.

Even with continued high school dropout rates of 1 in 5 students nationwide, research shows that Americans value education and that having additional education yields economic benefits for the individual and for the global economy (Mattern et al., n.d.; Carnevale and Smith, 2013). In 2013, The Lumina Foundation (2013) conducted a survey with 1,009 people to examine the perceptions of the general American population regarding several aspects of higher education and degree attainment. Although only about 3 in 10 U.S. adults have a bachelor’s degree, around 97% of the respondents say having a degree or certificate beyond high school is at least somewhat important to have for financial security. Over 67% say getting a good job and 65% say earning more money are important reasons for getting additional education after high school (Lumina, 2013). For the cost of education, 76% of Americans consider that higher education is not affordable to everyone that wants to take advantage. As discussed within the primary educational system, barriers to equity and access impact student’s ability to be in spaces such as colleges and universities in order to gain additional skill development which could afford increase financial security.

The ACT Condition of College and Career Readiness National (2018) report found that 76% of high school graduates surveyed (1,914,817) aspire to obtain additional education after high school which includes: Associate, Vocational, Bachelor and Graduate/Professional degrees. Four out of every 10 new college students take remedial courses. During high school, students are not being exposed to courses that will
adequately prepare them with the foundational skills to help them engage with higher-
level academics and job-specific skills (The Condition of College, 2018).

Achieve 2015 conducted a survey between October 2014 and May 2015 with
three populations: college instructors, employers, and public high school graduates about
the preparedness for college and career. Employers were asked if they thought public
high schools were doing enough to prepare students for the expectations of the work
world and 62% indicated that they are not doing enough. They survey indicated that
employers saw a skills gap in the preparation of 82% of high school graduates. There
were 83% high school graduates reporting that their high school did not prepare them
well for college and they had gaps in one or more subject areas. In two-year colleges,
96% and in four-year colleges 88% of college instructors reported that high schools
were not doing an adequate job in preparing students for the expectations they would face
in college (Achieve, 2015).

**Career College and Career Readiness**

In K-12 education, traditional indicators such as grade point average, class rank
and standardized achieve test have been used to determine college and career readiness
(Erikson & Sidhu, 2015), however, these measurements do not capture soft skill
development (Heckman & Kautz, 2012). Noncognitive predictors such as personality,
career interests, and self-belief are other aspects of readiness and better indicators of
success of academic performance and in the workforce (Erikson & Sidhu, 2015). Educational standards and determinants of college and career readiness are
defined differently for each state, which affects the skill development a new graduate
needs for success in the workplace.
Along with the Common Core Standards, primary education has integrated the 21st Century Skills framework into the teaching of the core subjects. The framework defines what students need to master to succeed in work and life by blending expertise, literacies, skills and content knowledge together (Framework for 21st, 2019).

Employability and soft skill research align with and supports this framework

**Defining Employability and Soft Skills**

There is no one definitive list of employability and soft skills; instead, researchers, are influenced by the current global and local factors and each list reflects a particular situation. Collectively, the lists have three broad domains (National Research Council, 2012):

- **Cognitive domain**: involves thinking and reasoning, such as ethical problem solving, active listening, and creativity
- **Intrapersonal domain**: involves self-management, such as emotional intelligence, adaptability, appreciation of diversity
- **Interpersonal domain**: involves expressing information to others, such as leadership, teamwork, and collaboration

Because there are multiple definitions, frameworks, policies, and implementation, strategies for career readiness the term and its application can become confusing. Divided viewpoints regarding the definition calls for a broader focus on what employers and colleges identify as knowledge and skills (Career Readiness Partner Council, n.d.). In some employer surveys, they frequently indicate communication, teamwork, work ethic, and critical thinking as important skills for readiness and rank them higher than the core academic skills (Erikson & Sidhu, 2015). Employment and educational agencies have conducted studies to define career success and identify relevant career ready skills (Bhagra & Kumar Sharma, 2018). Some various frameworks that have contributed to the
research on the trends of skill development and employability are listed in the table below.

Table 2.

*Employability Studies*

<table>
<thead>
<tr>
<th>Name of the Report or Paper</th>
<th>Author</th>
<th>Year of Publication</th>
<th>Competencies Defined/Researched</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2017 Employer Satisfaction Survey</strong></td>
<td>Quality Indicators for Learning and Teaching</td>
<td>2017</td>
<td>Foundation skills – general literacy, numeracy and communication skills, and the ability to investigate and integrate knowledge. Adaptive skills – the ability to adapt and apply skills/knowledge and work independently. Collaborative skills – teamwork and interpersonal skills. Technical skills – application of professional and technical knowledge and standards. Employability skill – ability to perform and innovate in the workplace</td>
</tr>
<tr>
<td><strong>Falling Short? College Learning and Career Success</strong></td>
<td>Hart Research Associates</td>
<td>2015</td>
<td>Oral Communication, Work effectively with others in teams, Communicate effectively in writing, Ethical judgement and decision-making, Critical thinking and analytical reasoning skills, Ability to apply knowledge and skills to real world settings</td>
</tr>
</tbody>
</table>
All these examples demonstrate that although there are different definitions and lists of skills, there is overlap present. The impact of different definitions and models affects how those in education work to ensure their students are getting the skills to make them employable. It also influences recruitment practices as employers have to navigate each university or colleges different set of standards and definitions of the skill development they are instilling in their students. Literature from the related studies begins with definitions of employability, which also lends to discussions about soft skills. Cole and Tibby (2012) emphasize that employability is a lifelong process that applies to all students regardless of the situation, course, or mode of study. Because it involves areas that interlink, employability skills should be the responsibility of the entire university. For those that help students it should span the career department as it is more
than a simple function of preparing students for employment (Cole & Tibby, 2012). Unlike some other models, Cole and Tibby (2012) identified areas that should not be included in the conversation about employability skills. Employability does not replace academic standards and rigor, nor is it about adding more content to the curriculum and any single measure should not quantify it (Cole & Tibby, 2012). The Higher Educational Academy “defined employability as a set of achievements, which includes skills, understandings, and personal attributes,” that make a graduate more likely to gain employment and be successful in their chosen occupation (Yorke. n. d.). The skills benefit them, the workplace, the community, and the economy. Pool and Sewell (2007) propose that employability considers a person’s knowledge, skills, and attitudes as they skills that will help them get a job.

It is also important to identify that the employability skills that have been identified go by many names including soft skills, personality traits, interpersonal skills, noncognitive skills, noncognitive abilities, character and socio-emotional skills (Heckman & Kaurz, 2012; Bartel, 2018).

There are many definitions of soft skills. Kechagias (2011) defines soft skills as intra and interpersonal skills essential for personal development, social participation, and workplace success. Soft skills are interpersonal skills that help people interact and coordinate with each other (Peck et al., 2016). “Soft skills” and “hard skills” differ in their learning modality. “Hard skills” are typically industry or subject specific and can be easily defined and assessed. “Soft skills” equate to interpersonal or people skills and are transferable across industry (Bartel, 2018).
In December 2014, the National Association of Colleges and Employers decided that there was not a lot of research in the area of career readiness in higher education. A committee reviewed current research in career readiness, soft skills and employability. Using the themes in the research, they designed a survey that would measure career readiness skills in higher education (NACE, 2017, p1). The National Association of Colleges and Employers defined career readiness as “the attainment and demonstration of requisite competencies that broadly prepare college graduates for a successful transition into the workplace” (NACE, 2017, p1.). The NACE Committee surveyed 606 representatives from organizations that hire through university relations and recruiting efforts. Respondents were asked to indicate the extent to which they view seven competencies as essential to new college hire success when considering new college graduate candidates for their workplaces. Results from the survey served as an initial vetting of seven competency areas underpinning "career readiness" (NACE, 2017). Nearly 20 industries were represented in the respondent poll, the greatest concentrations were in professional services consulting which included accounting, engineering, law, computers, and advertising (21.5 % education (13 %); organizations classified as "other manufacturing" (11.9 %; and (8 %) were in government organizations (NACE, 2017). A year later, another competency was added to the original list of seven. The eight competencies are “Critical Thinking/Problem Solving, Oral/Written Communications, Teamwork/Collaboration, Digital Technology, Leadership, Professionalism/Work Ethic, Career Management, and Global/Intercultural Fluency” (NACE, 2017). Findings from the survey indicated that professional/work ethic and critical thinking/problem solving were
top skills that employers felt a new hire should have as they enter the world of work. Each competency is described in table 3.

Table 3

*Career Readiness Skills for College Graduates*

<table>
<thead>
<tr>
<th>No.</th>
<th>Skill</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1.  | Professionalism              | *Work Ethic*  
  - Demonstrate personal accountability and effective work habits, e.g., punctuality, working productively with others, and time workload management  
  - Understand the impact of non-verbal communication on professional work image  
  The individual demonstrates integrity and ethical behavior, acts responsibly with the interests of the larger community in mind, and is able to learn from his/her mistakes. |
| 2.  | Critical Thinking            | *Problem Solving*  
  - Exercise sound reasoning to analyze issues, make decisions, and overcome problems  
  The individual is able to obtain, interpret, and use knowledge, facts, and data in this process, and may demonstrate originality and inventiveness. |
| 3.  | Teamwork/Collaboration:      | *              
  - Build collaborative relationships with colleagues and customers representing diverse cultures, races, ages, genders, religions, lifestyles, and viewpoints  
  The individual is able to work within a team structure, and can negotiate and manage conflict. |
| 4.  | Oral/Written Communications  | *              
  - Articulate thoughts and ideas clearly and effectively in written and oral forms to persons inside and outside of the organization  
  The individual has public speaking skills; is able to express ideas to others; and can write/edit memos, letters, and complex technical reports clearly and effectively. |
| 5.  | Leadership                   | *              
  - Leverage the strengths of others to achieve common goals  
  - Use interpersonal skills to coach and develop others |
The individual is able to assess and manage his/her emotions and those of others; use empathetic skills to guide and motivate; and organize, prioritize, and delegate work.

6. Digital Technology

- Leverage existing digital technologies ethically and efficiently to solve problems, complete tasks, and accomplish goals.

The individual demonstrates effective adaptability to new and emerging technologies.

7. Career Management

- Identify and articulate one's skills, strengths, knowledge, and experiences relevant to the position desired and career goals
- Identify areas necessary for professional growth.

The individual is able to navigate and explore job options, understands and can take the steps necessary to pursue opportunities, and understands how to self-advocate for opportunities in the workplace.

8. Global & Intercultural Fluency

- Value, respect, and learn from diverse cultures, races, ages, genders, sexual orientations, and religions.

The individual demonstrates openness, inclusiveness, sensitivity, and the ability to interact respectfully with all people and understand individuals’ differences.

(“NACE Career Competencies,” 2017, p.1)

The Career Readiness Partner Council (n. d.) defined a career ready person as someone able to navigate effectively through ways to connect their education and employment to achieve a fulfilling, financially secure and successful career. A career ready person has a good understanding of their interests, talents, and weakness and a solid grasp of the skill needed in a global economy. They have a foundational knowledge of core academic subjects and technical topics (Career Readiness Partner Council, n.d.). Literatures from related studies look at employer satisfaction using employability scales. Deloitte and the Manufacturing Institute (2018) conducted a survey that indicated that 52% of executives identified their employee’s inadequate problem-solving skills as a
serious deficiency; 40% identified basic employability skills, including work ethic; whereas only 30% cited inadequate math skills.

*Employer Satisfaction Survey National Report* (2017) a national survey in Australia links the experiences of graduates to the views of their direct supervisors. The survey asked 4,348 employers to report on their satisfaction with graduates across five scales. The overall satisfaction was 84% and suggested that employers are very satisfied with graduates of the Australia higher education system.

The satisfaction with the five scales:

- 93% satisfaction with foundation skills - general literacy, numeracy and communication skills, and the ability to investigate and integrate knowledge
- 90% satisfaction with adaptive skills – the ability to adapt and apply skills/knowledge and work independently.
- 86% satisfaction with collaborative skills – teamwork and interpersonal skills.
- 93% satisfaction with technical skills – application of professional and technical knowledge and standards.
- 85% satisfaction with employability skills – the ability to perform and innovate in the workplace.

*(Employer Satisfaction Survey National Report, 2017)*

A survey conducted at the University of Central Arkansas looked at skills employers found important. There were 244 respondents with an age range of 19 to over 30 years of age. The survey identified that there is a difference between what students perceive to be important and what employers deem as desirable for their employees. Employers and students agreed that people with soft skills such as oral and written communication, relationship building, work ethic, and problem solving are important to the workforce. The one significant difference between survey results of employers and
students was that employers placed more value on computer skills (Griffin, Cangelosi, McMurtry & Lyons, 2017).

Hart Research Associates (2015) conducted a survey on behalf of the Association of American College and Universities among 400 employers and 613 college students during November and December 2014. They found that three in five employers valued students that have both field specific and a broad range of knowledge and skills (Hart Research Associates, 2015). Employers indicated that transferable skills such as communication, teamwork, ethical decision making and critical thinking were the greatest priority when hiring new graduates. College students agreed with employers on the importance of transferable skills as the possibility of career success increases when they can apply learning experiences in the workplace (Hart Research Associates, 2015).

As cited in the research done by Bhagra & Sharma (2018), colleagues at the Universiti Tenaga Nasional in Malaysia looked at the determinants that influence employability skills in undergraduates at a private university. The survey received 356 responses. Findings indicated that students were aware of the importance of skill development and that communication and technology skills would increase their employability. The study also highlighted that educators in higher education should help students build skills in collaboration, communication, and working effectively (Bhagra & Kumar Sharma, 2018).

**Career Office Experiences, Programming and Resources**

As the world continues to shift around politics, social and economic changes, the educational consumer becomes more of an advocate for their own education (Royal & Tran, 2019). Many consumers expect post-secondary institutions to graduate students
with the knowledge and experiences that will help them become engaged and active citizens in the world. When considering the financial investment and the time to complete a degree program students and parents are evaluating their return of investment (Royal & Tran, 2019). Students expect more than outdated thinking around learning, they want access to skill development and instructional technology that will increase their post-graduation employability in a globalized economy (Hora, Benbow, & Smolarek, 2018). While 96% of chief academic officers of colleges and universities believe that their institutions are effective in preparing students for the workforce, only 11% of employers strongly agree (Royal & Tran, 2019). Almost 4 out 10 students have never visited their schools career services office or used resources, however, those that received career specific support from their university projected greater confidence in future workforce options (Royal & Tran, 2019).

It is important for institutions to understand how student and employers view the importance of employability and the experiences that provide skill development. So how then do intuitions of higher learning help prepare students for the world of work? Institutions use academic advisors and career services officers as resources to help students make informed choices about their career path including major selections and the development of career material such as resumes. One learning strategy to help prepare students for their career is co-curricular learning. It incorporates engaging workplace experiences that allow students to apply their academic and soft skill development to real-world problems alongside professionals in internships, job shadowing, and service learning (Peck et al., 2016).
Other ways that career centers help, is to provide services that give students tools to develop a career path based on their interest, skills, personality, and other factors. They use technology such as assessments, card sorts, and other activities help students create goals and build confidence in their choices by using data they generate themselves (Hanover Research, 2012).

Hanover Research (2012) found that trends in Career Services have moved the offices from information networking and physical career library spaces to creating a global networking platform to educate students for entrance into the global marketplace. They provide online resources, in person career themed workshops, podcasts, 1:1 and group meetings, career classes, and presentations for classroom and student organizations (Hanover research, 2012). Many offices now see the role of the staff as an educator, developer, and connector. They value theories of planned happenstance and use assessments to improve services (Hanover research, 2012).

The mission and goals of the Career and Academic Planning (CAP) office at James Madison University are in alignment with what other career offices are doing across the country.
Table 4.

**CAP Mission and Vision Statement**

<table>
<thead>
<tr>
<th>Our Mission</th>
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<tbody>
<tr>
<td>“Career &amp; Academic Planning engages students with opportunities and resources, leading to informed decisions for academic and career success at JMU and beyond.” (CAP, n.d. Mission)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Our Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>“The department will be innovative, adaptable, responsible, visible, and diverse so that we can enhance student learning and success. Therefore, we will:</td>
</tr>
<tr>
<td>• Employ technologies that increase our capacity to inform, inspire, guide, and support students, advisors, faculty, employers, and others.</td>
</tr>
<tr>
<td>• Make a real and visible commitment to diversity, thus becoming a more welcoming and multi-culturally competent organization.</td>
</tr>
<tr>
<td>• Develop advising systems, practices, and resources that ensure that students are equipped to make good decisions regarding choice of major and career.</td>
</tr>
<tr>
<td>• Know the characteristics and needs of our students and use that knowledge to design, deliver, and assess quality learning opportunities.</td>
</tr>
<tr>
<td>• Establish a clear departmental identity and marketing strategy that is consistent with our mission and attractive to students, faculty, and employers.</td>
</tr>
<tr>
<td>• Employ staffing and professional development practices that increase our capacity to impact student learning and effectively manage departmental affairs.” (CAP, n.d. Vision)</td>
</tr>
</tbody>
</table>

JMU CAP promotes the co-curricular experience by encouraging students to get involved in leadership activities, community service projects, internships and externships. These experiences provide continued development of their soft skills through the opportunity of reflection and application as they merge them with their academic knowledge. Another strong aspect of CAP is the connection to networking opportunities through programming with the alumni office, employers with strong JMU alumni bases, and other organizations that offer professional engagement (Hanover research, 2012). The office organizes its 23 full-time staff members, 6 graduate students and 22 student
workers around 3 units: Career Advisors, Academic Advisors for Undeclared First-year students, and Employer Services. They provide a variety of services and events including a wealth of online material and several campus and major specific career fairs throughout the year (Career and Academic Planning, n. d.). The career office embodies the idea that varied experiences help students grow, develop, and prepare for the workforce and societal needs. The office has adopted the NACE Career Readiness competencies framework to create a common language around career readiness and skill development for various stakeholders in and out of the university. In this section, I discussed the literature that grounds the current study. Next, I will describe the survey method approach used.
Chapter 3: Methodology

To examine student perception of career readiness in relation to development of career ready competencies, career program impact and career co-curricular experiences undergraduate seniors completed a self-assessment survey. The survey self-assessment allowed me as the researcher to address key quantitative research questions, gather demographic information, and explore relationships within and between the participant’s experiences. The following methodology section will discuss the research design used in this study, the population, data collection instruments, threats, data analysis, and protections for human subjects.

Research Questions

The research questions for this study include:

RQ1: What percentage of JMU seniors found CAPs in office services helpful?
RQ2: Is there a relationship between how often students visit CAP and their confidence?
RQ3: What competency areas are seniors most and least confident in their competency development?
RQ4: Is there a relationship between having a leadership role and confidence in being prepared to be successful in chosen career field?
RQ5: Is there a difference between genders in confidence of academic field of study preparation?
RQ6: For those that use CAP services to what extent does CAP career programming influence confidence in career preparation among first generation students.
**Research Approach**

Research must have a paradigm to inform the practice. According to Kivunja & Kuyini, (2017) a research paradigm illustrates a researcher’s way of thinking and defines the lens in which they see the world. This in turn informs the research method, interpretation, and explanation of data, as well as informs how the data is analyzed (Kivunja & Kuyini, 2017).

According to Creswell (2013), a pragmatic approach works best for researchers that need freedom in reality or philosophy to choose the methods that best meet their needs and purposes in order to collect and analyze data. Since pragmatists emphasize the research problem using a mixed method design of qualitative and quantitative measures to understand the problem yields more possibilities.

A survey research design approach allows for the collection and analysis of quantitative and qualitative data provided by JMU seniors. This research design provides a stronger understanding of the relationships that may exist between two or more variables as well as cause and effect (Fraenkel & Wallen, 2009). The qualitative data is open-ended without a predetermined response and quantitative data is closed-ended (Creswell, 2013).

**Population and Sample**

The targeted population for this study included current undergraduate seniors enrolled in a 4-year academic program. Seniors were selected due to their proximity to graduation and experiences with applying for internships and jobs. The sample procedure used for the study was purposive sampling. For inclusion in the survey, the participant must have met the JMU Office of the Registrar standard of having completed a minimum
of 90 course credits. Each student classified as a senior had an equal chance of participating in the survey.

The minimum samples size of this study was set at 30 undergraduate students, and the maximum sample size was set at 100. Participation in the study was voluntary and withdrawal from the process could happen at any time without penalty or consequence. Participants did not receive compensation or award for participation. Participation was not be allowed for students under age of consent based on U.S. laws. The students involved in the research come from mixed socioeconomic status, race, gender, and academic study. The students have a wide range of abilities and experiences.

James Madison University is located in the Shenandoah Valley of Virginia and consists of seven academic colleges with 77 undergraduate and 46 graduate degrees: College of Arts and Letters, College of Business, College of Education, College Integrated Science and Engineering, College of Science and Mathematics, College of Health and Behavioral Studies, and the College of Visual and Performing Arts.

According to the University’s institutional data, the enrollment for the 2018 academic year is 20,798 undergraduate students and 1,888 graduate students. The university currently officially lists two genders. The female to male ratio is 60/40% respectively.

The ethnic background of JMU students based on Fall 2016 data is as follows: .13% are American Indian/Alaska Native, 5.65% are Asian, 4.68% are Black or African American, .12% Hawaiian/Pacific Islander, 6.10% Hispanic, 75.44% White, 3.86 Two or more races, 4.02% Unreported, and 563 international students. In-state students comprise the majority of students on campus with 25% of students coming from other states outside of Virginia as well as the U.S. A senior student is classified as a student with 90 or more
credit hours. The school has an 82% six-year graduation rate (Facts and figures, n.d.).

According to 2016 published outcomes data completed by Career and Academic Planning, 87% of 3,679 graduated JMU students are employed, attending graduate school, or engaged in career-related endeavors (Stensby-Hurst, 2016).

**Instrumentation**

The data collection instrument for the current study was an anonymous online survey created in Qualtrics, sent to JMU undergraduate seniors through JMU bulk email and social media, specifically Facebook. The online survey had a total of thirty-seven questions (See appendix D: Survey Questionnaire) and took approximately fifteen to twenty minutes to complete. Thirty-two questions provided a mix of quantitative and qualitative findings regarding career readiness perceptions. The remaining five questions focused on demographics which included the participant’s major, minor or professional program, gender, age, and if they are a first-generation college student.

There were four open-ended questions, the first two focused on academic program. The remaining two questions asked participants to share their opinion on which events provided by Career and Academic Planning were most and least helpful. These open-ended questions produced qualitative results. In this study, the student’s demographic factors are classified as the independent variables, whereas the dependent variables are the instrument questions being used to measure perception and engagement.

After reviewing the literature and several measurements, I decided to develop a new survey instrument to answer my research questions because the existing instruments were not appropriate. Some the questions were adapted from a published survey, The
National Association of Colleges and Employers (NACE) 2018 Student Survey. The NACE student survey was designed to study “student expectations and preferences, attitudes, plans, and activities as they relate to employment, employers, and the job search” (NACE, 2018, p.1.). NACE administers this survey each year to graduating seniors across the country in partnership with academic institutions. The second survey reviewed was the University of Baltimore Career Development Center, Career Competencies Assessment (n.d.).

Because the survey I developed had not been previously used, efforts were made to strengthen the validity and reliability of the survey instrument. Colleagues in Career and Academic Planning reviewed the survey as well as my research chair. I generated test responses in Qualtrics to see how respondents might answer a question to ensure that the survey questions were in the correct format. The design of the survey took into account leading questions, as well as collecting information with relevance to the study and my research question. This survey focused on content evidence of validity since the questions are going to be used to determine if the representative sample of the behavior domain is being measured (Validity of Your Survey, n.d.). This survey measures student perceptions of their career readiness and the questions in the survey are focused on the eight NACE Career Readiness Competencies. As for the reliability of the survey, it is difficult to determine the consistency of the data as the survey had been offered and taken by participants once. Other possible threats to the survey instrument include self-report bias, response rate, sample size, and experimental mortality.
Data Collection and Procedure

The study began after receiving Institutional Review Board permission for the study and addendum (see Appendix A for IRB Application, Approval and Addendum). I distributed the survey through the JMU bulk email process to all students classified as seniors. Through Facebook the survey link was posted on the JMU 2019 student page. Students joined the Facebook group, as freshmen and continued to use it to stay connected to fellow classmates. The post included a brief introduction of the survey and once they clicked on the link it took them to the consent form (sees Appendix C for Facebook web post). The survey was open from January 2019 to March 2019. During this period, participants received two bulk emails, one of which was a reminder to participate in the study. According to the Office of the Registrar, through the bulk email request JMU contacted 5,636 current seniors (Bulk Email, 2019). There was a total number of forty-eight respondents for the survey, not every question included a response from each participant as not all questions were required. After the survey closed, an in-depth data analysis report for each question was created within Qualtrics based on 26 completed surveys. The response rate was .0046 for this research.

Data Analysis

The quantitative data for this study was analyzed using Qualtrics and SPSS. Descriptive statistics techniques were used along with charts and graphs to illustrate measures of mean, mode, central tendency, and averages. Descriptive statistics refer to using statistical analysis such as organizing, summarizing, and tabulating methods to describe the data set (Bui, 2014).
The qualitative data analysis included systematic analysis of the open-ended survey responses. Microsoft Excel was used in the analysis process. The qualitative data was coded in order to identify common themes in the participant’s responses. The research questions are mapped to the survey questions that were used for data analysis in the table below.

Table 5.

*Mapped Research Questions*

<table>
<thead>
<tr>
<th>Research Questions (RQs)</th>
<th>Survey Questions Relevant to RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1: What percentage of JMU seniors found CAPs in office services helpful?</td>
<td>Q8</td>
</tr>
<tr>
<td>RQ2: Is there a relationship between how often students visit CAP and their confidence?</td>
<td>Q7, Q34</td>
</tr>
<tr>
<td>RQ3: What competency areas are seniors most and least confident in their competency development?</td>
<td>Q17 through Q31</td>
</tr>
<tr>
<td>RQ4: Is there a relationship between having a leadership role and confidence in being prepared to be successful in chosen career field?</td>
<td>Q27</td>
</tr>
<tr>
<td>RQ5: Is there a difference between genders in confidence of academic field of study preparation?</td>
<td>Q35, Q32</td>
</tr>
<tr>
<td>RQ6: For those that use CAP services to what extent does CAP career programming influence confidence in career preparation among first generation students.</td>
<td>Q37, Q34</td>
</tr>
</tbody>
</table>

**Protection of Human Subjects**

Protection of human subjects was addressed in the Institutional Review Board Application (IRB). The researched followed protocols to ensure that the study did not intend any harm to the participants and provided minimal to no risks. The language use
for the consent form explained clearly to each participant that their involvement was voluntary, they could exit the survey at any time without any consequence and that their participation in the survey is anonymous. The participants were also provided with the IRB approval number as well as the name and contact information to the IRB reviewer, the faculty chair of the project and the researcher. The research design was intended to encourage participants to reflect on their experiences regarding competency development after attending classes at JMU as well as the impacts of attending or not attending career related events.
Chapter 4: Findings

This study includes quantitative and qualitative data obtained through a survey research survey. Data analysis procedure for a survey research design involves a concurrent nested design approach in which a small amount of qualitative data was collected in a larger quantitative study (Choosing a mixed, n.d.). The quantitative data was collected using a thirty-seven question survey built in Qualtrics. There were a total of forty-five self-assessment surveys recorded in Qualtrics, however twenty-six were returned fully complete. These responses provided insight into the career readiness perceptions for JMU senior students across all academic colleges. The academic colleges included are the College of Arts and Letters (11), College of Business (7), College of Health and Behavioral Studies (4), College of Visual and Performing Arts (1).

Demographics

The students that participated in the survey were asked three demographic questions regarding their gender, age and first-generation college status. For this survey, I chose not to focus on the variables of ethnic and racial background, and instead focused on the differences between gender and first-generation students in response to recent work with several on campus organizations that focus on these demographic areas. Another variable question is date of graduation. The table below provides the study’s demographics.
The following section will address the participant responses to the survey questions by connecting them to the research questions.

**RQ1: What percentage of JMU seniors found CAPs In Office Services Helpful?**

To answer this research question, survey question eight asked participants to indicate their use of nine (n=14) in office services and rank the helpfulness of the service in their job search and/or career planning. The services included appointments that focused on career assessments that can be in person or online, individual career counseling appointments, internship search, interview preparation, job search, major or minor exploration, researching employers, research careers and resume

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>76.92%</td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>19.23%</td>
</tr>
<tr>
<td>Non Binary</td>
<td>1</td>
<td>3.85%</td>
</tr>
<tr>
<td>Self-Describe</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Prefer Not to Answer</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 21</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>21-24</td>
<td>23</td>
<td>88.46%</td>
</tr>
<tr>
<td>25-28</td>
<td>2</td>
<td>7.69%</td>
</tr>
<tr>
<td>Over 29</td>
<td>1</td>
<td>3.85%</td>
</tr>
<tr>
<td>Choose Not to Answer</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td><strong>First person in family to go to college</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>30.77%</td>
</tr>
<tr>
<td>No</td>
<td>17</td>
<td>65.38%</td>
</tr>
<tr>
<td>Choose not to Answer</td>
<td>1</td>
<td>3.85%</td>
</tr>
<tr>
<td><strong>When will you graduate</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 2019</td>
<td>21</td>
<td>80.77%</td>
</tr>
<tr>
<td>December 2019</td>
<td>3</td>
<td>11.54%</td>
</tr>
<tr>
<td>May 2020</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>December 2020</td>
<td>2</td>
<td>7.69%</td>
</tr>
</tbody>
</table>
writing or reviews. Based on participant’s responses, of those that used the services they found them to be somewhat helpful or very helpful. Resume writing and resume reviewing assistance ranked the highest in helpfulness and was utilized the most and the results are displayed in Figure 2.

Based on participant’s responses, 61.36% found resume writing/reviewing assistance helpful. The two least used helpful services were minor or major help at 6.25% and career assessments at 6.25%. This number would be low because at this stage in their academic career most students have solidified their education track and have a plan to graduate. However, some students realize later in their academic career that a major is no longer a fit and want to explore other options. Some students may also have not gained admission into a program and need to research a new path using their current credits. Students tend to combine multiple services in one appointment such as exploring majors and potential careers or research career paths while looking for jobs. Most students also use career assessments when they are trying to figure out their major or minor and that tends to happen during the first two semesters of college. This data highlights that student’s find having resume assistance and individual career counseling appointments very helpful.

Research questions twelve (n=20) and thirteen (n=18) are open ended questions that ask what CAP events the participants found most and least helpful. As open-ended questions, there were mixed responses, but the most common theme for helpfulness was career fair (8). Other responses included resume help, interview preparation, and graduate school fair. These questions connect to the most used services in that most students get resume help in order to attend the career fair. There was no theme for
responses for events that were least helpful. The majority response was non-applicable (12).

![Helpfulness of In Office Career Services](image)

**Figure 2** Helpfulness of In Office Career Services

**RQ2: Is there a relationship between how often students visit CAP and their confidence?**

This question looks at the relationship between two survey questions. The seventh question (n=26) asked participants to indicate how often they visited CAP during the 2018 academic year which included the summer, spring and fall semesters. Question 34 which asks participants to rate how confident they feel that CAP has prepared them to be successful in their chosen career field. Figure 3 highlights the levels of confidence based on how often students visit CAP.

Students that visit CAP more than 2 times per semester rated their level of preparedness at 100% that CAP has prepared them to be successful in their chosen field. Students that indicated they went to CAP one or less times during the 2018 academic year varied in their responses. The findings show that students that did not use CAP during the year felt overall somewhat prepared. There are several factors that could...
impact a student’s perception of preparedness including having access to career information from organizations or universities. Students may also not have a clear definition of what being prepared means. Those that indicated feeling more prepared after one or move visits may have a better understanding of CAP resources, their goals and steps due to multiple interactions with a career advisor, and even exposure to upcoming events and programs. It is also possible that students that have did not use CAP during the 2018 has used CAP at some point in their academic career and has benefited from services.

![Relationship Between Confidence and Visits to CAP](image)

*Figure 3. Relationship between Confidence and Visits to CAP*

**RQ3: What competency areas are seniors most and least confident in their competency development?**

Questions Q 17 through Q 31 asked the student to self-assess their career readiness development by answering questions about their proficiency level for each Career Readiness Competency. The competency areas included career management,
critical thinking/problem solving, digital technology, global/intercultural fluency, leadership, oral/written communication, professionalism and teamwork/collaboration.

This question used a four-point Likert scale where participants could rate each area with the choice “no experience, basic proficiency, limited proficiency, and intermediate proficiency” for how proficient they felt in each career readiness competency area. The proficiency levels are defined in the figure below.

<table>
<thead>
<tr>
<th>Levels of Proficiency</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Experience</strong></td>
<td>You have no experience with this skill</td>
</tr>
<tr>
<td><strong>Basic</strong></td>
<td>You have a common knowledge or an understanding of basic techniques and concepts</td>
</tr>
<tr>
<td><strong>Limited</strong></td>
<td>You have used the skill very little and may need help from time to time</td>
</tr>
<tr>
<td><strong>Intermediate</strong></td>
<td>You can use the skills to accomplish a task</td>
</tr>
</tbody>
</table>

*Figure 4. Levels of Proficiency*

Students with proficiency on the career management scale will be able “to navigate and explore job options, understand and take the steps necessary to pursue opportunities, and understand how to self-advocate for opportunities in the workplace” (“NACE Career Competencies,” 2017, p 1).

Five questions were mapped to this competency. Items of interest are that 30.77% of students have basic proficiency in pursuing opportunities for additional learning outside of the classroom. This is an item that should be investigated further to determine causes. In this section 88.46% of students have a current resume they feel they can use to apply for jobs. Based on previous findings, resume assistance is one of the key CAP services that students use. It is also worth noting that all students felt that they had knowledge of possible career paths, which according to Hora (2017) is an area that
education has failed when students graduate without a direct industry link. Students also rated ability to research and explore job options at a high proficiency (73.08%). Students rated having no or basic experience in completing an internship (19.23%). This item could be rated high due to students in majors without an internship requirement. In this section 88.46% of students rated that they a current resume they feel they can use to apply for jobs. Based on research by NACE (2017), 95.9% of the employers surveyed found oral and written communication as important for a new hire to have in order to be successful as they transition into the world of work.

Table 7.

Career Management

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>No Experience</th>
<th>Basic Proficiency</th>
<th>Limited Proficiency</th>
<th>Intermediate Proficiency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I know possible career paths I can pursue with my major/minor</td>
<td>0.00% (0)</td>
<td>15.38% (4)</td>
<td>15.38% (4)</td>
<td>69.23% (18)</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>I pursue opportunities for additional learning outside of the classroom</td>
<td>0.00% (0)</td>
<td>30.77% (8)</td>
<td>15.38% (4)</td>
<td>53.85% (14)</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>I have a current resume that I can use to apply to jobs</td>
<td>3.85% (1)</td>
<td>3.85% (1)</td>
<td>3.85% (1)</td>
<td>88.46% (23)</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>I can research and explore job options</td>
<td>3.85% (1)</td>
<td>7.69% (2)</td>
<td>15.38% (4)</td>
<td>73.08% (19)</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>I have completed and internship</td>
<td>15.38% (4)</td>
<td>3.85% (1)</td>
<td>11.54% (3)</td>
<td>69.23% (18)</td>
<td>26</td>
</tr>
</tbody>
</table>

Students with proficiency on the oral and written communication scale will have “public speaking skills; the ability to express ideas to others; as well as write/edit memos, letters, and complex technical reports clearly and effectively” (“NACE Career Competencies,” 2017).

Four questions were mapped to this competency. These questions connect to the general education program at JMU. In the cluster one section which focuses on skills for
the 21\textsuperscript{st} century the courses include skill development in critical thinking, written and oral communication (\textit{General Education}, n.d.). The findings show that the majority of the students that completed the survey feel they have at minimum a limited proficiency in communication. 73.08\% of students have developed and delivered a presentation for a class or organization. This is an item that should be at 100\% due to the general education program. The double-barreled question may have confused students, developed and delivered a presentation should be separated. If a student enrolled in the group presentation course they may have only participated in one aspect of the process.

Table 8.

\textit{Communication}

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>No Experience</th>
<th>Basic Proficiency</th>
<th>Limited Proficiency</th>
<th>Intermediate Proficiency</th>
<th>High Proficiency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am able to articulate my thoughts and ideas clearly</td>
<td>0.00% (0)</td>
<td>3.85%(1)</td>
<td>15.38%(4)</td>
<td>38.46%(10)</td>
<td>42.31% (11)</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>I am able to create professional correspondence to peers, professors, and employers</td>
<td>0.00%(0)</td>
<td>3.85%(1)</td>
<td>3.85%(1)</td>
<td>30.77%(8)</td>
<td>61.54%(16)</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>I have developed and delivered a presentation for a class or organization</td>
<td>0.00%(0)</td>
<td>0.00%(0)</td>
<td>11.54%(3)</td>
<td>15.38%(4)</td>
<td>73.08%(19)</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>I am able to check for understanding and ask clarifying questions</td>
<td>0.00%(0)</td>
<td>0.00%(0)</td>
<td>7.69%(2)</td>
<td>26.92%(7)</td>
<td>65.38%(17)</td>
<td>26</td>
</tr>
</tbody>
</table>

Students with proficiency on the critical thinking scale will be able “to obtain, interpret, and use knowledge, facts, and data in this process, and may demonstrate originality and inventiveness” (\textit{“NACE Career Competencies,” 2017}, p 1).

Five questions were mapped to this competency. Items of interest are that 100\% of students self-identified as having intermediate and high levels of proficiency in being able to demonstrate integrity, accountability and ethical behavior. This is an item could
be directly related to the campus’s effort to expose students to a decision-making process. During fall orientation the majority of all first-year students are escorted by their resident assistants and freshman orientation guides to a session on ethical reasoning. It would be important to note that 15.38% rated that they had limited proficiency in being able to exercise sound reasoning to identify information and analyze data, which means that in reality they may have trouble making decisions. This area could benefit from further research regarding student’s decision-making process. It can be observed that based on the data students feel they have proficiency in brainstorming and creating the steps to solve a problem but struggle with understanding the information to make the decision however they feel that the decision they eventually make is ethical.

Table 9.

Critical Thinking

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>No Experience</th>
<th>Basic Proficiency</th>
<th>Limited Proficiency</th>
<th>Intermediate Proficiency</th>
<th>High Proficiency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am able to develop a plan of action with specific steps to solve a problem</td>
<td>0.0%(0)</td>
<td>0.0%(0)</td>
<td>8%(2)</td>
<td>48%(12)</td>
<td>44%(11)</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>I am able to brainstorm solutions to a problem before bringing it to another person</td>
<td>0.0%(0)</td>
<td>0.0%(0)</td>
<td>7.69%(2)</td>
<td>50%(13)</td>
<td>42.31%(11)</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>I am able to exercise sound reasoning to identify relevant information and analyze data</td>
<td>0.0%(0)</td>
<td>0.0%(0)</td>
<td>15.38%(4)</td>
<td>46.15%(12)</td>
<td>38.46%(10)</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>I am able to adopt multiple perspectives and distinguish between fact and opinion</td>
<td>0.0%(0)</td>
<td>0.0%(0)</td>
<td>11.54%(3)</td>
<td>23.08%(6)</td>
<td>65.38%(17)</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>I am able to demonstrate integrity, accountability and ethical behavior</td>
<td>0.0%(0)</td>
<td>0.0%(0)</td>
<td>0.0%(0)</td>
<td>26.92%(7)</td>
<td>73.08%(19)</td>
<td>26</td>
</tr>
</tbody>
</table>
Students with proficiency on the digital technology scale will be able “demonstrate effective adaptability to new and emerging technologies” (“NACE Career Competencies,” 2017, p 1).

Three questions were mapped to this competency. In this section each of the questions has around 50% of the responses in the high proficiency category. There are two limited proficiency categories to note, understanding applications needed for their career (15.38%) and ability to learn new software (11.54%). There could be a causal link between understanding the career industry and needed technology. The less a student knows about their career field the likelihood they will understand what skills are needed increases. Based on research findings employers value students that have computer skills (Griffin, Cangelosi, McMurtry & Lyons, 2017). As the world of work becomes more globalized computer skills and the ability to use multiple forms of technology to connect with others to solve problems becomes more important to organizations (Mattern, et.al, 2014).

Table 10.

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>No Experience</th>
<th>Basic Proficiency</th>
<th>Limited Proficiency</th>
<th>Intermediate Proficiency</th>
<th>High Proficiency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am able to understand what applications are necessary to be successful in my career</td>
<td>0.00%(0)</td>
<td>3.85% (1)</td>
<td>15.38%(4)</td>
<td>34.62%(9)</td>
<td>46.15%(12)</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>I am able to use technology to solve problems and accomplish goals</td>
<td>0.00%(0)</td>
<td>0.00%(0)</td>
<td>3.85%(1)</td>
<td>46.15%(12)</td>
<td>50.00%(13)</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>I am able to learn new computer software to accomplish tasks</td>
<td>0.00%(0)</td>
<td>3.85%(1)</td>
<td>11.54%(3)</td>
<td>30.77%(8)</td>
<td>53.85%(14)</td>
<td>26</td>
</tr>
</tbody>
</table>
Students with proficiency on the global and intercultural fluency scale will be able “demonstrate openness, inclusiveness, sensitivity, and [have] the ability to interact respectfully with all people and understand individuals’ differences” (“NACE Career Competencies,” 2017, p. 1).

Six questions were mapped to this competency. One item of interest is that 96.15% of students indicated that they had intermediate to high levels of proficiency in the area of engaging in conversations with those that have different perspective than their own. While there were 50% of the respondents reporting no experience or basic proficiency in attending diversity or inclusive trainings. This is an item that should be investigated further to determine how students define perspectives different than their own. They could be engaging with people who have complex and different views on gender, race, culture, sexuality, ability and other points of diversity. It could also be that they are seeking out people who are similar to themselves in one of the mentioned categories and are having surface conversations on topics of difference. Students being able to identify and address their own biases as well as understand power and privilege are going to be an important skill to have. According to data by 2020 the U.S. workforce will become more diverse with increases in immigrants, people of color, women, and gay and transgender workers (Burns, Barton, Kerby, 2012). In June 2012, people of color made up 36% of the labor force, women made up 47%, and gay and transgender individuals made up 6.28%

Another interesting item is that 73.08% of students completing the survey have not studied abroad while attending JMU. Because the ability to study abroad can be a socioeconomic issue, a more appropriate question to gauge student’s engagement with
diverse communities would have been a question regarding proficiency with civic and community engagement.

Table 11.

*Global and Intercultural Fluency*

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>No Experience</th>
<th>Basic Proficiency</th>
<th>Limited Proficiency</th>
<th>Intermediate Proficiency</th>
<th>High Proficiency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have attended a diversity/inclusive training</td>
<td>15.38% (4)</td>
<td>23.08% (6)</td>
<td>11.54% (3)</td>
<td>26.92% (7)</td>
<td>23.08% (6)</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>I am able to engage in conversation with those that have different perspectives than my own</td>
<td>0.00% (0)</td>
<td>0.00% (0)</td>
<td>3.85% (1)</td>
<td>19.23% (5)</td>
<td>76.92% (20)</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>I understand my own biases</td>
<td>0.00% (0)</td>
<td>3.85% (1)</td>
<td>15.38% (4)</td>
<td>34.62% (9)</td>
<td>46.15% (12)</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>I work to eliminate my own biases</td>
<td>3.85% (1)</td>
<td>3.85% (1)</td>
<td>15.38% (4)</td>
<td>23.08% (6)</td>
<td>53.85% (14)</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>I understand issues of power, privilege and inequality</td>
<td>0.00% (0)</td>
<td>3.85% (1)</td>
<td>11.54% (3)</td>
<td>38.46% (10)</td>
<td>46.15% (12)</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>I have studied abroad while attending JMU</td>
<td>73.08% (19)</td>
<td>0.00% (0)</td>
<td>0.00% (0)</td>
<td>0.00% (0)</td>
<td>26.92% (7)</td>
<td>26</td>
</tr>
</tbody>
</table>

Students with proficiency on the leadership scale will be able “to assess and manage [their] emotions and those of others; use empathetic skills to guide and motivate; and organize, prioritize, and delegate work” ("NACE Career Competencies," 2017, p 1).

Four questions were mapped to this competency. Overall, all questions had over 80% intermediate and high proficiencies reported. Areas of competency development would be in active member participation and taking on leadership roles. Students indicated no experience or basic proficiency in both of these areas. JMU has over 300 organizations on campus with a variety that includes but is not limited to cultural, social, special interest, academic and sports clubs (Be Involved, n.d.). Students receive guidance
and support from the office of Student activities and involvement such as meetings to help students plan, to helping organizations budget and promote themselves. Students can find just about any type of organization to join and if it is not at JMU they have the opportunity to create it. With this type of environment students are able to take on responsibilities that will develop their proficiency’s in this competency area.

Table 12.

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>No Experience</th>
<th>Basic Proficiency</th>
<th>Limited Proficiency</th>
<th>Intermediate Proficiency</th>
<th>High Proficiency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am an active member of a student or academic organization</td>
<td>7.69%(2)</td>
<td>7.69%(2)</td>
<td>0.00%(0)</td>
<td>19.23%(5)</td>
<td>65.38%(17)</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>I have taken on a leadership role such as leading a committee</td>
<td>15.38%(4)</td>
<td>3.85%(1)</td>
<td>0.00%(0)</td>
<td>15.38%(4)</td>
<td>65.38%(17)</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>I understand how to delegate responsibilities</td>
<td>0.00%(0)</td>
<td>0.00%(0)</td>
<td>7.69%(2)</td>
<td>38.46%(10)</td>
<td>53.85%(14)</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>I am able to manage a project from beginning to end</td>
<td>0.00%(0)</td>
<td>0.00%(0)</td>
<td>7.69%(2)</td>
<td>26.92%(7)</td>
<td>65.38%(17)</td>
<td>26</td>
</tr>
</tbody>
</table>

Students with proficiency on professionalism/work-ethic scale will be able “demonstrate integrity and ethical behavior, act responsibly with the interests of the larger community in mind, and will be able to learn from [their] mistakes,” (“NACE Career Competencies,” 2017, p 1).

Five questions were mapped to this competency. Based on the data, the majority of students are able to arrive to meetings and work prepared and on time. Based on mental health numbers in college students over 80% of students are reporting that they feel stress daily, 13% have felt depressed at some point within the last three months and
13% have been diagnosed with a mental health condition linked to anxiety (*Mental health guide*, n.d.). These numbers are significant when you consider that 38.46% of student’s self-report that they are able to manage their emotional responses with others and 42.31% of students indicate that they are able to recover from setbacks. In comparison to nationally reported numbers JMU students are managing concerns of anxiety and other mental health issues that could impact their relationships and ability to function at work or school very well. Overall, there were students who indicated in each of the question categories having limited proficiency which illustrates that there is a need for additional resource development.

Table 13.

**Professionalism/Work Ethic**

<table>
<thead>
<tr>
<th>#</th>
<th>Question</th>
<th>No Experience</th>
<th>Basic Proficiency</th>
<th>Limited Proficiency</th>
<th>Intermediate Proficiency</th>
<th>High Proficiency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am able to arrive to meetings/work on time and prepared</td>
<td>0.00%(0)</td>
<td>0.00%(0)</td>
<td>7.69%(2)</td>
<td>23.08%(6)</td>
<td>69.23%(18)</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>I am to manage my emotional responses with my others</td>
<td>0.00%(0)</td>
<td>7.69%(2)</td>
<td>11.54%(3)</td>
<td>42.31%(11)</td>
<td>38.46%(10)</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>I am able to recover from setbacks and challenges</td>
<td>0.00%(0)</td>
<td>0.00%(0)</td>
<td>15.38%(4)</td>
<td>42.31%(11)</td>
<td>42.31%(11)</td>
<td>26</td>
</tr>
<tr>
<td>5</td>
<td>I am able to maintain effective work habits</td>
<td>0.00%(0)</td>
<td>0.00%(0)</td>
<td>15.38%(4)</td>
<td>30.77%(8)</td>
<td>53.85%(11)</td>
<td>26</td>
</tr>
</tbody>
</table>
Students with proficiency on the teamwork/collaboration scale will be able “to work within a team structure, and can negotiate and manage conflict.” (“NACE Career Competencies,” 2017, p 1).

Three questions were mapped to this competency. Overall students in this section felt that they had high levels of proficiency with teamwork. Very few students indicated basic or no proficiency across the three areas. Students rated themselves as high proficiency in the areas of collaboration (56.69%) and considering other perspectives (57.69%). There were very few low proficiency areas for this question.

Table 14.

*Teamwork/Collaboration*

<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>No Experience</th>
<th>Basic Proficiency</th>
<th>Limited Proficiency</th>
<th>Intermediate Proficiency</th>
<th>High Proficiency</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am able to collaborate with others on a project</td>
<td>0.00%(0)</td>
<td>0.00%(0)</td>
<td>3.85%(1)</td>
<td>38.46%(10)</td>
<td>57.69%(15)</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>I am able to handle difficult conversations with respect</td>
<td>0.00%(0)</td>
<td>3.85%(1)</td>
<td>3.85%(1)</td>
<td>46.15%(12)</td>
<td>46.15%(12)</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>I am able to consider others perspectives before making a decision</td>
<td>0.00%(0)</td>
<td>3.85%(1)</td>
<td>7.69%(2)</td>
<td>30.77%(8)</td>
<td>57.69%(15)</td>
<td>26</td>
</tr>
</tbody>
</table>
RQ4: Is there a relationship between having a leadership role and confidence in being prepared to be successful in chosen career field?

For this question I analyzed data for question twenty-seven which focused on the leadership competency and selected two sub-questions in this category. The questions were, “I am an active member of a student or academic organization” and “I have taken on a leadership role such as leading a committee.” In order to look at the relationship between confidence and leadership I used question 33 which asked the participants to rate how the confidence they feel that activities outside of the classroom have prepared them to be successful in their chosen career field. Based on the findings students who have joined organizations and/or have taken on leadership roles are more likely to feel confident in their ability to be successful in their chosen career field. Responses suggest that students felt that they had developed the competency without participation in an organization. Four students indicated that they were strongly prepared with little to basic proficiency in the skill.

In figure 5, seventeen students indicated that they felt strongly prepared with intermediate and high proficiency experience in this category. While four students with no experience or basic proficiency ranked the same. In figure 6 there were also five students who indicated that they were prepared with no or basic proficiency in taking on a leadership role while there were fifteen with high proficiency that indicated they felt strongly prepared. It would be worth exploring if gender impacts perception with leadership competency as well as how the students define being prepared in this area and what similar experiences they have had that make them feel prepared.
Figure 5. Levels of Proficiency for Leadership Roles

Figure 6. Levels of Proficiency for Member in Student or Academic Organization
RQ5: Is there a difference between genders in confidence of academic field of study preparation?

To examine whether there are gender differences related to low or high confidence, a comparison was run in Qualtrics between question thirty-five which asked (n=26) to share their gender identity and question thirty-two (n=26) which asked the participants to rate how confident they feel that their academic field of study has prepared them to be successful in their chosen career field. For this response, we will look at those that identified as male and female only. There was one response for non-binary, none for prefer not say or self-describe.

Figure 7 shows the results and indicates that females feel more prepared for careers in their field of study than males by their academic departments. For students that identified as female, perceptions of preparedness were split down the middle. It is important to note that students that identified as male were significantly lower in both categories. To clarify the differences, it would be important to understand the expectations the students had for preparedness from their academic department.
RQ6: For those that use CAP services to what extent does CAP career programming influence confidence in career preparation among first generation students.

To investigate the relationship between first generation students and confidence in career preparation from engagement with career programming offered by CAP. This question looks at the relationship between two survey questions. Question thirty-seven (n=26) asked participants to indicate if they were the first person in their immediate family to attend college and question thirty-four (n=26) asked participants to rate their level of confidence that CAP has prepared them to be successful in their chosen career field.

Based on the survey results there were eight students that identified as first-generation college students. Out of those eight students, four reported feeling prepared, one felt unprepared and three did not use CAP services. In comparison of the seventeen that reported that the were continuing generation students ten felt prepared, one felt unprepared and five did not use CAP services. This figure shows that first generation students are not accessing CAPs services around the same rate as continuing generation students. The figure shows that in comparison more continuing generational students are using CAP for help in career preparation. However, the numbers show that students in both groups that used CAP felt more prepared and confident. In looking at how often first-generation students used CAP during the 2018 school year, findings show that three students did not go, one went once, four went at least twice during the year.
Figure 83. Comparing Confidence in CAPs Career Preparation for First Generation College Students

In this section, I presented the findings of the study and in the next section, I will discuss the conclusions, implications for practice, and recommendations.
Chapter 5: Discussion and Conclusion

Chapter four described in detail the analysis used for this study. The general findings visualized the career programming and resources that students engaged with at JMU and their impacts on the student’s self-perception of career readiness skill development. Demographic variables including gender and first generation were analyzed. Students were asked to respond about their experiences as it relates to engagement with academic and co-curricular opportunities. Co-curricular opportunities include career programming, resources and events offered by career and academic planning, student organizations and academic departments. Based on the survey research approach, the findings suggest that access to a variety of career services including online and in person events are beneficial to skill development for JMU students as they prepare for the next steps for their career path. In addition, JMU students can benefit from understanding the eight career readiness competency areas and the types of activities that could help them grow once they leave the university setting. In this chapter, I will discuss the limitations, interpretation of results, and recommendations for future research.

Limitations

The limitations for this study include response rate, sample size, self-report bias, and lack of validity and reliability from an established survey instrument. The sample and response size of the survey is also a limitation for statistical analysis and population generalization. The sample size of the population was 48 students, however, only 26 finished the survey. With the 26 respondents four of the seven undergraduate academic colleges were represented.
The low response rate could be attributed to several factors. Students receive multiple requests during a semester from peers, professors and campus departments requesting their opinion and thoughts about a variety of subjects and could have been experiencing survey fatigue. The request was sent via university bulk email and students could have a filter on their email to remove unwanted solicitation. There is a chance that a student may not have received the survey. Another possibility is that students dropped out of the survey due to lack of time, interest or understanding of the questions.

Another limitation of the study was self-selection. Student’s response may have been skewed based on the fact on the self-selection for the survey and their perceptions of CAP, their academic department and campus organizations due to personal experiences. The respondents may have also experienced bias that resulted in them reporting higher levels of proficiency than they actually possessed. Lastly, the survey was created using the framework of two other surveys. The instrument used for this research had not been previously tested.

**Interpretation and Implications of Results**

The interpretation and implications of the study are not straightforward. For example, a simple analysis of the results might suggest that students have high skill development and do not require additional opportunities to develop before entering the world of work. However, it is important to note that students attending colleges and universities are in a self-enclosed society in which they experience a limited or sheltered view of the world. They are provided with clear boundaries, direction, support and constant feedback from peers and those that work at the university. Being a part of this
type of environment can create disconnection between the reality of experiencing the competency and its application in a setting outside of the university.

Based on the literature review and the data analysis there are several implications and recommendations for practice. As a case in point, this study brings to light the need for a common framework for the university to discuss career readiness. Literature states that there are multiple definitions for career readiness skills and with this there is a stronger likelihood of misinterpretation and confusion. There are many benefits for the university and its stakeholders in using similar terminology across the university to explain the skills students need in order to increase their employability. While many offices have competency frameworks using consistent terminology creates synergy around interdepartmental collaboration which in turn increases the opportunities for students to be exposed to and engage in career development in a multitude of places. Consistent terminology also impacts recruitment by employers, as they will have a clear understanding of what the university expects and values. Universities also follow a business model and more are creating dynamic strategic plans to increase enrollment and retention around the marketing and promotion of outcomes and first destination data on their websites and through admissions offices.

The career office can also apply the knowledge learned from this study to inform the development of the career readiness program at James Madison University. The variables of academic program, personal experiences and interaction with career services programming will be used to determine how students develop career competencies through career related events and programming as well as themes and patterns that link
development together. Currently, most research focuses on college and career readiness for K-12 grade levels.

High Impact Practices and Career Engagement

High impact practices (HIPs) or co-curricular experiences are a component of student engagement in higher education. HIPs influence and promote learning and development through educational experiences that happen outside of the classroom (Engagement Indicators, 2018). This study recognized several engagement practices such as internships and study abroad that have been recognized in literature due to their positive connections to educational outcomes, strategic plans as well as the effectiveness of learning (Engagement Indicators, 2018). These practices require students to engage in higher-order thinking, collaborative learning with peers and faculty as well as participate in integrative learning opportunities outside of the classroom. The social learning theory and constructivism theories provide important connections to HIPs and are more likely to increase student’s transfer of learning. Students are learning through experiences that require social interaction and role modeling while also using reflection to make meaning of their experiences in order to transfer the learning to application (Hughey et al., 2009; Komives, Woodard & Associates, 2003; Caruana & Mcpherson, 2015; Ertmer & Newby, 1993).

For instance, a community service learning experience may increase global and cultural fluency, one of the eight NACE competencies and part of the Career Ready Dukes framework at JMU. The hands-on learning that takes place from participation in service learning can help students connect complex concepts with real-world experiences
and activities, can help provide the student with understanding of the world around them, and be more attractive to potential employers.

Other HIPs may intersect with career preparation as students participate in additional opportunities. Internships often provide real-world experience where students connect their academic theory to application and can often lead to a higher likelihood of employment. According to the outcomes data of JMU curriculum requirements for internships and experiential learning provided by CAP, 15% of colleges encourage it but do not offer internship credit, 25% offer internship credit within the major, and 60% require internship or experiential learning for major credit (Stensby-Hurst, 2016). CAP now offers an internship course during the summer that students can take if their academic major program does not offer a course or credit. Capstone or senior seminar courses can also help students apply hard skill knowledge to real-world problems through case study and case competitions. Occasionally, faculty bring employers into the classroom for presentations or to assist with the case competitions.

Study abroad provides students with cultural awareness, emotional intelligence, resilience, problem solving and empathy which are adaptive skills valued by employers for their ability to increase positive team dynamics and improve customer service. Field or faculty lead research or student leadership positions on campus are also considered HIPs. However, there are issues of access and equity as some students may not have opportunities to participate in certain HIPs due to their academic major, athletic status, transportation needs or financial barriers that require them to work. Another barrier is that some students are unaware of the experiences due to lack of familiarity with the college or university system.
Two research questions focused on additional HIP practices. The first is there a correlation between use of CAP services and confidence in being prepared to be successful in chosen career field? The second is there a relationship between having an internship and confidence in being prepared to be successful in chosen career field? Data results indicated in response to RQ3, that students who are not pursuing opportunities for additional learning outside of the classroom (30.77%) or completing internships (15.38%) which can impact their engagement with real world experiences that connect them to future employment opportunities. Data also shows that 96.15% of students indicated that they had intermediate to high levels of proficiency in the area of engaging in conversations with those that have different perspective than their own. While surprisingly, 50% of the respondents reported no experience or basic proficiency in attending diversity or inclusive trainings. It is also interesting to note that 73.08% of the seniors have not studied abroad. As mentioned in the literature there are barriers to access to some HIPs such as financial factors. Data results indicated in response to RQ4, that students who joined or participated in organizations or took on leadership roles felt more prepared to be successful in their chosen career fields.

**Equity and Access**

Research findings from relevant literature indicate that many Americans find additional education after high school to be beneficial to the individual and to society (Mattern, Burrus, Camara, O’Connor, Hansen, Gambrell, Casillas, & Bobek, 2014). Those with college degrees are still more likely to have job stability, earn more over a lifetime, and are less likely to live in poverty.
However, there are inequalities in how individuals gain access to educational opportunities after high school. While college is designed to be a place of exploration and growth it can be difficult to navigate for students especially those with intersecting identities such as first-generation college students and gender. According to Hughes (2017), education gaps remain in race and ethnicity for women.

Pathways to college have historically, been limited for certain ethnic and racial populations and for those of lower socioeconomic statuses. These students are often impacted by challenges with financial stability, college preparation and support from family (Falcon, n.d.).

*Figure 4:*

Race and Ethnicity Gaps in Education

![Pie charts showing race and ethnicity gaps in education](image)

Tate (2015), conducted an exploratory study using focus groups and asked questions about external influences on and internal beliefs about first–generation college students (FGCS) career development processes. The study found that the students who participated had parental incomes ranging from US$21,000 to $42,000 per year with one outlier of US$100,000 and none of the parents had completed a 4-year college degree
Tate (2015). The study examined three domains of external influence on the career development process, understanding of the career development process, and self-concept as an FGCS. The data showed that family influences impacted the student’s career path choices. Some participants expressed that their parents had concerns about major and career choices that may not result in the student having economic success (Tate, 2015). Some participants felt that they lacked a professional network to learn about their career path or to seek advice and that lack impacts their career development negatively. Students also shared that they feel marginalized at the university and fearful that if they identify as a FGCS to gain access to resources they will be viewed as being accepted at the university as part of affirmative action. In terms of self-concept students identified with persistence and motivation in order to succeed. Several also indicated that they felt more appreciate of resources and opportunities than they felt non-FGCS did (Tate, 2015).

The demographics of gender and FGCS are areas that should be further explored. Super’s Theory of Life-Span, Life-Space Career Theory, explains how students develop interest and competency through life stages which encompass social and environmental factors. These factors include economy, status of natural resources, family, community and peer groups (Komives et al., 2003). Students that identify as either a woman or a FGCS may have their career development impacted due to lack of access to develop curiosity about occupations. As students move through the educational system, they may attend schools without strong educational programs or updated technology resources such as computer labs or reliable wireless internet access. During the growth stage ages 0-14 it is important for students to be exposed to different types of careers and be encouraged to fantasize about different types of jobs. Students between the ages of 14 -24, that are in
environments that limit their ability to fantasy due to enforced gender roles or lack of exposure to high skill jobs may become disengaged with the educational system and their career path (Komives et al., 2003).

Research question five asked, is there a difference between genders in confidence of academic field of study preparation? Data indicates that students that identified as female (n=20) felt their academic departments prepared them for success in their academic field of study. This question needs further research to determine if female students have the same expectations for career development and experiences as male students.

RQ6 asked, to what extent does CAP career programming influence confidence in career preparation among first generation students. Data indicates that FGCS (n=8) four felt prepared, on felt unprepared and three did not use CAP services. Further analysis that connects to their feelings of preparedness of how often they visited CAP, shows that four students went to CAP at least twice during the 2018 school year, one went once and three did not go. In exploring issues of equity and access, the literature states that barriers to programs and services for FGCS are a lack of social capital in understanding “norms for college, college knowledge, and help and advice from their families, schools and communities” (Hughes, 2017). Students may be less likely to use resources and seek opportunities if they lack adequate information about them. Students that have also been impacted by issues of equity and access in primary educational settings may have inadequate self-exploration, career exploration, career planning and skill development. Students without a clear understanding of possible career paths may find it harder to identify outcomes from high-impact experiences that require significant time and effort.
This lack of direction can increase the skills gap for these students as they enter the workforce (Mattern et al., 2014).

**Revisiting the Hypotheses**

Through analysis of the data, the hypothesis were supported through data indicated in research questions one and two, though due to sample size the claims are not generalizable. The originally proposed hypothesis are as follows:

Hypothesis 1: Undergraduate seniors who have participated in CAP career related workshops and events will feel more confident with their skills in the job search process.

Hypothesis 2: Undergraduate seniors who have utilized career related resources will feel more confident with their skills in the job search process.

One of the primary goals of education is to prepare students to become engaged and enlightened students that will contribute to society when they graduate. In many cases this contribution comes in the form of employment, entrepreneurship or further study. An indication of success for a college or university institution would then focus on the employment of its graduates. When students are able to connect academic learning, career readiness skill development and apply them to real world applications their employability increases (NACE, 2018, p1.). According to 2016 published outcomes data completed by Career and Academic Planning, 87% of 3,679 graduated JMU students are employed, attending graduate school, or engaged in career-related endeavors (Stensby-Hurst, 2016).

Through the collection and analysis of the data, it is evident that students believe they have self-developed proficiency in the eight career readiness competencies. There
were several indicators which contributed to their career readiness development such as 61.36% found resume writing/reviewing assistance from CAP to be helpful, along with interview preparation, and individual appointments. The data also indicated that for the students in this study, the more often students utilized CAP services the more confident they felt in being successful in their chosen career field. Students that visited CAP four or more times felt strongly prepared versus those that visited never or once during the 2018 academic year.

Findings have also revealed that the lowest indicators are in the global cultural fluency and digital technology. However, more research needs to be conducted with a larger sample size to determine if additional attention should be given to the following career readiness skills by educators across the institution.

**Recommendations for Future Research**

This research has contributed to the current body of literature, which addresses career readiness perception for undergraduate seniors. The themes identified can be used to create a narrative around student experiences and expectations in relation to opportunities to engage with career-related programming and resources. It would be beneficial to engage in further research and conduct a mixed method inquiry on a larger scale. Due to the small sample size, generalization could not happen with the study. By broadening the scope and number of participants, more data could be collected and analyzed to better understand factors that influence student’s perception of their career development. Findings could then be applied by the universities career office to evaluate current and create new programming or resources. Collecting demographic data, with particular emphasis on the demographics of ethnicity and race, persons with disabilities,
and international students would add to the body of research. According to the Bureau of Labor Statistics (2017), the demographic population is expected to grow more racially and ethnically diverse with the increase of the labor force over the next ten years. This implies that globalization is a growing environmental and social factor that must be considered as students are engaged with career development in higher education spaces. Moreover, a longitudinal research would also be beneficial because it would allow it would allow the university to investigate trend data year over year, including from first year students all the way up to their first year outside of the university.

According to Carnevale, Gainer & Meltzer (1990), basic workforce skills include more than reading, writing and math, it includes the ability to learn, listen, communicate, creative thinking and problem solving. Research over the past twenty years has focused on the same competencies that are indicated in 21st Century Skills, the NACE Career Readiness Competencies and other employability studies. Research also indicates that there are multiple ways for universities and colleges to conceptualize the idea of employability or career readiness skills. The Employer Satisfaction Survey National Report (2017) a national survey in Australia categorized the skills in five categories which may make it an easier framework to understand and adapt. Table 10. Shows the five categories in comparison to the NACE Career Readiness Competency framework that JMU CAP currently uses.
Table 15.

Framework Comparison

<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Foundation skills</td>
<td>Oral/Written Communications Critical Thinking/ Problem Solving</td>
</tr>
<tr>
<td>- general literacy, numeracy and communication skills, and the ability to investigate and integrate knowledge</td>
<td></td>
</tr>
<tr>
<td>Collaborative skills</td>
<td>Teamwork/Collaboration Leadership Global &amp; Intercultural Fluency</td>
</tr>
<tr>
<td>- teamwork and interpersonal skills.</td>
<td></td>
</tr>
<tr>
<td>Employability skills</td>
<td>Professionalism/ Work Ethic Digital Technology Career Management</td>
</tr>
<tr>
<td>- the ability to perform and innovate in the workplace.</td>
<td></td>
</tr>
</tbody>
</table>

These areas do not have a direct connection to the NACE competencies

<table>
<thead>
<tr>
<th>Adaptive skills</th>
<th>Technical skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>- the ability to adapt and apply skills/knowledge and work independently.</td>
<td>- application of professional and technical knowledge and standards.</td>
</tr>
</tbody>
</table>

Adaptive skills and technical skills do not have a direct connection to the NACE Competencies. However, these two categories would add an important element to the current model by connecting adaptive skills such as emotional intelligence and resilience to the model. In the Workplace Basics Training Manual written in 1990, indicated that employers were concerned about basic skill deficiency and that workers have not acquired “more sophisticated job-related skills” (Carnevale, Gainer, Meltzer, 1990). Adaptive skills would provide educators with an opportunity to be engage more with new technology and trends to teach skills as they become necessary for the world of work. As technology continues to develop at a rapid pace this skill area would allow students to gain skills that that would make them competitive in a global economy. It would also
connect the academic skills that students learn in the major program which would increase the connection knowledge attainment and application. This application of skill could address the employer concern of a skills gap as students entering the workforce would be better equipped to manage changing technology and expectations.

Conclusions

In CAP, the role of the Career advisor or coach has changed over the past ten years. No longer are we expected to place students in jobs or simply provide them with information to read. We are expected to connect students to multiple experiences and to teach them how to manage their career through practical applications such as learning about their personality, developing interviewing skills and creating job documents. While the responsibilities of the career advisor has changed, so has the task of providing career education. All aspects of the university have an obligation to ensure that all students have equal access to opportunities and experiences that will assist them in skill development and career attainment. While some of these experiences may look differently in each major, it is still an important issue to ensure that academic colleges and student affair offices are paying attention to which students may be lacking engagement, access or inclusion to the services and resources offered.

It is important for universities to encourage students to engage with high-impact practices across campus as they increase student’s success academically and encourages social participation. Connecting to students, advisors, faculty and staff across campus increase retention and feelings of belonging, especially for FGCS students. Students may be more likely to join an organization or seek an experience such as study abroad or service learning. HIPs increase student opportunities to engage with diverse
perspectives, to examine real-world problems, to find support, to work with faculty and to seek work experiences such as internships, student teaching or clinical placements (Engagement indicators, 2018).

Lack of competence is a barrier in the world of work and may lead to low skill jobs which can then result in job instability and loss of income. It is in the student’s best interest that they are provided with skill development that teaches them how to identify and solve problems, develop interpersonal skills, collaboration and teamwork to name a few (Carnevale, Gainer, Meltzer, 1990). The career readiness framework provides an instructional system with connections to learning methods so that stakeholders across campus can create their own plans to intentional increase students to career development. The reality is that a framework takes university support and buy-in, this approach will create advocates that value the student’s expectations that their time and money are going to return in investment. Faculty and staff must be willing to implement the career program through utilizing resources, creating learning activities and linking students to opportunities and resources in and off of campus.

As the world of work becomes more globalized and new industries are developed it is important that students are able to articulate the transferable skills and competencies they have developed through engagement with academic learning and the application of that learning in co-curricular environments. Future studies would benefit from a focus on how to create best practices for competency development through a lens of access and equity in academic and high-impact practices. Through analysis of this research and its implications for future studies, students will be better prepared for the world of work.
Appendices

Appendix A: IRB Application and Approval

James Madison University
Human Research Review Request

<table>
<thead>
<tr>
<th>FOR IRB USE ONLY:</th>
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</thead>
<tbody>
<tr>
<td>Exempt:</td>
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<tr>
<td>Expedited:</td>
</tr>
<tr>
<td>Full Board:</td>
</tr>
</tbody>
</table>

| Project Title: | The Impact of Career Office Programming on Career Readiness Skill Development in College Students |
| (Not to exceed 1 year minus 1 day) |

| Responsible Researcher(s): | Venus Miller |
| E-mail Address: | millervs@jmu.edu |
| Telephone: | (540) 568-3788 |
| Department: | Adult Education and Human Resource Development |
| Address (MSC): | 6913 |

| Please Select: |
| Faculty | Administrator/Staff Member |
| Undergraduate Student | Graduate Student |

(If Applicable):

| Research Advisor: | Dr. Noorjehan Brantmeier |
| E-mail Address: | brantmnk@jmu.edu |
| Telephone: | (540)568-4530 |
| Department: | AHRD/LTLE |
| Address (MSC): | 6913 |

| Minimum # of Participants: | 20 |
| Maximum # of Participants: | 1000 |

| Funding: |
| External Funding: Yes: No: If yes, Sponsor: |
| Internal Funding: Yes: No: If yes, Sponsor: |
| Independently: Yes: No: |

<p>| Incentives: |
| Will monetary incentives be offered? Yes: No: |
| If yes: How much per recipient? 0.00 In what form? |</p>
<table>
<thead>
<tr>
<th>Must follow JMU Financial Policy:</th>
<th><a href="http://www.jmu.edu/fincemanual/procedures/4205.shtml#.394IRBApprovedResearchSubjects">http://www.jmu.edu/fincemanual/procedures/4205.shtml#.394IRBApprovedResearchSubjects</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional Biosafety Committee Review/Approval:</td>
<td>Use of recombinant DNA and synthetic nucleic acid molecule research:</td>
</tr>
<tr>
<td></td>
<td>□ Yes  □ No</td>
</tr>
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<td></td>
<td>If “Yes,” approval received: □ Yes □ No □ Pending</td>
</tr>
<tr>
<td>IBC Protocol Number(s):</td>
<td>□ Yes  □ No</td>
</tr>
<tr>
<td>Biosafety Level(s):</td>
<td></td>
</tr>
<tr>
<td>Will research be conducted outside of the United States?</td>
<td>□ Yes  □ No</td>
</tr>
<tr>
<td>If “Yes,” please complete and submit the International Research Form along with this review application:</td>
<td><a href="http://www.jmu.edu/researchintegrity/irb/forms/irbinternationalresearch.docx">http://www.jmu.edu/researchintegrity/irb/forms/irbinternationalresearch.docx</a>.</td>
</tr>
</tbody>
</table>

| Certain vulnerable populations are afforded additional protections under the federal regulations. Do human participants who are involved in the proposed study include any of the following special populations? Some populations may be vulnerable to coercion or undue influence. Does your research involve any of the following populations? |
|---------------------------------|-------------------------------------------------|
| Minors                         | □ Minors |
| Pregnant women (Do not check unless you are specifically recruiting) | |
| Prisoners                      | □ Prisoners |
| Fetuses                        | □ Fetuses |
| My research does not involve any of these populations | □ My research does not involve any of these populations |
| Elderly                        | □ Elderly |
| Diminished capacity/Impaired decision-making ability | |
| Economically disadvantaged     | □ Economically disadvantaged |
| Other protected or potentially vulnerable population (e.g. homeless, HIV-positive participants, terminally or seriously ill, etc.) | □ Other protected or potentially vulnerable population (e.g. homeless, HIV-positive participants, terminally or seriously ill, etc.) |
| My research does not involve any of these populations | □ My research does not involve any of these populations |

**Investigator:** Please respond to the questions below. The IRB will utilize your responses to evaluate your protocol submission.

1. □ YES □ NO Does the James Madison University Institutional Review Board define the project as research?
   The James Madison University IRB defines "research" as a "systematic investigation designed to develop or contribute to generalizable knowledge." All research involving human participants conducted by James Madison University faculty and staff and students is subject to IRB review.

2. □ YES □ NO Are the human participants in your study living individuals?
   “Individuals whose physiologic or behavioral characteristics and responses are the object of study in a research project. Under the federal regulations, human subjects are defined as: living individual(s)
about whom an investigator conducting research obtains:
(1) data through intervention or interaction with the individual; or (2) identifiable private information.”

3. ☒ YES ☐ NO Will you obtain data through intervention or interaction with these individuals?
“Intervention” includes both physical procedures by which data are gathered (e.g., measurement of heart rate or venipuncture) and manipulations of the participant or the participant's environment that are performed for research purposes. “Interaction” includes communication or interpersonal contact between the investigator and participant (e.g., surveying or interviewing).

4. ☐ YES ☒ NO Will you obtain identifiable private information about these individuals?
“Private information” includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, or information provided for specific purposes which the individual can reasonably expect will not be made public (e.g., a medical record or student record). “Identifiable” means that the identity of the participant may be ascertained by the investigator or associated with the information (e.g., by name, code number, pattern of answers, etc.).

5. ☐ YES ☒ NO Does the study present more than minimal risk to the participants?
“Minimal risk” means that the risks of harm or discomfort anticipated in the proposed research are not greater, considering probability and magnitude, than those ordinarily encountered in daily life or during performance of routine physical or psychological examinations or tests. Note that the concept of risk goes beyond physical risk and includes psychological, emotional, or behavioral risk as well as risks to employability, economic well being, social standing, and risks of civil and criminal liability.

CERTIFICATIONS:
For James Madison University to obtain a Federal Wide Assurance (FWA) with the Office of Human Research Protection (OHRP), U.S. Department of Health & Human Services, all research staff working with human participants must sign this form and receive training in ethical guidelines and regulations. “Research staff” is defined as persons who have direct and substantive involvement in proposing, performing, reviewing, or reporting research and includes students fulfilling these roles as well as their faculty advisors. The Office of Research Integrity maintains a roster of all researchers who have completed training within the past three years.

Test module at ORI website http://www.jmu.edu/researchintegrity/irb/irbtraining.shtml

<table>
<thead>
<tr>
<th>Name of Researcher(s) and Research Advisor</th>
<th>Training Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venus Miller</td>
<td>6/2/2017</td>
</tr>
<tr>
<td>Dr. Noorjehan Brantmeier</td>
<td>1/4/2017</td>
</tr>
</tbody>
</table>

For additional training interests, or to access a Spanish version, visit the National Institutes of Health Protecting Human Research Participants (PHRP) Course at: http://phrp.nihtraining.com/users/login.php.

By signing below, the Responsible Researcher(s), and the Faculty Advisor (if applicable), certifies that he/she is familiar with the ethical guidelines and regulations regarding the protection of human research participants from research risks. In addition, he/she agrees to abide by all sponsor and university policies and procedures in conducting the research. He/she further certifies that he/she has completed training regarding human participant research ethics within the last three years.

Principal Investigator Signature | Date
---|---
Principal Investigator Signature | Date
Submit an electronic version (in a Word document) of your **ENTIRE** protocol to researchintegrity@jmu.edu.

Provide a **SIGNED** hard copy of the Research Review Request Form to:
Office of Research Integrity, MSC 5738, 601 University Boulevard, Blue Ridge Hall, Third Floor, Room # 342
-Purpose and Objectives
Please provide a lay summary of the study. Include the purpose, research questions, and hypotheses to be evaluated. (Limit to one page)

The purpose of the research study is to measure student perception of their career readiness and career programs impact and to apply the knowledge learned from this study to inform the development of the career readiness program at James Madison University. The variables of academic program, personal experiences and interaction with career services programming will be used to determine how students develop career competencies through career related events and programming as well as themes and patterns that link development together. Currently, most research focuses on how college and career readiness for K-12 grade levels. The impacts of career readiness programs in higher education is an area of research that is lacking. The researcher wants to understand the student perception of career readiness and how that perception impacts level of confidence. By the end of the study the researcher will have gained insights to create suggestions for career readiness programming and resource initiatives that the Career and Academic Planning office should consider.

If students have intentional experience with career readiness initiatives, this might influence them to be better prepared in their career.

Therefore, the following hypotheses will be tested:
Hypothesis 1: Undergraduate seniors who have participated in CAP career related workshops and events will feel more confident with their skills in the job search process.

Hypothesis 2: Undergraduate seniors who have utilized career related resources will feel more confident with their skills in the job search process.

The research questions are as follows:
RQ1 Is there a relationship between how often students used in office CAP services and their competency development?

RQ2 Is there a relationship between how often students used online CAP services and their competency development?

RQ3 Is there a correlation between use of CAP services and confidence in being prepared to be successful in chosen career field?

RQ4 Is there a relationship between having an internship and confidence in being prepared to be successful in chosen career field?

RQ5 Is there a difference between genders in confidence of academic field of study preparation?

RQ6 To what extent does CAP career programming influence confidence in career preparation among first generation students.

Procedures/Research Design/Methodology/Timeframe
Describe your participants. From where and how will potential participants be identified (e.g. class list, JMU bulk email request, etc.)?
The population to be examined in this study is undergraduate students at James Madison University. In order for the study to be relevant, the participants must be currently enrolled and have a senior status at the university. Participants will be at least 18 years of age.

How will subjects be recruited once they are identified (e.g., mail, phone, classroom presentation)? Include copies of recruitment letters, flyers, or advertisements.

Participants will be recruited through the bulk email request process using the email letter provided at the end of the IRB document. Students will self-select to participate in the survey. Additional contacts will be identified through requests made on social media such as in both open and closed Facebook groups specifically for JMU students. These are informal and formal groups which have been created by the JMU Student Government Association members or members of the group themselves. Typical use of these groups is for social communication and collaboration between members. Personal communication as well as Facebook communication will be the avenues for recruiting participants for the study. Below is what will be posted on the Facebook group along with the survey link:

Hello JMU Seniors,

My name is Venus and I am the Career Readiness Coordinator for Career and Academic Planning at JMU. I am examining how students prepare for their careers and life after graduation and I’m requesting your participation in my study. If you choose to participate, all that is required is about 20 minutes of your time to fill out the survey. The questions are about your experiences in preparing for career and work. Thank you in advance for your time and willingness to contribute to this research!

**JMU Student Career Survey**

This study has been approved by the IRB, protocol 19-0246

Once individuals complete the survey, they will have the option to follow up with me if they have questions.

Describe the design and methodology, including all statistics, IN DETAIL. What exactly will be done to the subjects? If applicable, please describe what will happen if a subject declines to be audio or video-taped.

To determine the study design, I started with the research paradigm. According to Kivunja & Kuyini, (2017) a paradigm is used to illustrate your way of thinking. For a researcher a paradigm view defines the lens in which they see the world. This in turn informs the research methods, interpretation and explanation of data. A paradigm informs the research methods used and how the data itself is analyzed (Kivunja & Kuyini, 2017). My research question determined that I could use quantitative methods for gathering data.

According to Creswell (2013), a quantitative approach uses a postpositivist worldview to test a theory by utilizing a hypothesis of data that will either support or refute it. A correlational design will be used to examine the perceptions of Career Readiness for undergraduate university students. The correlation design is used in this research because it enables investigating the relationships that may exist between two or more variables as well as cause and effect (Fraenkel & Wallen, 2009). The study will look at independent variables such as academic department, classification. The dependent variable is the student classification as a senior at James Madison University. The study will survey a sample of cross discipline students attending James Madison University enrolled in a 4-5 year academic program. The students will meet the threshold for classification as a senior student by having completed a minimum of 90 credit hours as defined by the Office of the Register at James Madison University.

The survey will consist of Likert-type and rating scales, rank order and open ended questions. The questions will be used with the intentions of understanding participant’s perceptions of competencies and career resources and programming. The researcher will collect data over a 4-week period. Data analysis will begin at the close of the survey during the months of December, January and February. Data collected
will be kept with confidentiality in mind as individual responses are recorded anonymously and online through the Qualtrics system. There will be no identifiable information collected from the participants but it will be known that the participants are undergraduate students in their senior year at James Madison University. The data collected will include self-perceptions of career readiness competencies and their engagement with the Career and Academic Planning office at James Madison University. Additionally, data collected will include suggestions for career program and resource development, if any, which could be included in the career programming to better prepare graduating students for the workforce.

The Qualtrics email will request voluntary consent to participate in the survey, as well as the direct link to the Qualtrics survey. It is anticipated that the survey should take fifteen to twenty minutes to complete. This survey will contain one methodology to collect data, yielding quantitative responses (consisting of Likert scaled and open-ended questions).

Emphasize possible risks and protection of subjects.

It is anticipated that there will be no more than minimal risks associated with this research, which includes no risks beyond the risks associated with everyday life.

What are the potential benefits to participation and the research as a whole?

There are no direct benefits to participants in this study. Potential benefits to the area of research associated with this study include the following: increased understanding of JMU Students’ experiences that lead to career readiness, increased understanding of career experiences, exploration into an area of research that will inform career programming and resource initiatives, if any, need to be in place to better prepare students for the workforce.

Where will research be conducted? (Be specific; if research is being conducted off of JMU’s campus a site letter of permission will be needed)

The research will be conducted through an anonymous online survey completed at the participant’s convenience.

Will deception be used? If yes, provide the rationale for the deception. Also, please provide an explanation of how you plan to debrief the subjects regarding the deception at the end of the study.

No deception will be used in this study.

What is the time frame of the study? (List the dates you plan on collecting data. This cannot be more than a year, and you cannot start conducting research until you get IRB approval)

The timeframe of the study is December 2018 until April 2019. I plan on collecting data from December 3 until January 15. Transcribing, coding, and analyzing the qualitative data will take additional time, and my final thesis will be submitted to The Graduate School by April 15, 2019.

**Data Analysis**

How will data be analyzed?

Data will be analyzed within Qualtrics, the online survey instrument being utilized for this research project. Qualtrics will aggregate descriptive statistics and visual representations of the different variables.

How will you capture or create data? Physical (ex: paper or tape recording)? Electronic (ex: computer, mobile device, digital recording)?

Data will be stored and analyzed within Qualtrics, the online survey instrument being utilized for this research project. The survey being issued will be anonymous, in that there will be no identifying information attached to any of the research questions being asked. The researcher will not be present while the survey is being completed. Furthermore, any statistical information being analyzed for reporting purposes will be stored on a personal laptop computer that is password protected in an encrypted folder, with any statistical documents being password protected as well. A back-up copy of these documents may be kept on an encrypted portable hard drive, which will also be password protected. The researcher and the committee chair, Dr. Noorie Brantmeier, will be the only individuals who will have any access to this data, which will remain within a password-protected encrypted electronic file once the research has been completed.
Do you anticipate transferring your data from a physical/analog format to a digital format? If so, how? (e.g. paper that is scanned, data inputted into the computer from paper, digital photos of physical/analog data, digitizing audio or video recording?)

No transfer of data will take place.

How and where will data be secured/stored? (e.g. a single computer or laptop; across multiple computers; or computing devices of JMU faculty, staff or students; across multiple computers both at JMU and outside of JMU?) If subjects are being audio and/or video-taped, file encryption is highly recommended. If signed consent forms will be obtained, please describe how these forms will be stored separately and securely from study data.

Data will be stored first in Qualtrics and the descriptive analyses performed by Qualtrics will later be stored on my password protected laptop in an encrypted folder until the destruction of all records. This password protected laptop belongs to the researcher who is a JMU staff member. A back-up record of this data will also be stored on a password protected encrypted portable hard drive until the conclusion of the study. This encrypted portable hard drive will remain with the researcher during transit or secured in the researchers locked office and desk within the Student Success Center. Anonymity will be promised to all who respond to the survey.

Who will have access to data? (e.g. just me; me and other JMU researchers (faculty, staff, or students); or me and other non-JMU researchers?)

The researcher and Dr. Brantmeier, who is the committee chair of this research, will be the only individuals to have access to this data.

If others will have access to data, how will data be securely shared?

Data will remain on a single laptop with view access only shared during one-on-one meetings with the faculty advisor. Dr. Brantmeier will also have access to the data through an encrypted portable hard drive.

Will you keep data after the project ends? (i.e. yes, all data; yes, but only de-identified data; or no) If data is being destroyed, when will it be destroyed, and how? Who will destroy the data?

Yes, data will be kept after the project ends but only in aggregate form. All other documents and data associated with this research project including individual responses will be confidentially shredded and/or deleted.

**Reporting Procedures**

Who is the audience to be reached in the report of the study?

The audience to be reached in the report of this study is the researcher’s committee members. This committee consists of three graduate faculty members within the AHRD/LTLE graduate school at James Madison University. These members include:

- Dr. Noorjehan Brantmeier – Committee Chair
- Dr. Edward Brantmeier – Committee Member/Education Professor
- Diane Foucar-Szocki -- Committee Member/Education Professor

How will you present the results of the research? (If submitting as exempt, research cannot be published or publicly presented outside of the classroom. Also, the researcher cannot collect any identifiable information from the subjects to qualify as exempt.)

The results of this research will be presented to a Research Review Committee in a formalized classroom to the committee members listed above through a “defense” of the research and the resulting findings. The results of this research will be presented to staff members of JMU’s Career and Academic Planning office. I may publish a summary of my findings through written articles, presenting at conferences and/or through webinars with career and advising agencies such as the National Association of Career and Employers (NACE). I feel the information could be utilized to inform future work with career
competencies and highlight the work that Career and Academic Planning is doing at James Madison University.

How will feedback be provided to subjects?
Within the consent form in the email being sent to the participants of the anonymous survey, the researcher and committee chair’s email address will be included, which will allow the participants to contact the researcher with feedback, questions or concerns regarding the study, as well as provide them the opportunity to learn about the results of the study, if they choose to inquire.

**Experience of the Researcher (and advisor, if student):**
The researcher, Venus Miller, received a master’s degree from Western Carolina University in Public Affairs with a concentration in College Student Personnel in May of 2006 then enrolled in the Adult Education and Human Resource Development (AHRD) graduate program at James Madison University in fall 2017. She is a part-time student within the program and is anticipated to receive her master’s degree in AHRD in May of 2019. She works full time at James Madison University in the Career and Academic Planning office. The following graduate courses have been completed as of to date:

- AHRD 520 - Foundations of AHRD
- AHRD 580 – Learning Theories and Practice
- AHRD 600 - Performance Analysis and Needs Assessment in AHRD
- AHRD 640 – Program Evaluation and Measurement in Adult Education
- AHRD 695 - Portfolio
- EDUC 630: Research Methods and Inquiry in AHRD
- LTLE 570: Design and Development of Digital Media
- LTLE 610: Instructional Design in AHRD

Dr. Noorie Brantmeier has a Ph.D. in Adult Education and Human Resource Studies with a specialization in research methods from Colorado State University. She has a master’s degree in social work from Washington University in St. Louis where she conducted research on social and economic development in Native American communities. Dr. Brantmeier has been a principal investigator, co-principal investigator, and/or research coordinator on studies related to the measurement of student attitudes regarding diversity in higher education; youth civic engagement; and adolescent attitudes toward violence. She holds the rank of Graduate Faculty at JMU and teaches research methods courses at both the master’s and doctoral levels. Dr. Noorie Brantmeier will help guide me through my research.

Past and current research methods courses taught include:
- PSY 840: Qualitative and Mixed Research Methods
- AHRD/EDUC 630: Research Methods & Inquiry
- AHRD 680/700: Reading & Research/Thesis
The Impact of Career Office Programming on Career Readiness
Skill Development in College Students
“Web”/“Email” Cover Letter (used in anonymous research)

Identification of Investigators & Purpose of Study
You are being asked to participate in a research study conducted by Venus Miller from James Madison University. The purpose of the study is to examine student perceptions of their career preparedness in an attempt to identify resources and experiences that influence career readiness. This study will contribute to the researcher’s completion of her master’s research for the AHRD program.

Research Procedures
This study consists of an online survey that will be administered to individual participants through a link distributed via email and Facebook which leads to a Qualtrics online survey. You will be asked to provide answers to a series of questions related to experiences in and out of the classroom in regards to career.

Time Required
Participation in this study will require 20 minutes of your time.

Risks
The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits
Although there are no direct benefits from your participation in this study, any feedback you provide will help to determine what career programming and resource initiatives, if any, need to be in place to better prepare students for career after graduation.

Confidentiality
The results of this research will be presented at the student’s thesis defense and potentially in academic publications and conferences in the following year. While individual responses are anonymously obtained and recorded online through the Qualtrics software, data is kept in the strictest confidence. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location only accessible to the researcher. The researcher retains the right to use and publish non-identifiable data. At the end of the study, all records will be destroyed. Final aggregate results will be made available to participants upon request.

Participation & Withdrawal
Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

Questions about the Study
If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Venus Miller
Dr. Noorjehan Brantmeier
Adult Education and HR Development
Adult Education and HR Development
James Madison University
James Madison University
millervs@jmu.edu
brantmnk@jmu.edu
(540) 568-4530

Questions about Your Rights as a Research Subject
Dr. Taimi Castle
Chair, Institutional Review Board
James Madison University
(540) 568-5929
castletl@jmu.edu
Giving of Consent
I have been given the opportunity to ask questions about this study. I have read this consent and I understand what is being requested of me as a participant in this study. I certify that I am at least 18 years of age. By clicking on the link below, and completing and submitting this anonymous survey, I am consenting to participate in this research.

Please click below to begin the survey:
JMU Student Career Survey
Venus Miller
Name of Researcher (Printed)
November 1, 2018
Date

This study has been approved by the IRB, protocol 19-0246
IRB Approval Notification

Morgan, Cindy - morgancs
Fri, 12/7/2018, 11:24 AM
Miller, Venus - millerus; Brantmeier, Noodle - brantmnk

IRB

You replied on 12/7/2018 1:00 PM.

Action Items

Dear Venus,

I wanted to let you know that your IRB Protocol entitled, "The Impact of Career Office Programming on Career Readiness Skill Development in College Students" has been approved effective from 12/7/2018 through 4/30/2019. The signed action of the board form, approval memo, and close-out form will be sent to your advisor via campus mail. Your protocol has been assigned No. 19-0246. Thank you again for working with us to get your protocol approved.

All research must be conducted in accordance with this approved submission, meaning that you will follow the research plan you have outlined in your protocol, use approved materials, and follow university policies.

Please take special note of the following important aspects of your approval:

- Any changes made to your study require approval before they can be implemented as part of your study. Contact the Office of Research Integrity at researchintegrity@jmu.edu with your questions and/or proposed modifications. An addendum request form can be located at the following URL: http://www.jmu.edu/researchintegrity/irb/forms/irbaddendum.doc

- As a condition of the IRB approval, your protocol is subject to annual review. Therefore, you are required to complete a Close-Out form before your project end date. You must complete the close-out form unless you intend to continue the project for another year. An electronic copy of the close-out form can be found at the following URL: http://www.jmu.edu/researchintegrity/irb/forms/irbcloseout.doc

- If you wish to continue your study past the approved project end date, you must submit an Extension Request Form indicating a renewal, along with supporting information. An electronic copy of the close-out form can be found at the following URL: http://www.jmu.edu/researchintegrity/irb/forms/irbextensionrequest.doc

- If there are in an adverse event and/or any unanticipated problems during your study, you must notify the Office of Research Integrity within 24 hours of the event or problem. You must also complete adverse event form, which can be located at the following URL: http://www.jmu.edu/researchintegrity/irb/forms/irbadverseevent.doc

Although the IRB office sends reminders, it is ultimately your responsibility to submit the continuing review report in a timely fashion to ensure there is no lapse in IRB approval.

Thank you again for working with us to get your protocol approved. If you have any questions, please do not hesitate to contact me.

Best Wishes,

Cindy

Cindy Morgan
IRB Coordinator
Office of Research Integrity - James Madison University
Engineering/Geosciences Bldg., Room 3152
MSC 5738
Harrisonburg, VA 22807
morgancs@jmu.edu
(540) 568-7025
In accordance with federal regulations, the IRB must review and approve all changes to previously approved research prior to implementation. Please complete this form to describe the proposed changes to your study.

IRB Protocol #: 19-0246

Project Title: The impact of Career Office Programming on Career Readiness Skill Development in College Students

Name of Researcher(s): Venus Miller

Faculty Advisor (If applicable): Noorjehan Brantmeier

1. Provide an abstract of findings or summary of progress to date:
The survey has not been sent out to students and no data has been collected.

2. Type of addendum request:
   - [ ] Changes in personnel
   - [x] Data collection tools/procedures
   - [ ] Project goals
   - [ ] Informed consent process/forms
   - [ ] Funding source
   - [ ] Subject recruitment methods/selection criteria
   - [ ] Other (please specify):

3. Provide a brief description of changes and rationale:
   I have changed the survey format and questions.
   Survey format changes were made to reduce the size of the survey.
   Questions were amended to focus on a connection between career programming and career readiness. The previous questions focused mainly on career management and the job process.
   This narrow focus would not yield enough results to make any conclusions about overall career readiness development.

4. Attach amended material, as applicable (highlight all changes):

Certification:
I certify that the information supplied on this form and in accompanying attachments is complete and accurate and that no procedures other than those disclosed on this form will be used in this protocol. I will promptly report to the IRB all research-related accidents, injuries, complaints, problems, or breeches of confidentiality. I will report any significant new findings that may affect the risks and benefits to the subjects and other participants in writing to the research participants and to the IRB.

Signature: Venus Miller
Date: 1/14/19

Faculty Advisor Signature: Noorjehan Brantmeier
Date: 1/14/19

Submit electronic copy to researchintegrity@jmu.edu and a "signed" hard copy to the Office of Research Integrity, MSC 5738 | 801 Carrier Drive | Engineering/Geosciences (EnGeo) Building, Room # 3152 (Electronic signatures are accepted. If including electronic signature(s), a hard copy is not needed.)
Appendix B: IRB Addendum

IRB Addendum Approval

Dear Venus,

I want to let you know that the addendum request for your IRB protocol # 19-0246 entitled, "The Impact of Career Office Programming on Career Readiness Skill Development in College Students" has been approved.

This Addendum Request approval is for the following protocol changes:

- Changes to the survey format and survey questions.

Your Close-Out Form must be submitted within 30 days of the project end date. If you wish to continue your study past the approved project end date, you must submit an Extension Request Form indicating a renewal, along with supporting information. Although the IRB office sends reminders, it is ultimately your responsibility to submit the continuing review report in a timely fashion to ensure there is no lapse in IRB approval.

Thank you again for working with us to get your protocol addendum approved. We look forward to receiving your project close-out form upon completion of your study.

Best Wishes,

Cindy

Cindy Morgan
IRB Coordinator
Office of Research Integrity - James Madison University
Appendix C: Survey Emails

Hello JMU Seniors,

My name is Venus and I am the Career Readiness Coordinator for Career and Academic Planning at JMU.

I am examining how students prepare for their careers and life after graduation and I’m requesting your participation in this study.

Please click below to begin the survey:
https://jmu.co1.qualtrics.com/jfe/form/SV_3dXLezg6bgcecTP

This study has been approved by the IRB, protocol 19-0246
For questions: Venus Miller millers@jmu.edu
Bulk Email

The Impact of Career Office Programming and Career Readiness Skill Development in College Students

Identification of Investigators & Purpose of Study

You are being asked to participate in a research study conducted by Venus Miller from James Madison University. The purpose of the study is to examine student perceptions of their career preparedness in an attempt to identify resources and experiences that influence career readiness. This study will contribute to the researcher’s completion of her master’s research for the AHRD program.

Research Procedures

This study consists of an online survey that will be administered to individual participants through a link distributed via email and Facebook which leads to a Qualtrics online survey. You will be asked to provide answers to a series of questions related to experiences in and out of the classroom in regards to career.

Time Required

Participation in this study will require 20 minutes of your time.

Risks

The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits

Although there are no direct benefits from your participation in this study, any feedback you provide will help to determine what career programming and resource initiatives, if any, need to be in place to better prepare students for career after graduation.

Confidentiality

The results of this research will be presented at the student’s thesis defense and potentially in academic publications and conferences in the following year. While individual responses are anonymously obtained and recorded online through the Qualtrics software, data is kept in the strictest confidence. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location only accessible to the researcher. The researcher retains the right to use and publish non-identifiable data. At the end of the study, all records will be destroyed. Final aggregate results will be made available to participants upon request.

Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.
Questions about the Study

If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:

Venus Miller  
Dr. Noorjehan Brantmeier  
Adult Education and HR Development  
Adult Education and HR Development  
James Madison University  
James Madison University  
millervs@jmu.edu  
brantmnk@jmu.edu  
(540) 568-4530

Questions about Your Rights as a Research Subject  
Dr. Taimi Castle  
Chair, Institutional Review Board  
James Madison University  
(540) 568-5929  
castletl@jmu.edu

Giving of Consent

I have been given the opportunity to ask questions about this study. I have read this consent and I understand what is being requested of me as a participant in this study. I certify that I am at least 18 years of age. By clicking on the link below, and completing and submitting this anonymous survey, I am consenting to participate in this research.

http://jmu.co1.qualtrics.com/jfe/form/SV_3dXLezg6bgcecTP

Venus Miller 01/16/2019

This study has been approved by the IRB, protocol #19-0246

Thank you,

Venus Miller  
millervs@jmu.edu
Appendix D: Survey Instrument

JMU Career Readiness Survey 2019

Start of Block: SURVEY INSTRUCTION

Start of Block: Informed Consent

Q1

The Impact of Career Office Programming on Career Readiness Skill Development in College Students.

Identification of Investigators & Purpose of Study  You are being asked to participate in a research study conducted by Venus Miller from James Madison University. The purpose of the study is to examine student perceptions of their career preparedness in an attempt to identify resources and experiences that influence career readiness. This study will contribute to the researcher’s completion of her master’s research for the AHRD program.

Research Procedures  This study consists of an online survey that will be administered to individual participants through a link distributed via email and Facebook which leads to a Qualtrics online survey. You will be asked to provide answers to a series of questions related to experiences in and out of the classroom in regards to career.

Time Required  Participation in this study will require 20 minutes of your time.

Risks

The investigator does not perceive more than minimal risks from your involvement in this study (that is, no risks beyond the risks associated with everyday life).

Benefits

Although there are no direct benefits from your participation in this study, any feedback you provide will help to determine what career programming and resource initiatives, if any, need to be in place to better prepare students for career after graduation.

Confidentiality  The results of this research will be presented at the student’s thesis defense and potentially in academic publications and conferences in the following year. While individual responses are anonymously obtained and recorded online through the Qualtrics software, data is kept in the strictest confidence. No identifiable information will be collected from the participant and no identifiable responses will be presented in the final form of this study. All data will be stored in a secure location only accessible to the researcher. The researcher retains the right to use and publish non-identifiable data. At the end of the study, all records will be destroyed. Final aggregate results will be made available to participants upon request.

Participation & Withdrawal

Your participation is entirely voluntary. You are free to choose not to participate. Should you choose to participate, you can withdraw at any time without consequences of any kind. However, once your responses have been submitted and anonymously recorded you will not be able to withdraw from the study.

Questions about the Study  If you have questions or concerns during the time of your participation in this study, or after its completion or you would like to receive a copy of the final aggregate results of this study, please contact:  

Venus Miller  Dr. Noorjehan
Brantmeier  Adult Education and HR Development  Adult Education and HR Development
James Madison University  James Madison University
Questions about Your Rights as a Research Subject  Dr. Taimi Castle  Chair, Institutional Review Board  James Madison University  (540) 568-5929  castletl@jmu.edu

**Giving of Consent**  I have been given the opportunity to ask questions about this study. I have read this consent and I understand what is being requested of me as a participant in this study. I certify that I am at least 18 years of age. By clicking on the link below, and completing and submitting this anonymous survey, I am consenting to participate in this research.

By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age, and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

Please note that this survey will be best displayed on a laptop or desktop computer. Some features may be less compatible for use on a mobile device.

Thank you,  Venus Miller  millervs@jmu.edu

I consent, begin the study  (1)

☐ I do not consent, I do not wish to participate  (2)

**Q2 Have you completed a minimum of 90 credit hours?**

☐ Yes  (1)

☐ No  (2)

**Q3 Please indicate your major below.**

____________________________________________________________________________________

**Q4 If you have a minor or pre-professional program, please indicate it below.**

____________________________________________________________________________________
Q5 **When will you graduate?**

- May 2019 (6)
- December 2019 (7)
- May 2020 (8)
- December 2020 (9)

Q6 **The following questions are about your experiences with Career and Academic Planning.**

Q7 During the 2018 academic year (summer, spring, fall), how many times did you visit the office of Career and Academic Planning (CAP)?

- Never (1)
- Once (2)
- Once per semester (3)
- 2 or 3 times per semester (4)
- 4 or more times per semester (5)

_Skip To: Q10 If During the 2018 academic year (summer, spring, fall), how many times did you visit the office of Ca... = Never_
Q8 Did you use any of the following Career and Academic Planning (CAP) services IN OFFICE (during an appointment with a CAP Staff member) and, if so, how helpful was each on in your job search and/or career planning?

<table>
<thead>
<tr>
<th>Service</th>
<th>Did not use (1)</th>
<th>Used - Not very helpful (3)</th>
<th>Used - Somewhat helpful (4)</th>
<th>Used - very helpful (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career assessments (Focus, MBTI, etc)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual career counseling/coaching</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>(3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internship search assistance (4)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Interview preparation/review assistance (5)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Job search assistance (6)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Major or Minor help (7)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Researching a potential employer (8)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Researching careers (9)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Resume writing/reviewing assistance (10)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q9 During the 2018 academic year (summer, spring, fall) how many times did you visit the office of Career and Academic Planning (CAP) WEBSITE (ONLINE)?

- Never (1)
- Once (2)
- Once per semester (3)
- 2 or 3 times per semester (4)
- 4 or more times per semester (5)

Skip To: Q11 If During the 2018 academic year (summer, spring, fall) how many times did you visit the office of Car... = Never
Q10 Did you use any Career and Academic Planning (CAP) services ONLINE and, if so, how helpful was each on in your job search and/or career planning?

<table>
<thead>
<tr>
<th>Service</th>
<th>Did not use (1)</th>
<th>Used - Not very helpful (3)</th>
<th>Used - Somewhat helpful (4)</th>
<th>Used - very helpful (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career Assessments (Focus, MBTI, etc) (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Guide for Majors (9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Events Calendar (11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graduate School Preparation (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Handshake to Research jobs/internships or employers (12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internship Search Assistance (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview Preparation (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Search (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major or Minor research (7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Researching a Potential Employer (8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resume Writing (10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q11 Did you attend any career related events offered by CAP? (Select all that apply)

☐ No Events Attended (12)

☐ Campus Wide Career Fair (11)

☐ Career Workshops (Resume, interviewing, internship, etc.) (2)

☐ Campus to Career Conference (6)

☐ Graduate School Fair (3)

☐ Interview Prep (4)

☐ Networking Events (Career Bites, panels) (7)

☐ Resume Prep (8)

☐ Resume Drop-In Hours (9)

Skip To: Q14 If Did you attend any career related events offered by CAP? (Select all that apply) = No Events Attended

Q12 What Career and Academic Planning Event(s), if any, was MOST helpful?
________________________________________________________________________

Q13 What Career and Academic Planning Event(s), if any, was LEAST helpful?
________________________________________________________________________

Q14 Did you attend any career related events offered by an ACADEMIC DEPARTMENT or STUDENT ORGANIZATION? (select all that apply)

<table>
<thead>
<tr>
<th>Academic Department</th>
<th>Student Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (1)</td>
<td>Yes (1)</td>
</tr>
<tr>
<td>Event Type</td>
<td>Event Number</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Career Fair (192)</td>
<td></td>
</tr>
<tr>
<td>Career Workshops (193)</td>
<td></td>
</tr>
<tr>
<td>Career Conference (194)</td>
<td></td>
</tr>
<tr>
<td>Graduate School Fair (195)</td>
<td></td>
</tr>
<tr>
<td>Interview Preparation (196)</td>
<td></td>
</tr>
<tr>
<td>Networking Events (197)</td>
<td></td>
</tr>
<tr>
<td>Resume Preparation (198)</td>
<td></td>
</tr>
<tr>
<td>Resume Review (199)</td>
<td></td>
</tr>
</tbody>
</table>
Q15
Career Readiness is the attainment and demonstration of competencies that broadly prepare college graduates for a successful transition to the workplace.

All competencies can be developed over time through experiences.

As you complete the following questions, think about the variety of experiences in and out of the classroom you have had (including but not limited to: project work, volunteering, jobs/internships, and student and/or professional organizations).

Q16 CAREER MANAGEMENT You are able to identify and articulate your skills, strengths, knowledge, and experiences relevant to the position desired and your career goals. You are able to identify areas of professional growth. **Level of Proficiency definitions:**

- **No Experience** - You have no experience with this skill
- **Basic Proficiency** - You have a common knowledge or an understanding of basic techniques and concepts
- **Limited Proficiency** - You have used the skill very little and may need help from time to time
- **Intermediate Proficiency** - You can use the skills to accomplish a task
Q17 Rate your level of proficiency for the items below:

<table>
<thead>
<tr>
<th>Item</th>
<th>No Experience (1)</th>
<th>Basic Proficiency (2)</th>
<th>Limited Proficiency (3)</th>
<th>Intermediate Proficiency (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I know possible career paths I can pursue with my major/minor (1)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I pursue opportunities for additional learning outside of the classroom (2)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I have a current resume that I can use to apply to jobs (3)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I can research and explore job options (4)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I have completed an internship (7)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q18 **COMMUNICATION**

You are able to articulate thoughts and ideas clearly and effectively in written and oral forms to person(s) inside and outside of the organization.

**Level of Proficiency definitions:**

- **No Experience** - You have no experience with this skill
- **Basic Proficiency** - You have a common knowledge or an understanding of basic techniques and concepts
- **Limited Proficiency** - You have used the skill very little and may need help from time to time
- **Intermediate Proficiency** - You can use the skills to accomplish a task
Q19 Rate your level of proficiency for the items below:

<table>
<thead>
<tr>
<th>Skill Description</th>
<th>No Experience (1)</th>
<th>Basic Proficiency (2)</th>
<th>Limited Proficiency (3)</th>
<th>Intermediate Proficiency (4)</th>
<th>High Proficiency (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to articulate my thoughts and ideas clearly (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to create professional correspondence to peers, professors, and employers (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have developed and delivered a presentation for a class or organization (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to check for understanding and ask clarifying questions (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Q20 **CRITICAL THINKING/PROBLEM SOLVING**

You are able to exercise sound reasoning to analyze issues, make decisions, and overcome problems.

**Level of Proficiency definitions:**

- **No Experience** - You have no experience with this skill
- **Basic Proficiency** - You have a common knowledge or an understanding of basic techniques and concepts
- **Limited Proficiency** - You have used the skill very little and may need help from time to time
- **Intermediate Proficiency** - You can use the skills to accomplish a task
Q21 Rate your level of proficiency for the items below:

| I am able to develop a plan of action with specific steps to solve a problem (1) | No Experience (1) | Basic Proficiency (2) | Limited Proficiency (3) | Intermediate Proficiency (4) | High Proficiency (5) |
| I am able to brainstorm solutions to a problem before bringing it to another person (3) |                   |                       |                          |                            |                         |
| I am able to exercise sound reasoning to identify relevant information and analyze data (2) |                   |                       |                          |                            |                         |
| I am able to adopt multiple perspectives and distinguish between fact and opinion (4) |                   |                       |                          |                            |                         |
| I am able to demonstrate integrity, accountability and ethical behavior (5) |                   |                       |                          |                            |                         |

Q22 **DIGITAL TECHNOLOGY**

You are able to select and use appropriate technology to accomplish a given task.

**Level of Proficiency definitions:**

- **No Experience** - You have no experience with this skill
- **Basic Proficiency** - You have a common knowledge or an understanding of basic techniques and concepts
- **Limited Proficiency** - You have used the skill very little and may need help from time to time
- **Intermediate Proficiency** - You can use the skills to accomplish a task

---
Q23 Rate your level of proficiency for the items below:

<table>
<thead>
<tr>
<th>No Experience (1)</th>
<th>Basic Proficiency (2)</th>
<th>Limited Proficiency (3)</th>
<th>Intermediate Proficiency (4)</th>
<th>High Proficiency (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to understand what applications are necessary to be successful in my career (1)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am able to use technology to solve problems and accomplish goals (2)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am able to learn new computer software to accomplish tasks (4)</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Q24 **GLOBAL AND CULTURAL FLUENCY**

You are able to value, respect and learn from other cultures, races, ages, genders, sexual orientations, abilities, religions and individual styles.

**Level of Proficiency definitions:**
- **No Experience** - You have no experience with this skill
- **Basic Proficiency** - You have a common knowledge or an understanding of basic techniques and concepts
- **Limited Proficiency** - You have used the skill very little and may need help from time to time
- **Intermediate Proficiency** - You can use the skills to accomplish a task
Q25 Rate your level of proficiency for the items below:

<table>
<thead>
<tr>
<th></th>
<th>No Experience (1)</th>
<th>Basic Proficiency (2)</th>
<th>Limited Proficiency (3)</th>
<th>Intermediate Proficiency (4)</th>
<th>High Proficiency (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have attended a diversity/inclusive training (1)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am able to engage in conversation with those that have different perspectives than my own (2)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I understand my own biases (3)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I work to eliminate my own biases (6)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I understand issues of power, privilege and inequality (4)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I have studied abroad while attending JMU (7)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q26 LEADERSHIP

You are able to leverage the strengths of others to achieve common goals and use interpersonal skills to coach and develop others.

**Level of Proficiency definitions:**
- **No Experience** - You have no experience with this skill
- **Basic Proficiency** - You have a common knowledge or an understanding of basic techniques and concepts
- **Limited Proficiency** - You have used the skill very little and may need help from time to time
- **Intermediate Proficiency** - You can use the skills to accomplish a task
Q27 Rate your level of proficiency for the items below:

<table>
<thead>
<tr>
<th></th>
<th>No Experience (1)</th>
<th>Basic Proficiency (2)</th>
<th>Limited Proficiency (3)</th>
<th>Intermediate Proficiency (4)</th>
<th>High Proficiency (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am an active member of a student or academic organization</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I have taken on a leadership role such as leading a committee</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I understand how to delegate responsibilities</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am able to manage a project from beginning to end</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Q28 **PROFESSIONALISM/WORK ETHIC**

You are able to demonstrate personal accountability and effective work habits, e.g., punctuality, working productively with others, and time workload management, and understand the impact of non-verbal communication on professional work image.

**Level of Proficiency definitions:**

- **No Experience** - You have no experience with this skill
- **Basic Proficiency** - You have a common knowledge or an understanding of basic techniques and concepts
- **Limited Proficiency** - You have used the skill very little and may need help from time to time
- **Intermediate Proficiency** - You can use the skills to accomplish a task
Q29 Rate your level of proficiency for the items below:

<table>
<thead>
<tr>
<th></th>
<th>No Experience (1)</th>
<th>Basic Proficiency (2)</th>
<th>Limited Proficiency (3)</th>
<th>Intermediate Proficiency (4)</th>
<th>High Proficiency (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to arrive to meetings/work on time and prepared (1)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I understand what professional dress is for my future career (2)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am to manage my emotional responses with my others (3)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am able to recover from setbacks and challenges (4)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am able to maintain effective work habits (5)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q30 **TEAMWORK/COLLABORATION**

You are able to build collaborative relationships with colleagues and customers representing diverse cultures, races, ages, genders, religions, lifestyles and viewpoints.

**Level of Proficiency definitions:**

No Experience - You have no experience with this skill

Basic Proficiency - You have a common knowledge or an understanding of basic techniques and concepts

Limited Proficiency - You have used the skill very little and may need help from time to time

Intermediate Proficiency - You can use the skills to accomplish a task
Q31 Rate your level of proficiency for the items below:

<table>
<thead>
<tr>
<th>No Experience (1)</th>
<th>Basic Proficiency (2)</th>
<th>Limited Proficiency (3)</th>
<th>Intermediate Proficiency (4)</th>
<th>High Proficiency (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am able to collaborate with others on a project (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to handle difficult conversations with respect (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am able to consider others perspectives before making a decision (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q32 Rate how confident you feel that your academic field of study has prepared you to be successful in your chosen career field.

○ I am unprepared (27)

○ I am somewhat prepared (32)

○ I am strongly prepared (33)

Q33 Rate how confident you feel that your activities outside of the classroom (work, student/professional organizations, volunteer, etc.) have prepared you for to be successful in your chosen career field.

○ I am unprepared (27)

○ I am somewhat prepared (32)

○ I am strongly prepared (33)

○ Did not use (34)
Q34 Rate how confident you feel that Career and Academic Planning has prepared you for to be successful in your chosen career field.

- I am unprepared (27)
- I am somewhat prepared (32)
- I am strongly prepared (33)
- Did not use (34)

Q35 To which gender identity do you most identify?

- Female (2)
- Male (1)
- Non-Binary (3)
- Prefer to self-describe_______ (5)
- Prefer not to answer (6)

Q36 What is your age?

- Under 21 (1)
- 21-24 (2)
- 25-28 (3)
- Over 29 (4)
- Choose not to answer (6)
Q37 Are you the first person in your immediate family to go to college?

☐ Yes (1)

☐ No (2)

☐ Choose not to answer (3)

Skip To: End of Survey If Are you the first person in your immediate family to go to college? = Yes
Skip To: End of Survey If Are you the first person in your immediate family to go to college? = No

End of Block: Informed Consent

Q38 Thank you for participating in this survey. At this time due to your current credit hours you do not qualify to complete this survey.

End of Block: Block 2
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