

An Exploratory Study of the Influence of a Meaningful Career Center Engagement on Student Retention

A Mixed Methods Design

By

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ABSTRACT

Recent data highlights the advantages of earning a college degree, as bachelor's degree holders experienced lower unemployment rates (less than 2%) and significantly reduced poverty rates compared to peers with only a high school diploma (US Bureau of Labor Statistics, 2023; Carnevale et al., 2016). However, with rising tuition costs and 55% of graduates carrying an average student loan debt of nearly \$29,000 (McGee-Newton, 2019), career readiness has become a critical focus in higher education. However, the role that engagement with Career Services has on retention, which leads to graduation, has been understudied. Prior research demonstrates the tangible value of career services, with the Class of 2022 NACE Student Survey reporting that students who engaged with at least one career service averaged 1.24 job offers compared to 1.0 for those who did not (VanDerziel, 2022).

The Career Development Center, an auxiliary unit within the Division of Student Affairs, provides various support services; however, these services are not mandatory for degree completion. Forty-six percent of the 2017 initial cohort persisted to degree completion within six years (MTSU Common Data Set 2023-2024). Thus, exploring entities that can increase retention is imperative.

This study examines whether students who had a meaningful engagement with The Career Development Center were retained at a rate higher than their peers. It further explores students' perceptions of whether this engagement influenced their retention and their definition of career readiness.

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CHAPTER I: INTRODUCTION

OVERVIEW

In the evolving landscape of higher education, student retention and timely degree completion have become critical priorities for institutions nationwide. However, as of November 2022, national progress in college completion has stalled (Causey et al., 2022). The six-year completion rate remains unchanged, and the gender gap in graduation rates has widened to its most significant level since 2008, with the fall 2017 national six-year completion rate for men at 58.4 percent, a gap of 7.2 percentage points from 65.6 for women (National Student Clearinghouse Research Center, 2022). The national eight-year completion rate has not yet improved. Among the 2016 cohort, students attending private four-year for-profit institutions and public two-year colleges have experienced the highest stop-out rates, indicating significant challenges for these groups.

When examining the broader statistical landscape of higher education, it becomes clear that many students struggle to graduate on time. Kantrowitz (2021) reveals a sobering reality: fewer than half of college students complete their programs within the expected timeframe. This issue is further compounded by the alarming attrition rate, with more than one million students disengaging yearly from higher education (Kantrowitz, 2021). These figures underscore the complex academic, financial, and personal factors influencing students' academic journeys. Data from the National Center for Education Statistics (2023) shows that of the 2016 cohort of first-time, full-time, bachelor's degree-seeking students at four-year institutions, only 49.1% graduated within four years. Such trends prompt an urgent need to evaluate the effectiveness of institutional support systems, including those beyond the classroom. Traditionally viewed as a bridge to post-graduation employment, University Career Services may play a crucial but underexplored role in fostering student retention. Career Services could offer an impactful solution to the retention and completion challenges plaguing higher education today by aligning students' academic paths with career goals and creating support networks.

Amidst the plethora of options available for continuing education attainment, a recurring question emerges: Is the investment in college education still worth its steep price tag? Empirical evidence indicates that completing a degree yields substantial long-term financial benefits. Wolla et al. (2023) reveal that in 1980, new college graduates earned approximately \$1,000 more than their high school-educated counterparts, with the disparity widening to \$10,000 by mid-career. By 2020, these income differentials had grown significantly more prominent, with college graduates earning nearly \$5,000 more immediately after graduation and a staggering \$18,000 more by mid-career (Wolla et al., 2023). Despite the significant shifts in student enrollment trends in recent years, there is positive development in the rebound of community college enrollment post-pandemic. This sector has played a crucial role in recent undergraduate growth, reporting a 4.4% increase in 2023, accounting for nearly 59% of the total undergraduate growth. The appeal of more affordable, flexible education options such as shorter-term programs and certificates is on the rise, reflecting a changing landscape in higher education.

These trends reflect a shift in how students perceive higher education, with more individuals seeking vocational and shorter-term credentials rather than committing to traditional degree programs. For example, undergraduate certificates grew nearly 10% compared to previous years, signaling a rising preference for non-traditional credentials (National Student Clearinghouse Research Center, 2023). These changes emphasize the need for institutions to adapt their offerings and support structures to better align with students' evolving needs and expectations. In the evolving landscape of higher education, student retention, and timely degree completion have become critical priorities for institutions nationwide. However, as of November 2022, national progress in college completion has stalled (Causey et al., 2022).

While obtaining a college degree can lead to higher lifetime earnings, the rising cost of education often results in student loan debt. As of March 3, 2024, student loan debt in the U.S. totaled \$1.72

trillion (Hanson, 2024). Notably, 2023 marked the first year with a slight decline in total debt, reflecting shifting repayment trends. The average federal loan balance was \$37,088, fluctuating quarterly as repayment policies and individual borrower circumstances evolve (Hanson, 2024). Graduation outcomes and degree completion are concerns for students, families, and universities (Gonzalez et al., 2023). The ability for someone to attain a degree provides the opportunity for increased sociodemographic variables and non-monetary benefits such as better health outcomes and greater civic engagement.

However, public two-year and for-profit four-year institutions still need to grapple with high dropout rates, especially among students from cohorts starting in 2016. First-year student enrollment also shows signs of decline at traditional four-year institutions, suggesting a continued challenge for higher education as students increasingly turn to alternative credentials or other pathways outside conventional degrees. Despite some recovery in student numbers, overall higher education enrollment remains below pre-pandemic levels, highlighting the complexity of meeting evolving student demands and achieving meaningful retention gains (National Student Clearinghouse, 2022; Kantrowitz, 2021).

Student success initiatives allow staff to influence the department's graduation rates and overall success of the student, not only allowing prompt graduation but also leading to post-degree financial and civic success. According to Kowarski (2022), three university systems in different parts of the country have already implemented some success metrics that other universities could assess. What these schools are doing is leading to increased graduation rates. The California System is ensuring full course loads in classes that count toward degree completion and analyzing courses with low pass rates to ensure that the focus is on student learning. Georgia State is issuing microgrants for degree completion, and the University of Texas-Austin emphasized enhancing its advising systems to include career services. All these schools quickly identified that students drop out at a much higher rate if they face academic or financial challenges. Kowarski summarizes the findings to state that a positive sign about a college is if it provides significant guidance to students in times of adversity or uncertainty. Student success, of which

retention is a component of, leads to graduation; and intrusive practices are essential. Who students are, what they do before entering the collegiate experience, and how they attend college influence their chances of completing a degree (Kuh et al., 2006).

University career services are often tasked with bridging the gap between academic and student affairs and meeting the local economy's needs, thus making university career service centers critical to student completion and success in the workforce (Koc & Tsang, 2015). Ma and Pender (2023), state that retention through to degree completion yields more significant employment benefits than students who do not persist. The benefits of a college education extend beyond financial gains including greater access to health care and retirement plans. Students are more likely to prioritize healthy behaviors, pursue civic engagement, and provide better opportunities for their children (Ma & Pender, 2023).

STATEMENT OF THE PROBLEM

Higher education has seen an average dropout rate of 24.1% of first-time undergraduate first-year students and an overall rate of 32.9% of undergraduates who still need to complete their degree program (Hanson, 2023). In addition to one-fourth of students dropping out, federal student loan debt averages almost \$37,000 (Hanson, 2024). Recent data shows that college degree graduates weathered the recession better than peers with a high school diploma, the jobless rate of bachelor's degree holders is less than two percent, and poverty is 3.5 times lower than those with a high school diploma (US Bureau of Labor Statistics, 2023, Carnevale et al. | 2016).

According to a report from the Economic Policy Institute, released on May 9, 2024, the recent unemployment rate for college graduates, defined as workers ages 21 to 24, had recovered 2.5 times faster from the pandemic than those who went through the Great Recession of 2008-2009 (Hanson,

2024). Despite the positive trend in employment outcomes, a critical problem remains student retention and degree attainment within higher education.

PURPOSE OF THE STUDY

Career readiness is an emergent topic within higher education because as higher education costs increase, demonstrating a return on investment is paramount. Students are graduating with staggering debt, with 55% of graduates carrying an average of nearly \$29,000 in student loan debt (Hahn & Tarver, 2024). Of all student debt, 92% comprises federal loans, while the remaining portion comprises private student loans. The percentage of loan makeup explains the variation from the federally reported loan amount of \$37,000 when considering private loans. Additionally, only one in three students make it to their second year of college (MacGregor, 2020). The purpose of this study was to assess if students who had a meaningful career services engagement at the University Career Development Center were retained at a rate higher than or equal to their peers at the same institution. Then, the study explored students' perceptions about their engagement to learn if the meeting contributed to their retention and what the student perception of career readiness is.

SIGNIFICANCE OF STUDY

To thoroughly understand an institution's student success rate, retention is widely recognized as a "key indicator of institutional effectiveness" (Berger et al., 2012, p. 28) signifying its importance to higher education. The commonly utilized formulas for measuring retention assume it exists in a binary form; students either stay at the institution or do not (Hagedorn, 2012). Therefore, it is essential to examine the following research questions to determine the relationship between career services, offices which are often auxiliary and not required, and their impact on student retention. Research has

demonstrated tangible value in student job attainment through engagement with career services. For example, the Class of 2022 NACE Student Survey found that graduating seniors who used at least one career center service received an average of 1.24 job offers, compared to those who did not use any service, who averaged 1.0 job offer (VanDerziel, 2022).

RESEARCH QUESTIONS

To address the dynamic regarding student retention within an institution and the role of career services within the overall experience, the following questions were developed to serve as the driving framework of this study.

- Research Question 1 (RQ1): Were students who had a meaningful career service engagement with the University Career Development Center retained at a rate higher than their peers?
- Research Question 2 (RQ2): What are students' perceptions of the influence of their appointment with the Career Development Center on their retention?
- Research Question 3 (RQ3): What are students' perceptions of career readiness?

HYPOTHESIS

H₀ There is no positive relationship between students' meaningful engagement with the Career Development Center and retention.

CONTEXT

This study is being conducted at Middle Tennessee State University (MTSU), a prominent public institution recognized as a large, four-year university (College Scorecard, 2024). According to the

University's Fall 2023 Factbook, MTSU reported a total enrollment of 20,183 students, with 16,178 attending full-time. Geographically, Middle Tennessee State University is located thirty-two miles from the nearest international airport in Nashville, Tennessee. The surrounding area is characterized by a robust and diverse economy, encompassing manufacturing, office and administrative support, sales, and education (Rutherford Works, 2024).

This study focuses on current students who are either enrolled or have recently graduated within the timeframe of the dataset. Career Services, an auxiliary unit within the Division of Student Affairs, provides various support services; however, these services are not mandatory for degree completion. Forty-six percent of the 2017 initial cohort persisted to degree completion within six years (MTSU Common Data Set 2023-2024).

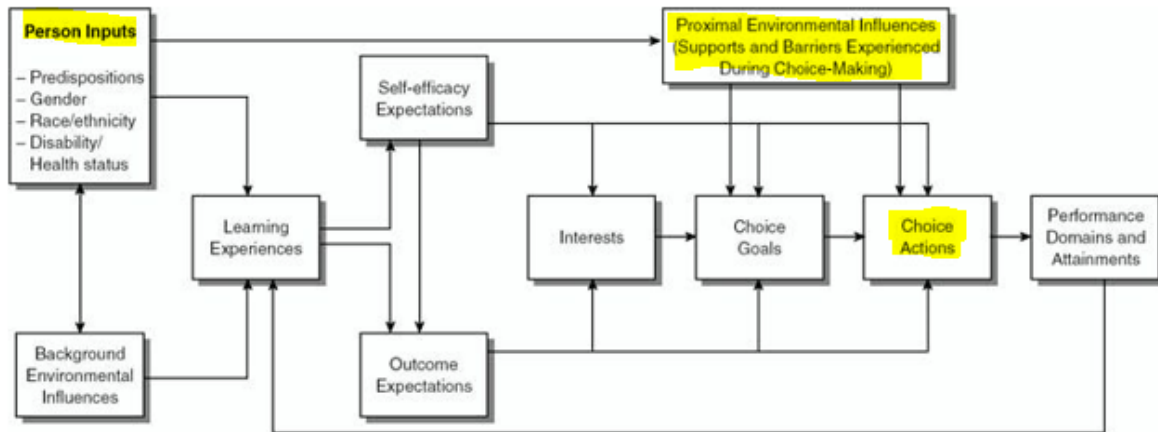
THEORETICAL FRAMEWORK

This study utilizes the Social Cognitive Career Theory (SCCT) framework, grounded in Albert Bandura's Self-Efficacy Theory and General Social Cognitive Theory (Lent, 2013). SCCT looks to understand how people form interests, make choices, and achieve different levels of success in educational and occupational endeavors. (Lent et al., 2000). As noted by Wang, Liu, and Deng (2022) in their examination of the current applications of SCCT, the contemporary career landscape is marked by a "boundaryless" nature due to technological advancements and the evolving, often unstable, relationship between organizations and employees. This emergent model, characterized by complexity, nonlinearity, and unpredictability, underscores the significant impact of environmental factors on individuals. Moreover, SCCT considers the interplay of individual factors that influence career decision-making processes (Lent et al., 1994).

This exploratory study looks primarily at three variables, highlighted below, within the SCCT theory: person inputs, environmental influences (career services), and choice (remaining within the institution) through student perceptions. The study intends to show practical implications of the measured value of an auxiliary service within the institution by learning what elements of students' meaningful engagement with the Career Development Center led them to the choice to remain within the institution.

Figure 1

Social Cognitive Career Theory



Note. This figure was produced by Lent, et al. in 1994 summarizing Social Cognitive Career Theory. From “Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of vocational behavior*, by Lent, R. W., Brown, S. D., & Hackett, G. (1994). 45(1), 79-122, p. 93.

DEFINITIONS AND ABBREVIATIONS

Career Development Theory:

Career development theories offer differing perspectives on how to view individual developmental needs, organizational fit, and the career counseling process. Theories are used to help

individuals find meaningful work that aligns with their traits, aptitudes, personality types, interests, values, and cultural contexts Pence, C. (n.d.).

Career Readiness:

NACE defines career readiness as a foundational platform from which individuals can demonstrate essential core competencies, providing a broad preparation for success in the workplace and lifelong career management (NACE, 2024).

Career Services (Career Center or Career Development Center):

A campus entity that aligns with the institution's mission and supports academic and experiential learning programs to promote career readiness, student learning, and development. In this context, "Career Services" refers to assisting students and other designated clients in developing, evaluating, and implementing career, education, and employment exploration, decisions, and plans (NACE, 2019). For the purposes of this research, the terms "Career Services" and "Career Center" will be used interchangeably to designate a centralized career support unit.

Higher Education:

Higher education includes many institutions providing study beyond secondary education, such as colleges and universities, community colleges, and vocational and technical schools. Higher education administrators, prevention coordinators, and community members are essential in addressing risk factors and promoting safe and supportive environments to maximize opportunities for student success and academic achievement (National Center on safe, supportive learning environments).

Meaningful Career Engagement:

Meaningful career engagement is defined as a career center appointment in one of four categories: assessment interpretation, career development meeting, job search meeting, interview preparation.

Motivation:

Motivation refers to processes that instigate and sustain goal-directed activities. Motivational processes are personal/internal influences that lead to outcomes such as choice, effort, persistence, achievement, and environmental regulation (Schunk, D. H., & DiBenedetto, M. K. 2020).

Student Retention:

Retention, defined as staying in school until completion of a degree, contrasts with dropout, which entails leaving school prematurely. Four primary retention categories exist: institutional, system-wide, within academic majors (disciplines), and individual courses (Hagedorn, 2012).

Student Success:

Increasing the numbers of students from different backgrounds proportionate to their age cohort consistent with national goals for postsecondary attainment who participate in high-quality educational programs and practices culminating in high-quality credentials (e.g., certifications, certificates, degrees) and proficiencies that enable them to be economically self-sufficient and civically responsible post-college" (Kinzie & Kuh, 2017). Common indicators of success include student retention and graduation (Kuh, et al. 2006).

SUMMARY

In 2020, over 235 million students were enrolled in higher education globally, doubling the 100 million students enrolled in 2000 (UNESCO, 2020). While enrollment figures are significant, the ability to retain and graduate students is crucial. The Higher Education Act of 1965 asserts that all Americans should have access to higher education, irrespective of their background. According to the American Federation of Teachers, student success hinges on providing the necessary resources for learning and achievement, including rich curricula, excellent facilities, talented and well-supported faculty, and robust academic standards developed and refined by educators (Aftunion, 2014).

Many institutions have implemented targeted recruitment strategies and programs to meet recruitment and retention goals. Despite these efforts, numerous institutions struggle with student retention, with completion rates falling below fifty percent (Hanson, 2024). The 2024 Economic Policy Institute report found that the unemployment rate for college graduates recovered more quickly from the pandemic, with young graduates experiencing a 2.2% real wage growth from 2020 to 2024. However, universities need help retaining students (deCourcy & Gould, 2024).

CHAPTER II: REVIEW OF LITERATURE

The researcher reviewed the relevant literature to determine if career services contribute to student retention and perceptions of career readiness. The literature review examined the history of work and higher education and its evolution in contributing to the American workforce. The review also explored career decision-making theories, student success in higher education, and the role of career services. Key factors include the definition of career readiness, which encompasses essential workplace competencies, and the commitment of higher education institutions to these services. Examining the multi-dimensional aspects of career readiness and retention allows institutions to assess the impact of career services on institutional retention.

HISTORY OF WORK AND HIGHER EDUCATION

In 1636, the General Court of the Colony of Massachusetts Bay acted, voting to "allocate four hundred pounds towards a school or College, with two hundred pounds to be paid the next year and the remaining two hundred pounds upon completion of the work, with the next Court tasked with determining the location and design" (Thwing, 1906). This initiative led to the establishment of what later became known as Harvard University, followed by William and Mary, and then Yale. The deliberate establishment of educational institutions was initially geared towards men due to societal norms of the time. The goal was to enrich the intellectual capital of communities and to train ministers, doctors, and lawyers to serve their localities. By the time of the American Revolution, there were nine colleges in existence in the United States, and the desire to foster educational advancement within communities only grew thereafter. The proliferation of educational institutions continued as the nation transitioned from the Colonial Era to the Industrial Age. This timeframe also saw an increase in the growth of apprenticeship training (Thwing, 1906).

The rise of industrialization from 1760 until approximately 1840 fundamentally transformed the nature of work, shifting from agrarian to industrial practices and sparking the development of urban centers fueled by a burgeoning wage labor force (Chen, 2024). The 1920 Census was the first in which more than fifty percent of the population lived in urban areas (Yuko, 2023). Concurrently, higher education underwent significant evolution to meet the changing needs of society. In the late 19th century, specialized fields of study began to emerge in response to the growing demands of industrialization (Goldin & Katz, 1999). Chemistry and physics gained prominence, serving as essential disciplines for the manufacturing of steel, rubber, chemicals, and various other industrial goods involved in the production of electricity (Kevles, 1979). Throughout much of the 19th century, American institutions of higher learning primarily focused on teaching rather than research. However, this paradigm began to shift towards the latter part of the century with the establishment of pioneering research centers such as Johns Hopkins University (1876), the inaugural research institution in the United States. Subsequently, institutions like Clark University (1889) and the University of Chicago (1892), with its exclusive focus on graduate programs, further propelled the expansion of research-oriented education (Goldin & Katz, 1999).

Concurrently, the late 1800s saw a rapid expansion of the social sciences, marked by the formation of numerous professional societies dedicated to various areas of biological research. The demand for expertise in scientific and technical fields surged, driven by government initiatives and private sector needs. State and federal governments substantially increased their hiring of chemists and engineers between 1900 and 1940 (Kaplan & Casey, 1958). This era witnessed a transition wherein science supplanted art, and professionalism superseded production. The growth of societies facilitated the dissemination of knowledge and catalyzed significant changes within higher education. Between 1890 and 1910, the period was particularly transformative, characterized by a profound restructuring of higher education as research activities flourished. The Morrill Acts of 1862 and 1890 further bolstered

the expansion of higher education by granting additional funds to institutions specializing in agriculture and mechanics (Nevins, 1962). Amidst these educational transformations, the labor landscape experienced an evolution, transitioning from industrialization to the emergence of labor unions advocating for improved working conditions for employees.

Transitioning from the evolution of higher education to the modern era in the world of work, it is evident that the two spheres evolved in tandem, influenced by technological advancements and societal shifts. From 1890 to 1940, significant changes reshaped both areas, including the emergence of the research university, the decline of independent professional institutions, and the transformation of theological and denomination institutions (Goldin & Katz, 1999). As highlighted by Goldin & Katz (1999), the modern university functions as more than just a provider of higher education services; it serves as a dynamic production center where research in one discipline enhances teaching and research across other areas.

The modern era, spanning from the 1980s to the present, has presented challenges and opportunities in the world of work. The decline of manufacturing industries, driven by globalization and deindustrialization, has impacted the labor movement (Plunkert, 1990). Efforts to undermine unions, such as the implementation of 'right-to-work' laws and anti-union campaigns, have complicated the landscape for organized labor. As work shifts toward service-oriented and technology-driven sectors, the demand for a college education became increasingly vital. Higher education equips individuals with the necessary skills for these emerging roles and enhances their employability and potential earnings (Carnevale et al., 2018). However, amidst these challenges, it is important to highlight the ongoing struggles and victories in the labor movement. Examples include the Fight for \$15 movement, which advocates higher minimum wages, and a resurgence of interest in unionization, particularly within sectors such as technology and gig work (Lathrop et al., 2022).

A 2016 Pew Research Report states that the continually evolving economic landscape is transforming employment opportunities. Jobs increasingly require higher-level social or analytical skills, and the growing demand for positions necessitates more significant preparation, whether through education, experience, or other forms of training (Pew, 2016). Furthermore, a report from September 2023 indicates that the labor market has undergone significant changes, influenced by new business practices, policies, and shifting social norms. The Great Recession of 2007–2009 and the pandemic of 2020 have notably impacted the world of work and the labor market, which continues to evolve (Hodge, Andreason, & Van Horn, 2023).

As the economic shifts continuously reshape the labor market, the escalating cost of higher education emphasizes the need for students to make informed career decisions and become career ready. Goldin and Katz (1999) underscore this urgency by highlighting the substantial returns to college education. Based on 1915 Iowa State Census data, Goldin and Katz's analysis showed that a standard log earnings regression was over 12 percent a year for young workers— similar to estimates for the 1990s. This financial incentive underscores the importance of continuing education, especially in states with high-quality yet affordable public systems. With the changes in the world of work and the increased demand for a college degree, more students are entering the collegiate experience without a clear idea of a career choice upon the completion of school, thus leading to lower graduation rates and institutions of higher education worried about student success, specifically retention, which leads to graduation. While a lot has changed since the 1915 Iowa State Census, recent data shows that college degree graduates weathered the recession better than peers with a high school diploma, the jobless rate of bachelor's degree holders is less than two percent, and poverty is 3.5 times lower than those with a high school diploma (Carnevale et al. 2016; US Bureau of Labor Statistics, 2023).

CAREER DECISION MAKING THEORIES

Just as higher education and the world of work have evolved due to economic and societal changes, so have career services to help individuals along their journeys. Career guidance in higher education can be traced back to the emergence of vocational guidance in the early 1900s with the creation of the Vocations Bureau located in the Civic Service House in Boston, MA, a public service entity that helped new immigrants transition to life in America (Dey & Cruzvergara, 2014; Vinson et al., 2011). Now more than ever, people are focusing on wanting to understand what the return on investment is while engaging in higher education, thus increasing the demand for students to be career ready (Flores, 2015).

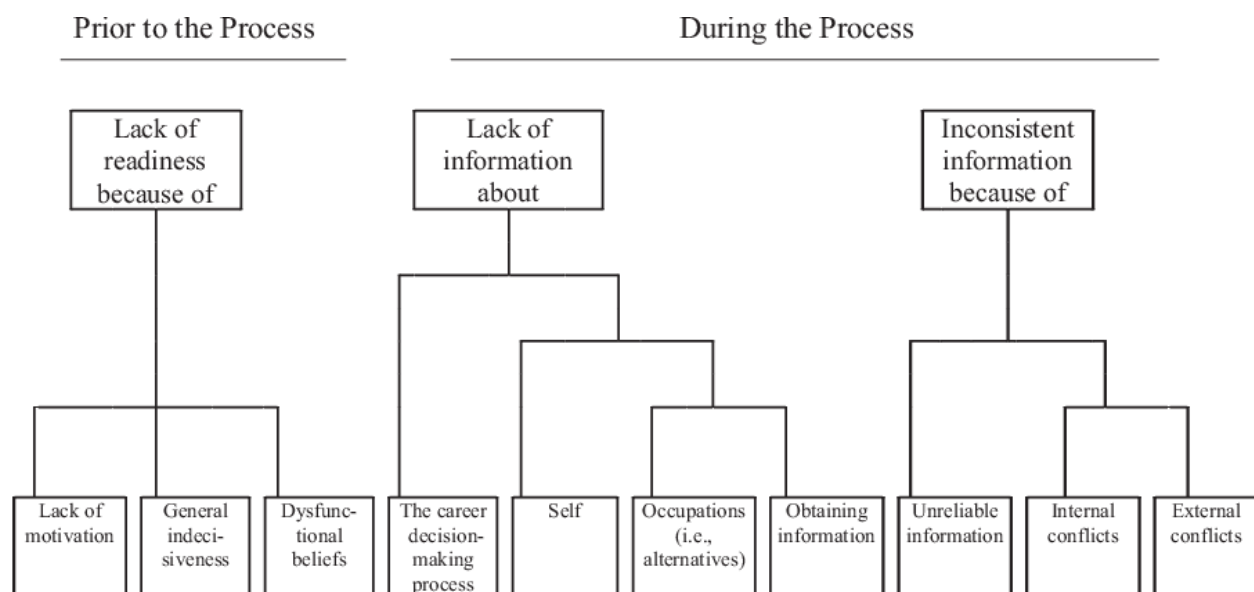
Making a career decision can often feel daunting, as it is a process that individuals navigate at various stages, each presenting unique developmental tasks (Buehler, 1933; Super, 1957). Family dynamics, exposure to different environments, educational support, and geographic location significantly influence career decision-making alongside an individual's developmental phase (Lent et al., 1994). For instance, students from lower socioeconomic backgrounds and first-generation college students may experience a lack of awareness and limited opportunities, which can hinder their career choices (Deng et al., 2022). Furthermore, students who are uncertain about their career paths may face anxiety related to decision-making (Bullock-Yowell et al., 2015). This anxiety can impede their ability to make informed decisions, ultimately affecting their career readiness, self-confidence, and the influences that guide their choices (Fouad et al., 2009). Similarly, individuals who delay making career decisions and struggle with anxiety regarding their options often encounter negative consequences, such as reduced employment opportunities, lower income, and decreased personal and professional confidence (Bullock-Yowell et al., 2014).

Career Decision Making Difficulties Theory

Before individuals can engage in career readiness, they must go through the career decision-making process. Gati et al. (1996) identified and researched three pillars of career decision-making difficulties after examining various theoretical approaches that have looked at career indecision, and each focus on a different aspect. Gati et al. (1996) state that from their perspective, the psychodynamic approach categorizes individual problems based on their internal origins; however, a significant challenge lies in the fact that these approaches tend to focus on a singular aspect. Consequently, their categorizations are limited, making them neither comprehensive nor inclusive. The taxonomy of career decision-making difficulties encompasses a dynamic representation of what individuals can go through as they try to engage in the decision-making process. Before engaging in the process, an individual may lack readiness due to a lack of motivation, indecisiveness, and dysfunctional myths. Once an individual identifies that they want to engage in the process, they may have a lack of information about self, occupations, and ways of obtaining information as well as inconsistent information due to internal or external conflicts or unreliable information.

Figure 2

Taxonomy of Career Decision Making Difficulties



Note. This figure was produced by Gati, et al. in 1996 summarizing the taxonomy of career decision making difficulties. From “Gati, I., Krausz, M., & Osipow, S. H. A taxonomy of difficulties in career decision making. *Journal of Counseling Psychology*, 43(4), 510–526. P 512.

In most cultures, starting from adolescence, the concept of job and career begins to play a significant role in shaping an individual's life. According to Friedman and Wallace (1968), during their time, there was a prevailing belief that:

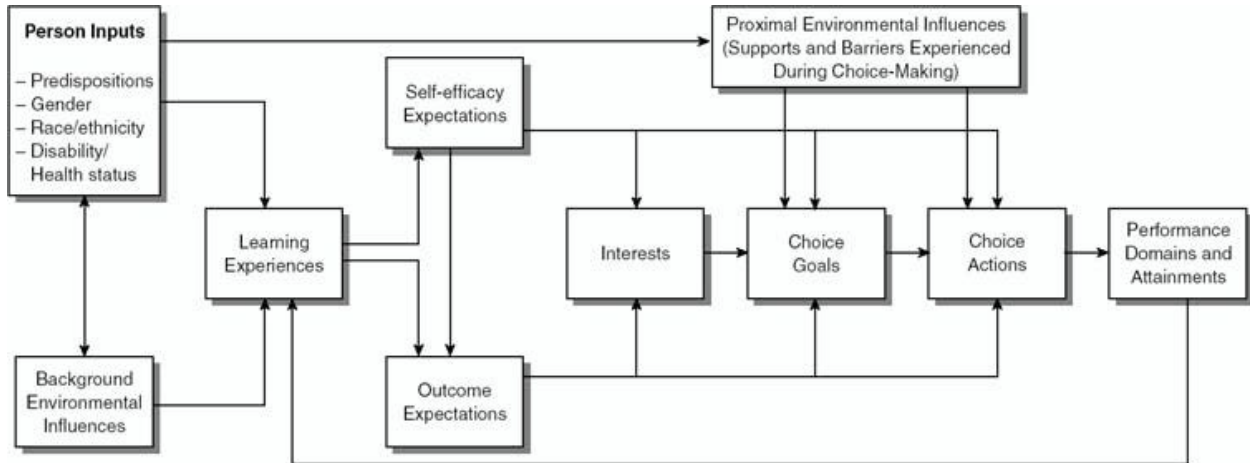
One of the major milestones in the life of a person is reached when he begins to contemplate job interests and opportunities and to make plans to obtain the education and skills required for the work of his choice. For most individuals in Western culture, this process begins in late adolescence and is completed soon thereafter (p. 246).

Social Cognitive Career Theory

Lent et al (1994) established a unique approach toward a comprehensive social cognitive theory called the Social Cognitive Career Theory (SCCT). This theory actively explores three vital aspects of career development: the genesis of fundamental and academic interests, the process of making educational and career choices, and the attainment of academic and career success. Rooted in Bandura's work on self-efficacy beliefs, outcome expectations, and goals, SCCT propels individuals towards engaging in, selecting, and excelling in activities where they harbor robust self-efficacy beliefs, provided they possess requisite skills and are bolstered by supportive environments (Lent et al. 1994).

Figure 3

Social Cognitive Career Theory



Note. This figure was produced by Lent, et al. in 1994 summarizing Social Cognitive Career Theory. From “Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of vocational behavior*, by Lent, R. W., Brown, S. D., & Hackett, G. (1994). 45(1), 79-122, p. 93.

The increasing emphasis on personal development and continued education has significantly increased global higher education enrollment. In 2020, over 235 million students were enrolled in higher education institutions worldwide, more than double the 100 million students in 2000 (UNESCO, 2020). This trend has resulted in more individuals pursuing advanced degrees before starting their careers. Social Cognitive Career Theory (SCCT) and the Decision-Making Taxonomy are central to this study because they highlight the influence of personal, environmental, and behavioral factors on career development. While the researcher acknowledges that other theories have since been developed, these two frameworks remain foundational in understanding how these factors interact to shape individuals' career paths. SCCT enables individuals to evaluate their aptitudes through feedback from their environment and personal experiences (Lent et al., 1994). While SCCT emphasizes self-efficacy and planned decision-making, it also recognizes the impact of chance events and unpredictable

circumstances on career paths, aligning with other more recent career development theories such as Chaos Theory (Pryor & Bright, 2003).

STUDENT SUCCESS IN HIGHER EDUCATION

While data tells the numerical significance of a college degree, it does not address the social-emotional influence of the collegiate experience and the necessity of universities to create a culture of well-being and to develop a continuum of care. Higher education must be an incubator for social and emotional development to allow students to engage in the learning process of content and develop core competencies to be marketable in the world of work. As stated by Castro and Clyde (2018) in the *Social Innovations Journal*:

In the words of Dale Carnegie, "Even in such technical lines as engineering, about 15 percent of one's financial success is due to one's technical knowledge and about 85 percent is due to skill in human engineering, to personality and the ability to lead people." Employers understand that education and experience do not merely impact academic knowledge and intellectual skills. College education also provides a foundation for social and emotional development and psychological maturation."

Kinzie and Kuh in their 2017 article in *Change Magazine* titled *Reframing Student Success in College: Advancing Know What and Know How* define student success as "increasing the numbers of students from different backgrounds proportionate to their age cohort consistent with national goals for postsecondary attainment who participate in high-quality educational programs and practices culminating in high-quality credentials (e.g., certifications, certificates, degrees) and proficiencies that enable them to be economically self-sufficient and civically responsible post-college" (p 20). Student success is a dynamic function of engagement, education, and proficiency development to enhance the future workforce. If students understand and actively engage in the career decision making process, they

are more likely to be retained, graduate, and acquire better employment opportunities. One of the most vital components of student success is the ability for students to attain employment post academic experience (Kuh et al. 2006).

A degree enables individuals to enhance their sociodemographic outcomes and enjoy non-monetary benefits, such as improved health and increased civic engagement (Gonzalez et al., 2023). To gain meaningful insights, it is essential to mine, refine, integrate, and analyze data related to these outcomes (Parnell et al., 2018, p. 1). Information on student retention and time to degree completion is crucial. Graduation and degree completion data offer valuable insights for assessing various factors, including affordability, financial resources, access to information, mindset, preparedness, and the availability of support services and networks (Gonzalez et al., 2023). Moreover, within support services, fostering career readiness actively facilitates favorable post-degree placement outcomes. The 2020 pandemic reshaped the work landscape, prompting universities to prioritize both student degree attainment and well-being. As Abrams stated in an *American Psychological Association* article, "Creating a culture of well-being must be the collective responsibility of everyone at the university" (Abrams, 2022).

Who students are, what they do before entering college, and how they attend college significantly influence their chances of completing a degree (Kuh et al., 2006). Higher education institutions must continually reevaluate institutional conditions and their impact on student behaviors to ensure that metrics such as retention and time to degree completion align with supporting the educational mission to meet funding requirements. Institutional conditions are crucial because graduation outcomes and degree completion are key concerns for students, families, and universities. While focusing on individual student success is important, these metrics collectively influence how states allocate support for higher education through funding mechanisms such as incremental, formula,

or performance funding. Performance funding emphasizes institutional outcomes, with states primarily evaluating success based on the number of degrees conferred (Ward et al., 2020).

CAREER SERVICES IN HIGHER EDUCATION

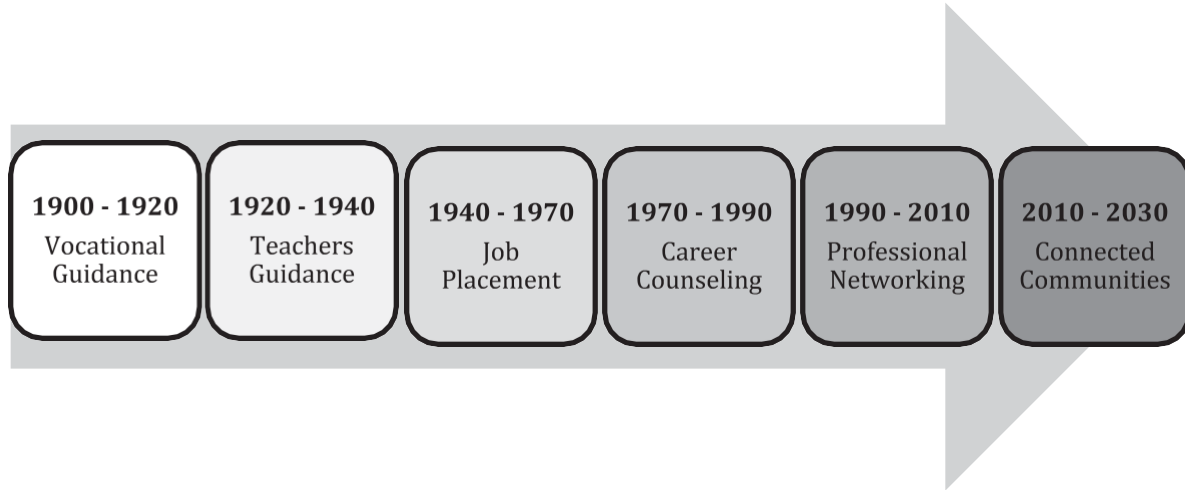
Career services began in the early 1900s to assist with vocational placement. At that time, vocational education wasn't meant to prepare students for college. The Smith-Hughes Act of 1917 first authorized federal funding for vocational education in American schools and defined vocational education as preparation for careers not requiring a bachelor's degree. "The early vocational education was driven by a philosophy of fitting people to their probable destinies," said Jim Stone, director of the National Research Center for Career and Technical Education (Hanford, 2014).

In the 1920s and 1930s, vocational guidance for teachers emerged due to the increasing demand for more educators. During the 1940s and through the 1960s, the need to place GI Bill veterans into jobs led to the establishment of new job placement centers on college campuses (Dey & Cruzvergara, 2014). In post-secondary educational settings, career centers were typically housed in either counseling centers or placement offices. More recently, career centers have been in specialized offices, such as career services offices (CSOs) (Vinson, Reardon, & Bertoch, 2014).

As Hoyt mentions in his book *Application of the Concept of Career Education to Higher Education* (1976), career education is a concept rather than a program. The concept should provide proper emphasis both philosophically and operationally to one of education's fundamental goals: education is preparation for work. As Career Education and Career Services are often interchangeable, the progression of Career Services in higher education has evolved from a transactional model, focused solely on vocational guidance and job placement, to one characterized by connection and collaboration (Dey & Cruzvergara, 2014).

Figure 4

Evolution of Career Services in Higher Education



Note: This figure was produced by Dey, F., & Cruzvergara, C. Y in 2014 summarizing the evolution of career services. From “Evolution of career services in higher education. *New Directions for Student Services*”, 2014(148)., 5–18. P. 6.

The integration of college with career services has long been a primary objective in higher education, tracing back to the colonial era. Early colleges were established with the purpose of training students to assume roles as clergy members and community leaders (Dey & Cruzvergara, 2014). Since then, curricula have been developed to provide students with the skills and knowledge necessary for specific career paths (Cohen & Kisker, 2010). According to McCabe (2000) in their report *No One to Waste: A Report to Public Decision-Makers and Community College Leaders*, as many as four fifths of high school graduates require some form of post-secondary education to achieve economic self-sufficiency and navigate the increasingly complex social, political, and cultural challenges they will encounter. Students enroll in college with the aim of securing meaningful employment and enhancing their competitiveness in the workforce, thereby striving for economic self-sufficiency (Kuh et al. 2006).

HIGHER EDUCATION COMMITMENT TO CAREER SERVICES

Higher education institutions are responsible for equipping students with the skills, knowledge, and personal attributes needed for the early stages of their careers (Bennett et al., 2016). However, a report by Barton et al. (2013), titled *Education to Employment: Designing a System that Works*, found that 40% of the youth surveyed were unfamiliar with market conditions or the requirements for well-known professions. This highlights the need for a more substantial commitment to career services within higher education.

To address the issue of employability and career readiness, universities are increasingly focusing on integrating essential employment skills—such as communication, teamwork, and self-management—into their academic curricula (Jackson, 2016). According to Andrewartha and Harvey (2017), there is growing pressure on universities to showcase the capabilities and prospects of their graduates to prospective employers. Additionally, their research shows that students from low socio-economic backgrounds, as well as those from regional and Indigenous communities, have lower completion rates compared to their peers. Andrewartha and Harvey further explain that university career services play a crucial role in enhancing student employability, thanks to their wide range of services.

The 2023 National Alumni Career Mobility (NACM) report emphasizes the significance of engaging with career services based on a survey of over 9,000 alums from 38 universities who were five- and ten-years post-graduation. Notably, 19% of the respondents stated that their institutions significantly invested in career preparation as identified in Figure 5 *Institutional Career Investment*. Furthermore, those who felt that their institution assisted them in creating a career plan were 6.3 times more likely to achieve high scores on the Career Mobility Index (CMI). This index measures career pathway preparation, career satisfaction, and economic mobility, going beyond mere job titles and salaries (NACM, 2023). This data highlights a significant opportunity for higher education institutions to enhance their return on investment by prioritizing initiatives focused on career readiness.

Figure 5

Institutional Career Investment



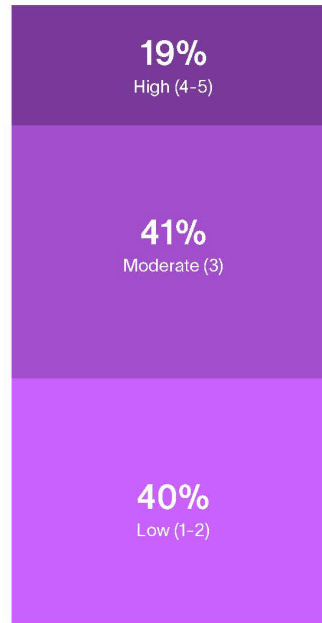
Institutional Career Investment

Institutional Career Investment is measured using the following questions (see Appendix B for detailed methodology):

- My institution invested in my career.
- My institution helped me to understand career opportunities.
- My institution helped me create a plan for my career.
- My institution helped me envision my career options.
- My institution helped me to network with employers.
- My institution helped me to network with alumni.

Overall, only 19% of respondents scored high on institutional career investment, leaving a considerable gap for campuses to improve ROI through intentionally investing in career preparation. The items that make up the factor may be a good place to start: networking with employers and alumni, creating a plan for career, and understanding career opportunities.

The data is beginning to show gaps between motivations to obtain a degree, the need for career decision making skills, and alumni's scores on Career Preparation and Institutional Career Investment. These gaps give us some context for how respondents are defining "return" on a higher education degree and if campuses are meeting those expectations. More can be discovered by looking at better-defined measurements of ROI.



Note: This figure was produced by The National Alumni Career Mobility Annual Report 2023. P. 12

Zunker (1986) notes, the evolution of career guidance has been primarily driven by societal changes and issues. According to Ceperley (2013), career service directors and staff face the challenge of improving employment prospects without a fully integrated campus approach but with shared accountability for student outcomes. Today, 85% of career centers are centralized with cross-campus responsibilities (Ceperley, 2013). Ceperley also highlights that over the past 25 years, campus-wide and

major-specific advising has expanded significantly, surpassing career centers and other student service functions. A 2023 Student Voice Survey revealed that while many students recognize the importance of career center services, approximately one-third have yet to engage with them, highlighting a disconnect between the services student's value and those they utilize. For example, 62% of students believe career centers should help with internships, yet only 17% report receiving such assistance. Similarly, 46% value professional headshots, but just 8% have accessed this service. These gaps indicate a need for career centers to align offerings more closely with student expectations and promote awareness of available resources (Flaherty, 2023).

To examine the dynamics within higher education, Makela et al. (2014) conducted a study on career service utilization. Their findings revealed that a significant portion of respondents who had not accessed these services cited reasons such as feeling unprepared to utilize them (42%) or being too busy (40%). This insight resonates with Astin's theory of involvement, emphasizing that time is a crucial resource for students in higher education. Addressing this challenge is pivotal in helping students acquire the necessary competencies for transitioning out of college and into the workforce effectively.

CAREER READINESS DEFINED

Career readiness is an important topic in higher education due to rising costs and the pressure to secure a job and repay student loans after graduation (McGee-Newton, 2019). Currently, 55% of graduates have student loan debt, with federal loans accounting for 92% of all student debt, with the average reported loan amount of \$37,000 (Hahn & Tarver, 2024). Additionally, only one in three students make it to their second year of college (MacGregor, 2020), potentially accruing debt without reaping the benefits of degree attainment.

The U.S. Chamber of Commerce Foundation (n.d.) highlights that career readiness skills, also known as employability skills, actively equip students with a competitive edge during interviews and

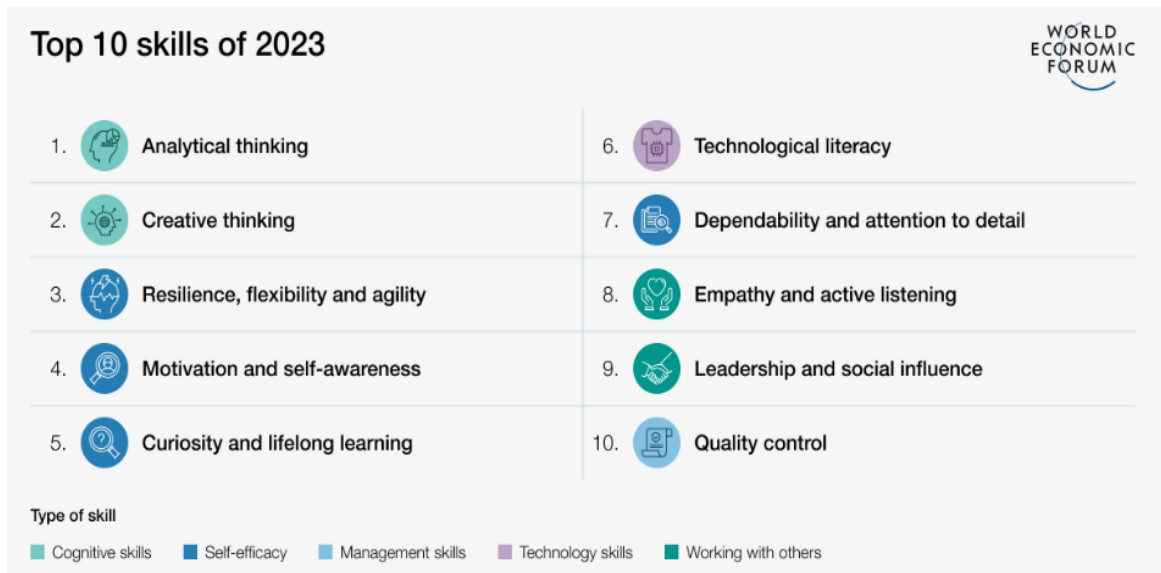
internships. According to the U.S. Department of Education (2013), students must be equipped to thrive in a world that demands more than just basic technical skills. Career readiness skills enable students to think critically, solve problems, and achieve success in workplace settings. Additionally, a publication by the National Association of Colleges and Employers (NACE), titled *Recruiters and Students have Differing Perceptions of New Grads Proficiency in Competencies* underscores significant disparities between employers' perceptions of students entering the job market and how students view themselves as they enter the workforce (Gray, 2024). Notably, employers frequently rate the proficiency of recent college graduates lower than the students themselves, indicating a significant skills gap perceived by employers but not acknowledged by college students. Similarly, Makela et al. (2014) found that both users and non-users of career services perceive growth in developmental areas targeted by higher education, such as critical thinking and problem-solving. However, when focusing on learning outcomes related to career development competencies, career service users consistently reported greater growth in confidence, ability, and knowledge compared to non-users.

NACE defines career readiness as a foundational platform through which individuals demonstrate essential core competencies, “that broadly prepare the college educated for workplace success and lifelong career management” (NACE, 2024). Educating students on the importance of career readiness and skill cultivation falls on various groups within higher education, ranging from academic classrooms to co-curricular programming, internships, student employment, and career services (Cavazos, 2021). However, as Jackson (2016) notes, a more comprehensive approach that goes beyond a skills-based perspective is crucial to fully capture the complexity of graduate work readiness.

Enhancing career readiness within higher education is more critical than ever. The World Economic Forum predicts that between now and 2027, 44% of workers' core skills will be disrupted, with the top ten skills of 2023 all being soft skills (Masterson, 2023). The World Economic Forum's top ten skills for 2023 include:

Figure 6

World Economic Forum Top 10 Skills



Comparatively, NACE (2024) identifies their career competencies as:

- Career and Self-Development
- Communication
- Critical Thinking
- Equity and Inclusion
- Leadership
- Professionalism
- Teamwork
- Technology

The alignment between the World Economic Forum's top skills and NACE's career competencies highlights the importance of a comprehensive approach to career readiness, integrating both soft and hard skills to prepare students for the evolving demands of the workforce. Career readiness is the foundation for a successful career (NACE, 2023). Similarly, Conley (2011) stated career readiness reflects the knowledge, skills and learning strategies that are required to begin a career pathway, including common expectations about workplace conduct. These competencies, which are independent of technical expertise, have been identified as essential for success in employment opportunities. The NACE Career Readiness Competencies are unique in that they focus on core or transferable skills. The eight

competencies are applicable to career-oriented jobs for two- and four-year graduates (Development and Validation of the NACE Career Readiness Competencies, 2022). They also offer employers a framework for developing talent through internships and experiential programs. Peck et. al (2016), report that the conversation about the ability of higher education to produce graduates with the skills necessary for the workforce is of great importance. Whether designated as competencies or soft skills, as highlighted by Kamenetz (2015) the lexicon surrounding these proficiencies exhibits a plethora of interchangeable terms, continually evolving and expanding. Thus, irrespective of nomenclature, the consensus prevails: the cultivation of soft skills stands as an imperative facet in professional preparedness.

RETENTION

In the second edition of *College Student Retention*, Linda Hagedorn (2012) discusses the dichotomous measures widely used in educational research and practice: retention and dropout. Retention, defined as staying in school until completion of a degree, contrasts with dropout, which entails leaving school prematurely. While these concepts are often viewed as opposites, Alexander Astin raised concerns about the oversimplification of the dropout concept in his book *Predicting Academic Performance in College* (1971). Astin argued that the term "dropout" lacks a precise definition, as individuals categorized as dropouts may ultimately re-engage with education, and vice versa. He noted the practical challenge of achieving a perfect classification, which would require all students to either complete college or permanently disengage from education. Relying solely on one measure of retention fails to provide a comprehensive picture of student persistence. To gain a thorough understanding of an institution's student success rate, it is essential to calculate and report multiple indicators. As Kuh and colleagues (2006) point out there are multiple theoretical perspectives on student success in college, including sociological, organizational, psychological, cultural, and economic perspectives. However,

student behaviors, activities, and experiences have a cumulative positive effect on earnings, values development, cognitive development and lifelong learning outcomes.

Each of the six regional accrediting bodies in the United States has its own distinct set of standards for evaluating member institutions. To ensure accountability and transparency in their operations, these accrediting bodies emphasize three critical functions central to this book: assessment of student learning outcomes, assessment of overall institutional effectiveness, and ongoing strategic planning informed by these assessments (Middaugh, 2011). While retention is widely recognized as a "key indicator of institutional effectiveness" (Berger et al., 2012, p. 28), the commonly used formulas typically assume retention exists in a binary form—students either remain at an institution or they do not. However, retention manifests in various forms and can be categorized into four primary types: institutional, system-wide, within academic majors (disciplines), and within individual courses (Hagedorn, 2012).

Institutional retention, the most straightforward and commonly measured type, evaluates the proportion of students who remain enrolled at the same institution from year to year, forming the basis for assessing overall student success in most funding formulas. In contrast, system retention focuses on the student rather than the institution, considering a student who transfers from one institution to another as persisting within the system. This metric accounts for the common occurrence of transfers among different campuses, states, or institutional types (e.g., for-profit institutions). However, tracking system persistence involves significant expenses and challenges.

The National Student Clearinghouse is the primary entity engaged in national tracking efforts and the data is frequently utilized for system persistence measurements. It is important to acknowledge that the data was not originally intended for this purpose, and as of March 2024, only 3,550 colleges and universities were within the system. Thus, not all institutions participate in the reporting process. A different approach to retention focuses on a narrower scope by examining persistence within a particular

area of study, discipline, or department. At the most granular level, retention is assessed through course completion. Analyzing retention at the course level enables the identification of specific courses that students fail to complete despite remaining enrolled at the institution.

Aside from overall university retention data, there is minimal information on the specific impact of career services on student retention across many universities. Although some dissertations have explored this topic with favorable outcomes, such as W. Sang's (2015) dissertation: *Career Development Among College Students: Determining the Influence of Career Services on Student Persistence to Graduation*—widely reported data is lacking. This gap was highlighted in an email correspondence with Josh Kahn, Associate Director of Research and Public Policy at the National Association of Colleges and Employers, in May 2024. Kahn indicated that their organization has not conducted a formal published study on the effect of career services on retention (J. Kahn, personal communication, May 2024). However, he referred me to Colorado State University, which he identified as the only institution that had conducted such research.

Colorado State University (2018) research indicated that career services were positively associated with student persistence into the second and third fall semesters. The report indicated that students who visited career services were more likely to have discussed their career plans with faculty or staff and participated in work-related activities (Colorado State University, Office of Institutional Research, Planning and Effectiveness, 2018, p. 8).

SUMMARY

In recent years, numerous articles have highlighted the shortcomings of higher education, particularly in fulfilling its promise of preparing students for the job market (Chamorro-Premuzic & Frankiewicz, 2019). In a recent Forbes article, Mancigliio (2020) identifies five areas where higher

education falls short including the need for mandatory skills training, particularly in job search techniques post-graduation, with only 10% of students utilizing available services. Other criticisms identified by Mancigli include inadequate resources compared to the demand, inaccessible career services, outdated content, and staff with insufficient expertise.

Similarly, in 2019, a blog post titled "Why students avoid career centers" by Vita Navis references data from Makela and the University of Illinois indicating that many students do not engage with career services because they identified that they were not yet ready. The data was reported primarily by first-year students (46% of these responses) and sophomores (34% of these responses). The data suggests that students feel vocational advising is something they must be "prepared" for (Vita Navis, 2019) or an activity that's somehow irrelevant to them early in their college careers. Career services are often short-staffed, with a ratio of 1 staff member for every 2,263 students (NACE, 2022). Despite this challenge, research indicates that students who receive career guidance are more likely to experience positive economic outcomes (Strada, 2024). The State Opportunity Index published by Strada Education Foundation (2024) highlights the value of quality coaching to help students connect their education to their careers. However, fewer than a quarter of graduates' report receiving this support.

These observations underscore the need for higher education institutions to reevaluate their approach to career preparation and make resources more accessible and relevant to students at all stages of their academic careers. In May 2022, Fran Berrick criticized career services, advocating for a significant overhaul. Berrick (2022) highlighted successful programs that possess three key distinguishing features: category experts for specialized career tracks, a commitment to programs that facilitate employer and student connections and programs that prioritize creating accessible environments with multiple points of entry for individuals seeking career support. Regardless of the recommendations for improvement from multiple areas, career services and career readiness are a vital component of the student experience.

Career Readiness and the ability for students to articulate and demonstrate the skills needed for an ever-changing world of work is at an all-time high. As Contomanolis et al (2015), mention in their NACE Journal article titled: “The Future of Career Services is Now” the authors outline the need for universities to invest in staffing, engage in co-curricular collaboration and utilize technology to elevate the engagement of students to be able to graduate with the ability to understand the application of the content that they have learned and apply it to the world of work is imperative.

In addition to fostering interdisciplinary collaboration across campus, the investment in establishing knowledge infrastructures is crucial for integrating systems, interactions, and technologies (Borgman & Brand, 2022). These knowledge infrastructures encompass a robust network of people, artifacts, and institutions dedicated to generating, sharing, and maintaining various forms of knowledge and data (Borgman & Brand, 2022). In alignment with an interdisciplinary approach and best practices, the American Association of Colleges and Universities (AAC&U) recommends high-impact practices supported by evidence of their significant educational benefits, especially for students historically underserved by higher education (AAC&U, 2024). These practices vary in form and are tailored to learner characteristics and institutional priorities, and many enhance student career readiness. Ghai (2023) notes that high-impact practices such as internships, co-op programs, and capstone projects equip students with essential workplace skills, including teamwork, leadership, and project management. Ghai (2023) also explains that these practices, including undergraduate research, service learning, and study abroad, increase student engagement and retention. These experiences help students feel more connected to their education and develop critical thinking, problem-solving, and communication skills—all integral to career readiness. Moreover, the perception of student career readiness by employers significantly impacts post-graduation employment. Pinto and Ramalheira (2017) indicate that employers view high-achieving, extracurricular-engaged students as possessing enhanced personal and professional traits.

Are career services critical, and how do they impact the students' employability? According to the results of the 2022 Student Survey, which had 15,860 respondents and was conducted by the National Association of Colleges and Employers (VanDerziel, 2022) graduating seniors who used at least one career service—any service—received an average of 1.24 job offers. Furthermore, for every additional service they used beyond just one, their average number of job offers increased by 0.05. In comparison, graduating seniors who didn't use any of the career center's services averaged 1.0 job offers. The most impactful of the individual services that were examined include: help with a search for an internship or co-op, mock interviews, and networking preparation. This review portrays the fact that many entities are demanding an increased focus on career services and its value within the higher education system and implications for student retention. Student retention is important because it honors everyone's journey, and not only leads to a degree, but also high job offer rates, and the ability to attain more money over the course of their lifetime. Having support in the academic journey allows students to not feel lost and a sense of belonging with their institution.

CHAPTER III: METHODOLOGY

INTRODUCTION

Higher education has faced significant challenges with student retention and degree completion. The average dropout rate for first-time undergraduate first-year students is 24.1%, while the overall rate of undergraduates who do not complete their degree programs stands at 32.9% (Hanson, 2023). In addition to the dropout rates, federal student loan debt averages nearly \$37,000 per borrower (Hanson, 2024).

Despite these challenges, recent data indicates that college degree graduates fare better economically than their peers with only a high school diploma. The jobless rate for bachelor's degree holders is less than two percent, and their poverty rate is 3.5 times lower compared to those with just a high school diploma (US Bureau of Labor Statistics, 2023; Carnevale et al., 2016). Furthermore, the Economic Policy Institute's latest report, released on May 9, 2024, shows that the recent unemployment rate for college graduates, defined as workers ages 21 to 24, has recovered 2.5 times faster from the pandemic than from the Great Recession of 2008-2009 (Hanson, 2024). While these positive employment outcomes highlight the value of a college degree, a critical issue remains student retention and degree attainment within higher education.

PURPOSE OF STUDY

Career readiness is an emergent topic within higher education because as higher education costs increase, demonstrating a return on investment is paramount. Students are graduating with staggering debt, with 55% of graduates carrying an average of nearly \$29,000 in student loan debt (Hahn & Tarver, 2024). Of all student debt, 92% comprises federal loans, while the remaining portion comprises private student loans. The percentage of loan makeup explains the variation from the federally reported loan amount of \$37,000 when considering private loans. Additionally, only one in three students make it to

their second year of college (MacGregor, 2020). The purpose of this study is to assess if students who had a meaningful career services engagement at the University Career Development Center are retained at a rate higher than or equal to their peers at the same institution. Then, the study will explore students' perceptions about their engagement to learn if the meeting contributes to their retention and what the student perception of career readiness is.

RESEARCH QUESTIONS

To address the dynamic regarding student retention within an institution and the role of career services within the overall experience, the following questions were developed to serve as the driving framework of this study.

- Research Question 1 (RQ1): Were students who had a meaningful career service engagement with the University Career Development Center retained at a rate higher than their peers?
- Research Question 2 (RQ2): What are students' perceptions of the influence of their appointment with the Career Development Center on their retention?
- Research Question 3 (RQ3): What are students' perceptions of career readiness?

Hypothesis

H₀ There is no positive relationship between students' meaningful engagement with Career Development Center and retention.

RESEARCH DESIGN

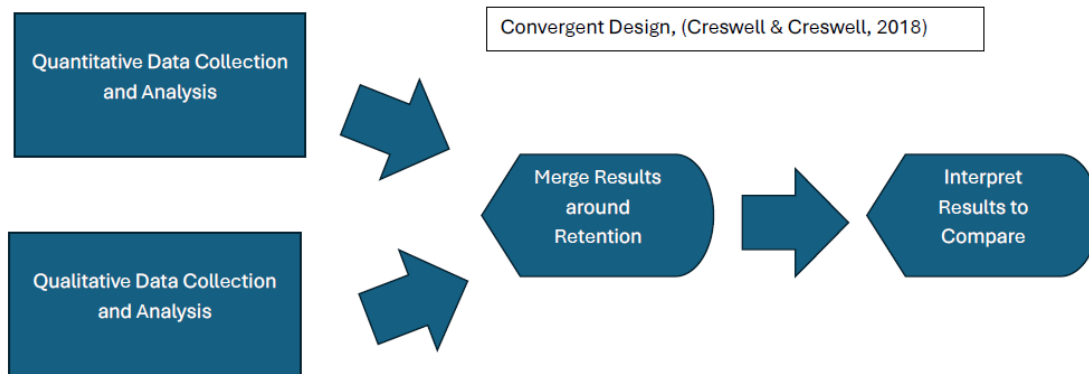
This study employs a mixed methods approach. A mixed methods approach is one that integrates both qualitative and quantitative data, which Creswell and Creswell (2018) state can provide

more insight into a problem and provide a stronger understanding of the problem or question than by itself. Qualitative data can be used to assess the validity of quantitative findings. The quantitative data is used to help generate the qualitative sample or support findings from the qualitative data, as stated by Jick (1979). The qualitative inquiry is exploratory in nature and will be used to explore if career services are a retention tool based on the student's perspective. Exploratory data is meant to probe a topic when the variable and theory base are unknown (Creswell & Creswell, 2018).

This study employed a convergent triangulation design. The convergent approach utilizes qualitative methods to illuminate "behavior in context" (Cronbach, 1975) where situational factors play a prominent role. In sum, triangulation, which prominently involves qualitative methods, can potentially generate what anthropologists call "holistic work" or "thick description" (Jick, 1979).

Figure 7

Convergent Design



Note: This image is from Creswell and Creswell, 2018.

ROLE OF RESEARCHER

The researcher in this study on career services as a retention tool possesses a diverse background in both public and private sectors. Presently, they lead the University Career Development Center at Middle Tennessee State University. This topic is of particular interest to the researcher because career services in higher education receives variable levels of support depending on the size of the institution, and having an educated workforce of the future is vital for a thriving economy. However, minimal studies have investigated the impact of career service engagement on retention. The researcher believes that students who understand how to articulate what they are learning in the classroom to the world of work are more likely to be retained within the institution. While the National Association of Colleges and Employers (2022) has conducted a study demonstrating positive outcomes on student job offers through career service engagement, there is limited research on the actual role of The Career Development Center in student retention.

POPULATION AND SAMPLE

This study was conducted at a prominent public institution recognized as a large, four-year university in Tennessee (College Scorecard, 2024). This study focuses on current students who are either enrolled or have recently graduated within the timeframe of the dataset. The Career Development Center, an auxiliary unit within the Division of Student Affairs, provides various support services; however, these services are not mandatory for degree completion. Forty-six percent of the 2017 initial cohort persisted to degree completion within six years (MTSU Common Data Set 2023-2024).

Participants for the qualitative component of this study were selected through purposive sampling, explicitly targeting individuals who have had meaningful interactions with the Career Development Center. These meaningful engagements are appointments in four types of transformational meetings: assessment interpretation, career development meeting, job search meeting, and interview

preparation. Purposive sampling is employed as it allows for the deliberate selection of participants who can provide the most relevant and insightful data based on their specific experiences and characteristics, as outlined by Creswell and Poth (2018). This approach is particularly suited for this study, which sought to explore student engagement with Career Services across four distinct appointment types: assessment interpretation, career development meetings, job search meetings, and interview preparation. The sampling frame included students who participated in one of the above-mentioned appointment types during the Fall 2024 term.

After their appointment, participants received an email with a link to the questionnaire, inviting them to contribute to the study. Participation was voluntary, with students given the option to consent or decline. The questionnaire did not ask for personally identifiable information to ensure anonymity. Additionally, responses were stored in a password-protected system accessible only to the researcher and their dissertation chair.

Quantitative data consisted of a purposive sampling of unique students who had a meaningful engagement with the Career Development Center in Fall 2023 and were retained or graduated between the time of their appointment and the Fall 2024 semester.

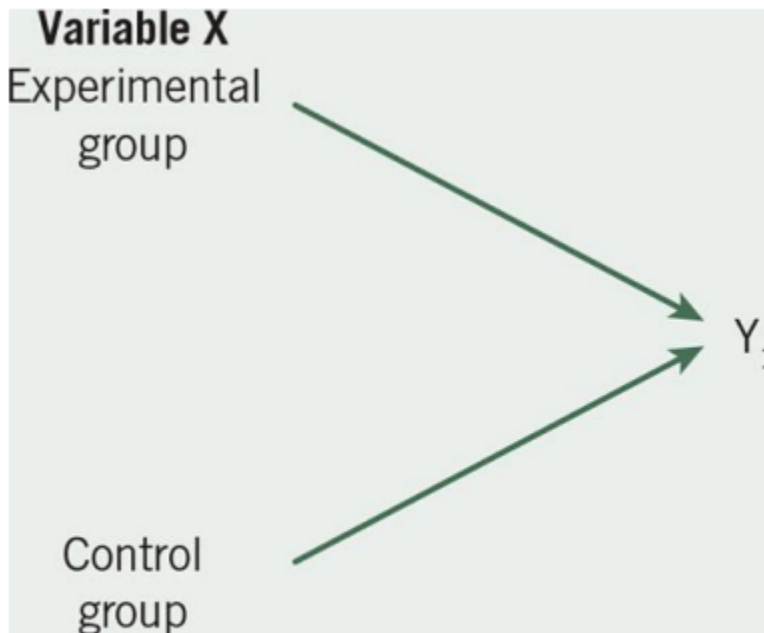
INSTRUMENTATION

Quantitatively retention rates were compared using descriptive statistics and two proportion testing of students who had a meaningful career engagement through the Career Development Center to the overall University retention rate from Fall 2023. This data was gathered from the internal system that students use to schedule and check in for Career Development Center appointments. Retention rates were gathered on those students who had a meaningful career engagement appointment in Fall 2023 and assessed to enrollment in Fall 2024 to see if they were retained within the institution or

graduated. A control (enrolled students) and experiment group (those that had an appointment) were compared for retention rates using descriptive statistics (Creswell, Creswell, 2018).

Figure 8

Control and Experimental Chart



Source: Jungnickel (1990). Reprinted with permission.

Qualitatively, the questions below were administered via a Qualtrics Questionnaire to those students who had a meaningful career engagement in Fall 2024. Meaningful career appointments are defined as: assessment interpretation, career development meeting, job search meeting, interview preparation. Data was stored within the Universities Qualtrics system of which the participants completed the questionnaire and thus protected behind multiple firewalls.

This questionnaire looked for students to share their story, as the researcher values the student experience. According to researchers, qualitative surveys, characterized by open-ended questions presented in a fixed order for all participants, allow respondents to type their answers in their own

words rather than selecting from predetermined options. This method enables the collection of rich and complex accounts, capturing the type of sense-making that is typically of interest to qualitative researchers, such as participants' subjective experiences and narratives (Braun, V, et al. 2020).

Questionnaire Question 1: Did your engagement with the Career Development Center help you gain clarity on what you can do with your degree, or did it provide insight into your personal goals and how to make informed educational choices? If yes, please elaborate on what the Career Development meeting provided knowledge on that was helpful. If not, what were you expecting to happen that didn't.

Questionnaire Question 2: As a result of your engagement with the Career Development Center, did you take action? i.e. apply for a job, change your major, etc. Why or why not?

Questionnaire Question 3: Do you think you will remain at MTSU through to degree completion, why or why not?

Questionnaire Question 4: What do you believe it means to be career ready? Please provide a few words and then define their meaning.

These four questions were crafted to learn if and what occurs in a career appointment with the Career Development Center that allows students to form meaning around career readiness and what is influencing their retention within the system. In the first round of coding four different types of codes were used. Those included:

Expected code: These would be items that the researcher expects to find that are directly related to career development. Items such as resume review or job search would be expected codes.

Surprising code: Items that could not be anticipated prior to the study.

Codes of unusual or conceptual interest: Items that might be of conceptual interest to readers. For example, triggering words or those that hint at theory correlation from a student perspective.

In Vivo Codes: These would be direct quotes that participants provide that have a direct correlation to the research study.

Second round coding would then look at if there are patterns between the questions, then themes will be developed and compared to the quantitative data. The written data will provide stories about the relationship between career development and retention.

Table 1.

Logic of Research Design

Research Question	Corresponding Source of Information	Corresponding Data Analysis/Reporting Procedures
RQ1: Were students who had a meaningful career service engagement with the University Career Development Center retained at a rate higher than their peers?	MTSU IEPR retention data Student appointment information Survey Question 3	Descriptive Statistics First Round Coding Pattern and Theme Development
RQ 2: What are students' perceptions of the influence of their appointment with the Career Development Center on their retention?	Survey Question 1 & 2	First and Second Round Coding Pattern and Theme Development
Research Question 3 (RQ3): What are students' perceptions of career readiness?	Survey Question 4	First and Second Round Coding Pattern and Theme Development

VERIFICATION

Establishing research validity is a multifaceted process that demands rigorous methodology and critical reflection on potential biases. This study employed a mixed-methods approach, which integrated both quantitative and qualitative data to enhance the robustness of findings and address potential biases inherent in relying on a single method (Creswell & Creswell, 2018). Triangulation is a foundational strategy, ensuring multiple data sources and methods to corroborate the findings. For instance, the quantitative data included the percentage of retained or graduated students between Fall 2023 and Fall 2024 students who had a meaningful career engagement with the Career Development Center.

To maximize inclusivity, this study broadly defines mixed methods as integrating qualitative and quantitative data collection and analysis to draw comprehensive inferences within a single study or inquiry program (Tashakkori & Creswell, 2007). The pragmatic approach, as advocated by Morgan (2007), offers a theoretical underpinning for mixed methods research. He states that the mixed methods approach's strength lies in its adaptability and focus on practical problem-solving. Thus, this approach is particularly suitable for this study, which aims to address real-world educational challenges.

This study's reliability is reinforced through transparent reporting of all phases of the research process, including a detailed account of the study's focus, the researcher's role, participant selection, and the contextual framework for data collection. Additionally, the qualitative component captures participants' perceptions and experiences. The study underwent assessment by a committee of researchers, providing additional scrutiny. The mixed-methods design, incorporating objective metrics and participants' personal narratives, allowed for a comprehensive understanding of the phenomena under investigation. *Does a meaningful engagement with The Career Development Center lead to retention?* Through these measures, the study strives to contribute meaningfully to the discussion on educational retention while maintaining research integrity and transparency.

LIMITATIONS

A limiting factor of this study includes the short timeline and the number of students who engage with the Career Development Center. Further limitations could be access to the data set to identify unique characteristics of students and further examine subsets of engagement such as age, race, gender, and ethnicity.

SUMMARY

The success of both students and institutions is intertwined, with student outcomes being a pivotal metric. These outcomes are essential whether they are defined by the students themselves or by external entities such as state governments or funding bodies. The broader context underscores the necessity of developing a skilled and capable workforce, which is fundamental for the prosperity of future generations.

This study evaluated a specific intervention, provided by the Career Development Center, within the student experience, with a focus on the value of both qualitative and quantitative research in understanding its impact on overall student retention at an institution. By exploring students' perceptions of how meaningful career engagement influences their retention, the research sought to provide valuable insights into how educational institutions can better support their students and improve retention rates. The qualitative data gathered also offered critical perspectives on auxiliary services within student affairs and validated the importance of students' time investment in activities beyond the classroom experience. Utilizing a mixed-methods convergent triangulation exploratory approach, the study analyzed quantitative data on student retention alongside students' perceptions of whether meaningful career engagement influenced their decision to stay at the institution and their perspective of career readiness.

CHAPTER IV: RESULTS

INTRODUCTION

In Chapter 4, the researcher discusses the data using a convergent triangulation design to address the area of interest: student perceptions of a meaningful career center engagement and its influence on student retention. This study examines whether meaningful engagement with the University Career Development Center increases student retention rates compared to their peers at the same institution. It also explores students' perceptions of their engagement to determine whether the meeting contributes to their career readiness and retention. Career Development Center engagement needs to be studied to determine if it influences student degree retention and attainment. To address this problem, the following research questions and hypotheses guided the researcher through data obtainment.

- Research Question 1 (RQ1): Were students who had a meaningful career service engagement with the University Career Development Center retained at a rate higher than their peers?
- Research Question 2 (RQ2): What are students' perceptions of the influence of their appointment with the Career Development Center on their retention?
- Research Question 3 (RQ3): What are students' perceptions of career readiness?

Table 2.

Logic of Research Questions and Data Source

Research Question	Corresponding Source of Information	Corresponding Data Analysis/Reporting Procedures
RQ1: Were students who had a meaningful career service engagement with the University Career Development Center retained at a rate higher than their peers?	MTSU IEPR retention data Student appointment information Survey Question 3	Descriptive Statistics First Round Coding Pattern and Theme Development
RQ 2: What are students' perceptions of the influence of their appointment with the Career Development Center on their retention?	Survey Question 1 & 2	First and Second Round Coding Pattern and Theme Development
Research Question 3 (RQ3): What are students' perceptions of career readiness?	Survey Question 4	First and Second Round Coding Pattern and Theme Development

DATA ANALYSIS

In the quantitative data collection, to address research question 1, the researcher had to mitigate potential conflicts of interest and researcher bias, the researcher coordinated directly with the Assistant Director of Career Development Services and the University Registrar at Middle Tennessee State University to facilitate the data collection. Specifically, the researcher requested anonymized data from Fall 2023 student appointments across four appointment categories: assessment interpretation, career development meetings, job search consultations, and interview preparation sessions. This data was subsequently transmitted to the University Registrar, ensuring an impartial analysis of student status for all participants in 2024. This protocol safeguarded the integrity of the research while maintaining the

confidentiality and accuracy of student records. The University Registrar then provided the researcher with the anonymized data. The data identified 409 unique students in the study for Fall 2023, with 363 of them actively registered during that semester. Of those, 320 were retained or graduated by Fall 2024, resulting in an 88.2% retention rate. Forty-three students were not retained or graduated in Fall 2024.

Table 3.

Retention/Graduation of Students who had a meaningful career center engagement

Total Number of Unique Students (N= 409)

Characteristic	n	%
Total Registered in Fall 2023	363	88.80%
Total Not Registered in Fall 2023	46	11.20%
<i>Total Alumni</i>	42	10.30%
<i>Total Former Students Not Graduated</i>	4	1.00%
Total Registered in Fall 2023, Retained to Fall 2024 or Graduated by Summer 2024	320	88.20%
<i>Total Enrolled Fall 2023 who Registered in Fall 2024, Did Not Graduate</i>	183	50.40%
<i>Graduated Fall 2023, Spring 2024, or Summer 2024</i>	137	37.70%
Total Registered in Fall 2023, Not Retained to Fall 2024 or graduated	43	11.80%

To further assess the research, the researcher had to look at the institutional retention from Fall 2023-Fall 2024.

Table 4.

Retention/Graduation of MTSU Students Fall 2023-Fall 2024

Characteristic	n	%
Total Registered in Fall 2023	20183	100.00%
Total Registered in Fall 2023, Retained to Fall 2024 or Graduated by Summer 2024	16504	81.77%

Using descriptive statistics of difference, and the z score for two population proportions test (Moore, et al. 2016) to compare the Career Center appointment data to the University data the difference between the two groups was statistically significant, $z=3.1293$, $p=.00174$. The proportion of students who had a meaningful engagement with the Career Development Center was significantly higher since the p value of .00174 is less than the significance level α of .05, thus the null hypothesis is rejected. The null hypothesis stated that students' meaningful engagement with the Career Development Center would have no positive relationship with retention.

QUALITATIVE RESULTS

The second part of the convergent triangulated study employed a qualitative metric to address student perceptions of meaningful career engagement and further expand upon student retention. A Qualtrics questionnaire with the following questions was developed.

- Questionnaire Question 1: Did your engagement with the Career Development Center help you gain clarity on what you can do with your degree, or did it provide insight into your personal

goals and how to make informed educational choices? If yes, please elaborate on what the Career Development meeting provided knowledge on that was helpful. If not, what were you expecting to happen that didn't.

- Questionnaire Question 2: As a result of your engagement with the Career Development Center, did you take action? i.e. apply for a job, change your major, etc. Why or why not?
- Questionnaire Question 3: Do you think you will remain at MTSU through to degree completion, why or why not?
- Questionnaire Question 4: What do you believe it means to be career ready? Please provide a few words and then define their meaning.

To maintain participant anonymity, the researcher distributed the questionnaire link and QR code to the six career advisors that work at the Middle Tennessee State University Career Development Center. The advisors were asked to send the link to students that they had met within the four appointment categories from the start of the semester through October 22, 2024, and again from October 22 to November 25, 2024. A thematic analysis was utilized to review the questionnaire results as displayed in Figure 9.

CREDIBILITY AND TRUSTWORTHINESS

The researcher enhanced the study's credibility and trustworthiness by utilizing various strategies to promote authentic responses, minimize bias, and ensure data collection and analysis transparency. Using purposive sampling, the researcher selected participants who had engaged in meaningful interactions with the Career Development Center in Fall 2024. To uphold ethical research practices, the researcher ensured voluntary participation, allowing individuals to decline involvement and answer only the questions they felt comfortable responding to. The questionnaire avoided forced logic, preserving participant autonomy. To maintain confidentiality and reduce response bias, the researcher refrained from offering incentives and did not collect personally identifiable information (PII).

Recognizing the researcher's critical role in qualitative studies (Patton, 2015), the researcher actively addressed positionality and reflexivity throughout the research process. With sixteen years of experience in higher education career services and a background in mental health and community career counseling, the researcher acknowledged the potential for bias. To mitigate this, they maintained a reflective journal to document arising patterns, biases, and analytical decisions. Direct participant quotes were incorporated to preserve authenticity, and both the researcher and dissertation chair reviewed questionnaire responses to ensure thematic accuracy (Berger, 2015; Creswell & Poth, 2018).

Following Lincoln and Guba's (1985) trustworthiness criteria, the researcher implemented multiple strategies to ensure rigor, as Shenton notes Guba in their 2004 article Strategies for ensuring trustworthiness in qualitative research projects. Shenton restates Guba's four constructs that correspond to the criteria employed by the positivist investigator, which address credibility, transferability, dependability, and confirmability.

Credibility

Adoption of Established Research Methods: The researcher applied methodologies from comparable research studies.

Prolonged Engagement: While the researchers did not have any direct contact with the participants, they are engaged in prolonged engagement with meaningful engagements within career services in higher education.

Sampling Approach: Although participants were purposefully selected based on meaningful career engagement, questionnaire completion remained voluntary and random.

Ensuring Honesty in Informants: Participants retained the right to refuse participation, reinforcing ethical considerations, while the researcher emphasized the significance of their contributions to the field.

Iterative Questioning: Repeated questioning confirmed students' perceptions of a meaningful career engagement and its impact on retention and subsequent actions taken.

Frequent Debriefing: Regular discussions with superiors refined analysis and interpretations.

Peer Scrutiny: The dissertation committee provided oversight and critical feedback.

Reflective Commentary: The researcher systematically documented the research process for ongoing reflective analysis.

Member Checks: Direct participant verification was impossible due to the absence of personally identifiable information. However, the researcher engaged in continuous theory validation through debriefing with superiors.

Thick Description: The study provides a detailed account of the research context within the literature review.

Review of Previous Research: A comprehensive examination of prior studies strengthens the research foundation.

Transferability

The methods used in this study can apply to any university career center, ensuring replicability in similar institutional settings. Detailed descriptions of the research environment and data collection procedures equip other researchers to ascertain the applicability of findings to different contexts. Data

collection occurred in the Fall of 2024, targeting individuals engaged in one of four designated meaningful appointment types. Six career advisors facilitated participant recruitment.

Dependability

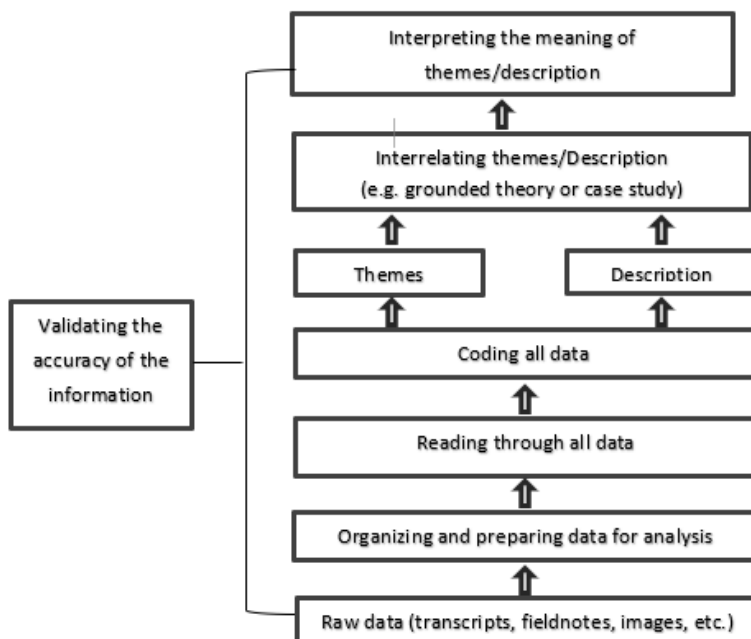
In alignment with Shenton’s (2004) framework, the researcher maintained a detailed audit trail documenting research decision, coding processes, and theme development. This record enhances consistency and supports future replication, reinforcing methodological rigor.

Confirmability

To strengthen confirmability, the researcher carefully recorded analytical reflections, potential biases, and methodological decisions. These reflexive practices ensured that the findings accurately reflected participant experiences rather than researcher interpretations, enhancing the study’s objectivity and trustworthiness.

Figure 9

Data Analysis in Qualitative Research



Note. This figure was produced by Creswell & Creswell summarizing data analysis in qualitative research. From “Research design: Qualitative, quantitative, and mixed methods approaches” (5th ed.). SAGE Publications, Inc.

THEMATIC ANALYSIS AND CODE DEVELOPMENT

The questionnaire data was analyzed using thematic analysis, following Tesch's Eight Steps in the Coding Process (Creswell & Creswell, 2018, p. 196). The researcher employed inductive coding to analyze responses to the four core questions. The coding process involved getting a sense of the whole, topic identification and topic clustering, and category development for each response. The researcher used Dedoose software for coding and thematic development to enhance accuracy and efficiency in data organization and interpretation (Miles et al., 2014).

Codes were identified based on response frequency and conceptual patterns. For example, many respondents indicated that they acted following their career engagement and believed they would be retained, forming high-frequency codes. Less frequent but still meaningful patterns, such as references to "strategy identification" or "a place to start," were categorized under broader themes related to action and outcomes. Similarly, responses regarding career readiness frequently referred to "knowledge, skills, and ability to contribute," forming a core theme.

The themes were developed by clustering related codes into overarching categories that captured key insights into meaningful career engagement and its perceived impact on retention and career readiness. The refinement process involved iterative review to ensure themes accurately represented participant responses and aligned with the study's objectives. The use of thematic analysis provided a structured yet flexible approach, enabling the study to capture the depth and nuance of participants' experiences (Braun & Clarke, 2006; Creswell & Poth, 2018; Lincoln & Guba, 1985).

Student perception of meaningful career center engagement on Retention (RQ 2)

Questionnaire Question 1: *Did your engagement with the Career Development Center help you gain clarity on what you can do with your degree, or did it provide insight into your personal goals and how to make informed educational choices? If yes, please elaborate on what the Career Development meeting provided knowledge on that was helpful. If not, what were you expecting to happen that didn't.* The following are direct excerpts from participants.

Respondent 23: Yes, my meeting at the Career Development Center did help and provided me with many more options than I thought I had. As a first-generation college student and the first female Veteran in my family, I do not have much guidance from my family to help me navigate furthering my career, and The Career Development Center has renewed my confidence in what I will need to do to further my career during college and following graduation.

Respondent 26: Yes, my meeting I had helped point me in the right direction in finding a job and what I needed to do to actually get the jobs I am applying for. I was sent resources of job sights and a mock resume that I can use to improve my resume for the jobs I want to apply for. I have had such a hard time getting a job in the degree I got and now I feel more confident in actually securing a job that I will enjoy. I wish I had used the career development services sooner.

Respondent 28: My visit with the Career Advisor at the Career Development Center was really helpful. They gave me a clearer idea of what I can do with my degree. I also got insight into my personal goals and how to make better educational choices. The Career Advisor gave me a lot of useful info on potential career paths (music business, entrepreneurship). I feel more confident about my choices at MTSU and much appreciate their guidance 🙏.

These responses illustrate recurring themes throughout about clarity and direction. Many

respondents highlighted the concept of a "career path," with one individual noting, "a new perspective in focusing my career path while honing in on some priorities that will make me successful in the future."

Additionally, several participants expressed that the meeting served as a starting point or provided a sense of renewal and confidence. One respondent shared, "the meeting has renewed my confidence in what I will need to do to further my career during college and following graduation."

Questionnaire question two also was developed to address students' perceptions of the influence of their appointment with the Career Development Center on their retention to learn if students acted because of their meaningful engagement with the Career Development Center. Responses include:

Respondent 15 indicated that they were going to add different classes outside of their major.

Respondent 17: Reported they adjusted their resume but had not yet applied because they were "doing their due diligence and researching the companies" to ensure they aligned with the respondents' beliefs.

Respondent 26 stated the meeting gave them resources they could implement for the job they are applying for.

The respondents' feedback aligned with two primary categories: personal actions and academic or professional endeavors. For instance, several respondents indicated plans to update their resumes, apply for jobs, or begin networking as part of their immediate next steps. On the other hand, responses of a more personal nature emphasized self-exploration. Some participants expressed the need to conduct further research to refine the specificity of their career paths. Others viewed the meeting as validation of their current trajectory, such as one respondent who remarked, "I had more resolve to stay on the current selected path."

RETENTION

Questionnaire question three was specific to whether respondents thought the meeting with the Career Development Center would lead to retention and if the respondents felt that they would remain at the University through the completion of their degree; thus, addressing research question one, were students who had a meaningful career service engagement with the University Career Development Center retained at a rate higher than their peers? All twenty-eight respondents indicated that yes they were going to remain at the school, except the following four respondents:

Respondent 1: “No, only because they do not have an occupational therapy assistant program or graduate program for OT.”

Respondent 11: “It’s hard to tell at this point. On some level I hope to, because I believe that I'd benefit in any professional setting from obtaining a degree. However, I get fed up with routine and am burning out rapidly.”

Respondent 18: It is difficult to say. I don't have any faith in a college degree. I just see it as a box I have to check. If I find the opportunity to have a well-rounded career i.e. pay and employers not exploiting me because I don't have a family so they assume I can work 70-hour weeks. I will drop my classes in a heartbeat.

Respondent 22: “No, because I'm an exchange student from Germany.”

CAREER READINESS

Career Readiness is a foundation where people can demonstrate core competencies that prepare college students for success in the workplace (NACE, 2024). Question four on the questionnaire asked students what they think it means to be career ready, to address research question three: What

are students' perceptions of career readiness? Some responses are indicated below:

Respondent 16: "Being career ready means that you are prepared and have the knowledge of the field when you are ready to join. Willingness to learn and want to is the key to being career ready."

Respondent 18: To be career ready you should have a "basic" understanding of the field you're in. You don't have to be a subject matter expert straight out of college. You should be able to work well under stressful conditions, understand the importance of deadlines, and communicate effectively. As a bonus you should know how to use Microsoft Excel and PowerPoint better than anyone else in the room.

Respondent 25: Prepared: Having the skills and knowledge to meet industry expectations, whether it's understanding Pro Tools, setting up a live sound system, or knowing how to communicate professionally. Connected: Building relationships with people in the industry, like professors, classmates, or professionals at events and internships. Confident: Believing in your abilities and being ready to showcase your work, whether it's a mix, a beat, or a live performance setup.

EMERGING THEMES

After coding the data, the researcher looked for interrelating themes and descriptors in the language that students used across responses to questions. Four themes emerged because of the data collected.

1. Career Path Clarity and Exploration
2. Academic and Career Integration
3. Confidence
4. Outcomes

Theme 1: Career Path Clarity and Exploration. Survey data revealed that many respondents consistently emphasized how their engagement with the Career Development Center provided greater clarity and a structured pathway for further exploration. This engagement was a critical starting point for students seeking direction in their academic and professional pursuits. Notably, self-disclosed, first-generation students highlighted the importance of this resource, expressing that, in the absence of familial guidance, the center offered essential information that facilitated deeper career exploration. Additionally, several participants reported that their interactions with the center contributed to refining their career trajectories, aligning their academic majors with long-term goals, and enhancing their ability to prioritize tasks effectively.

Table 5.
Theme: Career Path Clarity and Exploration

Theme	Sample Code	Sample Quote
Career Path Clarity and Exploration	Place to Start	Respondent 15: "It did both. The meeting really helped me bring career/major ideas to the surface that would better fit me than my current major, it provided clarity with my personality type and what careers I could possibly look into since each fall into each other."
	Clarity	
	Action	
	Perception	
	Career Exploration	
	Resources	
	Retained	Respondent 4: "Yes, I was able to understand to start taking certain steps and researching career path of CEOs along with having stepping stones from my personal career journey with my unique skill set and degrees"

Theme 2: Academic and Career Integration Survey responses revealed a consistent appreciation for the role of career advising in bridging this gap. Participants frequently highlighted how career advisors helped them “brainstorm majors that are a good fit” and clarify the “steps to take” in pursuing their career paths. These engagements also provided students with valuable insights and actionable strategies, enhancing their ability to align their academic choices with long-term professional goals.

Table 6.

Theme: Academic and Career Integration

Theme	Sample Code	Sample Quote
Academic and Career Integration	Confidence/Fit	<p>Respondent 11: “Yes. It was a very helpful meeting, where clarification was gained on steps to take, including how to setup Handshake, steps to take to connect to like-minded students, and resources to take advantage of to improve the likelihood of landing a solid internship.”</p> <p>Respondent 23: “I am learning how to network and I am confident that I will have an internship as soon as I finish my resume and feel that I am in a good place with my classes to juggle both.”</p>
	Perception	
	Resources	
	Strategies	
	Retained	
	Career Ready Knowledge	

Theme 3: Confidence. Confidence emerged as both a code and an overall theme. Confidence is defined as the feeling or belief that one can rely on someone or something or the state of feeling certain

about the truth of something (dictionary.com). Throughout all the responses there were consistent statements of how students felt more confident based on their interaction with the Career Development Center. Student stated things like, “I feel more confident in actually securing a job that I will enjoy”, and “I feel confident that I will become more successful due to this guidance.” Additionally, students felt that due to the increased confidence they could act as stated by one respondent. “I am confident that I will have an internship soon...” Lastly, respondents reported that confidence was a component of career readiness defined by a respondent as “believing in your abilities and being ready to showcase your work...”

Table 7.

Theme: Confidence

Theme	Sample Code	Sample Quote
Confidence	Confident Strategies	Respondent 26: I feel more confident in actually securing a job that I will enjoy.”
	Career Ready-Meaningful and Fulfilling Graduate(d)	Respondent 2: Yes. My interaction gave me the confidence to attend career fairs, apply to jobs, and schedule times for interviews
	Took Action	

Theme 4: Outcomes. While the nature of this research was to focus on one outcome, retention, respondents qualitatively identified several ways of which their meaningful appointment with the Career Development Center would lead to an additional outcome for them. One respondent indicated “where clarification was gained on steps to take” while others indicated very specific items such as applying for

jobs, finishing their degree and updating their resume as an outcome they were engaging in as a result of the meeting.

Table 8.

Theme: Outcomes

Theme	Sample Code	Sample Quote
Outcomes	Strategies	Respondent 19: I realized what I did wrong when applying for my desired job the first time.”
	Career Ready Skills	
	Career Ready Knowledge	Respondent 1: My interaction gave me the confidence to attend career fairs, apply to jobs, and schedule times for interviews
	Took Action	

SUMMARY

In this chapter, the quantitative and quantitative data was exhibited along with identification of themes that emerged because of inductive coding. The qualitative questionnaire responses included students and alumni who had a meaningful appointment with the University Career Development Center in Fall 2024. The quantitative data used descriptive statistics to compare percentage of students that were retained or graduated from Fall 2023-2024 within the University and those that had a meaningful engagement with the Career Development Center.

CHAPTER V: SUMMARY AND DISCUSSION

INTRODUCTION

Higher education is an investment of time and money. While those who have a bachelor's degree have a jobless rate that is less than two percent, (US Bureau of Labor Statistics, 2023; Carnevale et al., 2016) many people compound debt to achieve the degree. Career readiness is thus an important topic within higher education because as costs continue to increase, showing a return on investment is important. Students' ability to complete the degree in a timely manner decreases debt and increases employability. The goal of this study was to examine if a meaningful engagement with the Career Development Center did in fact have an impact on retention and students' perceptions of career readiness. According to the National Alumni Career Mobility Report (2023), nineteen percent of respondents reported high institutional investment, and those who agreed that their institution helped them create a career plan were 6.3 times more likely to score high on the Career Mobility Index, which shows pathway preparation, career satisfaction and economic mobility (NACM, 2023). This study's results reflect multiple pieces of the literature in which a meaningful engagement can provide clarity, connections and opportunity that can lead to retention and graduation.

The quantitative results present retention rates for the Career Development Center and the University. In contrast, the qualitative results highlight themes from respondents related to retention and career readiness. The discussion will connect these findings to existing literature, analyzing similarities and differences between respondents' insights and what the literature supports. This analysis explores the alignment between the study's results and the literature, guided by the research questions that shaped this study.

Research Questions

Research Question 1 (RQ1): Were students who had a meaningful career service engagement with the University Career Development Center retained at a rate higher than their peers?

Research Question 2 (RQ2): What are students' perceptions of the influence of their appointment with the Career Development Center on their retention?

Research Question 3 (RQ3): What are students' perceptions of career readiness?

RESEARCH AND LITERATURE INTEGRATION

To address research questions one and two, the study looked at both the quantitative and qualitative data. The quantitative data shows students who had a meaningful career engagement in Fall 2023 were retained or graduated at a rate of 88.2% whereas those in the general MTSU population had a rate of 81.77%. Using the z score of two population proportions, with a significance value of .05, the result of the study was .00174, thus rejecting the null hypothesis that there is no positive relationship between students' meaningful engagement with Career Development and retention. Qualitatively all respondents except 4 indicated that they would remain at MTSU through the completion of their degree. Those that answered no or were uncertain stated:

Respondent 1: "No, only because they do not have an occupational therapy assistant program or graduate program for OT."

Respondent 11: "It's hard to tell at this point. On some level I hope to, because I believe that I'd benefit in any professional setting from obtaining a degree. However, I get fed up with routine and am burning out rapidly."

Respondent 18: It is difficult to say. I don't have any faith in a college degree. I just see it as a box I have to check. If I find the opportunity to have a well-rounded career i.e. pay and

employers not exploiting me because I don't have a family so they assume I can work 70-hour weeks. I will drop my classes in a heartbeat.

Respondent 22: "No, because I'm an exchange student from Germany."

The data was collected through a Qualtrics survey (Moore, November 25, 2024)

Connecting the study data to the literature, VanDerziel, 2022 discusses how an engagement with career services leads to higher job offers, Colorado State University published a similar study in 2018 noting the impacts of Career Services on retention and Gati et al (1996) talk about how clarity is important in career decision making.

Table 9.

Research and Literature Alignment on Retention and Student Perceptions of Retention

Individual Codes	Themes	Literature Connections
Action, Career Ready Skills	Outcomes	VanDerziel, 2022
Retained	Outcomes	CSU, 2018
Clarity	Career Path Clarity and Exploration	Gati, et al, 1996

Additionally, feedback from research participants aligns with Social Cognitive Career Theory (Lent et al., 1994), as they emphasized how career meetings expanded their options, clarified actionable steps, or provided a starting point for their decision-making process. For instance, one participant shared, "I was able to figure out which career path I wanted to take because some questions made me think about how I feel towards my choices."

Table 10.

Research and Literature Alignment on Student Perceptions

Individual Codes	Themes	Literature Connections
Place to start, career ready knowledge, career exploration	Career Path Clarity and Exploration	Lent, et al. 1994

To address research question three, this study utilized two bodies of literature related to career readiness: the top ten skills identified by the World Economic Forum (2023)—analytical thinking, creative thinking, resilience, motivation, curiosity, technological literacy, dependability and attention to detail, empathy and active listening, leadership, and quality control—and the career competencies defined by the National Association of Colleges and Employers (NACE, 2024). These competencies include career and self-development, communication, critical thinking, equity and inclusion, leadership, professionalism, teamwork, and technology. The intersection of these frameworks informed the construction of a key question posed to respondents: "What do you believe it means to be career-ready? Please provide a few words and define their meaning."

One respondent offered a particularly insightful perspective: "To be career-ready, you should have a 'basic' understanding of the field you're in. You don't have to be a subject matter expert straight out of college." This reflection underscores the importance of foundational knowledge and adaptable skills as critical elements of career readiness.

Table 11.

Research Question Three Student Perceptions on Career Readiness

Individual Codes	Themes	Literature Connections
Career Ready Knowledge, skills, and professionalism	Academic and Career Integration	NACE, 2024; World Economic Forum, 2023)

COMPARISON OF THEMES WITH RETENTION AND CAREER READINESS

Tables 8-11 report themes based on the significance of the research’s theoretical orientation and outcomes defined in the literature that classify a college graduate as career ready. While many survey respondents indicated that they had not used the language of career ready previously, they had an overwhelming consistent response in that it meant to be knowledgeable within their desired occupational fields, have the foundational skills for a career and the ability to perform those skills. Although it does not develop into a broader theme, one consistent comparison mentioned in each section of the questionnaire was the impact of the I career center appointments. These appointments provided valuable resources that contributed to both student retention and career readiness, aligning with existing literature that supports engagement with career services.

MASKED OR SURPRISING THEMES

While the themes of Career Path Clarity and Exploration, Academic and Career Integration, and Outcomes align with expected findings in career-related research, two unexpected themes emerged: Confidence and Student Perception. These themes were noteworthy because they highlighted the intrinsic value of student engagement and the authenticity of their feedback.

One respondent shared their struggles with finding a job in their degree field, stating that, after their meeting, they felt “more confident in actually securing a job that I will enjoy.” Another respondent said the tips were helpful and expressed confidence that they would “become more successful due to the guidance.” These responses emphasize the internal value derived from these interactions. Additionally, other feedback demonstrated external expressions of confidence, such as one respondent who stated, “I am confident that I will get an internship, and that confidence means believing in one’s abilities and readiness to showcase their work.”

The confidence reflected in these responses aligns with the concept of self-efficacy as described in Social Cognitive Career Theory. Lent et al. (1994) explains that self-efficacy directly and indirectly influences performance through personal goals. Furthermore, Lent and colleagues highlight that modest overconfidence can inspire individuals to tackle challenges, ultimately fostering skill development and reinforcing self-efficacy.

DISCUSSION

Career readiness is important to higher education because it helps students understand how to articulate their academics to the world of work. While the literature shows that employers frequently rate the proficiency of recent college graduates lower than the students themselves, indicating a significant skills gap perceived by employers but not acknowledged by college students, higher education can help to bridge this gap. See Table 12 below.

Table 12.

Student and Employer Ratings of Importance of and Student Proficiency in Career Readiness Competencies by percent of respondents

Competency	New Graduates		Employers	
	Importance	Proficiency	Importance	Proficiency
Communication	96.30%	78.10%	96.10%	53.50%
Critical Thinking	94.00%	80.80%	96.10%	55.90%
Teamwork	90.50%	83.50%	93.90%	81.50%
Career & Self-Development	87.80%	61.50%	65.60%	43.20%
Professionalism	88.90%	79.70%	89.40%	50.30%
Leadership	84.60%	66.00%	45.00%	31.00%
Technology	77.90%	60.50%	71.70%	72.00%
Equity & Inclusion	78.30%	79.50%	70.00%	63.30%

Source: National Association of Colleges and Employers. Data are from NACE’s 2024 Student Survey and Job Outlook 2025 survey. Importance ratings are the percentages of responding students and employers that, on a five-point scale, rated the respective competency either “very important” (4) or “extremely important” (5). Proficiency ratings are the percentages of responding students and employers that, on a five-point scale, rated recent graduates either “very proficient” (4) or “extremely proficient” (5) in the respective competency.

Additionally, Makela et al. (2014) found in their study of career service users and non-users that students express the perception that they experience growth in developmental areas that higher education aims to affect, including critical thinking and problem-solving. Additionally, in the Makela study, the learning outcomes related to career development competencies showed that users of career services consistently reported higher levels of confidence, ability, and knowledge growth than non-users. Makela’s research aligns with this research project’s data as respondents stated that because of their engagement with the Career Development Center, they had increased clarity, confidence, and resources to navigate the career decision-making process. This research also aligns with both the Colorado State University study that highlighted the influence of career services on retention, and The

State Opportunity Index published by Strada Education Foundation (2024) that highlights the value of quality coaching to help students connect their education to their careers. Additionally, this project had several respondents that stated that they had gained the ability to apply the knowledge they had learned to the next chapter of their life post-graduation.

This study engaged Social Cognitive Career Theory (SCCT) as its theoretical framework, provides a specific lens for examining individualized barriers to career goals. SCCT achieves this by identifying connections between personal, behavioral, and environmental determinants in the context of career-related decisions. According to Lent et al. (2002) and Watt et al. (2022), individuals are shaped by their environments, which are, in turn, influenced by their interactions with them. These interactions result in goal attainment, self-efficacy beliefs, and outcome expectations (Lent et al., 2002). Additionally, Casto (2003), in the National Career Development Association's Career Convergence publication, defines career development as the interplay of psychological, sociological, economic, physical, and chance factors that collectively influence the sequence of jobs an individual may pursue throughout their lifetime. Integrating theory and industry best practices drove this study's focus on assessing "meaningful career engagement." Rather than emphasizing transactional services typically provided by the Career Development Center, the study prioritized examining opportunities that allow students to engage with professionals to navigate career-related decisions or challenges.

Because retention in higher education is important to both individuals and educational institutions, the value of completing a degree is imperative to both. Empirical evidence demonstrates that completing a degree leads to substantial long-term financial benefits. For example, Wolla et al. (2023) found that in 1980, new college graduates earned approximately \$1,000 more than their high school-educated counterparts, with the wage gap widening to \$10,000 by mid-career. By 2020, this income differential had grown even more pronounced, with college graduates earning nearly \$5,000 more immediately after graduation and a staggering \$18,000 more by mid-career. The value of

obtaining a college degree and institution retention can thus be shown in the individual income differential over time. However, the rising cost of education has led to substantial student loan debt. As of March 3, 2024, U.S. student loan debt totaled \$1.72 trillion (Hanson, 2024), placing additional pressure on students to complete their degrees and secure the financial rewards associated with higher education. Retaining students is not only a matter of financial gain for the individuals involved but also a financial imperative for colleges and universities.

According to a report by the Cato Institute in 2024 (Gillen, 2024), only five states have seen declining funding for higher education; however, nationwide, student enrollment in higher education has declined since 2012 (NCES, 2022). The revenue from retained students is crucial for maintaining institutional operations and reducing reliance on state and federal funding. Retention rates, like the ones published by *U.S. News & World Report*, are important in academic rankings. The rankings influence how students and parents analyze schools and how employers may make hiring and compensation decisions for recent graduates. Institutions prioritizing retention are more likely to improve their rankings, which can attract more students and funding. As retention has become a key metric for both financial and reputational reasons, colleges and universities need to focus on strategies to improve it.

Based on the information about the value of retention in higher education and the data provided in the 2018 study by Colorado State University, where they identified that students who had engaged with Career Services at that university were retained at a higher rate. The research in this study aimed to determine if a meaningful engagement with the Career Development Center influenced student retention. Analyzing the data through qualitative and quantitative methods indicated a significant positive relationship between a student's meaningful engagement and retention outcomes.

LIMITATIONS AND DELIMITATIONS

Limitations of this study include the inability to analyze personal inputs as defined by Social Cognitive Career Theory, highlighting physical and social features, cultural environments, and career-related learning experiences (Lent et al., 1994). Social cognitive assumptions suggest that these elements are interactive sources of influence on career development. This study did not examine information relevant to personal inputs, such as the research participants' physical and social features or cultural environments. This study only assessed an engagement with the Career Development Center. Future research could include additional personal factors and environmental influences, such as socioeconomic status, first-generation status, age, and classification, as these may impact the results of the study.

The study's response rate was appropriate regarding the quantitative data, as the quantitative data set was reflective of an entire semester. Additionally, not having access to demographic information about what year a student is enrolled within the institution makes it difficult to know the influence of a meaningful career engagement in the retention of varied years of enrollment.

Table 13.

Retention/Graduation of Students who had a meaningful Career Center Engagement

Total Number of Unique Students (N= 409)

Characteristic	n	%
Total Registered in Fall 2023	363	88.80%
Total Not Registered in Fall 2023	46	11.20%
<i>Total Alumni</i>	42	10.30%
<i>Total Former Students Not Graduated</i>	4	1.00%
Total Registered in Fall 2023, Retained to Fall 2024 or Graduated by Summer 2024	320	88.20%
<i>Total Enrolled Fall 2023 who Registered in Fall 2024, Did Not Graduate</i>	183	50.40%
<i>Graduated Fall 2023, Spring 2024, or Summer 2024</i>	137	37.70%
Total Registered in Fall 2023, Not Retained to Fall 2024 or graduated	43	11.80%

In contrast, the qualitative data sought to explore individual perceptions of the impact of a meaningful career engagement on their retention and further generalize the student's perceptions of career readiness; there was under one hundred, a total of 39 total respondents, two provided no meaningful data, submitting only irrelevant entries. Given that several hundred students had a meaningful career engagement with the Career Development Center the researcher desired more inputs. The study was meant to understand how Career Development Center users experience a phenomenon (usage of the Center). Additional responses over a more extended period or at different stages within the academic year could perhaps garner different retention and career readiness themes.

The career advisors attempted multiple sources of engagement in the questionnaire distribution to get more survey responses.

IMPLICATIONS FOR PRACTICE AND POLICY

As Hoyt (1976) mentions in their book *Application of the Concept of Career Education to Higher Education*, career education is a concept and should provide proper emphasis both philosophically and operationally to one of education's fundamental goals: education is preparation for work. The integration of career services is vital to aiding students in understanding how to articulate what they have learned in academics and then applying that knowledge to the world of work. Cruzvergara and Dey (2014) outline that career services are about connected communities; however, as Barton (2013) found in their research, 40% of youth surveyed were unfamiliar with market conditions or the requirements for well-known professions. Additionally, Ceperley (2013) noted that over the last 25 years, college campuses have focused heavily on expanding major-specific advising, surpassing career centers and other student service functions. Flaherty (2023) found that one-third of students did not interact with the campus career center.

This study demonstrates the importance of a meaningful career engagement with the Career Development Center in helping students navigate the complexities of understanding occupations while positively influencing retention at the institution. According to a 2018 Strada-Gallup report, many students cite job and career outcomes as the reason they go to college, yet not many students access career services. Additionally, as the Career Mobility Index indicates, nineteen percent of graduates who are five to ten years post-graduation felt like their institution invested in their career readiness. Thus, integrating meaningful career engagement into the broader academic framework to align with faculty efforts is essential for fostering a cohesive and collaborative approach. As Rebekah Pare (2024) states in her article: *When We Talk About Student Success, Why Aren't We Talking About Career Services?* She makes the poignant statement that their impact is limited when career services operate in isolation—

detached from academic departments or student success initiatives. The benefit of integration extends beyond supporting students in completing their degrees and prepares them for successful transitions throughout their lives. Consistent communication and collaboration with faculty about employer expectations and student competencies to meet evolving industry needs can provide students with a synergistic experience, preparing them for life after academia.

The Career Development Center engagement goes beyond mere career conversations; it empowers students to gain clarity and confidence in aligning their interests, aptitudes, and abilities with meaningful occupational and personal goals. As one respondent shared, "My visit with the Career Advisor at the Career Development Center was really helpful. They gave me a clearer idea of what I can do with my degree. I also got insight into my personal goals and how to make better educational choices. The Career Advisor gave me a lot of useful info on potential career paths (music business, entrepreneurship). I feel more confident about my choices at MTSU and much appreciate her guidance."

As Gati et al. (1996) stated, as written by Rochat (2019) in *The Career Development Quarterly* they note that indecision is not a single problem with different symptoms but maybe the consequence of various problems; thus, indecision is a multidimensional construct. Career Centers throughout the institutions of higher education work with students to help students who may be having a hard time deciding on a major course of study or career due to various constructs. Additionally, traditional college-age students (18–24) often have limited exposure to career options beyond their immediate environments. While research suggests that by age 15, adolescents typically exhibit metacognitive competence in decision-making, problem-solving, and commitment to action (Mann, Harmoni, & Power, 1989), they can potentially lack clarity about the specific actions required to pursue their career interests. This gap highlights the value of career services in guiding students toward informed decisions. As one questionnaire respondent reflected, "My meeting helped point me in the right direction in finding a job and what I needed to do to actually get the jobs I am applying for. I was sent resources for

job sites and a mock resume to improve my applications. I've had such a hard time getting a job in the degree I got, and now I feel more confident about securing a job I will enjoy. I wish I had used the Career Development services sooner."

As David Kozhuk (2023) states in his article *Why Higher Ed Should Invest In Career Services and not Abolish It*, he notes that the resources and opportunities career services offer are often known to few and have been overshadowed by sweeping judgments and absolutes about their effectiveness—rather than increased support for solutions. Career Services also help build confidence, provide clarity, and support personal and professional growth. Another respondent noted, "My meeting at the Career Development Center did help and provided me with many more options than I thought I had. As a first-generation college student and the first female Veteran in my family, I do not have much guidance from my family to help me navigate furthering my career. The Career Development Center has renewed my confidence in what I will need to do to further my career during college and following graduation."

These testimonies and the quantitative evidence emphasize that career services are a critical component of student development, fostering immediate and long-term success. Furthermore, as Helbig and Matkin (2021) state: when done well, career services that cover the entire curriculum—which begins with the student's first year in college and spans their career—help to increase the probability of alumni giving, encourage alumni to hire fellow alumni, and create a broad talent pool ranging from student interns to executive-level professionals.

RECOMMENDATIONS FOR FUTURE STUDY

Conducting a longitudinal study is crucial to comprehensively understanding the influence of career services on student retention. This approach would enable researchers to monitor the effects of career services on retention and outcomes, thereby enhancing alumni follow-up and engagement.

Moreover, it could potentially reveal how engagement with career services contributes to academic persistence and career readiness. The longitudinal data could also be instrumental in assessing accreditation needs and addressing institutional change, thereby providing a wealth of insights for the academic community.

Expanding the research to include other types of engagements, such as classroom presentations and transactional appointments, such as resume reviews and graduate or professional school applications, should be reviewed for impact, as these are often high-usage areas for career services. Universities can make better decisions about their services by examining individual and combined impacts. Makela et al. (2014) noted that about 42% of students felt unprepared to utilize career services or were too busy. Understanding marketing language and what resonates with students based on societal changes and issues to increase their desire to access career and other auxiliary services should be studied. Additionally, demographic and environmental influences can be studied, such as their impact on center usage and retention and perception of career readiness. These implications could lead to institutions making better data-informed decisions, empowering them to align more effectively with institutional goals and student needs.

To further understand the implications of this kind of research future research could look at both individual attributes and when the intervention took place and for what purpose. Specifically, the data could assess first generation status and its influence on students' perceptions of career readiness and if it is a factor on retention, another attribute that could be analyzed includes the academic year of a student, a first-year student might perceive career readiness different than a fourth-year student or recent alum. This data could provide meaningful information about outreach to targeted populations and inform both academic and co-curricular programming.

CONCLUSION

According to the National Center for Education Statistics (2023), the projected four-year institutional enrollment of full-time students will stagnate at around eleven million. As Generation Alpha—children born between 2010 and 2025—continues to infiltrate the educational and work system, technology follows them. They are growing up to be the most technologically skilled and educated generation, thus necessitating the educational system to adapt. This adaptation will be heavily influenced by the role of technology, as highlighted by Jukic & Skojo (2021).

As Feller (2014) points out, policymakers see college and career readiness as curricular alignment with expectations around test scores. Employers see college and career readiness as meeting workforce needs, and parents seek assurance that students will qualify for name-brand colleges and find livable wage employment. As Josh Bersin, a leading industry analyst, notes in a recent Forbes interview (2024), the future of work faces four predictions: labor shortages will continue, the transformation will be a leadership priority, work will become less of an identity for employees, and human resources will grow in power. As more people reach retirement age, organizations will need to get more revenue per worker. The future will be about developing employees' skills, thus leading leadership to think differently about workplace culture. In this context of changing generational needs, the strategies for integrating career development services into academic curricula, such as creating personalized career pathways and leveraging technology via badges and AI platforms to support students, become not just important, but urgent to higher education and its aid in transitioning.

With the cost of higher education increasing and the population of college-age students decreasing, higher education's emphasis on retention will continue to increase in priority. While institutional retention is important to the economic viability of the business of the school, it also leads to more significant societal and individual benefits as recent data shows that college degree graduates weathered the recession better than peers with a high school diploma, the jobless rate of bachelor's

degree holders is less than two percent, and poverty is 3.5 times lower than those with a high school diploma (US Bureau of Labor Statistics, 2023, Carnevale et al. | 2016). Additionally, according to the latest report from the Economic Policy Institute, released on May 9, 2024, the recent unemployment rate for college graduates, defined as workers ages 21 to 24, recovered 2.5 times faster from the pandemic than those who went through the Great Recession of 2008-2009 (Hanson, 2024).

The positive impact of career guidance and counseling efforts with developmentally appropriate content (career development) can significantly enhance a student's clarity and confidence as they exit the academic environment (Feller, 2003). As one participant noted in their questionnaire response, "The meeting really helped me bring career/major ideas to the surface that would better fit me than my current major; it provided clarity with my personality type and what careers I could possibly look into since each fall into each other." This feedback provides valuable student insight into the interconnected nature of academic and career services and calls for leadership and institutions to support integrating career services into the broader academic experience. Integration between academic and career services could include expanded partnerships between academic and career services, including career services within academic affairs, and discussing funding models to ensure that career services have adequate resources. This research, along with additional data from The National Association of Colleges and Employers and The National Alumni Mobility report, validates the need for college students to have a meaningful engagement with career services; it leads to higher retention rates, more job offers, and increased career mobility.

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APPENDIX A

INFORMED CONSENT

Research Study: Influence of Career Services on Retention

Protocol Number: IRB-FY2025-49

Approval Date: October 22, 2024

Principal Investigator: Beka Moore

Co-Principal Investigator: Dr. Kim Godwin Institution: Middle Tennessee State University

You are being asked to participate in a research project. The following information is provided to inform you about the research project and your participation in it.

The purpose of this study is to see if students who have a meaningful career center engagement are retained at a rate higher than or equal to their peers at the same institution and then to further explore students' motivations and perceptions about the career meeting to learn if the meeting truly does contribute to both their career readiness and their retention.

You will be asked a series of questions to determine how your meaningful engagement with the Career Development Center influenced your retention and career readiness.

This survey is short and should take no more than 3 minutes of your time.

There is no compensation for participation in this survey.

Here are your rights as a participant: a) Your participation in this research is voluntary. b) You may skip any item that you don't want to answer, and you may stop the research at any time. Note that if you leave an item blank, you will be warned that you missed one, just in case it was an accident. You can still click that you don't want to answer.

Some items may be required to accurately present the study. c) There are no risks associated with your participation besides possible discomfort with some of the questions. d) The benefit to participating in this study is that you are contributing to enhancing best practices within the area of Career Development. e) You will NOT be asked to provide any identifiable personal information. f) All efforts, within reason, will be made to keep the personal information in your research record private, but total privacy cannot be promised. Your information may be shared with people at MTSU (such as the MTSU Institutional Review Board) or other agencies (such as the Federal Government Office for Human Research Protection) if you or someone else is in danger or if we are required to do so by law.

Contact Information: If you should have any questions about this research study please contact:

Principal Investigator: Beka Moore Contact Information: beka.moore@mtsu.edu

For additional information about giving consent or your rights as a participant in this study, please contact the Middle Tennessee State University (MTSU) Office of Compliance at 615-494-8918 or via email at irb_information@mtsu.edu. (<http://www.mtsu.edu/irb>)

If you're ready to get started, please make your choice below before clicking the arrow button. Thanks again for volunteering your time to this project!

I have read the information above.

I am at least 18 years old. I believe I understand the purpose, risks, and benefits of the research, and I know what I will be expected to do as a study participant.

Yes

No

Default Question Block

Did your engagement with the Career Development Center help you gain clarity on what you can do with your degree, or did it provide insight into your personal goals and how to make informed educational choices? If yes, please elaborate on what the Career Development meeting provided knowledge on that was helpful. If not, what were you expecting to happen that did not.

As a result of your engagement with the Career Development Center, did you take action? I.e. apply for a job, change your major, etc. Why or why not?

Do you think you will remain at MTSU through the completion of your degree? Why or Why Not. Please provide a few words.



What do you believe it means to be career ready? Please provide a few words and then define their meaning.



APPENDIX B

From: do-not-reply@cayuse.com <do-not-reply@cayuse.com>

Sent: Tuesday, October 22, 2024 11:21 AM

To: Beka Moore <Beka.Moore@mtsu.edu>; Kim Godwin <Kim.Godwin@mtsu.edu>

Subject: [EXTERNAL] IRB-FY2025-49 - Initial: Initial Exempt Protocol Approval Letter



Office of Research Compliance
2269 Middle Tennessee Blvd.
Sam H. Ingram Bldg (ING) Room 010A
Box 124
Murfreesboro, TN 37132
www.mtsu.edu/irb

Date: October 22, 2024

PI: Rebekah Moore

Department: Career Development Center, EdD Assessment Learning School Impr

Re: Initial - IRB-FY2025-49

An Exploratory Study of Students Perceptions of a Meaningful Career Center Engagement and its Influence on Student Retention

The Middle Tennessee State University Institutional Review Board has rendered the decision below for the above referenced study.

Decision: Exempt

Category: Category 3.(i)(A). Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection.

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

Findings: Researcher responded to comments.

Research Notes:

Please note that even though your proposed study is deemed exempt from further IRB review, the following apply to your approved study:

1. In accordance with 45 CFR 46.110, expiration dates do not apply to research eligible for Exempt Review under the Common Rule, and continuing review is not required by the IRB.

2. Any unanticipated harm to participants or adverse events must be reported to the Office of Compliance.
3. All modifications to the approved study must be submitted for review through Cayuse IRB for approval before their implementation. Adding new researchers constitutes a modification to the protocol. Per MTSU Policy, a researcher is defined as anyone who handles the data or interacts with participants. Everyone meeting this definition for this project must have completed the required CITI training and received IRB approval prior to becoming actively involved in the project.
4. Closure of the study must be submitted within Cayuse when the study ends or when personal identifiers are removed from the data and all codes and keys are destroyed.
5. All research materials must be retained by the PI for at least three (3) years after study completion and then destroyed in a manner that maintains confidentiality and anonymity.

Sincerely,

The Middle Tennessee State University Institutional Review Board