

Fall 12-7-2023

Revitalizing the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in a Postsecondary Career and Technical Education Program

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REVITALIZING THE MIDDLE-SKILL TALENT PIPELINE: EXPLORING THE
DECISION TO ENROLL IN A POSTSECONDARY CAREER AND
TECHNICAL EDUCATION PROGRAM

by

Felicia Lindsey Hall

A Dissertation
Submitted to the Graduate School,
the College of Business and Economic Development
and the School of Leadership
at The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

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December 2023

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2023

Published by the Graduate School



ABSTRACT

A workforce shortage exists within occupations requiring educational training beyond high school but less than a 4-year degree, known as middle-skill occupations. Career and Technical Education (CTE) programs offered at community colleges throughout the United States equip graduates at the middle-skill level. Although affordable CTE programs are readily available, little is currently known about what makes students consider and ultimately enroll in postsecondary CTE programs. This qualitative phenomenological study investigated the decision to enroll in a postsecondary CTE program as experienced by current students at a North Alabama community college to identify enablers and barriers faced during the decision to enroll process. The researcher utilized Interpretative Phenomenological Analysis (IPA) methodology to interpret data collected from semi-structured one-on-one interviews with current students and a focus group of postsecondary CTE program administrators. Purposeful sampling was employed to select seven participants for one-on-one interviews and two focus group participants. The researcher developed an instrument with six open-ended one-on-one interview questions and seven open-ended focus group interview questions. Protocols for both one-on-one interviews and the focus group were also developed. The findings and recommendations from this study inform the recruiting efforts of institutions offering postsecondary CTE programs to increase community awareness and interest in such programs, increase enrollment, and add significant qualified talent to the middle-skill talent pipeline.

Keywords: CTE, postsecondary CTE, decision to enroll, CTE enablers, CTE barriers, middle-skill talent pipeline

ACKNOWLEDGMENTS

I want to express my sincere gratitude to several individuals who had a significant influence on my dissertation journey. First, and foremost, my committee chair Dr. Quincy Brown. Thank you for your tireless encouragement and endless willingness to guide and assist me with this paper – I would not have completed this process without your expertise. Next, to my committee members: Dr. Annulis, Dr. Kmiec, and Dr. Lunsford, your input and support were beyond valuable – thank you all. To Robin Johnson, Joyce Powell, Courtney Isgett, and Suzy Robinson – your dedicated work behind the scenes taking care of all us students did not go without notice and is greatly appreciated. Finally, to Mr. Kenneth Kirkland, Dean of Health Sciences at Calhoun Community College – your assistance in helping me secure permission to research at Calhoun and access to the Health Sciences student population allowed this research study to come to fruition after months of disappointment. Thank you for everything.

DEDICATION

To my parents, Steve and Anna Hall – I'm convinced that being your daughter is my life's greatest privilege. I love you.

This is for you.

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LIST OF ABBREVIATIONS

<i>CTE</i>	Career and Technical Education
<i>IPA</i>	Interpretative Phenomenological Analysis

CHAPTER I – INTRODUCTION

A labor shortage exists in the United States (Ferguson, 2022; Templet, 2022). According to the U.S. Chamber of Commerce (2021), this labor shortage represents the “most critical and widespread challenge facing businesses right now” (para. 5). On December 31, 2021, there were 6.3 million unemployed persons in the United States and 10.9 million job openings (U.S. Department of Labor, Bureau of Labor Statistics [BLS], 2022). Employers across many industries are experiencing difficulty filling their open positions (Fowers & Van Dam, 2021; Rosenbaum, 2021). More than half of small businesses have unfilled job openings (Dunkelberg, 2022), and 31% report having open positions they were unable to fill for at least three months (Wronski, 2021). Companies cannot find a reliable supply of workers with the skills, training, education, or experience required to fill their vacancies (Carnevale et al., 2013; Carnevale et al., 2020). This unmet demand for labor threatens businesses’ ability to thrive (Ezrati, 2022). The structure for this chapter is as follows: background of the study, statement of the problem, statement of purpose, research questions, research objectives, conceptual framework, the significance of the study, delimitations, assumptions, and definitions of key terms.

Background of the Study

One segment of the workforce where the shortage of labor is most evident is middle-skill occupations (Rios-Aguilar et al., 2019). Middle-skill occupations are defined as jobs that require education and training beyond a high school diploma but less than a 4-year degree (Holzer & Lerman, 2007). This type of postsecondary education includes vocational certificates and credentials, associate’s degrees, work experience, on-the-job training, and “some college” with no earned degree (Modestino, 2016, para. 7). Middle-

skill occupations make up 24% of the U.S. labor market (Carnevale et al., 2018). When surveyed about recruiting efforts, 46% of managers report difficulty finding workers for their middle-skill vacancies (Business Wire, 2019).

The workforce shortage within middle-skill occupations presents a risk not only to individual businesses and communities but also threatens national economic consequences (Cappelli, 2015). Companies offer increased salaries to recruit the scarce talent available (Leonhardt, 2021). Sustained increased operating costs can ultimately affect the supply chain, leading to inflation. A robust talent pipeline increases recruitment efficiency, lowering costs for businesses (Calma & Sayin, 2021). Postsecondary career and technical education (CTE) programs equip students at the middle-skill level, producing graduates qualified to enter the middle-skill talent pipeline (Lowry & Thomas-Anderson, 2017).

Community colleges and technical colleges provide CTE programs at the postsecondary level (Dortch, 2014). Community colleges are central to most communities in the United States and play an essential role in regional workforce development (Eyster et al., 2016). Postsecondary CTE programs at community and technical colleges provide the skills and credentials needed for middle-skill jobs. These programs immediately qualify participants to fill middle-skill positions upon graduation (National Conference of State Legislatures, 2022). Federal legislation requires these programs to align with regional needs so that graduates are prepared for “in-demand” jobs (Miller, 2022).

Individual states must demonstrate alignment between their CTE programs and the local labor force to receive federal funding for public CTE programs (Advance CTE, 2022). This alignment promotes “high-quality CTE programs,” qualifying students to

enter the middle-skill talent pipeline upon graduation, with the potential for immediate, local, well-paying employment (Advance CTE, 2021; Dortch, 2014; Stevens, 2019). Given the critical role postsecondary CTE programs could play in ending the middle-skill labor shortage and the lack of current literature about the students enrolling in these programs, further research is needed (Haviland & Robbin, 2021; Jacob, 2017).

Statement of the Problem

Local economies are healthy when regional talent pipelines align with workforce needs (National Governors Association, 2018) and are filled with vetted candidates, allowing employers to recruit qualified workers cost-effectively and efficiently (Breugh, 2016). A nationwide shortage of qualified workers has disrupted the middle-skill talent pipeline in the United States (Cappelli, 2015). Postsecondary CTE programs equip graduates with the knowledge and skills to immediately enter the workforce (Association for Career and Technical Education [ACTE], 2021). The majority of these programs train graduates for middle-skill jobs (Tobenkin, 2021). Despite millions of federal dollars invested in postsecondary CTE programs annually, the middle-skill talent pipeline is not sufficient to meet workforce needs (Perkins Collaborative Research Network, 2020). If this gap between workforce needs and available qualified workers is not resolved with a robust talent pipeline, the economy and individual businesses will continue to suffer (Levesque, 2019).

Statement of Purpose

The purpose of this phenomenological study is to understand the decision to enroll in a postsecondary CTE program as experienced by current students at a community college. While literature identifies factors influencing students' choice

between academic and technical postsecondary education (Chapman, 1981; Hossler & Gallagher, 1987; Iloh, 2018), the results do not allow generalization as to why people choose to enroll in postsecondary CTE programs. For this study, the decision to enroll will generally be defined as the process by which learners consider embarking on and successfully entering a CTE program (Haviland & Robbins, 2021). The results will provide recommendations to improve recruitment efforts and increase enrollment in postsecondary CTE programs, which could grow the number of qualified middle-skill workers, revitalizing the middle-skill talent pipeline.

Research Questions

This study will document the lived experiences of CTE students who are currently enrolled in a postsecondary CTE program. There is a need to understand the factors influencing how students consider and enter CTE programs (Haviland & Robbins, 2021). Understanding these influencing factors can inform postsecondary CTE program providers' recruitment processes, possibly leading to increased enrollment. One question will serve as a basis for guiding the research: How do students describe their experience of their decision to enroll in a postsecondary CTE program? Two associated sub-questions will narrow the focus of the study:

1. How do students come to consider postsecondary CTE?
2. What makes students decide to pursue postsecondary CTE?

Research Objectives

This study will explore the lived experiences of postsecondary CTE students to identify the enablers that contributed to their decision to enroll in a postsecondary CTE program. The research will also identify barriers that hindered their decision to enroll.

This study focuses on current postsecondary CTE students. The research objectives are as follows:

RO1 - Describe the demographic characteristics of the study participants, including age, gender, ethnicity, race, education level, field of study, and career level.

RO2 - Identify the perceived enablers that encourage enrollment in a postsecondary CTE program.

RO3 - Identify the perceived barriers that hinder enrollment in a postsecondary CTE program.

RO4 - Explore the lived experiences of postsecondary CTE students and the perceived influence of those experiences on the decision to enroll in a postsecondary CTE program.

Conceptual Framework

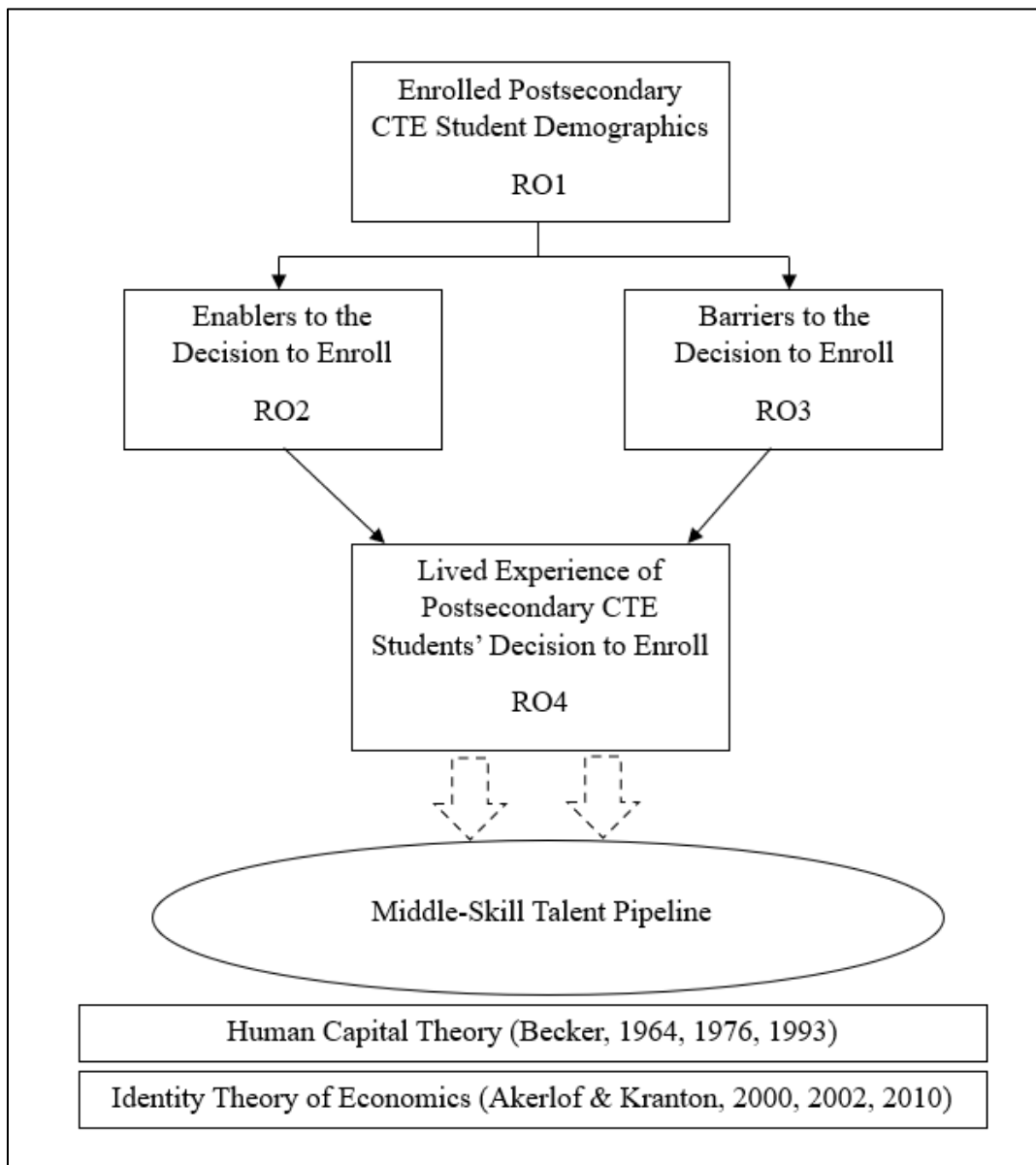
This study is rooted in two theories: human capital theory and the identity theory of economics. Human capital theory suggests that investment in human capital leads to increased worker productivity which leads to economic growth (Becker, 1962, 1964, 1976, 1993). Individuals choose to invest in themselves based on their self-interest for increased future lifetime earnings (Becker, 1976). According to Weiss (2015), human capital is “the collection of productive skills embodied in a person that can be used to generate earnings in the labor market” (p. 27). Postsecondary CTE programs are suppliers of human capital. A person’s decision to enroll in such a program represents their investment in education and training which will increase their human capital.

The identity theory of economics suggests that individuals' identities impact their economic decisions (Akerlof & Kranton, 2000, 2010). Individuals think of themselves as being in social categories with certain acceptable behaviors. People avoid actions that conflict with these norms because doing so affects their self-image. Davis (2011) attributes personal identity as a significant factor in people's decision-making processes, including decisions with personal economic impact. Deciding to participate in a postsecondary CTE program represents a personal economic decision.

A recent report from the Cengage Group (2021) surveying current postsecondary students found that costs of tuition, living, and course materials are the biggest barriers to enrollment in postsecondary education. The same report cited students' belief that "their education was necessary for their career path" (p. 17) as the greatest motivator or enabler to enrollment in postsecondary education. Postsecondary CTE programs develop skills in line with in-demand occupations at the middle-skill level at a fraction of the cost of a traditional 4-year degree (Anderson et al., 2021). These programs address the top barrier and the top motivator to postsecondary education enrollment, and also feed directly into the middle-skill talent pipeline (Tobenkin, 2021). However, little is known about barriers and enablers to the decision to enroll in a postsecondary CTE program as experienced from the perspective of current students through the lens of social categories, their associated norms, and their impact on identity. The conceptual framework in Figure 1 illustrates the decision to enroll from the perspective of current postsecondary CTE participants, guided by human capital theory and identity theory of economics.

Figure 1

Conceptual Framework



Significance of the Study

There is little research in the literature examining motivating factors related to the decision to enroll in a postsecondary CTE program. Most related research is centered on a student's choice of 4-year institution or major (e.g., Beggs et al., 2008; Chapman, 1981; Hossler & Gallagher, 1987; Hossler et al., 1989). Given the rising importance of high-

skill jobs that fall within the category of middle-skill education and training requirements that can be provided by postsecondary CTE programs, it is important to understand how current CTE students experienced their decision to enroll through the lens of social identity.

With a greater understanding of these critical decision-making behaviors, community colleges administering postsecondary CTE programs could better inform potential students of their program offerings and how these programs may be beneficial to these students, in terms of both economic and identity gains. Additionally, data from this study could inform the recruiting practices of postsecondary CTE programs looking to influence choice behavior amongst potential students, ultimately increasing participation in postsecondary CTE, and supporting the growth of a knowledgeable and qualified workforce within the United States. Stakeholders include CTE programs, high school counselors, community college counselors, industry recruiters, students, their families, and the communities in which they live and work.

Delimitations

Roberts (2010) states that delimitations are boundaries the researcher has set for the study that determine the scope of the research. The researcher set two delimitations to understand the lived experiences of the decision to enroll in a postsecondary CTE program from the perspective of current students. First, the study focuses on students currently enrolled in a postsecondary CTE program in North Alabama. The study does not include students who did not choose to enroll in a postsecondary CTE program or those not currently enrolled in a postsecondary CTE program. This limitation was set since the purpose of this study is to explore the lived experiences of current

postsecondary CTE students. Second, the study will focus on students enrolled in a health sciences program. Limiting the research to students enrolled in one field of study allows the researcher to investigate a more homogenous population. This choice is relevant since the qualitative purpose of the research is to more deeply understand and describe the experiences of a particular group, current health sciences students, in detail.

Assumptions

Assumptions are the ideas taken for granted by the researcher in a study (Roberts, 2010). This study has three assumptions. First, the researcher assumes the participants will provide open, honest responses to the interview questions. Second, the participants have recall ability to accurately remember the enablers and barriers they experienced in their decision to enroll. Finally, the participants can fully and clearly describe their experience of their decision to enroll.

Definitions of Key Terms

Roberts (2010) recommends research proposals include operationalized definitions of any terms that may be misunderstood. A listing of key terms and definitions for the purposes of this study is included.

1. *Barrier* – “something immaterial that impedes or separates” (Merriam-Webster, n.d.)
2. *Career and technical education (CTE)* – “courses (at the high school level) and programs (at the postsecondary subbaccalaureate level) that focus on the skills and knowledge required for specific jobs or fields of work. The occupational fields included in this definition are: agriculture and natural resources; business support, management, and finance; communications;

computer and information sciences; construction; consumer services; education; engineering and architecture; health sciences; manufacturing; marketing; public, social, and protective services; repair; and transportation” (National Center for Education Statistics [NCES], n.d.-a, para. 1)

3. *Enabler* – “something or someone that makes it possible for a particular thing to happen or be done” (Cambridge Dictionary, n.d.)
4. *Human capital* – “the collection of productive skills embodied in a person that can be used to generate earnings in the labor market” (Weiss, 2015, p. 27)
5. *Middle-skill occupations* – “jobs that generally require some significant education and training beyond high school but less than a bachelor’s degree” (Holzer & Lerman, 2007, p. 8)
6. *Non-traditional fields* – “occupations or fields of work, such as careers in computer science, technology, and other current and emerging high-skill occupations, for which individuals from one gender comprise less than 25% of the individuals employed in each such occupation or field of work” (Hyslop, 2018, p. 154)
7. *Postsecondary* – “of or relating to education beyond high school” (Dictionary.com, n.d.)
8. *Student college choice* – “a complex, multistage process during which an individual develops aspirations to continue formal education beyond high school, followed later by a decision to attend a specific college, university, or institution of advanced vocational training” (Hossler et al., 1989, p. 234)

9. *Talent pipeline* – A talent pipeline is a pool of candidates who have the skills and credentials required by employers (U.S. Chamber of Commerce Foundation, 2020).

Organization of the Study

The manuscript for this study contains five chapters. Chapter I includes the introduction, background of the study, purpose of the study, and conceptual framework. The chapter also outlines research objectives, delimitations, assumptions, and definition of terms. Chapter II presents a literature review and relevant research related to the topic. The chapter also includes theories shaping the framework through which the participants' experiences will be analyzed. Chapter III describes the qualitative research methods to be used to conduct the study and the proposed process to collect data for the study. Chapter IV presents the results of the study. Chapter V concludes with the study's findings, conclusions, and researcher's recommendations.

Summary

The labor shortage within middle-skill occupations could lead to negative economic impact nationwide (Rios-Aguilar et al., 2019). While postsecondary CTE programs that equip students with skills, knowledge, and experience at the middle-skill level are readily available, little research has been conducted as to *why* people choose such programs (Jacob, 2017). Such training could end the labor shortage within middle-skill occupations (ACTE, 2021). Therefore, there is a need to understand the decision-making process that leads students to enroll in postsecondary CTE programs (Haviland & Robbins, 2021). The purpose of this study is to explore the decision to enroll in a postsecondary CTE program as experienced by current students. This study will also seek

to identify both enabling factors that encourage enrollment and barriers that hinder the decision to enroll in a postsecondary CTE program. Chapter II presents a literature review and relevant research, including a theoretical framework for the study.

CHAPTER II – LITERATURE REVIEW

While literature identifies factors influencing students' choice between academic and technical postsecondary education (Chapman, 1981; Hossler & Gallagher, 1987; Iloh, 2018), the results do not allow generalization as to why people choose to enroll in postsecondary CTE programs. The purpose of this phenomenological study is to understand the decision to enroll in a postsecondary CTE program as experienced by current students at a community college in North Alabama. For this study, the decision to enroll will generally be defined as the process by which learners consider embarking on and successfully entering a CTE program (Haviland & Robbins, 2021). The results will provide recommendations to improve recruitment efforts and increase enrollment in postsecondary CTE programs, which could grow the number of qualified middle-skill workers, revitalizing the middle-skill talent pipeline.

Existing literature identifies factors influencing student college choice and career choice; however, little research has explored factors influencing the enrollment decision of students choosing postsecondary career and technical education (CTE) programs. This chapter begins with a discussion of human capital theory and identity theory in economics which together form the study's theoretical foundation. The discussion continues, focusing on the relationship between CTE programs and the talent pipeline for middle-skill occupations. The chapter closes with an exploration of college choice and career choice.

Theoretical Foundation

This section considers human capital theory and identity theory in economics as together comprising the theoretical foundation of the research study. Human capital

theory purports that an individual's investment in their education increases their human capital leading to increased economic productivity that culminates in increased earnings (Becker, 1964, 1976, 1993). Human capital is considered the aggregate knowledge, skills, and other characteristics possessed by individuals that help them be economically productive (OECD, n.d.). Akerlof and Kranton's (2000, 2002, 2010) identity theory in economics suggests that an individual's economic decisions are impacted by social categories and their related norms. Social norms are how people think they and other people should behave (Akerlof & Kranton, 2000).

Human Capital Theory

Human capital theory is an economic theory concerned with the knowledge, skills, and abilities contained within individuals that enable them to be productive (Weiss, 2015). The idea that both learned and inherent useful capabilities of individuals directly contribute to a nation's economic progress and thus its aggregate wealth was suggested by Adam Smith in the late-eighteenth century (Fleischacker, 2004). This discussion focused on the productivity of individuals. It wasn't until the mid-twentieth century that the term 'human capital' began being further discussed within neoclassic economics. Jacob Mincer (1958) and Theodore Schultz (1961) focused on the importance of education, based on the assumption that skills could be learned and developed within a person rather than something innate and static. Becker (1993) notes that Schultz studied the implications of human capital investments specific to economic growth. Gary S. Becker (1962, 1964), an economist from the University of Chicago, would collaborate with and build upon Mincer and Schultz's work to build a theory of human capital through which sociological issues could be analyzed from an economic point of view.

Becker would go on to conduct economic analyses of issues of discrimination, crime, and family dynamics through a human capital perspective (Becker, 1993).

Becker (1993) worked from the assumption that humans were rational beings. Thus, in order to incorporate human capital theory into an analysis, the foundational assumption is that people make decisions about their education, training, and various other additions to knowledge by weighing costs and benefits. Costs of investing in one's own human capital typically revolve around the foregone value of time spent in training while accumulating human capital. Benefits include increased earnings across a lifetime, cultural gains such as status attainment, and other non-monetary gains. Three foundational ideas lay the groundwork for human capital analysis: (a) individuals maximize welfare as they conceive it; (b) individuals' behavior is forward-looking and consistent over time; (c) individuals' actions are constrained by income, time, and their imperfect memories and calculating abilities (Becker, 1964, 1993).

Becker (1993) also believed that “set(s) of values and preferences” (p. 385) drive the cost/benefit analysis. These values and preferences make up what economists call “tastes” (Akerlof & Kranton, 2010, p. 6)—a factor within standard economic theory usually used to explain non-market decisions. Human capital theory acts as part of this study's theoretical framework since the concept of individuals' ability to increase their lifetime earnings by investing in their own human capital applies directly to a student's college choice process. Understanding how effective current postsecondary CTE students considered their program of choice in its ability to increase their human capital and how that ultimately impacted their decision to enroll is crucial to the purpose of this study.

Identity Theory in Economics

What Becker referred to as values and preferences, those social factors influencing non-market, seemingly non-rational choices, Akerlof and Kranton (2000, 2002, 2010) posit as elements of an individual's identity, specifically their social identity. In Akerlof and Kranton's (2000, 2010) identity theory in economics, people are in various social categories. Within these categories are a set of norms, or how people within a social category should act themselves and also how others should act. When an individual acts in accordance with norms, they experience "gains" to their identity; conversely, when they act in opposition to those norms, they experience a "loss" to their identity (Akerlof & Kranton, 2010). Thus, a person's social identity is made up of their social categories, the associated norms with those categories, and how well their behavior lines up with those norms. The gains and losses are part of economic utility used in making decisions as costs and benefits are weighed.

According to Huettel and Kranton (2012), social contexts can have dramatic effects on decisions. Researchers in behavioral economics and neuroeconomics have a "core goal" (p. 680) of understanding how decision processes are influenced by social information. Akerlof and Kranton's (2010) identity theory in economics provides a unique framework through which to view behavior by considering the motivations of individuals that impact decision-making based on their social context and the norms within that context (Huettel & Kranton, 2012). This is relevant to the current study as it provides a social identity lens through which the researcher will analyze participants' experience of their decision to enroll in a postsecondary CTE program.

Career and Technical Education

According to Carnevale et al. (2018), there are three pathways to good jobs: (a) the high school pathway; (b) the middle-skill pathway; and (c) the Bachelor's degree pathway. Career and Technical Education (CTE) programs provide occupational and non-occupational training at both secondary and postsecondary levels (Dortch, 2014). Sometimes referred to as vocational education, CTE provides the academic and technical skills individuals need in order to be prepared for careers (Edgerton, 2022a). CTE is an important part of the U.S. workforce development system (Granovskiy, 2016). Typically offered at community and technical colleges, CTE programs provide students with skills that can lead to well-paying careers (Durham & Bragg, 2019; Stevens, 2019).

Tracing the History of CTE Through Federal Investments

The federal government has long funded occupation-related training in the United States. The Morrill Land Grant College Act of 1862 signaled a change for higher education in America (Foster, 1972). This legislation provided funding for the establishment of at least one land-grant university in each state to teach the “industrial classes” the agricultural and mechanical arts crucial to the nation’s agricultural system (Dortch, 2014). Until this point in time, higher education institutions had offered mostly classical arts and science-related courses (Foster, 1972). Dr. Parker V. Foster (1972), from Ohio’s National Center for Research in Vocational Education noted that the Morrill Act “committed the expanding nation to a mass higher education sponsored in public universities” (p. 105). The Act and its reauthorization in 1890 paved the way for federal sponsorship of vocational training a few decades later.

The Smith-Hughes Act of 1917

The Smith-Hughes Act of 1917 represents the United States' first federal investment into secondary vocational training (Dortch, 2014). On July 1, 1917 this “scheme of cooperation between the federal government and individual states” (p. 58) became effective, providing a \$1.7 million appropriation in its first year (Barlow, 1976a). The Act funded training within three programs: Agriculture, Home Economics, and Trade and Industrial (Barlow, 1976a). World War I training needs initially dominated vocational education, but soon after the War ended 16 months later, programs refocused on preparing people for work. In 1926 the National Society for Vocational Education joined the Vocational Education Association of the Middle West to create the American Vocational Association which served to promote vocational education throughout the states and to lobby for continued funding in Washington D.C. (Hyslop, 2018). Enrollment in vocational education programs reached 900,000 the same year (ACTE, 2002). The Smith-Hughes Act remained part of federal CTE funding for 80 years until it was repealed by the Balanced Budget Act of 1997 (Congressional Budget Office, 1997).

The George Deen Act of 1936

Nearly two decades after Smith-Hughes, the George Deen Act of 1936 expanded vocational education in America by broadening the use of federal funds to include training for teachers and marketing jobs as part of the “distributive education” program (Hyslop, 2018; Barlow, 1976b). The Act authorized \$14 million each year to vocational education (ACTE, 2002). It also allowed Congress to re-determine the amount appropriated each year, a first in federal vocational education funding. Vocational education continued to expand even through the decade-long Great Depression from

1929-1939 (O'Coin, 1988). Economic crisis and the seemingly-competitor New Deal education and workforce programs did not stunt the growth of federal vocational education and its mission of training people for jobs. With the start of World War II looming in 1938, the U. S. Office of Education began researching training needs that might arise during a national emergency (Federal Security Agency, 1946). The next year President Roosevelt encouraged vocational education schools to assist aircraft companies with their job training needs and to join with the War Department and help identify crucial training needs related to aircraft trades. Vocational education institutions ultimately assisted with emergency training in “armament, aircraft, and shipbuilding factories” (Federal Security Agency, 1946, p. 71) across the nation. By 1942, enrollment in vocational education programs had nearly tripled to 2.6 million participants (Barlow, 1976b).

The George-Barden Act of 1946

After WWII ended, the George-Barden Act of 1946 doubled the United States' investment in vocational education, including the funding of two student organizations and setting limits on agricultural equipment spending (Hyslop, 2018). New flexibilities in the use of the funding were also included in the Act, specifically for the administration of vocational education programs (Barlow, 1976b). This funding positioned vocational education institutions to make an impact on the United States' post-war training needs. Representative Graham Barden of North Carolina remarked about the proposed Act: “New occupational fields in industries requiring new skills, new tools requiring development of other new skills, new materials, and new processes will require additional vocational and technical knowledge and skills. This bill provides a way to encourage it”

(Barlow, 1976b, p. 75). With an abundance of funding, vocational education continued to grow and develop with expansion evident across the United States. Amendments to the Act in 1956 added practical nursing and fishery occupations as eligible programs and included funding for vocational centers (Hyslop, 2018).

The Vocational Education Act of 1963

The Vocational Education Act of 1963 greatly extended vocational education by expanding funding to include “persons of all ages in all communities” (Vocational Education Act of 1963, Section 1). Growing social revolution of the 1960s brought attention to the plight of disadvantaged groups of people within the United States (Barlow, 1976b). Many public laws were passed during this time for the protection and advancement of the civil rights of such groups, including women. Up until this point funding had been authorized solely by field of study (Hyslop, 2018). The Vocational Education Act of 1963 included appropriated funding by student population, including academically and economically disadvantaged students as well as disabled students, all considered to be “special populations” (LaFollette, 2011). Five years later, the Vocational Education Amendments of 1968 expanded federal funding to include postsecondary students and extended funding for specific disadvantaged populations. This Act marked a shift in vocational education’s focus from occupations to people (U. S. Department of Health, Education, and Welfare, 1969). Vocational education continued this trend with the Vocational Education Amendments of 1976 that promoted equal opportunities for females (Hyslop, 2018).

The Carl D. Perkins Vocational Education Act of 1984

The Carl D. Perkins Vocational Education Act of 1984 was named in honor of education advocate Carl D. Perkins, a state representative from Kentucky who particularly championed vocational education in order to benefit his constituents and those in similar economic situations across the country (LaFollette, 2011). Continuing the focus on serving special populations, Perkins I expanded the definition of *special populations* to include women, the disadvantaged, the handicapped, individuals with limited English proficiency, and both racial and ethnic minorities (Carl D. Perkins Vocational Education Act of 1984, 1984). Perkins I improved the access of underserved populations and those who have greater-than-average educational needs (LaFollette, 2011).

Perkins II through Perkins V (1990 – Present Day)

The 1990 reauthorization of the Carl D. Perkins Vocational Act of 1984 continued CTE development and growth in honor of Representative Perkins. The Carl D. Perkins Vocational and Applied Technology Education Act of 1990, also referred to as Perkins II, marks the beginning of contemporary vocational education in the United States (Hyslop, 2018). This reauthorization introduced alignment between secondary and postsecondary programs, business partnerships, and academic integration – all of which are reflected in current federal CTE policy. Shortly after Perkins II, the School-to-Work Opportunities Act of 1994 was passed, and industry partnerships helped align school-based and work-based learning (Hyslop, 2018). This Act expired in 2001.

Perkins III, or the Carl D. Perkins Vocational and Technical Education Act of 1998, focused on secondary and postsecondary alignment and continued academic

integration (Hyslop, 2018). The Act ensured 85% of federal CTE funding would reach local state agencies. Also in 1998, 71 years after its creation the American Vocational Association was renamed the Association for Career and Technical Education, “reflecting a change from job-specific vocationalism to skill-based, rigorous career education” (ACTE, 2021, para. 12). With the reauthorization of the Carl. D. Perkins Career and Technical Education Act of 2006, called Perkins IV, the term *Career and Technical Education* in favor of *vocational education* was first introduced at the federal level (Hyslop, 2018). This Act focused on programs of study with the intention of unifying CTE. The most recent reauthorization of federal CTE legislation was passed in 2018 with the Strengthening Career and Technical Education for the 21st Century Act of 2018 (ACTE, 2021). Known as Perkins V, this Act represents continued federal focus on programs of study within CTE. The purpose of the act is to “develop more fully the academic knowledge and technical employability skills of secondary and postsecondary students who elect to enroll in CTE programs” (Edgerton, 2022b, p. i). Full implementation of the Act began in the 2020-21 school year (ACTE, 2021). The United States budgeted more than \$1.3 billion in FY2021 for Perkins V (Edgerton, 2022b).

Current Postsecondary CTE Programs

The goal of CTE is preparation for future employment in a particular sector or occupation (Stevens, 2019). CTE training is offered by community colleges, technical colleges, and by employer through apprenticeships and on the job training (Dortch, 2014). Perkins V requires states’ CTE programs must be aligned with local business and industry needs to receive funding (Edgerton, 2022b). This alignment is achieved through CTE provider collaborations with business and industry. One important outcome of this

alignment is the awarding of industry-recognized credentials (IRC). IRCs are awarded to “individuals who demonstrate skills, experience, knowledge, or a set of competencies that are recognized as necessary or desired for a particular occupation by the relevant industry” (p. 7). In addition to IRCs, postsecondary CTE programs award certificates and associate degrees to program graduates (Dortch, 2014).

CTE Fields of Study

The National Center for Educational Statistics (NCES) is part of the U.S. Department of Education’s Institute of Education Sciences (IES, n.d.). The IES provides scientific evidence relevant to the U.S. education system through research and evaluation conducted by NCES. NCES’s taxonomy for postsecondary education classification identifies 13 credit-bearing occupational fields that comprise CTE fields of study. Based on this taxonomy, NCES reports their National Postsecondary Student Aid Study and associated Beginning Postsecondary Students survey. This study provides the best data on CTE students in community colleges because it captures the 90% of community college students who have declared a major, in either academic or CTE fields of study, including CTE fields that aren’t funded by Perkins V (Anderson et al., 2021). The allows reporting on all credential-granting CTE fields of study. Table 1 provides NCES’s classification breakdown of both CTE and academic fields of study.

Table 1

CTE and Academic Fields of Study

CTE fields of study	Academic fields of study
Agriculture and natural resources	Visual and performing arts
Business management	Humanities (foreign languages, liberal arts, philosophy, and religious studies)
Business support	Interdisciplinary studies
Communications and design	English/letters
Computer and information sciences	Natural sciences (biological sciences, physical sciences)
Consumer services	Mathematics
Education	Social sciences (anthropology, economics, geography, political science/government, sociology)
Engineering, architecture, and science technologies	Area/ethnic studies
Health sciences	History
Manufacturing, construction, repair, and transportation	Psychology
Marketing	
Protective services	
Public, legal, and social services	

Note. Table 1 is adapted from the National Center for Educational Statistics (NCES) Postsecondary Taxonomy (n.d.) found in *About CTE Statistics*.

CTE Students

For the 2015-16 academic year, postsecondary CTE students accounted for nearly one-quarter of all U.S. undergraduate students (NCES, 2021). Perkins V requires each state to submit plans detailing how they will work toward “equal access to high-quality CTE courses and programs of study for all students” (Anderson et al., 2021). This encompasses students from special populations such as individuals with disabilities,

individuals from economically disadvantaged families, individuals preparing for non-traditional fields, single parents, single pregnant women, out of workforce individuals, and homeless individuals (Edgerton, 2022b; Granovskiy, 2018; Hyslop, 2018).

Understanding CTE programs as developers of human capital is relevant to the current study of exploring the experience of deciding to enroll from the perspective of a current student. These students who choose to enroll in a postsecondary CTE program made the decision to invest their time and money to gain a set of particular occupational skills hoping to grow their productivity within the middle-skill occupational category and increase their future earnings over their lifetime.

College Choice

Understanding how students' decisions related to their participation in higher education is important, specifically in relation to the proposed study when considering how students come to decide to enroll in postsecondary CTE programs. The complex process of student college choice encompasses many different and often interrelated aspects and variables (Litten, 1982). Various models of college choice are found in existing literature (Chapman, 1981; Hossler & Gallagher, 1987; Hossler et al., 1989; Jackson, 1981). These models seek to explain how characteristics of individual students and characteristics of higher education institutions impact student's decisions on where to attend college (Hossler et al., 1989). There are three widely-used perspectives within college choice literature: (a) an economic approach; (b) a sociological approach; and (c) combined approaches (Braxton et al., 1995; Brown et al., 1999; Hossler et al., 1989; Hossler & Maple, 1993; Vrontis et al., 2007). Each perspective views the decision-making process of students and the related factors influencing the process through a

different theoretical lens. These related factors are often separated into student characteristics and institutional characteristics, allowing for greater analysis through each respective lens.

Economic, Sociological, and Combined Perspectives

Economists became interested in students' decision-making processes related to college choice out of a concern for public policy, specifically funding implications (Litten, 1982). The economic perspective of student college choice considers students' decision making to essentially be an investment calculation (Hossler et al., 1989). Students consider the potential return on investment of a college degree in terms of their future earnings. This approach aligns with Becker's (1964) idea of human capital being an investment individuals choose to make in themselves. An economic perspective on college choice is relevant to this study since human capital theory comprises part of the study's theoretical framework. Investigating *how* students are making the cost-benefit analysis of the decision to enroll in a postsecondary CTE program will be helpful.

According to Litten (1982), sociologists initially became interested in college choice theory in order to examine "processes of social mobility and occupational attainment" (p. 383). College choice models from the sociological perspective are also referred to as status-attainment models since choosing a college and degree can assist in a person's attainment of increased social status (Perna, 2006). While economic models consider the concept of human capital, sociological models are concerned with social capital (Jackson, 1982; Perna, 2006). Social capital refers to relationships and social networks and the strength of those relationships as added value to individuals (Tierney & Venegas, 2009). A sociological perspective on college choice is relevant to this study

since identity theory in economics comprises part of the study's theoretical framework. Understanding the status-attainment view of the decision to enroll in a postsecondary CTE program will provide the researcher insight into the possible social categories in which the study's participants identify.

Combined models of college choice incorporate both economic and sociological perspectives and are considered a third type of approach to student college choice (Hossler et al., 1989; Perna, 2006; Vrontis et al., 2000). Hossler et al. (1989), note that while economic and sociological college choice models enabled researchers to identify factors related to the decision-making process, neither perspective alone can explain the process of college choice. Researchers combined the economic and sociological perspectives in hopes of creating models to “predict the effectiveness of policy-making interventions” (p. 240). These interventions are intended to assist policy makers in finding opportunities for intervention in the choice process. The combined perspectives of college choice are relevant to the current study since they allow an integrated, process-driven analysis of the student decision-making process. Since the current study is focused on the decision to enroll in a postsecondary CTE program as experienced by current students, a combined perspective will allow the researcher to focus on the appropriate stage of the college choice process the participants describe experiencing.

Factors Influencing College Choice

College choice research conducted through economic and sociological models identified factors influencing the student college choice process (Chapman, 1981; Hossler et al., 1989; Hossler & Gallagher, 1987). These factors fall into one of two categories: student characteristics and institution characteristics. Individual student characteristics

impact how students choose to enroll in a college (Hossler et al., 1989). These characteristics include socioeconomic status, academic aptitude and expectations, and the influence of parents and peers. Institutional characteristics include tuition cost, availability of financial aid, academic reputation, and institution size (Hossler et al., 1989). When considering the decision to enroll, as experienced by current postsecondary CTE students through the framework of human capital, it is essential to view these factors through an economic lens, understanding how the investment required by these factors impacts the college choice process. For the purposes of this study, it is also important to consider both individual and institutional characteristics through an identity economics framework, looking for social categories and norms associated with each influencing factor.

Comprehensive College Choice Models

Comprehensive college choice models are intended to encompass the entirety of the decision process. Hendrickson (2002) terms such comprehensive models as “process models” which “must capture elements of potential students, institutional characteristics, and the college application process” (p. 403). Researchers in the 1980s developed three of the most well-known and widely-researched models of college choice—David W. Chapman (1981), Gregory A. Jackson (1982), and Don Hossler and Karen S. Gallagher (1987). While Chapman’s (1981) research focused on the types of factors influencing the college choice, Jackson (1982) and Hossler and Gallagher’s (1987) research showed that the decision process was developmental, occurring in phases. Each of these college choice models were developed to apply to “traditional age prospective students” (Chapman, 1981, p. 503).

Chapman's (1981) Student College Choice Model

David W. Chapman's (1981) research focused on two sets of factors that influence college choice: student characteristics and external factors. The goal of his research included "assist[ing] college administrators responsible for setting recruitment policy to identify the pressures and influences they need to consider in developing institutional recruiting policy" (p. 491). Chapman's (1981) model differs from other comprehensive models in that it is not comprised of phases or stages, but rather focuses on the relationship between student characteristics and external factors. He identified student characteristics comprised of four factors: socioeconomic status, aptitude, level of educational aspiration and expectation, and high school performance. He also identified factors external to the student: significant persons, relatively fixed college characteristics, and college efforts to communicate with students.

Chapman (1981) found that the interplay of these factors leads to the student's choice of college and also explains what factors lead students to apply to multiple colleges. Chapman's model is relevant to the current study in that it differentiates the student characteristics and external influences impacting the college choice decision. Since the current study is concerned with the experience of the decision to enroll in a postsecondary CTE program by current students, having a framework of student characteristics impacting the decision will enable the researcher to identify possible associated social categories in which the students identify. Likewise, considering external influences will enable the researcher to identify possible identity-related norms connected to those influences.

Jackson's (1982) Three Phase Student Choice Model

Following Chapman's (1981) self-proclaimed "crude, exploratory analysis" (p. 246) of factors influencing college choice, Gregory A. Jackson's (1982) research led to a combined approach from sociological methods and economic methods. His combined model consists of three phases through which students navigate as they decide where to enroll in college: preference, exclusion, and evaluation (Jackson, 1982). A sociological perspective informs the first phase, preference. The preference phase correlates a student's academic achievement in high school with their educational aspirations for higher education. Family relationships and background also impact the preference phase. Phase two, the exclusion phase, involves how students create "choice sets" (p. 240) by which they exclude certain colleges. A choice set is the list of colleges to which the student will actually apply (Hossler & Gallagher, 1987). Location and available information are the strongest factors influencing this phase. Because of this, an economic perspective informs a view of this phase since the significant influencing factors are both of a "physical nature" (p. 240); Jackson (1982) identifies this phase as a target for policy makers and related stakeholders.

The final phase is evaluation, during which students consider their choice sets and rate according to their personal preferences. College choice is based on these ratings. Individual and institutional characteristics including family background, academic experience, and college cost all come into play in this final stage, illustrating the benefits of a combined approach (Hossler et al., 1989). Jackson's (1982) model is relevant to the current study due to its process-oriented structure. This will allow the researcher to

identify possible social categories and associated norms within each phase, which are clearly delineated and separated from each other.

Hossler & Gallagher's (1987) Three Phase Student College Choice Model

Hossler and Gallagher's (1987) three-stage student college choice model is the most widely-cited comprehensive model of college choice (Bergerson, 2009). Their research, like Jackson's (1982), frames the college choice experience as a three-phase process through which the student moves linearly (Hossler & Gallagher, 1987). Hossler and Gallagher call the student-centric stages predisposition, search, and choice. In the first developmental phase, students decide whether or not they intend to continue their education beyond high school (Hossler et al., 1989). The predisposition phase is influenced by socioeconomic status, family background, parental and peer influence (Hossler et al., 1989; Hossler & Gallagher, 1987). Characteristics of both the individual student and the institution are relevant to this stage (Hossler & Gallagher, 1987).

During the second phase, students begin gathering information about different colleges (Hossler et al., 1989; Hossler & Gallagher, 1987). This information is what will eventually lead them to choose an institution to attend. Jackson (1982) found that students do not go about this phase rationally—students work through their search uniquely and create their choice set from their own internal rating system. Inaccurate information regarding colleges may lead to exclusion of good-fitting institutions that the student may later come to regret (Hossler & Gallagher, 1987). It is during the last phase, the choice phase, that the student decides which college they will attend by ranking colleges, evaluating their choices, and choosing which institution they will attend (Hossler & Gallagher, 1987; Paulsen, 1990).

When considering the different perspectives on college choice, the sociological, or status-attainment, approach most aligns with the first two phases of Hossler and Gallagher's (1989) model. The third phase, choice, is informed by an economic approach. This demonstrates the strength of a combined model. Hossler and Gallagher's three phase model is relevant to the current study in the same ways as Jackson's (1982) model. Observing the current postsecondary CTE students' experience of their decision to enroll from this three-phase model aids the researcher in identifying social categories and related norms within each phase with either an economic, sociological, or combined perspective.

Summary

Chapter II presents a review of literature relevant to the study. This chapter includes a discussion of human capital theory and identity theory in economics as the study's theological foundation. The history of CTE in the United States is also traced through federal investments. Next, the current state postsecondary of CTE programs is profiled, along with contemporary CTE fields of study, and with a discussion of current postsecondary CTE students. Chapter II concludes with an exploration of college choice theories, institutional and individual characteristics influencing the decision to enroll in higher education, and three comprehensive models of student college choice.

According to Creswell (2008), one purpose of the literature review is to document the need for the study. There is little available research on why students choose CTE careers (Jacob, 2017). Haviland and Robbins (2021) conducted a targeted research review of CTE as a conduit for skilled technical careers. As a result of this review, they created a pathway-based CTE research framework and a call for further research. One priority for

future CTE research, according to Haviland and Robbins (2021), is the need to know more about student decision-making processes that lead them to choose a postsecondary CTE career pathway.

Chapter III describes the qualitative research methods to be used to explore and identify enablers and barriers influencing the decision to enroll in postsecondary CTE programs as experienced by current students. The chapter also includes an overview of the study, the sampling procedures, instrumentation, and data collection procedures. Chapter III concludes by detailing the steps of data analysis, a description of the measures taken to ensure the study's trustworthiness, and a chapter summary.

CHAPTER III – METHODOLOGY

The purpose of this study was to explore the lived experiences of current students while deciding to enroll in a postsecondary CTE program and focuses on identifying factors that serve as enablers and barriers to the enrollment decision. Postsecondary CTE programs produce skilled graduates who are able to immediately enter the middle-skill talent pipeline as qualified, hireable job candidates (Advance CTE, 2021). However, enrollment in such programs has been stagnant for more than a decade (Gewertz, 2017) with significant declines following the COVID-19 pandemic (Smith & Soricone, 2021). Based on their own research, Haviland and Robbins (2021) created a preliminary model for CTE research and call for further research into understanding factors affecting the decision-making process that lead students to consider and ultimately enter CTE programs. This study explored the lived experiences of current students while deciding to enroll in a postsecondary CTE program at a North Alabama community college and focused on identifying factors serving as enablers and barriers to the decision to enroll in a postsecondary CTE program. This chapter provides details on the study's research objectives, research design, instrumentation, role of the researcher, population and sample, sampling procedures, Institutional Review Board process, data collection procedures, data analysis, and trustworthiness of the research design.

Research Objectives

This study explores the lived experiences of current postsecondary CTE students to identify the enablers and barriers influencing their decision to enroll in a postsecondary CTE program. The research objectives are as follows:

RO1 - Describe the demographic characteristics of the study participants, including age, gender, ethnicity, race, education level, field of study, and career level.

RO2 - Identify the perceived enablers that encourage enrollment in a postsecondary CTE program.

RO3 - Identify the perceived barriers that hinder enrollment in a postsecondary CTE program.

RO4 - Explore the lived experiences of postsecondary CTE students and the perceived influence of those experiences on the decision to enroll in a postsecondary CTE program.

Research Design

A qualitative phenomenological approach was used to investigate students currently enrolled in a postsecondary CTE program to document their experiences while deciding to enroll. Qualitative research is based on the foundational idea that people make sense of and give meaning to their experiences (Merriam & Tisdale, 2016). The goal of qualitative research is to understand how people make sense of their experiences and what subsequent meanings they create. Creswell (1998) defines qualitative research as “an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem” (p. 15). Additionally, Merriam and Tisdell (2016) describe qualitative research as being “discovery-oriented” since “the findings are not predetermined” as with quantitative research (p. 7). Because minimal literature exists regarding the decision-making process involved in choosing to enroll in

postsecondary CTE programs, a qualitative design allowed the researcher to gather rich descriptions of each participant's experience of the decision to enroll.

A phenomenological research approach was used to explore the lived experiences of enrolled students to determine the barriers and enablers that influenced their decision to enroll in a postsecondary CTE program. Phenomenology focuses on the meaning individuals give to an experience, assuming there is an essence or essences to a shared experience (Patton, 2002). Patton (2002) also asserts the foundational question underlying phenomenological research is "What is the meaning, structure and essence of the lived experience of this phenomenon for this person or group of people?" (p. 104). Little research investigating students' experiences of deciding to enroll in postsecondary CTE programs exists. Therefore, a phenomenological approach was appropriate for the study's purpose of attempting to gather in-depth participant responses rather than attempting to build upon findings on the related topics of college choice, technical versus academic college major, and two-year college choice (Chapman, 1981; Hossler & Gallagher, 1987; Iloh, 2018; Stokes & Somers, 2009). Phenomenology seeks to discover how a shared phenomenon was experienced by a group of people to identify the essence of that experience, or how they made sense of the phenomenon (Patton, 2002).

Population and Sample

In research, population is defined as "a collective term used to describe the total quantity of things (or cases) of the type which are the subject of [a] study" (Walliman, 2018, p. 107). The population for this study consists of students currently enrolled in a postsecondary CTE program at an Alabama community college. Calhoun Community College (CCC) is the state's largest two-year institution with three sites across four

counties in North Alabama and an enrollment of more than 10,000 students (CCC, n.d.-a). CCC administers more than 100 associate degree options and career/certificate programs with both academic and career options for students, making the institution a good representation of community colleges across the nation (CCC, n.d.-b).

Walliman (2018) defines sampling as “the process of selecting just a small group of cases from out of a large group” (p. 107). The sample for this study consisted of students currently enrolled in one of 15 health sciences CTE programs offered at CCC. A sample confined to current CTE students ensures data is collected from individuals who have recently lived the decision-to-enroll experience. The population and sample were chosen from a two-year community college since this study is concerned with skill acquisition at the middle-skill level.

Specific guidelines for actual sample sizes in qualitative research are limited (Guest et al., 2006). According to Sandelowski (1995), adequate sample size in qualitative research is determined by evaluating the information to be collected “against the uses to which it will be put, the particular research method and purposeful sampling strategy employed, and the research product intended” (p. 179). For phenomenological studies, Creswell (1998) suggests a range of five to 25 participants (p. 64). Interpretative Phenomenological Analysis (IPA) is the only “formalized” (p. 3) method of phenomenological research to suggest possible sample sizes (Bartholomew et al., 2021). Professional doctoral student research with between three and six participants “can be reasonable” (p. 51) using IPA, with overall sample sizes being best if they range from four to 10 interviews (Smith et al., 2009). For focus groups, it is generally held that five to eight participants are ideal (Krueger & Casey, 2014).

Sampling Procedures

Merriam and Tisdale (2016) explain that criterion-based, purposeful selection is made based on attributes participants must have based on the study's purpose and by then selecting participants with those attributes. The use of purposeful sampling ensures that data gathered is solely from students currently enrolled in health sciences CTE programs at CCC. This homogenous sampling technique helps ensure all study participants experienced the phenomenon being studied (Pajo, 2018). The researcher reviewed a pre-interview demographics questionnaire provided by all interested individuals prior to setting up interviews to ensure all participants met the criteria for the study, which included CTE students currently enrolled in a CCC health sciences program. Since this research study was conducted as part of the requirements for a professional doctorate degree, the sample size for the one-on-one interviews was set between six and 10 participants (Smith et al., 2022). The researcher conducted a total of seven one-on-one interviews.

Fern's (1982) research suggests that focus groups consisting of eight participants generated more ideas than focus group with four or six participants, respectively. For this reason, the researcher aimed to recruit eight individuals for the focus group for the purposes of triangulation (Merriam and Tisdale, 2016). The researcher reviewed a pre-interview demographics questionnaire to ensure focus group participants met the criteria as subject matter experts within postsecondary CTE program administration. The focus group requests for participation were met with limited interest, therefore, the researcher conducted a focus group with two postsecondary CTE program expert participants.

Instrumentation

Literature suggests researchers should collect data for phenomenological studies chiefly through in-depth interviews (Creswell, 1998). Data was collected for this study by conducting one-on-one interviews and a focus group interview. The one-on-one interviews as well as the focus group were conducted via online video conference. The focus group was conducted after an initial analysis of data collected from all one-on-one interview participants. The researcher drafted a protocol for the one-on-one interviews (see Appendix A) and conducted seven semi-structured one-on-one interviews using six open-ended questions to collect rich accounts of the lived experiences of current CTE students' experience of the decision to enroll in a postsecondary CTE program (see Appendix B). Semi-structured interviews consisting of open-ended questions accept that individuals uniquely define their experience of the world and allow the researcher to adapt the flow and order of the interview as the participant's description of the phenomenon unfolds (Merriam & Tisdale, 2016).

The researcher gathered information to identify factors acting as enablers and barriers to enrollment in postsecondary CTE programs. Table 2 maps the study's research objectives with questions from both the demographics questionnaire and the one-on-one interview questions to ensure the information gathered during the interviews was sufficient to meet the study's purpose.

Table 2

Mapping Instrument to Research Objectives (One-on-One Interviews)

Research Objective	Instrument Questions
<i>RO1</i> - Describe the demographic characteristics of the study participants, including age, gender, ethnicity, race, education level, CTE program, and career level.	Demographics Questionnaire DQ1-DQ5
<i>RO2</i> - Identify the perceived enablers that encourage enrollment in a postsecondary CTE program.	Q4, Q5
<i>RO3</i> - Identify the perceived barriers that hinder enrollment in a postsecondary CTE program.	Q4, Q5
<i>RO4</i> - Document the lived experiences of postsecondary CTE participants and the perceived influence of those experiences on the decision to enroll in a postsecondary CTE program.	Q1-Q6

The researcher also drafted a protocol for the focus group (see Appendix C). The focus group interview was semi-structured and included seven open-ended questions. The number and nature of the questions depended on the initial analysis of data previously collected from the one-on-one interviews (see Appendix D). Table 3 maps the study’s research objectives with the seven questions from the focus group in order to ensure the information gathered during the focus group is sufficient for triangulation of data.

Table 3

Mapping Instrument to Research Objectives (Focus Group)

Research Objective	Instrument Questions
<i>RO1</i> - Describe the demographic characteristics of the study participants, including age, gender, ethnicity, race, education level, CTE program, and career level.	Demographics Questionnaire DQ1-DQ6
<i>RO2</i> - Identify the perceived enablers that encourage enrollment in a postsecondary CTE program.	Q2, Q3
<i>RO3</i> - Identify the perceived barriers that hinder enrollment in a postsecondary CTE program.	Q4, Q5
<i>RO4</i> - Document the lived experiences of postsecondary CTE participants and the perceived influence of those experiences on the decision to enroll in a postsecondary CTE program.	Q1-Q7

Role of the Researcher

According to Merriam and Tisdell (2016), a characteristic common to all qualitative research is that of the researcher being the primary instrument through which data is both collected and analyzed. It is therefore important that the researcher acknowledge any biases that may impact the research and work to mitigate their influence. The researcher executed the steps necessary to implement appropriate validation strategies to ensure the research remains objective, including the reflexivity measures described later. The researcher has no previous exposure to CTE programs.

Through her doctoral studies in human capital development, specifically workforce

development, she became aware of postsecondary CTE programs. The researcher believes postsecondary CTE may provide economically disadvantaged individuals a “ticket to the middle class” (Petrilli, 2016) helping to reduce inequality while simultaneously growing regional economies, ultimately growing the national economy. Therefore, the researcher acknowledges she has a positive view of postsecondary CTE programs and the potential benefits offered by such programs with little downside to participants.

Institutional Review Board (IRB)

The Office of Research Integrity at the University of Southern Mississippi (USM) is committed to research integrity and thus oversees the Institutional Review Board (IRB) (USM, n.d.-b). The IRB is a committee who reviews all proposed research involving human subjects to ensure it meets all applicable federal and institutional standards and guidelines prior to the research taking place (USM, n.d.-a). According to the University’s website, “All research performed by Southern Miss faculty, staff, or students involving human subjects requires prior approval by the University’s Institutional Review Board (IRB) to ensure that the proposed research meets the relevant federal and institutional standards and guidelines” (USM, n.d.-a, para. 2). Through the Office of Planning, Research and Grants, CCC has a similar IRB process (CCC, n.d.-d). The CCC IRB requires outside student researchers to apply to conduct research at the community college after receiving IRB approval from their home institution prior to conducting research at CCC (CCC, n.d.-c). The researcher submitted the proposed study to both USM and CCC’s IRBs for approval prior to collecting data.

Data Collection Procedures

Obtaining permission to access to the population of the study was the first step in the data collection process. First, approval to conduct the research was requested from the researcher's dissertation committee and USM's IRB (see Appendix E). Upon USM's IRB approval, the research plan was then submitted to CCC's IRB in order to obtain approval to conduct research using CCC's health sciences students as the source for participant selection for the one-on-one interviews, as well as CCC CTE faculty and staff as the source for a focus group (see Appendix F). Once final approval was received from CCC's IRB, the preliminary phase of data collection began. The researcher requested the Dean of Health Sciences at CCC to distribute an informational email to all current students in health sciences CTE programs requesting participation in the study (see Appendix G). The email instructed interested students to complete a demographic questionnaire via an included hyperlink to a Google Form (see Appendix H). The researcher's contact information was provided in the email to answer any questions. A \$35 Amazon gift card was offered as an incentive to increase participation in the research study. The gift card was given to selected participants at the conclusion of their one-on-one interview. Participants for the one-on-one interviews were purposefully selected from the group of respondents to the demographic questionnaire. First preference was given to participants based on their willingness and availability to meet for the interview. Seven students completed the demographic questionnaire indicating their interest in participating in the study.

Next, the researcher emailed the potential interviewees to schedule a date and time for a one-on-one interview at the potential participant's convenience. The seven

interviews lasted between 17 and 60 minutes and were conducted via online videoconference. The selected mode of interview was chosen based on convenience due to the physical distance between the researcher and the participants. The researcher met each participant at the agreed upon time. Before each interview began, a hyperlink to an informed consent form via Google Forms was provided to each participant to read as the researcher read the form aloud, requesting participants' signature for consent (see Appendix I). The interviews were recorded by two hand-held recording devices. The \$35 gift card was sent via email to participants at the conclusion of their interview.

After the end of each interview, the interview recordings were sent to transcriptionist service TranscribeMe for transcribing. When the researcher received an interview transcript, she listened to each interview recording while reading the interview transcript to verify the transcript's accuracy. After the researcher conducted an initial analysis of the data collected from the one-on-one interviews, the researcher sent the initial analysis to the participants for verification as a means of member checking. The focus group interview questions were refined based on the initial findings. The focus group interview questions were then submitted first to USM's IRB and then to CCC's IRB for approval (see Appendix J and Appendix K).

After all one-on-one interviews were conducted and the researcher completed an initial analysis of the data, the researcher requested the Dean of Health Sciences programs to distribute an email soliciting focus group participants from individuals involved with the administration of CCC's CTE programs for the purpose of triangulation (see Appendix L). The email instructed interested individuals to complete a demographic questionnaire via an included hyperlink (see Appendix M). A \$15 Amazon gift card was

offered as an incentive to increase participation in the research study. The researcher's contact information was provided in the email to answer any questions. Focus group participants were selected from the group of respondents to the demographic questionnaire. First preference was given to participants based on their willingness and availability to meet for the focus group. Two individuals completed the demographic questionnaire indicating their interest in participating in the focus group.

The researcher contacted selected potential focus group participants with four possible times for the interview. Based on response, the researcher chose a time at which the potential participants were available. The focus group interview lasted 75 minutes and was conducted via online videoconference at the agreed upon time. Before the focus group began, a hyperlink to an informed consent form via Google Forms was provided to participants to read as the researcher read the form aloud, requesting participants' signature for consent (see Appendix N). The focus group interview was recorded by two hand-held recording devices. The \$15 gift card was sent via email to participants at the conclusion of the focus group.

After the focus group ended, the recording of the interview was sent to transcriptionist service TranscribeMe for transcribing. When the researcher received the transcription of the focus group interview, she listened to the recording while reading the interview transcript to verify the transcript's accuracy. Once the transcript's accuracy was verified, the researcher analyzed the focus group data and compared it with the data collected from the one-on-one interviews.

After the data collection process was complete, the researcher sent an email to participants of the one-on-one interviews (see Appendix O) and participants of the focus

group (see Appendix P) thanking them for participating in the study. The email thanked the participants for their interest in participating in the study and let them know that their interest was greatly appreciated. The data collection process took six weeks, an additional two weeks to analyze the data from the one-on-one interviews and the focus group. Table 4 outlines the data collection plan including analysis and final reporting.

Table 4

Data Collection Plan

Week	Task
Pre-study	<ul style="list-style-type: none"> • Obtain approval from university’s Institutional Review Board • Obtain approval from Calhoun Community College’s Institutional Review Board
1	<ul style="list-style-type: none"> • Send email detailing the purpose of the study, requesting participation in one-on-one interviews • Schedule one-on-one interviews • Make entries into reflexivity journal
2-3	<ul style="list-style-type: none"> • Conduct on-on-one interviews and send audio data to transcriptionist service at the conclusion of each interview • Distribute incentive at the conclusion of each interview • Read and review each transcript upon receipt • Document self-reflection in journal for each interview and continue making entries throughout the data collection and analysis process • Begin analyzing data concurrently with conducting one-on-one interviews • Send initial analysis to participants for member checking
7	<ul style="list-style-type: none"> • Send email detailing purpose of the study, requesting participation in a focus group • Moderate focus group and distribute incentives at the conclusion
8-9	<ul style="list-style-type: none"> • Analyze focus group data • Compare focus group data to one-on-one interview data • Complete analysis and findings • Create a report of key findings and themes • Email thank you letters to participants

Data Analysis

The data analysis and data collection for this study occurred simultaneously as the researcher followed the Interpretative Phenomenological Analysis (IPA) methodology. IPA's purpose is to produce detailed descriptions of personal experience by emphasizing the unique personal experience of human nature as described by the individual (Smith, 2015). Smith et al. (2022) outline seven steps to conduct data analysis using the IPA methodology: (a) reading and re-reading, (b) exploratory noting, (c) constructing experiential statements, (d) searching for connections across experiential statements, (e) naming the personal experiential themes (PET) and consolidating them in a table, (f) continuing the individual analysis of other cases, and (g) develop group experiential themes (GET) across cases. The researcher worked through each of the seven steps to analyze the data.

Smith et al. (2022) prescribe that the first thing a researcher should do while using the IPA methodology is to immerse themselves in the original data. For this study, the data from the interviews were transcribed and soon after receipt the researcher began the process of reading and re-reading the transcripts. It is helpful to listen to any available audio recordings of the data at this stage (Smith et al., 2022). The researcher listened to the one-on-one interview recordings at least three times each during this initial stage. The researcher also noted and corrected any inconsistencies within the transcript. This level of immersion ensures the researcher is aware that the participant and their world, as they experience, is the focus of the interview and the most important thing being discussed (Smith et al., 2022).

The next step of the process involves exploratory noting. Throughout this phase, the researcher noted anything of interest within the transcript. During exploratory noting, there are “no rules about what is commented on [by the researcher]” (Smith et al., 2022, p. 79). Any initial notes made by the researcher during the initial reading and re-reading of transcripts were incorporated during this step. The researcher engaged in what Smith et al. call “analytic dialogue with each line of the transcript” (p. 79) by looking at each word, phrase, and sentence and then attempting to determine what each meant to the participant. By engaging with the text in great detail, the researcher created detailed notes on the data (see Appendix S).

For the third step in the IPA data analysis process, the researcher consolidates their thoughts up until this point by developing experiential statements for each participant. The main focus of consolidating into these statements is for the researcher to reduce the total volume of data while keeping the complexity of the data, keeping the most important parts of the exploratory notes (Smith et al., 2022). The experiential statements should reflect both the participant’s original words and the researcher’s analysis. Because of this, experiential statements are “an initial preliminary marker” of the researcher’s “analytic work” (Smith et al., 2022, p. 87). Smith et al. (2022) maintain that there are no steadfast guidelines regarding the number of required or expected experiential statements. The researcher considered each participant individually and created experiential statements related directly to their experiences and also the participant making sense of their experiences. The entire transcript was included as the statements were constructed. The researcher created between 21 and 45 experiential statements for the seven participants, depending on the length of the interviews.

The fourth step in the IPA process is to map how the experiential statements fit together in light of the research questions and scope of the study. There is no conscripted means of how researchers should search for connections between the statements (Smith et al., 2022). The researcher chose to go about this in a manual fashion by printing two hard copy sets of each interview transcript along with the annotations from earlier steps. While working in this manner is more time consuming than utilizing qualitative computer software or programs, a deeper understanding of the text is produced due to a deeper engagement with the text (Merriam and Tisdale, 2016). The researcher then cut up the document, separating each experiential statement in random order on a table. She then searched for connections between the experiential statements, and begin piecing seemingly related statements together in clusters.

Step five involves the researcher giving a title called Personal Experiential Themes (PETs) to each separate cluster based on the common characteristics of the cluster (Smith et al., 2022). Below each main PET, the researcher organized the supporting experiential statements with annotations as to where in the transcript the data supports it. From there, the researcher identified direct quotes supporting the experiential statements. This process was followed for each participant, resulting in a separate PET set for each participant. The researcher made entries in a reflexivity journal along the way to remain self-aware of personal values, experiences, and potential biases present throughout the data analysis process.

Once the first five steps have been completed for a participant, the researcher moves on and conducts the same process with each subsequent participant (Smith et al., 2022). This process should occur simultaneously with the data collection process, so that

the researcher will be analyzing data from participant one while having not yet interviewed participants four and five. Each case will be analyzed on its own terms, without regard to other initial analysis from the other cases. The researcher worked through the five steps for each participant as interviews were conducted. Each case was analyzed on its own terms, without regard to other initial analysis from the other cases, per Smith et al.'s procedures (2022).

The final step to the IPA methodology is to identify patterns of similarity and differences amongst the participant's PETs in order to create a set of Group Experiential Themes (GETs; Smith et al., 2022). The GETs are organized into themes, similar to the PET organization process in step five. The researcher took the same "hard copy" approach as in step four to create GETs across the seven participants. The researcher's findings from GETs are reported in Chapter IV according to the data analysis plan. The data analysis will be reported with descriptive statistics (RO1), content analysis and recurring themes (RO2 and RO3), and narrative analysis (RO4). Table 5 outlines the data analysis plan.

Table 5

Data Analysis Plan

Objective	Data collected	Data category	Data analysis
<i>RO1</i>	Age, gender, ethnicity, race, education level, career level, CTE program	Nominal/ordinal	Descriptive statistics
<i>RO2</i>	Enablers to enrolling in postsecondary CTE program	Text	Content analysis/ Recurring themes
<i>RO3</i>	Barriers to enrolling in postsecondary CTE program	Text	Content analysis/ Recurring themes
<i>RO4</i>	Lived experience of postsecondary CTE students	Text	Narrative analysis/ Recurring themes

Once final data analysis occurred, the researcher sent a final thank you email to all participants thanking them for their participation in the completed research project (see Appendix T).

Trustworthiness

Merriam and Tisdale (2016) affirm, “All research is concerned with producing valid and reliable knowledge in an ethical manner” (p. 237). In qualitative research, the trustworthiness of a study depends on the rigor with which the research was conducted. Internal validity and external validity are constructs through which the qualitative researcher transparently displays the rigor with which they designed and carried out their

study. Internal validity answers the question “are the findings credible, given the data presented?” (Merriam and Tisdale, 2016, p. 242). This study employs three strategies to increase its internal validity and shows that the findings are reliable: triangulation, member checks, and reflexivity.

Triangulation is a method of demonstrating credible findings. Collecting data from multiple sources regarding the same phenomenon is one way to achieve triangulation (Merriam and Tisdale, 2016). The researcher collected data from both one-on-one interviews with current CTE students and cross-checked the data against perceptions from a focus group made up of CTE program administrators. Member checking occurs when the researcher solicits feedback from participants on if the researcher’s initial analysis “rings true” (p. 246) to the participant (Merriam and Tisdale, 2016). The researcher takes action as appropriate based on the participant feedback and documents everything. After the researcher completed an initial analysis of the one-on-one interview transcripts, the analysis was sent to each participant asking if the analysis represents their responses (see Appendix U). The researcher received two comments from one participant during the member checking process and updated the analysis as appropriate.

Reflexivity is the third strategy for internal validation within the current study. According to Probst and Berenson (2014), reflexivity is the researcher’s awareness of their influence on what is being studied and at the same time how the researcher is being affected by the research process. The role of the researcher has been discussed earlier in this chapter, addressing one side of reflexivity. The researcher kept a reflexivity journal

throughout the entire research process in which she documented her feelings and thoughts related to the research process, including any biases that arose.

External validity is typically concerned with the generalizability of the study's findings (Merriam and Tisdale, 2016). The use of "rich thick description" (p. 256) is a strategy to ensure a qualitative study's findings are transferrable to other settings. This involves the researcher presenting the findings of their study in a detailed, highly descriptive way, including descriptions of the interview settings, participants themselves, as well as the findings and conclusions. The researcher uses rich thick descriptions in her documentation of the study's findings presented in Chapter IV satisfying both RO4 and adding to the study's trustworthiness.

Summary

This chapter outlines the qualitative research methodology used to collect data about the lived experiences of current students enrolled in a postsecondary CTE program in North Alabama. The researcher conducted a phenomenological research study to explore the lived experiences of postsecondary CTE students to identify perceived enablers and barriers to the decision to enroll. This chapter also provides information on instrumentation and the role of the researcher. The chapter further outlines the research population, proposed sampling strategy, and data collection procedures. Purposeful sampling guided by selection criteria were used to select the sample interviewed from the population of current postsecondary CTE students at a North Alabama community college. The data analysis plan is outlined, including details of the IPA process. The chapter concludes with a discussion of the strategies to ensure the trustworthiness of the

research study including triangulation, member checking, and rich thick description of findings. Chapter IV presents the results of the study.

CHAPTER IV – RESULTS

The purpose of this study was to explore the enablers and barriers to the decision to enroll in a postsecondary CTE program. This study used a phenomenological qualitative design to explore the lived experiences of current students while deciding to enroll in a postsecondary CTE program. This chapter includes the results from the one-on-one semi-structured interviews conducted by the researcher. This chapter also includes an outline of the data analysis process, descriptions of the study's participants, and themes derived from the interviews.

Data Analysis

The researcher followed the IPA methodology for data analysis since IPA's purpose is to produce detailed descriptions of personal experience by emphasizing the unique personal experience of human nature as described by an individual (Smith, 2015). The researcher used the following process outlined by Smith et al. (2022):

1. Starting with the first interview, read the interview transcripts for accuracy; continue re-reading to become immersed in the original data.
2. Begin exploratory noting of the transcript, noting anything of interest with the aim of producing a detailed set of notes and comments on the data.
3. Construct experiential statements relating directly to the participant's experiences to produce a summary of what was important in the exploratory notes.
4. Search for connections across experiential statements searching for connections across experiential statements, charting how they fit together in clusters.

5. Name the Personal Experiential Themes (PETs) for each cluster of experiential statements and organize them in a table.
6. Continue the individual analysis of other interviews by following the same process, treating each case on its own terms.
7. Develop Group Experimental Themes (GETs) from the PETs across cases looking for patterns of similarity and differences to highlight both shared and distinct markers of the individual experiences.

The researcher conducted seven one-on-one interviews. Each interview was initially analyzed individually before considering the data collectively. A transcription company transcribed audio recordings of the interviews. The researcher then listened to each interview while reading the transcription for accuracy, editing where needed. Once the transcripts were verified as accurate, the researcher printed hard copies of the transcripts. The researcher read and re-read each transcript several times and listened to the interview recordings in their entirety at least once more.

The researcher then made comments on the hard copy transcripts, noting anything of interest within the interview (see Appendix S). Based on those notes, the researcher created experiential statements for each participant, summarizing what was important in the notes (see Appendix T) and then grouped related statements together by theme (see Appendix U). After identifying multiple PETs for each participant, the researcher clustered related themes across all the participants, creating GETs. The researcher manually grouped hard copy statements into both personal and group themes (see Appendix V). Twelve initial themes emerged from the one-on-one interviews (see Appendix W). Further analysis led to the combining of similar emergent themes (see

Appendix X), and the researcher concluded that eight final themes emerged from the one-on-one interviews (see Appendix Y).

Participant Demographics

ROI – Describe the demographic characteristics of the study participants, including age, gender, ethnicity, race, education level, field of study, and career level.

The first research objective described the demographic characteristics of the study participants. For both the one-on-one interviews and the focus group, the researcher collected demographic information from each participant through a demographic questionnaire completed by interested participants prior to the interviews being conducted.

One-on-One Interviews

Each one-on-one interview participant is currently enrolled in a postsecondary CTE health sciences program at a community college in North Alabama. These participants fell into age groups ranging from 18-25 to 26-35 years of age and consisted of six females and one male. The participants' levels of educational attainment ranged from pursuing a recognized industry credential to a Master's degree. The one-on-one interview participants' career level at the time of entry into CTE included individuals upskilling, retraining, and nontraditional first career preparation. To maintain their privacy, a pseudonym was given to each participant. Table 6 outlines the demographics of the seven one-on-one interview participants.

Table 6

One-on-one Interview Participant Demographics

Participant	Age Group	Gender	Highest Level of Education	Field of Study	Career Level
Mariah	26-35	Female	Bachelor's Degree	Medical Laboratory Assistant	Upskilling ^a
Daniela	26-35	Female	Associate's Degree	Dental Hygiene	Retraining ^b
Jacob	26-35	Male	Associate's Degree	Physical Therapist Assistant	Retraining
Briana	26-35	Female	Pursuing Credential	Medical Laboratory Technician	Retraining
Kiara	26-35	Female	Master's Degree	Medical Laboratory Technician	Upskilling
Amelia	26-35	Female	Bachelor's Degree	Surgical Technologist	Upskilling
Shanelle	18-25	Female	Pursuing Undergraduate Degree	Physical Therapist Assistant	Nontraditional First Career Preparation ^c

Note. Table 6 presents the participants by pseudonym. ^a Entrance to postsecondary Career and Technical Education (CTE) for advancement in a current industry through further credentialing or skills acquisition. ^b Entrance to postsecondary CTE to seek entry into a new industry or a radically different role within a current industry. ^c Entrance to CTE after the age of 20 with very limited experience with formal paid employment.

Participant 1 – Mariah

Mariah is a female between 26-35 years of age. She is currently finishing the last semester of a two-semester Medical Laboratory Assistant program. She has previously earned a Bachelor's degree. Mariah entered postsecondary CTE for advancement in her current industry through further credentialing and skills acquisition.

Participant 2 – Daniela

Daniela is a female between 26-35 years of age. She is currently finishing last semester of a five-semester Dental Hygiene program. She has previously earned an Associate's degree. Daniela entered postsecondary CTE to seek a radically different role within her current industry.

Participant 3 – Jacob

Jacob is a male between 26-35 years of age. He is currently finishing the second semester of a five-semester Physical Therapist Assistant program. He has previously earned an Associate's degree. David entered postsecondary CTE to seek entry into a new industry.

Participant 4 – Brianna

Brianna is a female between 26-35 years of age. She is currently finishing the second semester of a five-semester Medical Laboratory Technician program. She is currently pursuing an industry-recognized credential, her highest level of education. Brianna entered postsecondary CTE for advancement in her current industry through further credentialing and skills acquisition.

Participant 5 – Kiara

Kiara is a female between 26-35 years of age. She is currently in the last semester of a five-semester Medical Laboratory Technician program. She has previously earned two Master's degrees. Kiara entered postsecondary CTE for advancement in her current industry through further credentialing or skills acquisition.

Participant 6 – Amelia

Amelia is a female between 26-35 years of age. She is currently in the second semester of a three-semester Surgical Technologist program. She has previously earned a Bachelor's degree. Amelia entered postsecondary CTE for advancement in her current industry through further credentialing or skills acquisition.

Participant 7 – Shanelle

Shanelle is a female between 18-25 years of age. She is currently finishing the second semester of a five-semester Physical Therapist Assistant program. She is currently pursuing an undergraduate degree, her highest level of education. Shanelle entered postsecondary CTE for advancement in her current industry through further credentialing and skills acquisition.

Focus Group

For the focus group, each participant is involved in the administration of a CTE program at the same community college in North Alabama. The focus group participants fell into age groups ranging from 36-45 to 46-55 years of age and consisted of two males. The participants' levels of educational attainment ranged from a Master's degree to a doctoral degree. The focus group participants' years of experience at their current institution ranged from less than one year to more than 15 years. The participants' total

years of experience with postsecondary CTE programs ranged from 11-15 years to more than 15 years. To maintain their privacy, a pseudonym was given to each participant.

Table 7 outlines the demographics of the two focus group participants.

Table 7

Focus Group Participant Demographics

Participant	Age Group	Gender	Highest Level of Education	Total Years Involved with CTE at Current Postsecondary Institution	Total Years of Postsecondary CTE Experience
Participant 1	36-45	Male	Master's Degree	Less than 1 Year	11-15 Years
Participant 2	46-55	Male	Doctoral Degree	More than 15 Years	More than 15 Years

Note. CTE = Career and Technical Education

Participant 1

Participant 1 is a male between 36-45 years of age. His highest level of education attained is a Master's degree. He has been affiliated with CTE at Calhoun Community College for less than 1 year. He has between 11-15 years of experience with postsecondary CTE programs.

Participant 2

Participant 2 is a male between the ages of 46-55 years of age. His highest level of education attained is a doctoral degree. He has been affiliated with CTE at Calhoun Community College for more than 15 years. He has more than 15 years of experience with postsecondary CTE programs.

Themes

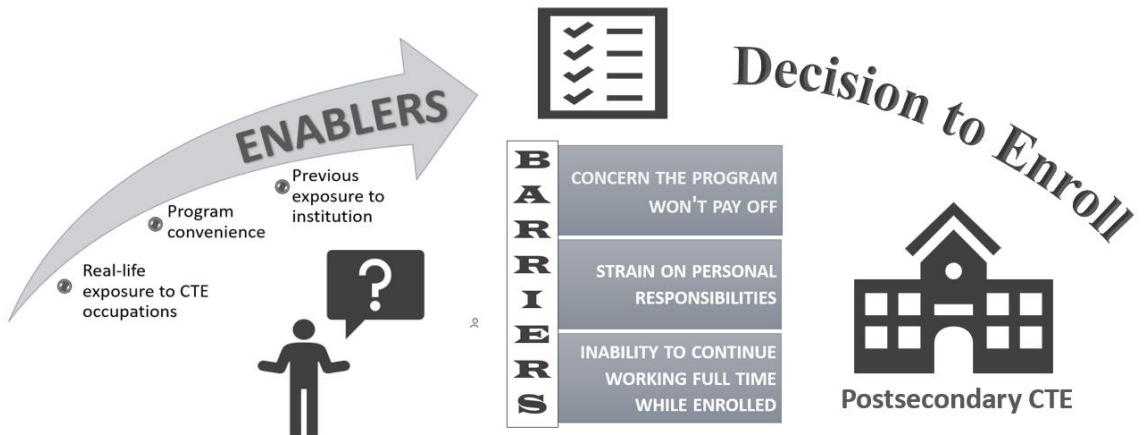
Participants in this study provided answers to a range of six to seven semi-structured, opened ended questions about the lived experiences of current postsecondary CTE students and their decision to enroll in a postsecondary CTE program in North Alabama. The analysis of the data produced multiple PETs for each participant which were then organized into GETs, presented as themes relating to the research objectives for this study, illustrated in Figure 2. The eight themes are listed below:

- Theme 1 *Real-life exposure to CTE occupations*
- Theme 2 *Program convenience*
- Theme 3 *Previous exposure to institution*
- Theme 4 *Concern the program won't pay off*
- Theme 5 *Strain on personal responsibilities*
- Theme 6 *Inability to continue working full time while enrolled*

- Theme 7 *Online access to program information matters*
- Theme 8 *Seeking personal meaning and fulfillment through CTE*

Figure 2

Themes Related to the Decision to Enroll



Themes Associated with Enablers to the Decision to Enroll

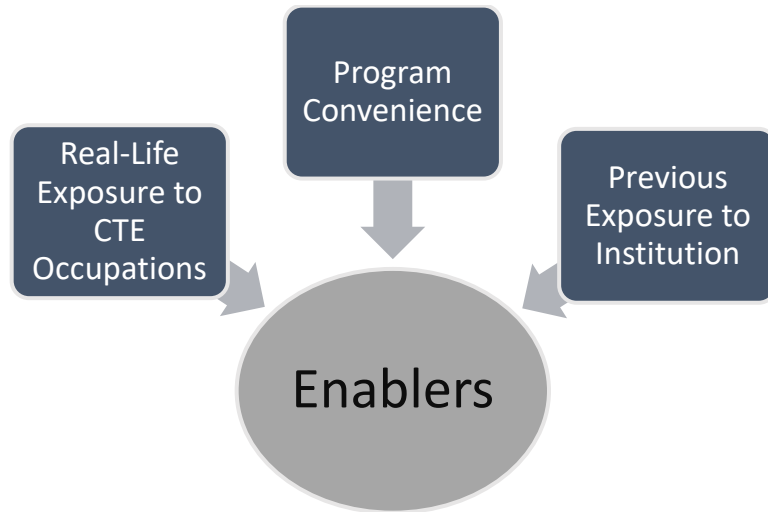
RO2 - Identify the perceived enablers that encourage enrollment in a postsecondary CTE program.

The second research objective identified perceived enablers encouraging enrollment in a postsecondary CTE program. During the semi-structured interview, study participants were asked various open-ended questions to gather their perceptions on the enablers that motivated their decision to enroll in a postsecondary CTE program. The data analysis of their responses resulted in three themes emerging as enablers to the decision to enroll in a postsecondary CTE program, illustrated in Figure 3. The enablers identified were real-life exposure to CTE occupations, location and affordability of

program, and previous exposure to the institution. Excerpts from participants' interviews are included as supporting information for each theme associated with enablers.

Figure 3

Enablers to the Decision to Enroll



Theme 1. Real-life exposure to CTE occupations.

While explaining what drew them to their particular CTE program, six of the seven participants mentioned encountering the occupational field in real life prior to their decision to enroll impacted their decision-making process. Positive interactions as a patient in the physical environment of the CTE field influenced two participants. The first of these interactions seemed to cause a paradigm shift in the participant's mind, allowing her to envision herself one day working in the same constructive manner:

- And to be honest with you, I didn't have much education on dental care. I was just oblivious. And I think I had a tooth break. And it was very painful, and I had to go to the dentist and get it fixed. And I had a really amazing dentist. I had to have all my wisdoms pulled...And so that's initially what got my interest. That's when I

started all my prerequisites...So personal experience with dental problems [caused interest in this CTE program]”. (Daniela)

For another participant, experiencing a casual and fun work environment with an ever-changing daily routine made a lasting positive impression. This experience also opened her eyes to CTE as an opportunity to live the kind of life she wanted to live:

- I had just graduated high school...and [my friends and I] got to start thinking of college stuff like that. And what led me to physical therapy is I got injured when I was-- I swam in high school, and I got injured. And I remember my physical therapist assistant that I worked with me was the most laid back, coolest guy I've ever met. Everyone in that clinic was fantastic, and they were wearing jeans to work. And I was like, "I want that." I want to wear jeans to work. I don't want to work weekends. That's the thing for me...And so I just was thinking about it even then and talking to them and seeing how they interacted with me and the environment of their clinic and stuff like that. It made a big impact on me...And they showed me that you know working as a physical therapist assistant can be fun and also very rewarding. And you learn different things every day, you're working with different patients. And so, you get kind of different things that you're doing every day. It's not basically doing the same thing over and over again. (Shanelle)

One participant had a negative experience in the occupational environment that ultimately culminated in a desire to create positive change in that same occupational field for future patients in his situation. This desire for reform positively impacted his decision to enroll:

- But the [physical therapy assistant program] kind of called to me more so because of the-- well, one, because I've been through physical therapy, and I broke my back. That was the biggest thing that I've been through. And so, I kind of had a bad physical therapist when I was going through PT, and that was when I was 15. And I say "bad"-- they were just not truly compassionate enough to sit there and try to teach me why I need to do stuff...I struggled with that a lot. And honestly, I would rather people be fully aware and motivated to prevent these from their injuries, this type of condition, so that they don't have to go through kind of what I had to go through. (Jacob)

Two participants encountered CTE occupations through their current jobs, but in different ways. One participant became aware of a CTE program that would benefit her current career while at work in the same field:

- I already work in a lab. It's clinical diagnostics lab...I enrolled in this program is because it would benefit me in my current job... I [knew] I was going to be learning different things in the lab, compared to what I do, so I was very excited...I'm 32. I started learning how to be in a lab when I was 18...so I've been in every sort of lab in and out. So, I know my way around already. (Mariah)

Word-of-mouth from a co-worker and a tour of the physical environment to watch the job being competently performed impacted another participant. The opportunity to job shadow someone she trusted and admired helped strengthen her confidence to follow suit:

- I knew about the surgical technology program at Calhoun because one of my coworkers from 2021 enrolled in the program. She was working as a tech at the

hospital on weekends...so I knew about [the program] from [my coworker]. I saw her doing her flashcards at the break room or between doing rounds on patients... I spent a couple of days getting to shadow [my coworker] and see the OR...she did the program at Calhoun, and she recommended it, too...seeing her be assertive in the OR and her knowledge and experience made me feel very comfortable with her opinions and recommendations. (Amelia)

Another participant encountered the physical environment while touring the labs of different available CTE programs as part of an orientation offered by the postsecondary CTE institution. Seeing the actual environment in which these CTE professions work cemented her decision to enroll:

- If I would have never toured the lab at [the hospital], I probably [wouldn't have known about this profession] the experience that I had at [the hospital], getting to tour their facility...just the actual tour, itself, made me think, "Oh, this is exactly what I want to do." (Brianna)

Theme 2. Program convenience.

Four of the seven participants expressed the appeal of their chosen program's convenience in terms of location, financial cost, and length of the program:

- I looked at my options at Calhoun. Because, like I said, I'm very familiar with Calhoun and it's cheap and it's close to home. (Amelia)
- It was mostly just convenience of location [that helped me narrow it down to this program]. Everything else required too much travel...it was just a convenient location. (Kiara)

- Location for me [was the biggest influence in choosing this particular program]. Living in Decatur is nice having a campus right there. Yeah, mainly just the location. I believe there's a couple other colleges around us that have the same program, but this specific program was location, but also just pricing. Community college, for me, is cheaper than universities and you get the same education [which appealed to me]. (Shanelle)
- I've been in Huntsville for three years and I googled Calhoun because it's the community college here, and I saw that there was a medical lab technician [at the community college], but that was a two-year program, and I wasn't willing to spend another two years in school, I already had a bachelor's, and I wouldn't have time from work...but then I saw they had the six-month program, the medical lab assistant, which I'm doing right now, so I decided [to enroll]. (Mariah)

Theme 3. Previous exposure to institution.

Of the seven participants, three expressed their prior exposure to the postsecondary institution offering CTE programs led them to consider their specific program. Each had previously been enrolled at the community college, and two had earned all their prerequisites at the institution:

- I went into college at Calhoun in 2016. And I wanted to start-- I started out wanting to be a vet. So that was my mindset leaving high school. (Jacob)
- I was very familiar with Calhoun since I had taken classes from there as a dual enrollment student when I was in high school. (Amelia)

One participant developed a long-standing relationship with her academic counselor while previously enrolled at the institution. This connection is how she found

out about a new program that might have interested her, and the counselor also encouraged her to enroll:

- I have an advisor that I've had for probably 10 years, a college advisor. And he knows dental hygiene is what I want, we've been working this for a long time. And he emailed me that, "Hey, we're opening--" because the college I graduated from opened the dental hygiene [program I'm enrolled in]. So, I had my associates from the same college. (Daniela)

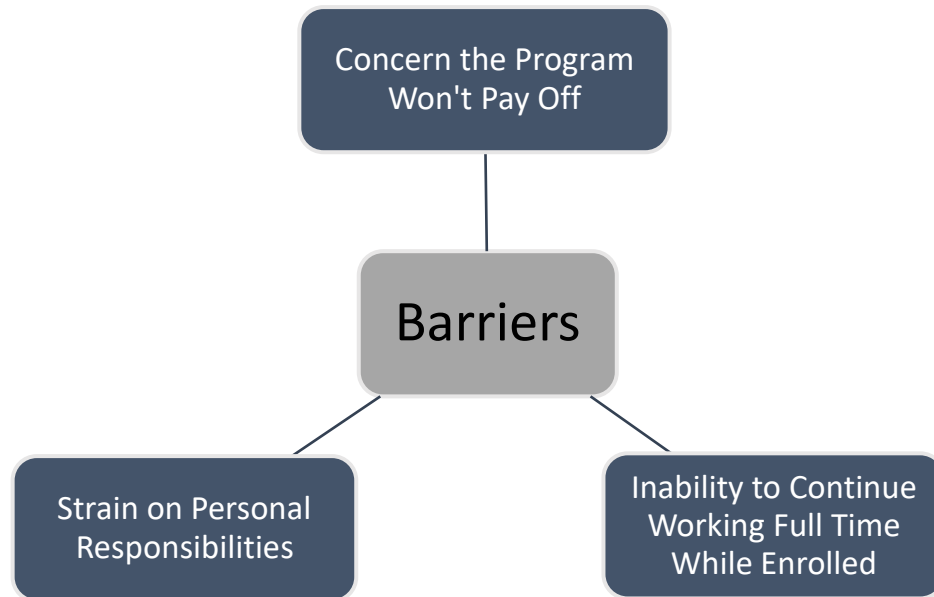
Themes Associated with Barriers to the Decision to Enroll

RO3 - Identify the perceived barriers that hinder enrollment in a postsecondary CTE program.

The third research objective identified perceived barriers hindering enrollment in a postsecondary CTE program. During the semi-structured interview, study participants were asked various open-ended questions to gather their perceptions on the barriers they had to overcome while making their decision to enroll in a postsecondary CTE program. The data analysis of their responses resulted in three themes emerging as barriers to the decision to enroll in a postsecondary CTE program, illustrated in Figure 4. The barriers identified were concern the program won't pay off, strain on personal responsibilities, and the inability to continue working full time while enrolled. Since all participants are currently enrolled in a postsecondary CTE program, each of them overcame the barriers experienced during their decision to enroll. This decision came at a cost to the participants' personal lives – a cost ultimately deemed worth it even in the face of uncertain return on investment. Excerpts from participants' interviews are included as supporting information for each theme associated with enablers.

Figure 4

Barriers to the Decision to Enroll



Theme 4. Concern the program won't pay off.

Topping the list of obstacles faced while considering whether or not to enroll in a postsecondary CTE program was the concern that the program won't pay off after completion. Four of the seven participants expressed this idea in different ways. One participant overcame the barrier of previously enrolling in a CTE program that wasn't ultimately satisfying. Although she was worried that another CTE program might turn out the same way, she persisted and enrolled in her current program:

- So, after high school, I started doing nursing, and then I was like, "I don't know if I love this, you know, and this is what I'm going to do forever." [and it didn't work out] ... I was kind of discouraged a little bit because I thought, well, maybe it'll be like that again [for this CTE program], and I'll decide that this is not what I

want to do. And I mean, there are definitely times that it's like that... after this, I'm not really sure what I want to do next. We'll figure that out later. (Briana)

Another participant cited previous educational pursuits that did not meet her expectations after completion. Ultimately, she enrolled in spite of this concern as a show of tenacity, believing that it will pay off in long-term satisfaction:

- [When I enrolled] I felt, more than anything, just kind of nervous because I didn't want another program to not work out, especially paying for it out of pocket. I just wanted to kind of see some results for my time and my money because I'm paying out of pocket... because again, I've been in school for so many years...it's just you keep trying until something works out and you get to where you want to be in life. (Kiara)
- Let's see. Well, I was a bartender and a dental assistant. And so, I was working-- dental assistants, we didn't get paid very much to, I guess, live to pay your bills. So, I had to bartend as well. And that was late hours. And so, I was working late hours, up early in the morning, stressed to the max, always working. And so, coming out of this program, I'll be able to just have one job, work four days a week, and be able to successfully live without having to consistently try to find other jobs. (Daniela)
- My intent was, [when I graduated from college] in 2019, was to come back home to Decatur and work for a year before applying to PA school. Since physician assistant programs are structured on their students having prior healthcare experience having worked in a field and depending on that practical knowledge... I looked at my options at Calhoun...And for PA school, they want things where

it's hands-on patient care experience ...so I knew I wanted to get out and do something else while getting ready for PA school. (Amelia)

Theme 5. Strain on personal responsibilities.

Of the seven participants, four were concerned with the anticipated strain a postsecondary CTE program would place on their personal responsibilities such as caring for and raising children, maintaining household chores, working a job, and spouses/significant others. Two participants highlighted the challenge of balancing home and life responsibilities while enrolled:

- Right now, I am working still full-time and going to class full time. So, it's been a bit draining not necessarily with the studying. It's just a lot of my time. It's just-- everybody has the same amount of hours a day. So, I used to work four tens, so now I only get Saturday. And I used to have three days in a row off, and I only have two. So, in those two, I need to get all my house work stuff down. I need to get groceries. I need to do all this stuff. Plus, keep up with my workload at work...so it's a lot of pressure. There's a lot of planning going on there and then how am I going to divide my time when I'm home? (Mariah)
- Everything revolves around school right now. I've got three kids, and I feel like sometimes I don't see them because I'm studying, or I can't spend as much time with them on the weekends because I've got finals coming up or something like that... [this CTE program is] definitely a huge part of my life...It's the biggest stressor, and it's a big part of my life right now, so. (Shanelle)
- I was excited, but I had severe anxiety the first semester because...it was every day. It was like you're in the ocean and you're drowning...it's just like hanging on

for dear life. I did have to quit my job to be in the program because it's very extensive and dives deep and takes a lot of time from life... [this CTE program] changed a lot of my life. (Daniela)

- It's challenging for sure, the program itself...In the end, I mean, the outcome is really good because I know when I do finish, it won't be as difficult as it is currently. Everything will be smooth again. But it is definitely challenging. (Briana)

Theme 6. Inability to continue working full time while enrolled.

The same number of participants, four of the seven, expressed worry they would encounter financial concerns as a result of reducing working hours or quitting their job altogether for the duration of the CTE program.

- It was a little challenging with work life because I'm mostly used to working on Monday to Friday, 9:00 to 5:00...me wanting to not work so that I could focus on my studying, that kind of caused a little bit of friction [in my marriage], but I got another job and I limited my hours and I'm working somewhere that's a little bit easier just to help with that. (Jacob)
- I had anxiety because I had left my job, and my dentist had hired two other assistants to take my spot. And so, I knew I couldn't return...I had anxiety through the roof. (Daniela)
- I'm not able to work as much as I used to before, which sucks...when I started the program, because it's three days a week, I had to go down to two days a week at work. Some of my classmates don't work at all because of the time spent on

school. Some of them you have to work full-time or also doing loans and living on a tight budget. (Amelia)

- So that was a big thing to make that commitment to come out of my savings and to pursue this as well as take away from my working hours. (Kiara)

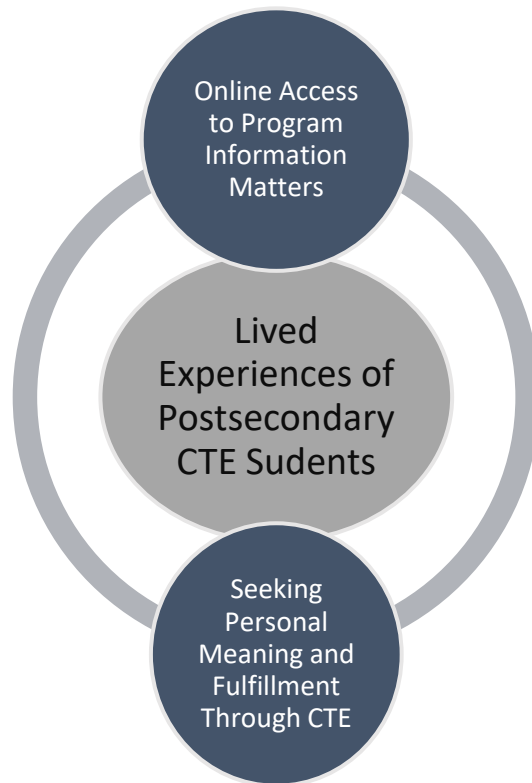
Themes Associated with the Lived Experiences of Postsecondary CTE Students

RO4 - Explore the lived experiences of postsecondary CTE students and the perceived influence of those experiences on the decision to enroll in a postsecondary CTE program.

The fourth research objective explored the lived experiences of postsecondary CTE students and the perceived influence of those experiences on the decision to enroll. During the semi-structured interview, study participants were asked various open-ended questions to gather their lived experiences of deciding to enroll in a postsecondary CTE program. The data analysis of their responses resulted in two themes emerging from the lived experiences of postsecondary CTE students, illustrated in Figure 5. The themes identified were online access to program information matters and seeking personal meaning and fulfillment through CTE. Excerpts from participants' interviews are included as supporting information for each theme emerging from participants' lived experiences.

Figure 5

Lived Experiences of Postsecondary CTE Students



Theme 7. Online access to program information matters.

Four of the seven participants highlighted their thorough use of the community college's website to look for information about CTE programs to better inform their decision-making process. This theme came about in various ways:

- [My wife] was reading through the PTA program [online] because I was talking about being a personal trainer...so she was like, "Well, what about something like this?"...and she handed me her phone and it was Calhoun's PTA program. And I read through everything and realized that I was pretty close to having all the [pre-requisites], it was only two years [long], and it was nice to kind of sit there and

read about it...the more I looked into it, the more I was having that feeling that I should do this. [By my wife looking online], she's exactly how I knew about the program. I didn't even know who had a PTA program. (Jacob)

- [The application process] goes by points, in a way. So, if you do certain things, you get more points, and the more points you have, the more likely you're to be accepted. And so, I just made sure-- they actually have the application and everything online, so you can look at it well before applying. And so, I just made sure that I got all of the classes that they needed marked off. (Shanelle)
- I googled Calhoun because it's the community college here...I saw they had the six-month program...I emailed the program director, and I was like, "Hey, when does this start? What do I need to do? I have three weeks. I need to know if you have any spots left in the program," because it only takes 12 students at a time, and [I was] trying to enroll last minute. (Mariah)
- [I found this program] with just some self-searching online. Me and my best friend who was also in the program with me, we kind of just came across it [online] and kind of investigated more as we both were applying for jobs and they were asking us if we had the certification. It was like, "What is it?" So, it was kind of like we heard about it through being turned down jobs and then we just investigated what it was and found a program. (Kiara)

Theme 8. Seeking personal meaning and fulfillment through CTE.

Four of the seven participants expressed they felt enrolling in their CTE program would lead to a sense of personal meaning and fulfillment. Multiple participants expressed a desire to help people and make an impact in the world:

- [Seeing a positive CTE practitioner working] was just a really good experience that you would go into with high anxiety and come out of. And I was like, "Man, I could do that." (Daniela)
- [My decision to enroll in CTE], it's good. And I think it's great. I feel great about it currently. It's stressful sometimes for sure...but then it's also really rewarding because I'm so close to accomplishing this little goal that I have made for myself. (Brianna)
- I knew that I needed to do it, not only to help provide for my family and help support my husband with that, but also just me personally, I need to do something. I need to be working. I don't see myself being a stay-at-home mom or anything like that... [if I had not chosen to enroll] I wouldn't feel as fulfilled in a way. I feel like I would still be searching for my purpose in a way. I really feel strongly like this is what I'm supposed to be doing. And if I wasn't doing it, then I'd just kind of be going through the motions day by day...So, yeah, if I wasn't doing this, I don't think I would be as happy as I am now. (Shanelle)
- It was probably the best decision I've made. ...I was tired of not really having that purpose in my life. So, this is something I really want...I just want to help people. I want people to feel good about themselves. So, I think, for what's most important to me, is having that purpose. So being able to do something that's going to have that type of impact is going to really fulfill that purpose for me. Because I mean, just because that's how I kind of feel purpose is through serving others. I really enjoy the phrase serve others, and that's what I really-- I'm

passionate about that. So, it's kind of really helped me be mentally happy with myself, I guess, so to speak. (Jacob)

Research Objectives and Theme Correlation

The analysis for this study yielded 45 PETs, clustered into eight GETs presented as themes related to each research objective. A display of the participant demographics (see Table 6), along with a brief narrative description of the participants fulfilled RO1. The descriptive narrative and interview excerpts from themes 1-3 satisfy RO2. Themes 4-6 and the related descriptive narrative and interview excerpts satisfy RO3. The descriptive narrative and interview excerpts from themes 7-8 satisfy RO4. Table 8 outlines the correlation between the research objectives and themes for the study.

Table 8

Research Objectives and Theme Correlation

Research Objective (RO)	Themes
RO1	<ul style="list-style-type: none"> • Demographic Questionnaires
RO2	<ul style="list-style-type: none"> • Theme 1: Real-life exposure to CTE occupations • Theme 2: Program convenience • Theme 3: Previous exposure to institution
RO3	<ul style="list-style-type: none"> • Theme 4: Concern the program won't pay off • Theme 5: Strain on personal responsibilities • Theme 6: Inability to continue working full time while enrolled
RO4	<ul style="list-style-type: none"> • Theme 7: Online access to program information matters • Theme 8: Seeking personal meaning and fulfillment through CTE

Summary

This chapter details the data analysis process used to develop the experiential statements, PETs, GETs, themes, and results of the study. The participants' demographics were presented in a table with a brief description addressing the first objective of the study. Excerpts from the one-on-one interviews addressed the remaining three research objectives. The responses from the participant interviews yielded 45 PETs ultimately organized into eight themes. Table 6 displays the research objectives and theme correlation as a result of data analysis. The conclusions, interpretations, and recommendations for future research are discussed in Chapter V.

CHAPTER V – CONCLUSION

This study explored the lived experiences of current postsecondary CTE students and their decision to enroll in a postsecondary CTE program. Background information, a literature review, the study's methodology, and the results from the data collection were presented in Chapters I – IV. Chapter V includes a summary of the study, a presentation of the results, findings, conclusions, and the researcher's recommendations. Recommendations for further research, discussion, and chapter summary conclude the chapter.

Summary of the Study

A critical labor shortage exists within middle-skill occupations throughout the United States (Cappelli, 2005; Ferguson, 2022; Rios-Aguilar et al., 2019; Templet, 2022). Post-secondary CTE programs offered at community and technical colleges across the nation equip participants at the middle-skill level enabling graduates to immediately enter the middle-skill talent pipeline (Dortch, 2014; Eyster et al., 2016; National Conference of State Legislatures, 2022; Stevens, 2019). Little is currently known about the factors influencing the decision-making process of individuals who choose to enroll in postsecondary CTE programs (Haviland and Robbins, 2021; Jacobs, 2017).

The purpose of the research was to explore and identify enablers and barriers influencing the decision to enroll in a postsecondary CTE program as experienced by current students. The data was collected using a phenomenological qualitative approach. The following research objectives guided the study:

RO1 - Describe the demographic characteristics of the study participants, including age, gender, ethnicity, race, education level, field of study, and career level.

RO2 - Identify the perceived enablers that encourage enrollment in a postsecondary CTE program.

RO3 - Identify the perceived barriers that hinder enrollment in a postsecondary CTE program.

RO4 - Explore the lived experiences of postsecondary CTE students and the perceived influence of those experiences on the decision to enroll in a postsecondary CTE program.

Purposeful sampling was used to select participants for one-on-one interviews and a focus group. The one-on-one interview sample consisted of seven current postsecondary CTE students enrolled at a community college in North Alabama. The semi-structured one-on-one interviews included six open-ended questions. The focus group sample consisted of individuals involved with the administration of postsecondary CTE programs at the same community college. The focus group interview was semi-structured and included seven open-ended questions.

The data was interpreted using the IPA method. The participants' demographics for the one-on-one interviews and the focus group were collected using the respective demographic questionnaires. Eight themes emerged from the IPA process: 1) real-life exposure to CTE occupations, 2) program convenience, 3) previous exposure to institution, 4) concern the program won't pay off, 5) strain on personal responsibilities, 6)

inability to continue working full-time while enrolled, 7) online access to program information matters, and 8) seeking personal meaning and fulfillment through CTE.

Summary of the Results

The demographics information collected from participants were presented as descriptive statistics in table form in Chapter IV, satisfying RO1. Analysis of the one-on-one interview transcripts and focus group transcripts yielded 45 personal experiential themes, which were categorized into eight group experiential themes. These eight themes supported RO2 – RO4. Interview transcript excerpts capturing rich, descriptive explanations of the participants’ experiences were used to support each theme. The themes identified as enablers to the decision to enroll in a postsecondary CTE program include:

- Theme 1 *Real-life exposure to CTE occupations*
- Theme 2 *Program convenience*
- Theme 3 *Previous exposure to institution*

Themes identified as barriers to the decision to enroll in a postsecondary CTE program include:

- Theme 4 *Concern the program won’t pay off*
- Theme 5 *Strain on personal responsibilities*
- Theme 6 *Inability to continue working full time while enrolled*

Themes resulting from the exploration of postsecondary CTE students and the perceived influence of those experiences on their decision to enroll in a postsecondary CTE program include:

- Theme 7 *Online access to program information matters*
- Theme 8 *Seeking personal meaning and fulfillment through CTE*

Findings, Conclusions, and Recommendations

The findings discussed in this section relate to the factors influencing the decision to enroll in a postsecondary CTE program as experienced by current students. The conclusions presented results from the connections between the existing literature and the data collected from the research participants. The recommendations are offered as practical suggestions for increasing the effectiveness of the recruiting efforts of postsecondary CTE programs in hopes of increasing enrollment. These recommendations target practitioners involved in the administration of postsecondary CTE programs.

Finding 1: Community connections increase the likelihood of enrolling in a postsecondary CTE program.

The study participants frequently mentioned connections within their local community when discussing their decision to enroll in a postsecondary CTE program. These connections included an interconnectedness within the community itself and the connectedness of the individual to the community. Participants frequently mentioned community touchpoints as significant to their decision-making process. Encountering a CTE profession while going about their daily lives, the general awareness of the local community college and types of programs offered, and recommendations from a trusted friend, co-worker, or mentor served as influencing touchpoints between participants and their community.

Conclusion. The idea that community connectedness matters during the process of deciding to enroll in a postsecondary CTE program is supported by current literature.

Jacoby (2017) confirms that nearly every city and county in the United States is serviced by a community college system whose mission includes community workforce development through CTE programs. The *preference* phase of Jackson's (1982) three phase student choice model includes student characteristics and desires that are impacted by the community surrounding individuals. Additionally, the location of the learning institution is one of the strongest factors influencing a decision to enroll in a postsecondary institution, according to Hossler and Gallagher (1987).

Recommendation. Though community connections happen organically and therefore cannot be manufactured or replicated as part of recruiting efforts, there are steps institutions can take to increase the likelihood of these organic connections occurring by increasing awareness of existing CTE occupations within the community. At the root of these connections leading to a decision to enroll in a postsecondary CTE program is an initial intrigue about the CTE occupation itself. Institutions can highlight the existence of jobs requiring CTE training in their local communities and CTE programs available by increasing informational campaigns in local professional environments where CTE graduates funnel. The main purpose of the messaging within the environment should be to create intrigue about specific CTE professions. The most important piece of the informational campaign is to funnel the intrigue to resources as to how the local community college/CTE programs equip and prepare individuals for those jobs. Social media should point to the institution's website on which very detailed information about particular jobs within each CTE field – what type of work is involved, what a usual day looks like, the average starting salary in the local community, etc. Highlighting the existence of various CTE occupations throughout the community while pointing to the

training opportunity offered in the same community could increase awareness of CTE programs and grow interest, potentially leading to an increase in enrollment.

Finding 2: Overcoming uncertainty increases the likelihood of enrolling in a postsecondary CTE program.

Ambiguity was described by each study participant as influential on their decision to enroll. The uncertainty centered around CTE career paths, specific CTE programs, and the processes within these programs. To overcome these barriers of uncertainty, participants looked for answers to a variety of questions: What CTE programs are available? How does one enroll in this program? What pre-requisite courses are required? How much does this program cost? How long is this program? What kind of job can one get after graduation? How much money will one make after graduation? Is this program worth the sacrifice?

Participants expressed needing to process through these questions and the unknowns of enrolling in a CTE program by searching extensively for information. Answers were found in a variety of ways, including searching the internet, consulting with friends and family, speaking with a community college counselor, and conferring with a CTE graduate. It wasn't until participants were able to reduce a moderate amount of uncertainty during their hunt for information that they felt comfortable moving forward with their decision to enroll in a postsecondary CTE program.

Conclusion. This finding aligns with the current literature. Chapman's (1981) student college choice model addresses the interplay of student concerns, college characteristics, and college efforts to communicate with students in an attempt to reduce ambiguity on the student's part. The final two stages of Hossler and Gallagher's (1987)

also illustrate how students work to eliminate as much uncertainty as possible during the *search* and *choice* phases. Additionally, Jackson (1982) captures this required ambiguity-busting in his *evaluation* phase, the final phase of his three-phase student choice model. Hudnett (2016) suggests the responsibility of resolving this uncertainty lies with the educational institution. He found that institutions must increase the level of effective communication during the application and enrollment process in order to increase enrollment decisions (Hudnett, 2016).

Recommendation. To facilitate individuals' decision to enroll in postsecondary CTE, educational institutions should offer extensive information about their programs. The website is crucial. Prospective students are looking for a clear and detailed picture of what to expect before, during, and after their CTE program. All of this information should be easily accessible online. Institutions should lay out the academic requirements to enter the program, the length of the program, program costs, available financial assistance, a typical schedule of classes, the average amount of out-of-class work required, any additional fees and costs of books. Prospective students are trying to see if the program is a good "fit" for their life. This information gives students a complete, clear picture of what is required of them to enter and successfully complete a given CTE program, thereby eliminating unnecessary ambiguity.

Institutions can also take steps to eliminate the ambiguity of post-graduation opportunities for CTE graduates. Utilizing testimonies of prior graduates outlining what their life looks like after earning their CTE credential and how their lives were impacted because of their decision to enroll. Information regarding future career tracks after program completion, like stacking credentials, allow students to imagine and broadens

the possibilities for life after graduation, reducing uncertainty and perhaps evoking excitement. These efforts can assist individuals to more easily weigh whether or not the CTE program in question would be a good fit and a good investment of their time, energy, and money, potentially increasing enrollment.

Finding 3: Recognizing the potential human capital growth and personal economic gains associated with completing a postsecondary CTE program increases the likelihood of enrolling in a postsecondary CTE program.

The decision to enroll in a postsecondary CTE program was positively influenced by an anticipated increase in self-confidence by study participants. Self-confidence was anticipated to increase as the individual's earning ability was set to increase after acquiring a credential relevant and valuable to their local workforce. Additionally, choosing to embark on a course with the intent to complete the program added to individual levels of self-efficacy, also adding to self-confidence. Believing they were capable of achieving something that would add to their personal happiness and productivity motivated the decision to enroll.

Conclusion. Literature supports the idea that value is found when individuals increase their knowledge, skills, and productive abilities. Becker (1993) assumed that people make decisions about their education, training, and other additions to knowledge by weighing costs and benefits. Becker (1964, 1976, 1993) also asserted that an individual's investment in their education increases their human capital, ultimately culminating in increased earnings. Additionally, Perna (2006) maintains that anticipated gains resulting from an increase in education and qualification for higher paying careers impacts educational choices. Stevens et al. (2019) confirmed that CTE programs raise

earnings for students who complete them. Hudnett (2016) maintains that one commonly perceived benefit of postsecondary CTE programs is the favorable return-on-investment on CTE credentials. As individuals weigh the costs and benefits of a particular educational choice, once the benefits are perceived to outweigh the costs, the decision to enroll is positively impacted.

Recommendation. Institutions can highlight the transformative potential of credential acquisition through powerful personal testimonies of program graduates. Video would be a powerful form of media for this. Highlighting the empowerment that comes as a result of growing your personal human capital as well as the positive economic impact that follows such an investment makes CTE programs more attractive to potential students. Thereby increasing enrollment.

Finding 4: The practical advantages inherent to community colleges increase the likelihood of enrolling in a postsecondary CTE program.

Several factors acted as enablers to the decision to enroll: the proximity of the program to potential students' existing homes and jobs, the affordability of the program in question, and the short length of time required to complete the program, relative to longer degree options, such as a Bachelor's degree. These factors are uniquely inherent to community colleges and their mission. Financial accessibility was a significant consideration.

Conclusion. This finding is consistent with existing literature. Price and affordability considerations are included in comprehensive models of college choice. Hossler and Gallagher's (1987) *search* phase includes the consideration of a program's cost. Jackson's (1982) *exclusion* phase involves students making choice sets and

narrowing their consideration of college programs based on factors including cost and location. Hossler et al. (1989) included program cost, length, and the institution's physical location as part of their institutional characteristics. Chapman (1981) described such considerations as relatively fixed college characteristics which act as external factors influencing the decision to enroll. Additionally, Hudnett (2016) maintains that a commonly perceived benefit of postsecondary CTE programs is the reasonable program length. Moogan's (2011) research indicates educational institutions benefit from increased instances of enrollment when successful communication occurs between the institution and potential student, particularly concerning the institution characteristics and how they fit the student.

Recommendation. Institutions should highlight the practical advantages afforded by community colleges – cost, program length, close to home – and clearly market their programs as such. These should be “front door” points of information, forefront on any marketing campaign. Community colleges and the programs they offer are the best deal going – the ROI should be clearly demonstrated in an easy-to-understand format. This appeals to potential students, increasing the potential for increased enrollment.

Implications of Limitations

The research study faced several limitations. Limitations of a study are issues that may negatively affect the results of a study outside of the researcher's control (Roberts, 2010). One major limitation faced by the researcher was limited access to data. After gaining IRB approval from the researcher's university (see Appendix Z), the request to conduct research at an initial institution was denied (see Appendix AA). The researcher modified her proposed research study to include a population at a different institution and

gained IRB approval from the researcher's university (see Appendix BB) and the new institution (Appendix CC). After exhausting efforts to secure participation in one-on-one interviews, the researcher then modified the research study's population to another CTE discipline, receiving IRB approval from the researcher's institution (see Appendix E) and the institution of the study's population (see Appendix F). The researcher made entries in a reflexivity journal throughout the process to eliminate any researcher bias that may have arisen. Although the study was restructured, both the population and sample were adequate to fulfill the study's research objectives.

Another limitation was the researcher's inexperience with qualitative data collection, specifically the interview process as specified by the IPA protocol. During the first two one-on-one interviews, the researcher learned how to further probe to gather information related to the study's objectives. As the interviews progressed, the researcher's interviewing skills continued to increase, resulting in the length of the one-on-one interviews increasing which increased the amount of relevant information collected.

A final limitation was the researcher's inability to acquire more than two individuals for the focus group, which was part of the research study's triangulation. After following the data collection plan and soliciting for focus group participation, only two individuals were interested and available to participate. This may have impacted the triangulation of data. The researcher intentionally asked probing questions and further encouraged discussion from the two participants to gain richer, more descriptive information in an attempt to mitigate this limitation.

Recommendations for Further Research

Future research may investigate the lived experiences of postsecondary CTE students in fields other than Health Sciences. The current study examines the enablers and barriers influencing the decision to enroll in a postsecondary CTE program as experienced by current Health Sciences students. Forthcoming research could compare enablers and barriers experienced by current CTE students across occupational fields, and at other community colleges.

Further research into the enablers and barriers influencing the decision to enroll in a postsecondary CTE program as experienced by individuals who chose not to enroll could provide valuable insight into the differences experienced by non-enrollers. Findings from this research could be compared to findings from studies on enrollers to examine the differences in experiences and how those differences impacted the enrollment decision.

Discussion

Information collected through this research study provided insight into the lived experiences of current postsecondary CTE students as they reflected on their decision to enroll. The honest, transparent, and reflective participant responses revealed the personal, human side of a decision that is often viewed from a flat perspective. Participants spoke with a level of passion regarding how their educational decision was positively impacting their self-worth and efficacy in the present while believing even more positive results await them in the future.

Upon program completion, these students will enter the workforce in their chosen occupational fields through the middle-skill talent pipeline contributing to the health of

their local economy and community. Since the participants were all current students in Health Sciences professions, they will be actively serving their communities through their occupations. The researcher believes skill acquisition increases individuals' human capital and enables people to improve their personal financial situation through gainful employment with a good wage. An exploration of the lived experiences of current postsecondary CTE students reflecting on their decision to enroll begins the conversation of how community colleges, along with state and national leaders can better recruit the right people and offer them not only financial stability but also increased self-worth.

Summary

This chapter presents a summary of the study, including interpretations of the results. This study focused on the lived experiences of current postsecondary CTE students at North Alabama community college. The purpose of the research was to explore and identify enablers and barriers influencing the decision to enroll in a postsecondary CTE program. The researcher used a qualitative approach to collect the data. The data was interpreted using the IPA method and reported as either enablers or barriers to the decision to enroll. Transcript excerpts from one-on-one interviews offer insight to participants' lived experiences.

This study's findings, conclusions, and recommendations offer a lens to explore and expand knowledge relating to enrollment trends in postsecondary CTE. The researcher's hope is that the study results in more effective recruiting efforts of postsecondary CTE programs, resulting in a significant increase in qualified workers entering the middle-skill talent pipeline, which will allow businesses a competitive

advantage in the global economic landscape, improving the national economic outlook while also improving the lives of individuals.

APPENDIX A – One-on-One Interview Protocol

Reinvigorating the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in a Postsecondary Career and Technical Education Program

Date: _____ Place: _____
Interviewer: _____ Interviewee: _____
Start Time: _____ Pseudonym: _____
End Time: _____ Email Address: _____

1. Prior to the start of the meeting:
 - a. Ensure notepads and pens are available to capture non-verbal details and to note points that may need additional explanation.
 - b. Ensure digital recorder is operational.
 - c. Collect a signed consent form from the interviewee.
 - d. Review study criteria and demographic information from demographic questionnaire:
 - i. Gender
 - ii. Ethnicity/Race
 - iii. Age Group
 - iv. Highest Level of Education Completed
 - v. Current CTE Program
 - vi. Career Level

2. Interview Guide

“Hello and welcome. Thank you for taking the time to meet with me today. My name is Felicia Hall and I am a PhD candidate conducting this research.

The goal of my research investigation is to explore the decision to enroll in a postsecondary Career and Technical Education (CTE) program as experienced by current students.

I will ask questions today that focus on your lived experiences as a current postsecondary CTE student in hopes of understanding what enablers and barriers influence the decision to enroll in such a program.

The interview will last approximately 45-60 minutes. With your permission, I would like to record our conversation to ensure I accurately capture your responses. At times, I may take notes during the interview. The recording only for transcription and analysis purposes; they will not be released in any publications or reports. I am the only person who will have access to your responses and your name. Your name will not be associated with anything that is said today. All information received from you will be confidential. You will be identified in the research by a pseudonym. Only summarized data will be presented at meetings or in publications.

The interview questions are designed to evoke responses about your lived experiences as a current postsecondary CTE student at a community college in North Alabama. I want you to provide honest and accurate accounts of your experiences and personal feelings; however, should you feel uncomfortable with any of the questions, feel free to skip such questions.

Your participation in this study is completely voluntary. You are free to withdraw at any time, for any reason. The data collected today will be transcribed by a third-party transcription company. Once the transcript is verified for accuracy, I will contact the transcription agency and request the deletion of the files and recordings associated with this interview.

Before we begin, please read and sign the Informed Consent form. I will give you a copy for your records, and I will keep a copy for my records.”

3. Start the recording:
 - a. Verbal Identification:
 - i. Date, time, place
 - ii. Interviewer’s Name
 - iii. Interviewee’s Name
 - b. Ask semi-structured, open-ended interview questions.
 - c. Use prompts and clarifying questions as needed to assist the interviewee in providing deep, descriptive answers to the questions and to help refocus the discussion as needed.

4. Stop the recording:
 - a. Verbal identification of interview end time.

5. After the interview:
 - a. Explain that a third-party transcription service will transcribe the interview and an electronic copy of the initial analysis will be emailed to them for validation.
 - b. Explain “member checking” and its importance.
 - c. Request the participant respond to the validation request within three days of receiving a copy of the transcript.

6. At the conclusion of the meeting:
 - a. Thank the participant again for their contribution to the research project.
 - b. Present the participant with a \$35 Amazon gift card.
 - c. Ask the participant if they would like to receive a copy of the results from the study once it has been finalized and approved by the university.
 - d. Answer any remaining questions the participant may have.

APPENDIX B – One-on-One Interview Questions

1. Could you please tell me about your CTE program?
 - Possible prompt: How would you describe your program?
 - Possible prompt: What do you like about your program?
 - Possible prompt: How do you feel about your program?

2. How will your program benefit you in the future?
 - Possible prompt: What does this program add to your life?
 - Possible prompt: How does this program “fit” with your other roles and relationships?

3. Let’s change direction for a moment. Think back to before you chose to enroll in this program. What were you doing then?
 - Possible prompt: When did you first learn about programs like this?
 - Possible prompt: How did you narrow it down to this program?
 - Possible prompt: Did you consider doing anything else?
 - Possible prompt: Was deciding to enroll a difficult choice?

4. What happened when you made the decision to enroll in this program?
 - Possible prompt: How did you feel?
 - Possible prompt: How do you think others in your life felt?
 - Possible prompt: How does it feel reflecting on your decision to enroll?
 - Possible prompt: Have you thought about changing programs?
 - Possible prompt: How do you think your life would be different if you had chosen to do something else?

5. Who influenced you the most in choosing to enroll in your program?
 - Possible Prompt: How do you feel about their influence?

6. What else can you tell me about your decision to enroll?

APPENDIX C – Focus Group Protocol

Reinvigorating the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in a Postsecondary Career and Technical Education Program

Date: _____ Place: _____

Interviewer: _____ Start Time: _____

End Time: _____

Interviewees' Names and Position Titles: _____

1. Prior to the start of the meeting:
 - a. Ensure notepads and pens are available to capture non-verbal details and to note points that may need additional explanation.
 - b. Ensure digital recorder is operational.
 - c. Collect a signed consent form from each interviewee.

2. Interview Guide

“Hello and welcome. Thank you for taking the time to meet with me today. My name is Felicia Hall and I am a PhD candidate conducting this research.

The goal of my research investigation is to explore the decision to enroll in a postsecondary Career and Technical Education (CTE) program as experienced by current students.

I will ask questions today that focus on your lived experiences as an individual connected to current postsecondary CTE students in hopes of understanding what enablers and barriers influence the decision to enroll in such a program from your perspective.

The interview will last approximately 45-60 minutes. With your permission, I would like to record our conversation to ensure I accurately capture your

responses. At times, I may take notes during the interview. The recording only for transcription and analysis purposes; it will not be released in any publications or reports. Only summarized data will be presented at meetings or in publications. The interview questions are designed to evoke responses about your lived experiences as an individual connected to current postsecondary CTE students at a community college in North Alabama. I want you to provide honest and accurate accounts of your experiences and personal feelings; however, should you feel uncomfortable with any of the questions, feel free to not respond.

Your participation in this study is completely voluntary. You are free to withdraw at any time, for any reason. The data collected today will be transcribed by a third-party transcription company.

Before we begin, please read and sign the Informed Consent form. I will give each of you a copy for your records, and I will keep a copy for my records.”

3. Start the recording:
 - a. Verbal Identification:
 - i. Date, time, place
 - ii. Interviewer’s Name
 - iii. Focus Group Members’ Names
 - b. Ask semi-structured, open-ended interview questions.
 - c. Use prompts and clarifying questions as needed to assist the focus group in providing deep, descriptive answers to the questions and to help refocus the discussion as needed.
4. Stop the recording:
 - a. Verbal identification of interview end time.
5. At the conclusion of the meeting:
 - a. Thank each participant again for their contribution to the research project.
 - b. Present the participants with a \$15 Amazon gift card.
 - c. Ask the participants if they would like to receive a copy of the results from the study once it has been finalized and approved by the university.
 - d. Answer any remaining questions the participants may have.

APPENDIX D – Focus Group Questions

1. How do you think students would describe their CTE program?
Possible prompt: What do you think they like about the program?
Possible prompt: How do you think they feel about their program?
2. In your experience, what factors encourage potential students' decision (enablers) to enroll in postsecondary CTE?
3. Based on the one-on-one interviews I conducted, students described the following enablers to their decision to enroll:
 - Location of program (near home)
 - Affordability of program (cheaper than university)
 - Real-life exposure to occupations following program completion
 - Previous exposure to Calhoun Community College

Does this ring true to your experience?

4. What factors discourage (barriers) potential students' in deciding to enroll in a postsecondary CTE program?
5. Based on the one-on-one interviews I conducted, students described the following barriers to their decision to enroll:
 - Worry about being accepted to program / limited number of seats
 - Decrease in income / changing jobs / quitting work for program's duration
 - Nervous about program "working out" or "paying off" in the end
 - Unsure of ability to maintain personal responsibilities in addition to becoming a student

Does this ring true to your experience?

6. Based on the one-on-one interviews I conducted, students described their lived experiences of deciding to enroll in postsecondary CTE as the following:
- Individuals were hoping for career growth opportunities through CTE programs.
 - Individuals were looking for personal meaning & achievement through CTE programs.
 - Ease of locating program information was noted as important.
 - Ease of application process was noted as important.

Does this ring true to your experience?

7. Is there anything else you would like to tell me about postsecondary CTE students and their decision to enroll in a program

APPENDIX E – University of Southern IRB Approval Letter

Office of Research Integrity



118 COLLEGE DRIVE #5116 • HATTIESBURG, MS | 601.266.6756 | WWW.USM.EDU/ORI

Modification Institutional Review Board Approval

The University of Southern Mississippi's Office of Research Integrity has received the notice of your modification for your submission *Reinvigorating the Middle Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs* (IRB #22-1243).

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI using the Incident form available in InfoEd.
- The period of approval is twelve months from the initial approval. If a project will exceed twelve months, a request should be submitted to ORI using the Renewal form available in InfoEd prior to the expiration date.

PROTOCOL NUMBER: 22-1243
PROJECT TITLE: Reinvigorating the Middle Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs
SCHOOL/PROGRAM School of Leadership
RESEARCHERS: PI: Felicia Hall
Investigators: Brown, Hamett Q.-Hall, Felicia-
IRB COMMITTEE
ACTION: Approved
CATEGORY: Expedited Category
PERIOD OF APPROVAL: 10-Apr-2023 to 15-Nov-2023

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

APPENDIX F – Calhoun Community College IRB Approval Letter



CALHOUN COMMUNITY COLLEGE

Post Office Box 2216 • Decatur, Alabama 35609-2216 • Phone 256-306-2500 • www.calhoun.edu

Apr 17, 2023

Dear Felicia Hall – Principal Researcher,

The modifications to the proposed project, *Reinvigorating the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs* have been approved. Approval extends for a period of 12 months from the date of this letter. Please be mindful of the following:

- Participant anonymity, both physical and digital, must be maintained as per the submitted IRB application.
- Participation is optional as per the submitted IRB application.
- Only the instruments and associated questions presented in the IRB application may be used in data collection.
- Identifying information related to participants may not be included in any publication or media release.
- Participants may not be under 18 years of age.
- This approval is contingent upon the researcher agreeing to refer any student concerns about personal safety, harassment, mental distress to student services.

As a reminder, research conducted at Calhoun Community College requires written permission to use the premises. Requests for permission to use the premises may be submitted to the office of the Vice President for Academic Affairs, wesley.rakestraw@calhoun.edu. This permission is separate and independent of the IRB or IRB approval. Since there have been no substantive changes to the research as it applies to the premises, an updated permission use the premises is not required. Permission from the February 2023 process meets expectations.

If you have any questions about the IRB, or wish clarification regarding this communication, please do not hesitate to contact me.

Warm Regards,

A handwritten signature in cursive script, appearing to read "S. Sayle".

Sara Sayle, Ph.D.
Psychology Instructor, IRB Chair
Calhoun Community College

APPENDIX G – First Email Request for Participation (One-on-One Interviews)

Hello,

My name is Felicia Hall. I am a doctoral candidate at the University of Southern Mississippi in the Human Capital Development program. I am conducting research on the enablers and barriers to the decision to enroll in postsecondary Career and Technical Education (CTE) programs. Since you are currently a postsecondary CTE student, I am interested in hearing about your experience. Your contribution to the research study could result in a lasting and positive impact on the recruitment process to these valuable programs.

Participation in this research includes sharing your decision-to-enroll experience in a one-on-one interview setting. If you are selected to participate, at the conclusion of your interview, you will receive a **\$35 gift card as a token of appreciation** for your participation. If you are interested, please complete the demographic questionnaire linked here [Demographic Questionnaire Link](#) within the next 7 days.

If you are selected, I will reply and we will set a time to meet. Feel free to email me if you have any questions regarding the study.

Your time and consideration are greatly appreciated.

Sincerely,

Felicia L. Hall

Doctoral Candidate, University of Southern Mississippi

felicia.l.hall@usm.edu

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project (Protocol Number 22-1243), which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdraw from this study at any time.

APPENDIX H – Online Demographic Questionnaire (One-on-One Interviews)

Select the circle next to the items that describe you.

1. Gender:

- Female
- Male
- I do not wish to provide this information.

2. Age Group:

- 18-25 years old
- 26-35 years old
- 36-45 years old
- 46-55 years old
- 56 years old or older

3. Ethnicity: Are you of Hispanic, Latino, or of Spanish origin?

- Yes
- No
- I do not wish to provide this information.

4. Race: How would you describe yourself?

- American Indian or Alaska Native
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White

- I do not wish to provide this information.

6. Highest level of education you have completed:

- Currently pursuing an industry-recognized credential
- Currently pursuing a certificate
- Currently pursuing an undergraduate degree
- Industry-recognized credential
- Certificate
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctorate degree
- Other (please explain): _____

7. Current CTE Program:

- Dental Assistant
- Dental Hygiene
- Emergency Medical Services (EMT, Advanced EMT, and Paramedic)
- Medical Laboratory Technician
- Nursing
- Physical Therapist Assistant
- Surgical Technologist
- Other (please specify): _____

8. Career level:

- First career preparation (traditional) – entry into postsecondary CTE in the year after an on-time completion of a high school diploma or equivalency; limited experience within workplaces of chosen career path
- First career preparation (nontraditional) – entry into postsecondary CTE after the age of 20 with very limited experience with formal paid employment
- Retraining – entry into postsecondary CTE to seek entry into a new industry or a radically different role within your current industry
- Upskilling – entry into CTE to further advance in an industry through further credentialing or skills acquisition

APPENDIX I – Informed Consent Form (One-on-One Interviews)

Consent is hereby given to participate in the study titled: *Revitalizing the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in a Postsecondary Career and Technical Education Program.*

- 1. Purpose:** The purpose of this research is to explore how current students experienced their decision to enroll in a community college Career and Technical Education (CTE) program.
- 2. Description of Study:** The study is a qualitative design using both one-on-one interviews and a focus group to collect the data. One-on-one interviews will last approximately 45-60 minutes. Interviews will take place on the campus of either the researcher or the participant or via video teleconference. This interview will be recorded and later transcribed with your permission. The researcher's initial analysis of your interview will be provided for your review as a member check.
- 3. Benefits:** This study offers a \$35 Amazon gift card as incentive for full participation in a one-on-one interview. The findings from this study will add to the discussion regarding postsecondary CTE participation, which could lead to an increase in the recruitment and retention of future students.
- 4. Risks:** There are no known risks associated with this study.
- 5. Confidentiality:** Myself, members of the research committee, Institutional Review Board, and the transcription service will be the only ones with access to the raw interview data. No presentations or publications of the data will identify you as a participant. The final version of the dissertation and any subsequent journal publications will use pseudonyms to protect your identity.
- 6. Alternative Procedures:** There are no alternative procedures associated with this study. Participants may end the interview at any time.
- 7. Participant's Assurance:** This project and this consent form have been reviewed by USM's Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5125, Hattiesburg, MS 39406, 601-266-5997. Any questions about this research project should be directed to the Principal Investigator, Felicia L. Hall at felicia.l.hall@usm.edu.

Consent to Participate in Research: All research procedures and their purpose were explained to me, and I had the opportunity to ask questions about both the procedures and their purpose. I received information about all expected benefits, risks, inconveniences, or discomforts, and I had the opportunity to ask questions about them. I understand my participation in the project is completely voluntary and that I may withdraw from the project at any time without penalty, prejudice, or loss of benefits. I understand the extent to which my personal information will be kept confidential. As the research proceeds, I understand that any new information that emerges and might be relevant to my willingness to continue my participation will be provided to me.

Participant's Name: _____

Participant's Signature: _____ Date: _____

Person Explaining the Study: Felicia L. Hall, Principal Investigator

Per 45 CFR 46.116, all consent documentation must address the following elements: purpose, procedures, duration, benefits, risks, alternative procedures, confidentiality, whom to contact in case of injury, and a statement that participation is voluntary.

Signed copies of the consent form will be provided to all participants.

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project (Protocol Number 22-1243), which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdraw from this study at any time.

APPENDIX J – University of Southern Mississippi IRB Modification Approval

Office of Research Integrity



118 COLLEGE DRIVE #5116 • HATTIESBURG, MS | 601.266.6756 | WWW.USM.EDU/ORI

Modification Institutional Review Board Approval

The University of Southern Mississippi's Office of Research Integrity has received the notice of your modification for your submission *Reinvigorating the Middle Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs* (IRB #:22-1243).

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI using the Incident form available in InfoEd.
- The period of approval is twelve months from the initial approval. If a project will exceed twelve months, a request should be submitted to ORI using the Renewal form available in InfoEd prior to the expiration date.

PROTOCOL NUMBER: 22-1243
PROJECT TITLE: Reinvigorating the Middle Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs
SCHOOL/PROGRAM: School of Leadership
RESEARCHERS: PI: Felicia Hall
Investigators: Brown, Hamett Q-Hall, Felicia-
IRB COMMITTEE ACTION: Approved
CATEGORY: Expedited Category
PERIOD OF APPROVAL: 10-Apr-2023 to 15-Nov-2023

Alen Hajnal, Ph.D.
Institutional Review Board Vice Chairperson

APPENDIX K – Calhoun Community College IRB Modification Approval



CALHOUN COMMUNITY COLLEGE

Post Office Box 2216 • Decatur, Alabama 35609-2216 • Phone 256-306-2500 • www.calhoun.edu

May 12, 2023

Dear Felicia Hall – Principal Researcher,

The May 2023 modifications to the proposed project, *Reinvigorating the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs* have been approved. Approval extends for a period of 12 months from the date of this letter. Please be mindful of the following:

- Participant anonymity, both physical and digital, must be maintained as per the submitted IRB application.
- Participation is optional as per the submitted IRB application.
- Only the instruments and associated questions presented in the IRB application may be used in data collection.
- Identifying information related to participants may not be included in any publication or media release.
- Participants may not be under 18 years of age.
- This approval is contingent upon the researcher agreeing to refer any student concerns about personal safety, harassment, mental distress to student services.

As a reminder, research conducted at Calhoun Community College requires written permission to use the premises. Requests for permission to use the premises may be submitted to the office of the Vice President for Academic Affairs, wesley.rakestraw@calhoun.edu. This permission is separate and independent of the IRB or IRB approval. Since there have been no substantive changes to the research as it applies to the premises, an updated permission use the premises it not required. Permission from the February 2023 process meets expectations.

If you have any questions about the IRB, or wish clarification regarding this communication, please do not hesitate to contact me.

Warm Regards,

A handwritten signature in cursive script, appearing to read 'S. Sayle'.

Sara Sayle, Ph.D.
Psychology Instructor, IRB Chair
Calhoun Community College

APPENDIX L – Email Request for Participation (Focus Group)

Hello,

My name is Felicia Hall. I am a doctoral candidate at the University of Southern Mississippi in the Human Capital Development program. I am conducting research on the enablers and barriers to the decision to enroll in postsecondary Career and Technical Education (CTE) programs. Since you are currently involved with a postsecondary CTE at CCC, I am interested in hearing about your experience to help identify the factors that influence students' decision to enroll in a postsecondary CTE program. Your contribution to the research study could result in a lasting and positive impact on the recruitment process to these valuable programs.

Participation in this research includes sharing your perceptions of the decision-to-enroll experience of postsecondary CTE students in a focus group setting. If you are selected to participate, at the conclusion of your interview, you will receive a **\$15 gift card as a token of appreciation** for your participation. If you are interested, please complete the demographic questionnaire linked here [Demographic Questionnaire Link](#) within the next 7 days.

If you are selected, I will reply and we will coordinate a time for the focus group to meet. Feel free to email me if you have any questions regarding the study.

Your time and consideration are greatly appreciated.

Sincerely,

Felicia L. Hall

Doctoral Candidate, University of Southern Mississippi

felicia.l.hall@usm.edu

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project (Protocol Number 22-1243), which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdraw from this study at any time.

APPENDIX M – Online Demographic Questionnaire (Focus Group)

Select the circle next to the items that describe you.

1. Gender:

- Female
- Male
- I do not wish to provide this information.

2. Age Group:

- 18-25 years old
- 26-35 years old
- 36-45 years old
- 46-55 years old
- 56 years old or older

3. Highest level of education you have completed:

- Currently pursuing an industry-recognized credential
- Currently pursuing a certificate
- Currently pursuing an undergraduate degree
- Industry-recognized credential
- Certificate
- Associate's degree
- Bachelor's degree
- Master's degree

- Doctorate degree
- Other (please explain): _____

4. How are you affiliated with Career and Technical Education at CCC?

5. How long have you been affiliated with Career and Technical Education at CCC?

- Less than 1 year
- 1 to 5 years
- 6 to 10 years
- 11 to 15 years
- More than 15 years

6. How long in total have you been affiliated with postsecondary Career and Technical Education programs?

- Less than 1 year
- 1 to 5 years
- 6 to 10 years
- 11 to 15 years
- More than 15 years

APPENDIX N – Informed Consent Form (Focus Group)

Consent is hereby given to participate in the study titled: *Revitalizing the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in a Postsecondary Career and Technical Education Program.*

- 1. Purpose:** The purpose of this research is to explore how current students experienced their decision to enroll in a community college Career and Technical Education (CTE) program.
- 2. Description of Study:** The study is a qualitative design using both one-on-one interviews and a focus group to collect the data. The focus group will last approximately 45-60 minutes and will take place on the campus of the participants. This interview will be recorded and later transcribed with your permission.
- 3. Benefits:** This study offers a \$15 Amazon gift card as incentive for full participation in the focus group. The findings from this study will add to the discussion regarding postsecondary CTE participation, which could lead to an increase in the recruitment and retention of future students.
- 4. Risks:** There are no known risks associated with this study.
- 5. Confidentiality:** Myself, members of the research committee, Institutional Review Board, and the transcription service will be the only ones with access to the raw interview data. No presentations or publications of the data will identify you as a participant. The final version of the dissertation and any subsequent journal publications will use pseudonyms to protect your identity.
- 6. Alternative Procedures:** There are no alternative procedures associated with this study. Participants may end the interview at any time.
- 7. Participant's Assurance:** This project and this consent form have been reviewed by USM's Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5125, Hattiesburg, MS 39406, 601-266-5997. Any questions about this research project should be directed to the Principal Investigator, Felicia L. Hall at felicia.l.hall@usm.edu.

Consent to Participate in Research: All research procedures and their purpose were explained to me, and I had the opportunity to ask questions about both the procedures and

their purpose. I received information about all expected benefits, risks, inconveniences, or discomforts, and I had the opportunity to ask questions about them. I understand my participation in the project is completely voluntary and that I may withdraw from the project at any time without penalty, prejudice, or loss of benefits. I understand the extent to which my personal information will be kept confidential. As the research proceeds, I understand that any new information that emerges and might be relevant to my willingness to continue my participation will be provided to me.

Participant's Name: _____

Participant's Signature: _____ Date: _____

Person Explaining the Study: Felicia L. Hall, Principal Investigator

Per 45 CFR 46.116, all consent documentation must address the following elements: purpose, procedures, duration, benefits, risks, alternative procedures, confidentiality, whom to contact in case of injury, and a statement that participation is voluntary.

Signed copies of the consent form will be provided to all participants.

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project (Protocol Number 22-1243), which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdraw from this study at any time.

APPENDIX O – Post One-on-One Interview Email

Dear Participant,

Thank you for participating in my research study titled *Reinvigorating the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in a Postsecondary Career and Technical Education Program*. Like we discussed, once your interview has been transcribed, I will conduct an initial analysis, and I will email you a copy for your review.

Thank you, again, for your participation and support of my research project. If you have any questions or concerns, please don't hesitate to reach out.

Sincerely,

Felicia L. Hall

Doctoral Candidate, University of Southern Mississippi

felicia.l.hall@usm.edu

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project (Protocol Number 22-1243), which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdraw from this study at any time.

APPENDIX P – Post Focus Group Interview Email

Dear Participant,

Thank you for participating in my research study titled *Reinvigorating the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in a Postsecondary Career and Technical Education Program*. I greatly appreciate your participation and support of my research project. If you have any questions or concerns, please don't hesitate to reach out.

Sincerely,

Felicia L. Hall

Doctoral Candidate, University of Southern Mississippi

felicia.l.hall@usm.edu

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project (Protocol Number 22-1243), which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdraw from this study at any time.

APPENDIX Q – Final Thank You Letter (One-on-One Interviews)

Dear Participant,

Thank you for participating in my research study titled: *Reinvigorating the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs*. The stories, descriptions, and input you provided of your experiences will no doubt continue to add to the scholarship relating to the enablers and barriers influencing the decision to enroll in postsecondary CTE programs.

Your support throughout this project was greatly valued.

Please don't hesitate to contact me if you have any further questions.

Sincerely,

Felicia L. Hall

Doctoral Candidate, University of Southern Mississippi

felicia.l.hall@usm.edu

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project (Protocol Number 22-1243), which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdraw from this study at any time.

APPENDIX R – Member Check Email (One-on-One Interviews)

Dear Participant,

Thank you for participating in my research study. As we discussed, a copy of my initial analysis is attached for you to review. Please take some time to review the entire document and mark any places you think are inaccurate, or you would like to change.

If you would like, I am happy to set a time to meet with you to review the document.

If I don't hear back from you within 3 days, I will assume you are satisfied with the transcript, and I will move forward with my work.

Sincerely,

Felicia L. Hall

Doctoral Candidate, University of Southern Mississippi

felicia.l.hall@usm.edu

The Institutional Review Board of The University of Southern Mississippi reviewed and approved this project (Protocol Number 22-1243), which ensures research projects involving human subjects follow federal regulations. Direct any questions or concerns about rights as a research participant to the Chair of the IRB at (601) 266-5997 or irb@usm.edu. Participation in this project is completely voluntary, and participants may withdraw from this study at any time.

APPENDIX S – Transcript Analysis (Participant Excerpt)

TranscribeMe!

other CTE programs ~~with~~ backup plans were

P. 2- worried about available seats

accepted the first time, I was going to apply for the other three. I was going to apply for PTA, surgical tech, and dental hygiene the next semester.

FELICIA H.: 23:21

Was deciding to apply a difficult choice?

JACOB: 23:26

The only difficult choice would be financially. And so we didn't know if we were quite ready to have that type of financial commitment, but my wife was extremely encouraging, and she kind of eased my mind about it, and she has her Master's, and she got her Master's in HR. And she started at a company, and she had gone through a series of promotions, and she even integrated an executive assistant role at her company. So I like to brag on her a little bit. She kind of became a sugar mama for me. [laughter] And I worked all while she was going through school, granted she worked too. So I feel like she's helping me out a lot. But it was difficult because I knew that my income would go down, and I knew that it would be more on her, but she was extremely reassuring about that. Mentally, no, I was ready. I've done a lot of different types of work, definitely hard labor. And whether or not there would be something out there better for me, I'm not too sure, but I sure know I enjoyed doing this, and I have a passion for it.

Financial burden due to loss of job/ changing jobs for fewer hrs -overcame worry be mentally ready

PTA his fav

"passion"

JACOB: 24:54

likes to learn passionate about CTE subject matter

reg

short length of programs positive

FELICIA H.: 26:06

Okay. Thank you. So my next question is, what happened when you chose to enroll in your program? You've kind of talked about it, but any more details about that?

JACOB: 26:32

More so like what did I do when I figured out that I got accepted, or?

FELICIA H.: 26:38

Yeah, how did you feel? How do you think others in your life felt?

Decision to enroll was easy bc already knew he didn't like previous types of work (hard labor, stuck at entry level (p.1-2) etc), the program was relatively short and wife could make up for lost wages.

mentally ready x2

TranscribeMe

APPENDIX T – Experiential Statements (Participant Excerpt)

Shanelle – Initial Analysis – Experiential Statements – 05/07/2023

She was, and is continuously surprised her program is so difficult and challenging – since she hasn't given up, she realized she is more competent and capable than she thought (p. 2, 3)

In spite of the material being difficult to learn she greatly enjoys the material because it will enable her to help people (p. 3)

She struggles through the program significantly because of the level of difficulty of the material along with strict professors holding closely to requirements outlined on strict rubrics (p. 3, 4)

The program is very selective with limited seats and not everyone who is admitted progresses because they cannot make passing grades due to difficulty of the program (p. 5)

Persevering through the difficult program has many positive outcomes: professionally (she'll be a good, qualified PTA); personally, as a mother (can empathize with her kids while helping with their difficult schoolwork) personally, as a friend (has gained many good friendships through the program); and internally (more self-confident). (p. 5, 6)

She will have more good job opportunities throughout the future as a result of finishing this rigorous, well-regarded program most of all because she will be a competent, confident PTA (p. 6)

Spending so much time working through this stressful program regrettably takes time away from her kids because it is a high-priority for her that requires her focus (time-consuming) (p. 6, 7)

First exposure to PTA as an occupation through direct experience as a patient in high school. Workplace was appealing due to its casual, friendly atmosphere that suits (p. 7)

Working non-skilled jobs to help her family was not fulfilling – saw PTA as an avenue to pursue something more for herself (p. 8)

The campus location being convenient to her home while also providing a quality education at an affordable price made the program at Calhoun appealing (p. 8)

She deeply knew she wanted to pursue PTA after observing and developing an affinity for the occupation – others in her life affirmed her saying she would be a good fit – all this together made deciding to enroll and easy decision (p. 9)

She desires to work outside the home to help her husband support the family and also for personal fulfillment and purpose (p. 9)

While the prerequisites were clearly laid out and the application process was transparent and simple, she was deeply concerned she would not be accepted due to limited available seats and she knew this is what she wanted to do (p. 10)

People in her life supported her decision to enroll because they believed she would be successful (especially her husband), but she had doubts about her ability since the program is so rigorous – she still doubts her abilities, but is persevering (p. 11)

The PTA program gives her purpose and fulfillment – she is happy and doesn't regret her decision (p. 11, 12)

Biggest influence in choosing this path was extremely positive real-life encounter with the occupation; because of this is seeking professional but fun career where every day is different (p. 12, 13)

Husband deeply supports her (p. 12)

Deeply emotional when she was accepted because she convinced herself she wouldn't be accepted in spite of deeply desiring to be part of the PTA program (p. 13)

Happy she overcame fears and doubts because this was a good decision impacting several layers of her life: career, relationships, family life, inner world (p. 14)

Achieving in spite of challenges through hard work has increased her self-confidence because she knows she will be worthy to be helping others working as a PTA (p. 14)

She didn't think she could do this before (p. 14)

APPENDIX U – Personal Experiential Themes (PETs)

Participant	Personal Experiential Themes (PETs)
Mariah	<ul style="list-style-type: none"> • I knew this certification would lead to an immediate raise at my current job. • Completing this program will lead to better work opportunities in the future. • I committed to this particular program because it best fit with my personal and work experiences. • I previously worked in this field and it was a positive experience. • I researched program details online while making my decision. • The program was appealing because it was close to home.
Daniela	<ul style="list-style-type: none"> • I believe this program will lead to financial stability and future career options. • I thought the program was very rigorous and was initially unsure I could be able to successfully complete it. • My positive personal experience with the occupational field sparked my interest in postsecondary CTE. • I knew about postsecondary CTE programs since I was previously enrolled at this institution. • I felt like similar postsecondary CTE programs were too limited and didn't fit my personal needs. • Choosing to quit working in order to go to school full time caused major hesitation as I was deciding to enroll.
Jacob	<ul style="list-style-type: none"> • I thought I might find personal fulfillment through enrolling in this program. • Having previously attended the institution and earning pre-requisites there positively influenced my decision to enroll. • Being able to reference detailed program information online played a role in my decision-making process. • The limited number of seats available in the program added to my feelings of trepidation during my decision process. • The financial implications of enrolling were my top concern. • I believed this program could add to my self-confidence and pride. • My negative first-hand experience with the occupation mattered when considering which program I was interested in. • Knowing the program would lead to me being able to help others was an important factor.

Briana	<ul style="list-style-type: none"> • Experiencing the occupation in real life led me to choose this program. • I chose this program because it best fit with my current personal responsibilities, including the length of the program. • I wish I had known about this program earlier. • I decided to enroll to find “my own little thing” and to discover what makes me happy. • This program will help me help others.
Kiara	<ul style="list-style-type: none"> • I found out about this program online. • I was looking for an accredited program near my home. • I will be disappointed if the program doesn’t work out by not leading to a good job. • I wish I would have known about this program earlier so that I could have gotten a good job earlier. • I believe this certification will lead me to a good job. • Having to reduce my working hours in order to enroll was a difficult choice.
Amelia	<ul style="list-style-type: none"> • I previously took classes at this institution. • This program is affordable and the location is convenient. • Watching my friend work at her job which requires the certification at the end of this program made me interested in the program. • This program will help me achieve my further educational goals and will lead to financial gains through a good job. • Budgeting is very important to me since I had to change jobs and reduce my working hours in order to enroll. • I also considered accessibility issues when thinking about enrolling.
Shanelle	<ul style="list-style-type: none"> • I pursued this program in hopes of finding my purpose and increasing my self-esteem. • Finishing this program will enable me to help people. • Enrolling in this program impacts my role as mother in my family’s life and related responsibilities. • I liked that the campus is close to home and the program is affordable. • I had a positive experience with the occupation as a teenager and then after observing in person I knew I wanted to enroll. • This program will lead me to a solid career. • I liked that there was detailed information about the program online, including information about the limited number of seats.

APPENDIX V – Initial Coding Board

PREVIOUS EXPOSURE TO INSTITUTION

- knew about the program while previously attending this institution
- She previously took classes at Oakton - it was convenient and affordable
- Having previously attended the institution and coming to requests there positively influenced the decision

AFFORDABILITY OF PROGRAM

- She liked that the campus is close to home and affordable
- She previously took classes at Oakton - convenient + affordable

LOCATION OF PROGRAM

- The program was appealing bc it was close to home
- Location was near her home and accredited

REAL LIFE EXPOSURE TO CTE OCCUPATIONS

- Experiencing the cooperation in real life led her to choose this program
- Negative first-hand experience with cooperation within alien concerning CTE program offers
- She previously worked in this field and had positive experiences in the past
- Positive personal experience with the occupational field sparked an interest in CTE
- Noticing her friend do the job of someone certified made her interested in the program
- She had a positive experience with the occupation as a youth and after observing in person she knew she wanted to apply

I WISH I KNEW ABOUT CTE SOONER

- Wishes she knew about this program earlier
- She wishes she would have known about this program earlier so she could have gotten a good job earlier

INABILITY TO CONTINUE WORKING FT WHILE ENROLLED

- Financial implications of enrolling were the top concern
- Quitting work to go to school full time was a major hesitation while deciding to enroll
- Budgeting is very important because she had to change her financial situation to be able to afford the program
- Reducing working hours to enroll was a difficult choice

CONCERN THE PROGRAM WON'T PAY OFF

- Believed this program would lead to financial stability and future career options
- Unsure if this program would work out for her - if she would enjoy it
- Program will help her achieve further education goals and will lead to financial gain
- She knew this would lead to immediate raise + adjustment job

ANTICIPATED STRAIN ON PERSONAL RESPONSIBILITIES

- Committed to the particular program bc it best fit in with her personal and work responsibilities
- She thought the program fit with current personal responsibilities - includes length of program
- Program wasn't a burden on her
- Similar CTE programs were too limited and didn't fit personal needs
- Although the program was very rigorous and was more she could do this in complete

WORRY ABOUT LIMITED AVAILABLE SEATS

- The limited number of seats available in the program added to feelings of impatience during the decision process
- Detailed program information was available online - includes info about limited seats

SEEKING PERSONAL FULFILLMENT THROUGH CTE

- She decided to enroll to find out how she would feel about the program
- She pursued this program in hopes of finding her purpose and career for self-fulfillment
- Personal fulfillment would be found through enrolling in this program
- Believed this program could add to self-confidence and pride when enrolling whether or not to enroll

TRANSPARENT APPLICATION PROCESS MATTERS

- Researched program details online while waiting for decision
- Returning detailed program info online played a role during the decision process

EASY ACCESS TO CTE INFO MATTERS

- Found out about the program online

HOPING FOR CAREER GROWTH FROM CTE

- Completing this program will lead to better work opportunities
- This certification will lead to a good job
- This program will lead to a solid career
- This program will help with a good job and future options
- She would be disappointed if the program didn't work out - wants a good job

I LIKE TO HELP PEOPLE - CTE EQUIPS ME TO HELP

- This program will help her help others
- Knowing the program would lead to the ability to help others was an important factor
- Finishing this program enables her to help people

APPENDIX W – Emergent Theme Matrix

RO2: Perceived Enablers

Emergent Themes	Mariah	Daniela	Jacob	Brianna	Kiara	Amelia	Shanelle
Previous Exposure to Institution		X	X				
Affordability of Program						X	X
Location of Program	X				X		
Real-Life Exposure to CTE	X	X	X	X		X	X
“I Wish I Knew About CTE Sooner”				X	X		

RO3: Perceived Barriers

Emergent Themes	Mariah	Daniela	Jacob	Brianna	Kiara	Amelia	Shanelle
Inability to Continue Working Full Time		X	X		X	X	
Concern the Program Won’t Pay Off		X		X			
Anticipated Strain on Personal Responsibilities	X	X		X		X	X
Worry About Limited Available Seats			X				X

RO4: Lived Experiences

Emergent Themes	Mariah	Daniela	Jacob	Brianna	Kiara	Amelia	Shanelle
Seeking Personal Fulfillment		X	X	X			X
Transparency in the Application Process Matters	X		X				
Easy Access to Program Information Matters						X	
Hoping for Career Growth Through CTE	X			X	X		X
“I Like to Help People”		X	X	X			X

APPENDIX X – Final Coding Board

Enablers

REAL LIFE EXPOSURE TO CTE OCCUPATIONS

Experiencing the respectability that job led her to choose this program.

Acquainted first-hand experience with occupation and what it entails when considering CTE program options.

She previously worked in this field and had positive experiences in the past.

Learned personal exposure with the occupational field sparked an interest in CTE.

Notation her friend as the job of someone working made her interested in the program.

She had a positive experience with the program that also sparked an idea regarding a career she knew she wanted to apply.

LOCATION OF PROGRAM

AFFORDABILITY OF PROGRAM

She liked that the campus is close to home and affordable.

Location was near her home and accredited.

She previously took classes at Oklahoma - convenient & affordable.

The program was appealing bc it was close to home.

PREVIOUS EXPOSURE TO INSTITUTION

Knew about CTE programs while previously attending this institution.

She previously took classes at Oklahoma - it was convenient and affordable.

Having previously attended the institution and doing pre-requisites there previously influenced the decision.

Barriers

CONCERN THE PROGRAM WON'T PAY OFF

HOPING FOR CAREER GROWTH FROM CTE

Completing this program will lead to better work opportunities.

This certification will lead to a good job.

Program will help her achieve further education goals and will lead to financial gains.

This program will pay off with a good job and future options.

This program will lead to a solid career.

She would be disappointed if the program doesn't work out - lead to a good job.

Unsure if this program would work out for her - if she would enjoy it.

Believed this program would lead to personal growth and future career options.

She knew this certification would lead to immediate ease of finding a job.

ANTICIPATED STRAIN ON PERSONAL RESPONSIBILITIES

Committed to this particular program bc it best fit in with her personal and work responsibilities.

Diverse program bc it fit with current personal responsibilities - includes budgeting and income.

Program supports family life as a mother.

Similar CTE programs were too limited and didn't fit personal needs.

Thought the program was very rigorous and was unsure she would be able to complete.

INABILITY TO CONTINUE WORKING FT WHILE ENROLLED

Financial implications of enrolling were the top concern.

During work to go to school full time was a major hesitation while deciding to enroll.

Budgeting is very important because she had to change jobs and decide her budget how to enroll.

Reducing working hours to enroll was a difficult choice.

Lived Experience

EASY ACCESS TO CTE INFO MATTERS

WORRY ABOUT LIMITED AVAILABLE SEATS

TRANSPARENT APPLICATION PROCESS MATTERS

Researched program details online while waiting for decision.

Found out about the program online.

Retired over detailed program info online played a role during the decision process.

The limited number of seats available in the program added to feelings of urgency during the decision process.

Detailed program information was available online - including info about limited seats.

SEEKING PERSONAL FULFILLMENT THROUGH CTE

She decided to enroll to find her own little thing - what makes her happy.

She pursued this program in hopes of finding her purpose and career fulfillment.

Personal fulfillment might be found through enrolling in this program.

Believed this program could add to self-confidence and pride when deciding whether or not to enroll.

Brianna

Mariah

[Redacted]

Kiara

Daniela

Jacob

Amelia

APPENDIX Y – Theme Clustering Matrix

- Theme 1 Real-life exposure to CTE occupations
- Theme 2 Location and affordability of program
- Theme 3 Previous exposure to institution
- Theme 4 Concern the program won't pay off
- Theme 5 Anticipated strain on personal responsibilities
- Theme 6 Inability to continue working full time while enrolled
- Theme 7 Online access to program information matters
- Theme 8 Seeking personal meaning and fulfillment through CTE

Emergent Themes	Theme 1	Theme 2	Theme 3	Theme 4
Previously exposed to CTE jobs in real life	X			
Location of program		X		
Affordability of program		X		
Previously exposed to Calhoun as learning institution			X	
Concern the program won't pay off				X
Hoping for career growth through CTE				X

Emergent Themes	Theme 5	Theme 6	Theme 7	Theme 8
Anticipated strain on personal responsibilities	X			
Inability to continue working full time		X		
Easy access to CTE information matter			X	
Worry about limited available seats			X	
Transparent application process matters			X	
Seeking personal fulfillment through CTE				X

APPENDIX Z – USM Initial IRB Approval (November 2022)

**Office of
Research Integrity**



118 COLLEGE DRIVE #5116 • HATTIESBURG, MS | 601.266.6756 | WWW.USM.EDU/ORI

NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: 22-1243
PROJECT TITLE: Reinvigorating the Middle Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs
SCHOOL/PROGRAM: School of Leadership
RESEARCHERS: PI: Felicia Hall
Investigators: Hall, Felicia~Brown, Hamett Q.~
IRB COMMITTEE ACTION: Approved
CATEGORY: Expedited Category
PERIOD OF APPROVAL: 16-Nov-2022 to 15-Nov-2023

Donald Sacco

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

APPENDIX AA – Request to Conduct Research Denial (January 2023)

RE: Application to Conduct Research at Mississippi Gulf Coast Community College [#48]

Adam Swanson <adam.swanson@mgccc.edu>

Wed 1/11/2023 8:26 AM

To: felicia.l.hall@usm.edu <felicia.l.hall@usm.edu>

The Executive Council reviewed your application to conduct research regarding the study titled, 'Reinvigorating the Middle Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs.' The decision was made not to support this study at this time as we have already approved several other studies and their data collection. Thank you for reaching out and we wish you the very best.

Adam Swanson, Ph.D.
Executive Vice President, Technology & Research
Mississippi Gulf Coast Community College

<http://www.mgccc.edu/>



APPENDIX BB – USM IRB Approval for Research Site Change (February 2023)

**Office of
Research Integrity**



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Modification Institutional Review Board Approval

The University of Southern Mississippi's Office of Research Integrity has received the notice of your modification for your submission *Reinvigorating the Middle Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs* (IRB #:22-1243).

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER: 22-1243
PROJECT TITLE: Reinvigorating the Middle Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs
SCHOOL/PROGRAM School of Leadership
RESEARCHERS: PI: Felicia Hall
Investigators: Brown, Hamett Q.-Hall, Felicia-
IRB COMMITTEE ACTION: Approved
CATEGORY: Expedited Category
PERIOD OF APPROVAL: 09-Feb-2023 to 15-Nov-2023

A handwritten signature in cursive script that reads "Donald Sacco".

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

APPENDIX CC – CCC IRB Approval for Research Site Change (February 2023)



CALHOUN COMMUNITY COLLEGE

Post Office Box 2216 • Decatur, Alabama 35609-2216 • Phone 256-306-2500 • www.calhoun.edu

Feb 13, 2023

Dear Felicia Hall – Principal Researcher,

The proposed project, *Reinvigorating the Middle-Skill Talent Pipeline: Exploring the Decision to Enroll in Postsecondary Career and Technical Education Programs* has been approved. Approval extends for a period of 12 months from the date of this letter. Please be mindful of the following:

- Participant anonymity, both physical and digital, must be maintained as per the submitted IRB application.
- Participation is optional as per the submitted IRB application.
- Only the instruments and associated questions presented in the IRB application may be used in data collection.
- Identifying information related to participants may not be included in any publication or media release.
- Participants may not be under 18 years of age.
- This approval is contingent upon the researcher agreeing to refer any student concerns about personal safety, harassment, mental distress to student services.

As a reminder, research conducted at Calhoun Community College requires written permission to use the premises. Requests for permission to use the premises may be submitted to the office of the Vice President for Academic Affairs, wesley.rakestraw@calhoun.edu. This permission is separate and independent of the IRB or IRB approval.

If you have any questions about the IRB, or wish clarification regarding this communication, please do not hesitate to contact me.

Warm Regards,

A handwritten signature in cursive script, appearing to read "S. Sayle".

Sara Sayle, Ph.D.
Psychology Instructor, IRB Chair
Calhoun Community College

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