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Persistence and Retention of Adult Learners: Results of a Program Evaluation of Tuition Funding Provided by Employers

Abstract

As the looming enrollment cliff approaches and more adult learners return to higher education, understanding the factors that affect their persistence and retention is vital for higher education institutions. Previous studies have shown that external factors influence post-traditional learners' pursuit of higher education. This program evaluation aimed to acquire knowledge of up-front employer tuition funding and its effects on adult learners' persistence, retention, and time to degree completion. Through a quantitative approach, this program evaluation examines the differences between students receiving up-front employer tuition funding and those who do not. The results indicated that students who received employer funding retained at higher rates than those who did not across all programs except graduate certificates. The length of time and cost of the degree affect how influential employer tuition funding is for the adult learner. The results also indicated that employer tuition funding affects completion time while influencing a student's decision to return to higher education. Recommendations for consideration include locking tuition rates for those who remain active with continuous enrollment, reviewing transfer policies for undergraduate students to increase the courses allowed to be used for transfer credits, awarding Prior Learning Assessment (PLA) credit for college-level knowledge and competencies at both the undergraduate and graduate-levels, increasing scholarship opportunities for Master-level students, creating articulation agreements with statewide community colleges, and reengage students who have stopped out by offering discounted or locked tuition to return. Understanding the academic journey for adult learners and the influence employer tuition funding can help institutions formulate practices and facilitate degree completion within the post-traditional student population.

Document Type

Dissertation in Practice

Degree Name

Ed.D.

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Keywords

Adult learner, Cost, Employer tuition funding, Persistence, Post-traditional learner, Retention

Subject Categories

Adult and Continuing Education | Education | Higher Education

Publication Statement

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Persistence and Retention of Adult Learners: Results of A Program Evaluation of Tuition
Funding Provided by Employers

A Dissertation in Practice

Presented to

the Faculty of the Morgridge College of Education

University of Denver

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

by

Andrea J. Gross

August 2023

Advisor: Dr. Cecilia M. Orphan

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Degree Date: August 2023

ABSTRACT

As the looming enrollment cliff approaches and more adult learners return to higher education, understanding the factors that affect their persistence and retention is vital for higher education institutions. Previous studies have shown that external factors influence post-traditional learners' pursuit of higher education. This program evaluation aimed to acquire knowledge of up-front employer tuition funding and its effects on adult learners' persistence, retention, and time to degree completion. Through a quantitative approach, this program evaluation examines the differences between students receiving up-front employer tuition funding and those who do not. The results indicated that students who received employer funding retained at higher rates than those who did not across all programs except graduate certificates. The length of time and cost of the degree affect how influential employer tuition funding is for the adult learner. The results also indicated that employer tuition funding affects completion time while influencing a student's decision to return to higher education. Recommendations for consideration include locking tuition rates for those who remain active with continuous enrollment, reviewing transfer policies for undergraduate students to increase the courses allowed to be used for transfer credits, awarding Prior Learning Assessment (PLA) credit for college-level knowledge and competencies at both the undergraduate and graduate-levels, increasing scholarship opportunities for Master-level students, creating articulation agreements with statewide community colleges, and reengage students who

have stopped out by offering discounted or locked tuition to return. Understanding the academic journey for adult learners and the influence employer tuition funding can help institutions formulate practices and facilitate degree completion within the post-traditional student population.

Keywords: post-traditional learner, adult learner, retention, persistence, stop-out, higher education, employer tuition funding, cost

ACKNOWLEDGMENTS

Throughout this journey, I felt supported, encouraged, cheered on, and challenged by many individuals. The list of those to thank is long, but I begin by thanking my wife, Gini, who is my rock. She has supported me throughout my journey of completing my EdD as I worked early morning and weekends, and she likely knows more about post-traditional learners and retention than she has ever wanted to know. She provided encouragement and a listening ear and was my biggest cheerleader throughout, even when the alarm clock would go off at 3:00 a.m. Thank you to my committee: Dr. Cecilia Orphan for being my advisor and champion, and for the endless edits and revisions needed to get me to this place, Dr. Chris Nicholson for sparking my passion for serving the adult learner, as well as your continued mentorship and support over the past nine years, and for Dr. Laura Sponsler for supporting me during the final stretch of my dissertation. Thank you to Dr. Bobbie Kite, my honorary committee member, for her support, guidance, and mentorship throughout my dissertation's data collection and analysis. A special thank you to my family and friends: to my parents, Art and Chris Gross, who believed in me and have always challenged me to chase my dreams, to my sister, Dr. Nicole Bartholomew, for sharing her expertise and lending a listening ear, and to my friends who cheered me on along the way. Thank you to those colleagues who completed their journey before me and alongside me for their critical thought partnership and accountability. Thank you to my writing partners, Diana and Allyson; they provided the accountability, friendship, and encouragement I needed to finish. Finally, thank you to University College and my colleagues for their support over the past seven years.

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CHAPTER ONE: INTRODUCTION

Preface

Susan finds herself at a crossroads yet again, the same one she has found herself standing at in the past. Each time she has hit this crossroad, she has chosen to pivot toward a different path and, yet again, finds herself at the very crossroad she stood at years before. Susan continues to get stuck at the crossroads of education and career advancement. She feels stuck on the corporate treadmill; her experience has helped her to advance her career; however, she feels stagnant because others are passing her by, and she has reached the ceiling for career advancement. She needs something more to advance in her career, provide for her family, and attain her personal and professional goals. Might furthering her education be the answer? Will an additional credential allow her to break through the ceiling? She has what seems to be a hundred responsibilities on her plate. Is it the right time to add another competing priority to her already hectic life? She has been thinking of taking the leap, and her spouse is supportive but is the investment of her time and money worth it for her and her family, and is additional education the answer for her to advance her career?

After months of contemplation and her exhaustion from the corporate treadmill, Susan was thrilled when her company announced that they had changed their educational tuition benefits for their employees. This new policy will eliminate the requirement for employees to pay tuition upfront and then be reimbursed by the company. Instead, the

company will cover tuition costs immediately. She needed this push to finally take the leap and pursue additional education to advance her career. Her employer's change in tuition funding policy significantly reduces her financial burden. She understands that taking this leap means she will need to sacrifice her time and energy; however, the reduction of financial costs makes this education endeavor possible, and she is excited about this opportunity to reenter higher education. She plans to take advantage of the opportunity to grow personally and professionally, and now that her dream is a reality, her next step is to find the program that will help her take her career to the next level. Susan is so grateful and excited for this opportunity for her and her family as they are all in it together.

While this is a glimpse into Susan's career and educational state, she is not much different from Arthur, Angela, Michael, Louis, or the countless other post-traditional learners who desire further education to advance their careers. This vignette tells the story of a fictional character to demonstrate the millions of adult learners contemplating taking the leap back into higher education and the challenges they face while pursuing higher education (NCES, 2020). Some will return to complete the bachelor's degree they started years ago, others to upskill or reskill with certificates, and others to earn master's degrees (UPCEA, 2017). Millions of adult learners are and will continue to return to higher education. Understanding how to support them in their academic journey is vital in helping them persist and retain throughout their programs (Carnevale et al., 2015). The persistence and retention of adult learners need to be at the forefront of postsecondary administrators' minds as this student population continues to grow.

Introduction

Across the United States, post-traditional learners—ages 25 and older, account for 56% of the students enrolled in postsecondary education (National Center for Educational Statistics, 2022). These learners face obstacles different from those of students ages 18-23. Finding the delicate balance required to excel academically while juggling the competing demands of work, life, and family can be challenging for adult learners. Thirty-eight percent of adult learners will drop out in their first year due to financial pressure and family obligations (National Adult Learner Coalition, 2017). The impacts of adult students stopping out extend beyond the higher education institutions they depart from. Their departure impacts not only their lives but also the lives of their families and communities. College graduates experience higher employment rates and personal earnings compared to those who do not have a degree (Pew Research Center, 2014). Individuals with four-year degrees have greater career mobility and are more likely to vote and be engaged in their communities (UPCEA, 2017). Persistence and retention of adult learners is an area that needs more research to fill the gaps of understanding on how to best serve this growing student population.

While many institutional leaders across the country are thinking strategically about how to provide access to the millions of adult learners through online education, micro-credentialing, and technical degrees (Fong et al., 2017; Nichols, 2019), they must also navigate the obstacles that impede their progress toward degree completion. University College—University of Denver’s Professional and Continuing Education unit has partnered with Guild to help attract, serve, and retain post-traditional learners. Guild

serves as the conduit between employers and higher education institutions to provide educational opportunities for America's workforce. Guild is a female-founded organization whose mission is to unlock opportunities for America's workforce through education, upskilling, and opportunity (Guild website, n.d.). Guild's focus is to transform traditional tuition reimbursement, where an organization or company reimburses the employee after the completion of a course, into a strategic investment that aligns employees with company needs, therefore, increasing recruiting, retention, upskilling, and brand equity in the process (Guild website, n.d.). Guild focuses on providing opportunities to those who traditionally are not offered the opportunity to advance their careers (Guild: You're your talent rising, April 12, 2023). Guild's approach is to reduce the financial stress for the employee and not require the employee to pay the tuition up-front, as few employees take advantage of the benefit when a company sets up the benefit as a reimbursement versus up-front funding (EdAssist, 2012). Instead, Guild eliminates the high out-of-pocket expenses and partners with companies and higher education institutions to offer tuition funding up-front instead of as a reimbursement. This up-front tuition funding is a win-win for employees, employers, university partners, communities, and the economy (Gallup-Lumina Foundation, 2021).

University College began its partnership with Guild in 2017 and remains the only Top-Ranked institution partnered with Guild. During the time frame of this program evaluation, University College admitted, on average, 100-150 new students through the Guild partnership across their academic programs each quarter (Guild Admissions Report, 2023). University College has admitted approximately 2,600 students into a University College program through the partnership with Guild, and this population

continues to grow as they admit between 50-70 new students each quarter (Guild Admissions Report, 2023). Of these students, this program evaluation will focus on the 1,005 who have completed their degree(s) or credential(s) through one of University College's academic programs as of the fall 2022 quarter. These students have completed the requirements for one or more of the following programs, Bachelor of Arts Completion, Master's, and Graduate Certificates. The Graduate Certificates consist of four-course Specialized Graduate Certificates and six-course Graduate Certificates. With the continued growth of the partnership and more than five years' worth of data, this program evaluation evaluated the effect of Guild employer tuition funding on the persistence, retention, and time to degree completion of post-traditional learners as the program evaluation compared students entering through the Guild partnership to those who entered organically or not through the Guild partnership.

Problem Statement

Over the past 15 years, higher education institution leaders and policymakers have increased their focus on retention, making retention a significant field of study across different student classifications (Berger et al., 2005). Higher education institutions have prioritized enhancing persistence and retention by examining various student populations and their unique characteristics to determine the essential factors needed to support students (Paulsen & St. John, 1997, 2002; Chen & Hossler, 2017; Tran & Smith, 2017). Much of the research focuses on social integration, how connected a student is to the institution, faculty, and other students (Tinto, 1993), self-efficacy, belief in their ability to achieve or influence academic outcomes (Bandura, 1977), and belonging, student's perception of acceptance and affiliation with members of a group whom they share

similar attitudes, values, and goals (Braxton, 2014), and while each of these is important factors, failing to understand the role funding plays leaves a significant gap in the research. Continued research on post-traditional learners and the influence employer funding may have on their ability to persist and retain toward degree completion is vital to serving the growing adult student population. Bean and Metzner (1985) state, “The chief difference between the attrition process of traditional and non-traditional students is that non-traditional students are more affected by the external environment than by the social integration variables affecting traditional student attrition” (p. 485).¹ Funding is a crucial part of the external environment for adult learners as they often have more financial obligations than traditional-aged students.

Many factors influence adult students' stop-out behaviors, including childcare, family commitments, work demands, lack of flexibility from the institution, faculty-staff connection, motivation, and cost (Bergman et al., 2014; Erisman & Steele, 2015; Merrill, 2015; Pearson, 2019; Renner & Shursha, 2022). These stop-out behaviors influence retention and increase the time to degree completion. Even though these external environmental factors affect persistence and retention, researchers often lump tuition costs in with other factors, minimize external environmental factors, or even ignore them when studying retention across all student populations. Research has demonstrated that financial support positively affects college completion (Chen & Hossler, 2017; Pearson, 2019; Tran & Smith, 2017). According to labor statistics, adult degree programs are crucial in meeting the growing demand for an educated workforce and are vital for the

¹Note that Bean and Metzner (1985) use the term non-traditional student when referring to the post-traditional or adult learner. In this paper, this student population will be referred to as post-traditional or adult learners to distinguish but not “other” this unique and growing population.

stability and growth of a nation's economy. There are more than 166 million people in the U.S. workforce (Statista, 2023), and there are 20.3 million who are 25 and older with some college but no degree (Causey et al., 2023). However, degree programs geared toward the post-traditional learner often struggle with low student retention rates (Bergman et al., 2014). As companies continue to partner with higher education institutions and third-party organizations to help educate their workforce, research is needed to understand how these tuition funding models affect the persistence and retention of adult learners. Reducing the financial costs for the adult learner positively influences a student's persistence, retention, and time to degree completion (Chen & Hossler, 2017; Tran & Smith, 2017). Reducing financial costs is critical to increasing the retention rates of this unique student population. The benefit of tuition funding stretches beyond the students themselves and affects the lives of their families, their communities, and the overall economy (McKinsey Global Institute, 2021). Covid-19 has amplified the employment gap for women, minorities, non-college-educated workers, and lower-wage workers (McKinsey Global Institute, 2021). Economic recovery and employment levels for women, those with lower income jobs, and lower educational attainment are expected to lag behind and unlikely to recover by 2024 (McKinsey Global Institute, 2021). A significant gap in the research on persistence and retention is the role of external factors, specifically finances, in shaping a student's commitment to retaining toward degree completion.

Understanding the history of persistence and retention in the American higher education system and building upon the already established retention theories will help educators continue to best attract, serve, and retain the variety of student populations on

their campuses who attend in person and/or virtually. Efforts to find the solutions to the retention problems we face across higher education need to be as unique as the student populations served, and with the growing percentage of adult learners returning to high education (National Center for Educational Statistics, 2022), researching the effects of employer tuition funding on persistence and retention is critical to serving the adult learner and the institutions enrolling these learners into their programs. The higher education landscape is changing, and more post-traditional learners are entering higher education across all types of institutions (Miller, 2014); thus, there is a need for research to analyze how cost affects persistence, retention, and time to degree completion.

Purpose of Program Evaluation

Understanding the factors that affect their persistence and retention is vital for the higher education institutions that admit these students. Previous studies have shown that cost is a driving factor influencing post-traditional learners' pursuit of education (Bergman et al., 2014; Chen & Hossler, 2014; Tran & Smith, 2017). Evaluating the University College and Guild partnership from both a use and methods perspective provided an understanding of the influence of up-front employer tuition funding and begins to fill the gap in research on how up-front employer tuition funding influences persistence and retention for adult learners. It is common for companies to offer tuition benefits as part of their benefits package to attract and retain employees. Research has shown that tuition benefits are beneficial in increasing employee retention (Cappelli, 2004); however, the benefits for students and the influence these benefits have on persistence and retention through to degree completion are less understood. This quantitative program evaluation aimed to acquire knowledge of up-front employer tuition

funding and its effects on adult learners' persistence, retention, and time to degree completion. Understanding how adult learners progress through degree completion and the influence employer tuition funding has can help institutions formulate practices and facility degree completion within the post-traditional student population. Providing access and support to the millions of adult learners across all institution types helps lessen the higher education equity gaps and meets workforce needs.

Guild and University College Partnership

Guild is an Ed Tech company that serves as the conduit between employers and higher education institutions—often through Professional, Continuing, and Online Education (PCO) units, by building strategic education and reskilling experiences. Guild was founded in 2015 by Rachel Romer on a belief: “when opportunity is as evenly distributed as talent, everyone benefits. Individuals rise, companies, grown and our economy thrives” (Guild website, 2023, About Us section). Guild has expanded employer tuition benefits beyond white-collar and salary employees into blue-collar occupations and for hourly employees (Romer, 2023). Guild is a Denver-based company that serves students and employers across the country and remains focused on equity and inclusion within the educational benefits offered. Half of the students who completed a program through one of Guild’s educational partners identify as a person of color, and 59% identify as female (Guild website, 2023). Guild focuses on transforming traditional tuition reimbursement into a strategic investment that aligns employees with company needs, increasing recruiting, retention, upskilling, and brand equity (Guild Website, 2023). The partnership between University College and Guild began in 2017, and the number of students in the program continues to grow as Guild adds new employers to

their employer portfolio. In 2019, Guild (formerly Guild Education) became a unicorn (a startup company with a value of over one billion dollars) following a 157-million-dollar fundraising round (Toussaint, 2020). In 2021, Guild offered more than 4.4 million employees' access to higher education through their partnerships with employers and higher education institutions (Mann, 2023). During the 2021 calendar year, 310,000 employees took advantage of this benefit (Mann, 2023). As Guild continues to grow and the Guild and University College partnership continues to mature gaining insight from this partnership can lead to transformative change for University College and the students they serve.

Research Questions and Hypotheses

In this program evaluation, I examine how up-front employer tuition funding affects persistence, retention, and time to degree completion for post-traditional learners. The following research questions guided the evaluation of the external partnership between the University of Denver's University College and Guild.

- 1) How does the retention of post-traditional students who receive funding through the Guild partnership compare to students who do not receive this funding?
- 2) How does time to time to degree completion for post-traditional students compare across different funding levels?
- 3) How is the retention of post-traditional students affected by age, GPA, race, gender, and employer tuition funding?

Little is known about post-traditional learners' enrollment and completion patterns, and these research questions will provide insight into how employer tuition funding

influences persistence, retention, and time to degree completion for the post-traditional student population. I hypothesize that there will be a positive relationship between up-front employer tuition funding and persistence and retention and a negative relationship between up-front employer funding and time to degree completion. In this evaluation, I examined the effect of up-front employer tuition funding on various student populations, including Bachelor of Arts Completion, Master of Science, Master of Arts, six-course Graduate Certificates, and four-course Specialized Graduate Certificates. Finally, I hypothesize that up-front employer tuition funding will influence retention most when testing the independent variables of age, GPA, race, gender, and up-front employer tuition funding for tuition and fees.

Theoretical Framework

The theoretical framework that supports this program evaluation comprises three separate theories, each essential in understanding the persistence and retention of post-traditional learners. Bean and Metzner's (1985) Conceptual Model speaks of the differences between traditional and post-traditional learners, pointing to the need for further exploration of external environmental factors, including but not limited to cost, when researching the effects of external environmental factors on persistence and retention for post-traditional learners. Bean and Metzner built their model upon the groundwork of organizational turnover, and one of the educational factors for degree completion for the post-traditional student population is the perceived value of earning the degree. Therefore, this is a fitting framework as it not only focuses on the post-traditional learner, but I am using it to evaluate employer tuition funding. Employers offer tuition benefits to help with employee retention and reduce organizational turnover.

The overall perceived value from Been and Metzner's model can be explained further with Human Capital Theory. I used Human Capital Theory to examine students as product consumers and explain the cost-benefit analysis influencing post-traditional learners (Long, 2007). Adult learners approach their return to higher education as a business decision that affects not only the decision to begin a degree but also the decision to continue toward degree completion (Bowers & Bergman, 2016). These theories serve as the foundation of this program evaluation and strengthen the argument for up-front employer tuition funding, increasing persistence and retention of post-traditional learners. Employers who offer tuition benefits that pay for tuition up-front have a higher percentage of employees engaging with the benefit than those who offer tuition benefits as reimbursement (EdAssist, 2012). As the employer shares the funding costs, the student's return on investment increases considerably, reducing the financial burden for the student. Understanding how the adult learner engages throughout their academic journey through these two theories can help higher education leaders and policymakers strategically approach persistence and retention for this population. The final theory used is the Evaluative Inquiry for Learning in Organizations (EILO) (Preskill, 1999), which allows for a reflective practice of strategic organizational practices and the application of findings to improve persistence and retention for adult learners. I designed this program evaluation to provide results that can guide how higher education leaders approach strategic planning and organizational change when navigating the complex problem of persistence and retention for adult learners. A visual representation of the theoretical framework is available in Appendix A.

Methodology Summary

I used a quantitative approach to answer each research question in this program evaluation. Through a statistical program, Stata, I analyzed archived data between 2017 and 2022 of University College students who completed their program(s) of study. I used correlation and multiple regression to examine the relationship between the independent variables (age, GPA, race, gender, and employer funding for tuition and fees) on the dependent variable, retention, for different sample groups (Guild and Organic students). I also utilized *t*-tests to compare the time to completion for those students funded by Guild and those who are not. Aside from running statistical tests on just the overall Guild and Organic populations, I also tested based on level of degree (graduate and undergraduate) as well as by degree (Bachelor of Arts, Master of Science, Master of Arts, six-course Graduate Certificate, and four-course Specialized graduate Certificate) of both Guild and Organic students. Finally, I conducted a Kruskal Wallis Test to examine different levels of employer tuition funding and the effects on time to degree completion. The three funding levels included unlimited employer tuition funding, some employer tuition funding, and no employer tuition funding.

Results Summary

The results suggest that employer funding significantly affects the time to degree completion for each population tested except for six-course and four-course graduate certificates. Employer tuition funding had the most significant influence on the students who completed a Bachelor of Arts, followed by those in Master of Arts programs and those in Master of Science programs. The length of a student's program and the cost associated with the program were likely contributing factors, as no significant effect was

found in either six-course or four-course Graduate Certificates. While the results suggest employer tuition funding affects the time to completion and retention, employer tuition funding was not the most influential factor. The independent variable GPA had the greatest influence on time to completion across every population tested, followed by employer tuition funding. The results align with Bean and Metzner's (1985) model that for the adult learning population, external environmental factors are important to understanding the persistence and retention of post-traditional learners; however, the factors that affect persistence, retention, and time to degree completion are as complex as the learners themselves. The results also suggest that post-traditional learners with unlimited employer tuition funding will complete their degrees the fastest, followed by learners with no employer tuition funding and, finally, learners with some employer tuition funding. These results align with Human Capital Theory, showing that post-traditional learners decide to return to higher education and persist toward completion based on a decision of return on investment (ROI) (Bowers & Bergman, 2016). Employer funding plays a role in this ROI evaluation for the post-traditional learner, thus increasing the likelihood that they will be retained and graduate.

Significance of Research

University College is the continuing and professional education unit of the University of Denver. University College serves over 3,000 adult learners annually in undergraduate and graduate academic programming and is the largest graduate school at the University of Denver. University College facilitates postsecondary access to the most diverse population of students on the University of Denver's campus—90% have full-time jobs while enrolled in classes, 65% reside outside the state of Colorado, 64% identify as

female, 25% identify as students of color, 10% are active duty or veteran students, and the average age of students is 32 (University College Enrollment Report, 2022). To effectively serve this unique population, educators and practitioners must understand the academic journey of adult learners and how it differs from traditional-aged students.

Manchester (2008) states that the two primary reasons employers participate in tuition funding programs are to promote employee retention and increase recruitment. As employers continue to expand and rethink their tuition funding to attract and keep highly skilled employees, research on the effects of tuition benefits should be a focus for educational institutions. Tuition assistance programs create opportunities for companies to develop their current employees and attract new employees. Much of the research and studies on tuition benefits are from the vantage point of the employer assessing the effectiveness of these benefits to the companies and their employees from a workplace setting (Cappelli, 2004; Flaherty Manchester, 2012; Gallup-Lumina Foundation, 2016; St. Amour, 2020). What is missing is an understanding of how these tuition benefits affect the learner and the institutions admitting and supporting these students. Examining tuition funding for these students is just as crucial for higher education institutions as it is for their employers. Understanding the effect of cost on post-traditional learners can lead to more strategic conversations within postsecondary institutions addressing tuition, scholarships, and other financial benefits to attract and serve this unique student population. Higher education professionals and leaders can use the results of this program evaluation as a reference point when addressing the financial obstacles for adult learners. While not every post-traditional or continuing education unit can or should partner with Guild or another similar external partner to address persistence and retention problems

for post-traditional learners understanding how tuition costs affect adult learners is vital to serving this growing population effectively. Adult students return to higher education to upskill, reskill, or make career pivots, ultimately increasing their socioeconomic status. However, the financial burden may be too significant of an obstacle to overcome, leading to higher rates of stopping out and, thus, lower student retention rates for institutions.

Results of this program evaluation point to the significance of cost for the post-traditional student population. The results of this program evaluation suggest that adult learners are influenced by cost, which can be seen in decision patterns to return to higher education and persist through to completion. Extrapolating research and studies centered around traditional-aged students will not suffice when understanding the patterns of post-traditional learners. This program evaluation is essential for leaders and administrators of professional and continuing education units as they strategically plan for the future of their departments or units and the student populations they serve.

Definition of Terms

Table 1.1

Key Terms with Definitions

Key Term	Definition
Active Student Status	Actively enrolling in at least one quarter per academic year. (University College student policy)
Adult Learner	Students aged 25 and older who pursue higher education with the hopes of changing careers, expanding career options, or staying competitive in their current careers by earning new credentials. (Education Advisory Board, EAB).
Guild Student	A student who is admitted into a program (bachelor's, graduate certificate, or master's) at the University of Denver's University College directly from the partnership with Guild.

Organic Student	A student admitted into a program (bachelor’s, graduate certificate, or master’s) at the University of Denver’s University College as a direct result of recruiting efforts not tied to the partnership with Guild.
Persistence	Continuous learning process from when a student enrolls into a program until they reach their educational goal of degree or graduate certificate completion (Tinto, 1975).
Post-Traditional Learner	Students who frequently must balance life, work, and their education concurrently. These students are typically 25 and older, care for dependents, and work full-time while enrolled (American Council on Education). Some studies instead refer to non-traditional learners, as this term uses a deficit lens by categorizing adult learners as not something, “othering” them, or giving the perception that they are different from the norm; this program evaluation will not use this term. Instead, it will use the term post-traditional learner.
Retention	Continuous enrollment quarter to quarter (or semester to semester) from matriculation to graduation at the same institution (Berger et al., 2005). It is common for adult learners to stop-out for a quarter or two and then return (UPCEA, 2017). Those who maintain active student status based on University College policy will be considered retained.
Stop-Out	One who withdraws temporarily from a college or university (Merriam-Webster). Some studies instead refer to drop-out, as this term places the responsibility solely on the students to retain themselves rather than the institution to regain them; this program evaluation will not use this term. Instead, it will use the term stop-out
Time to Degree Completion	The attainment of a degree (bachelor’s, graduate certificate, or master’s). This term is used in place of graduation as students pursuing a graduate certificate do not graduate by University College definitions they complete.
Tuition Reimbursement	Tuition funding program where an organization or company reimburses the employee for tuition and fees after the completion of a course. This type of tuition funding requires the employee/student to pay out-of-pocket and receive reimbursement from the employer at the end of the semester or quarter.
Up-Front Tuition Funding	Tuition funding program where an organization or company pays up-front for tuition and fees or before the

	course is completed. This type of tuition funding eliminates the need for employees/students to have out-of-pocket expenses up-front.
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Dissertation Overview

This section outlines the organization of this program evaluation. Chapter One began with a vignette to capture a typical adult learner and the obstacles they often face in pursuing higher education, giving examples of the students behind the quantitative approach to this program evaluation. Chapter One has also provided background information on the Guild partnership; the students served, and a statement of the problem. Chapter One also defined key terms used throughout the program evaluation and provided the conceptual framework, summary of the methodology, and significance of employer funding on the persistence and retention of adult learners.

Chapter Two outlines the literature review and conceptual framework used to guide this program evaluation. The literature review is used to orient this program evaluation within prior research. This chapter establishes a foundation for the program evaluation by reviewing the history of retention and exploring the six most-cited theoretical retention models. I review prior studies and existing literature on retention, the effects of employer funding on retention, as well as professional and continuing education units. I then establish the theoretical framework used for this program evaluation using Bean and Metzner's (1985) Conceptual Model, Human Capital Theory, and Evaluative Inquiry for Learning in Organizations.

Chapter Three describes the methodology used in this program evaluation. I begin by explaining the guiding framework of Evaluative Inquiry for Learning in Organizations

describing an outcomes approach to this program evaluation and tying it to strategic planning. Next, I share my research design, including a detailed description of University College, Guild, and the students served. I then provide details on my approach to instrumentation and data collection procedures and the possible influence COVID-19 may have on the program evaluation. This chapter concludes with my positionality statement, how it informs my research, and the decisions made throughout this program evaluation.

Chapter Four presents the results of my program evaluation as they relate to each research question. I present descriptive statistics and *t*-test results on the various student populations. I then turn to an analysis of employer tuition funding levels using the Kruskal Wallis Test. Finally, I present the results of the Guild and Organic student populations established through correlation and multiple regression, where I break the results down into subsets of populations including by level (graduate and undergraduate) as well as by degree (Master of Science, Master of Arts, six-course Graduate Certificate, four-course Specialized Graduate Certificates, and Bachelor of Arts).

In Chapter Five, I discuss the results of this program evaluation and how they intersect with previous research conducted, and how this program evaluation begins to fill the gap in research on the persistence and retention of post-traditional learners. I conclude by discussing implications and recommendations for implementation into practice, the need for partnerships and programs that support state workforce needs, and the need for further research on the effects of external factors on the persistence and retention of post-traditional learners.

CHAPTER TWO: LITERATURE REVIEW

This literature review explores existing research on the effects of employer tuition funding on post-traditional learners and is used to orient and place this program evaluation within previous research. This literature review is organized into six sections. In the first two sections, I explore retention within higher education, including a brief history of the study of retention, the six major retention theories, and how the research relates to the current issues of persistence and retention for adult learners. Examining the literature on the study of retention shows not only the importance placed on retention within higher education but also the need for more research on the persistence and retention of serving adult learners. The third section examines the influence of external environmental factors on adult learners, emphasizing the differences of these external factors between traditional and post-traditional learners. In the fourth section, I delve into the influence of the external factor of finances on post-traditional students and retention rates. I explore the financial impact of employer tuition funding on students' ability or perceived ability to persist and complete their degrees. The fifth section examines professional and continuing education units and the students they serve. A look at student retention and completion and how this student population differs from a traditional-aged student anchors the importance of this research on serving this unique student population. The last section of the literature review incorporates the theoretical framework for this program evaluation, drawing upon Hallie Preskill's *Evaluative Inquiry for Learning* in

Organizations, Bean and Metzner's Conceptual Model (see diagram in Appendix B), and Human Capital Theory.

Historical Look at Retention

American colleges have existed for over 300 years, but it was in the early 1970s that retention became a focus of institutions, educators, and researchers (Berger et al., 2005). Berger and colleagues explain the development of retention by breaking it down into nine eras:

- retention pre-history (the 1600s-mid 1800s)
- evolving toward retention (the mid-1800s-1900)
- early developments (1900-1950)
- dealing with expansion (the 1950s)
- preventing dropouts (the 1960s)
- building theory (the 1970s)
- managing enrollments (the 1980s)
- broadening horizons (the 1990s)
- current and future trends (early twenty-first century)

In the first era of student enrollment and retention, higher education institutions were serving few students; therefore, retention was not a thought or consideration, as it was likely not essential for the survival of a higher education institution (Berger et al., 2005). Across higher education institutions, there was little to no concern with degree attainment, as college was more of a luxury than a necessity (Berger et al., 2005). After the American Revolution, new colleges were chartered; however, it would be years until enrollments began to grow (Thelin, 2004). The early 1800s was a rapid expansion of American colleges, private religious colleges emerged, and enrollments grew by over 80% (Berger et al., 2005). The expansion of college enrollment continued until the economic crash of 1837.

The second era of student enrollment and retention came about when institutions began to see growth in degree attainment, quite the change from the first era of the American Higher Education System. The birth of student life occurred during this era as more students attended colleges, and the importance of co-curricular social activities began; colleges created social curriculum, and extra curricular activities emerged (Berger et al., 2005). While persistence was still not a concern during this time, the social activities and connectedness that Spady (1971) and others will point to later began to receive increased attention from higher education administrators.

The third era of student enrollment and retention brought about the birth of selective admission practices as colleges grew and gained stability for the first time since the inception of American colleges (Berger et al., 2005). While the thought of retention may be in the minds of some, it was an afterthought for many as the focus during this era was on attracting students—the right students—in this case, privileged students, generally white and from higher socioeconomic backgrounds, not on keeping the students an institution had already admitted and committed to serving (Berger et al., 2005). In 1938, John McNeely published one of the first research studies on retention and the issues of student departure (Berger et al., 2005). The title of McNeely’s study was “College Student Mortality,” he completed his study on behalf of the United States Department of Interior and the Office of Education. While the results of his research are important to the study of retention, the idea of student mortality, or the death of a student associated with the departure from a college, is problematic. The word mortality suggests that education is a linear process, that all individuals must follow the same path to be successful, and that leaving or stopping out is equivalent to a student’s figurative death. This insinuation

of death or suicide will continue throughout many theories of retention that I explore later in this chapter. John McNeely (1938) pointed to academic dismissal, financial difficulty, illness/death, lack of interest, and parents calling students home as the principal causes of why students were departing from the higher education system. Twenty-five institutions participated in McNeely's study, and his research showed that of the 25 institutions, 10 showed that the largest percentage of students departed due to financial difficulties (McNeely, 1938, p. 48). Tuition and funding are not new issues for retention; each has existed since the first study of retention in higher education institutions across the United States.

In the fourth era of student enrollment and retention, enrollments remained constant and even grew in the late 1940s after the Second World War (Berger et al., 2005). The GI Bill, which funded education for soldiers returning from war, was likely the reason for the increase in enrollment growth across American higher education institutions (Greenberg, 2004). This era saw higher education becoming increasingly tied to economic and social development and was viewed as a way to improve oneself. Retention remained an afterthought of higher education leaders during the 1950s while enrollments continued a pattern of growth. With enrollment trends continuing upward, higher education leaders did not feel the pressure to retain the students enrolled in their programs.

In the 1960s, the fifth era of student enrollment and retention, the focus shifted to preventing stop-outs. Universities—while still not racially or ethnically diverse, began enrolling a more racially and ethnically diverse student body, and this change was met with challenges (Stulberg & Chen, 2014). Higher education leaders' concerns about the

lack of student completion led to studies that focused on individual student characteristics and personality traits in attempts to predict student departure (Summerskill, 1962). Student stop-out studies began in the late 1960s and became some of the foundations for William Spady's work. These early retention studies were conducted by Knoell (1960), Marsh (1966), Panos and Astin (1968), Bayer (1968), and Trent and Medsker (1968). These early retention theorists grounded their studies in psychology rather than sociology, and thus they often explained retention in terms of student characteristics, personal attributes, and shortcomings. These studies place the onus of retention solely on the strengths and weaknesses of the students while ignoring the institutional and social context. Psychological theories claim that higher education institutions can improve retention through the selection process by admitting only those academically suited or by improving students' skills (Knoell, 1960; Marsh, 1966; Panos & Astin, 1968; Bayer, 1968, Trent & Medsker;1968; and Tinto, 1993). Restricting access or finding the right students is problematic as it perpetuates an already flawed system built on privilege and continues the oppression of minoritized students. Solving retention problems through the admissions and selection process fails to address the structures, policies, procedures, and supports an institution has or does not have and their influence on the student's journey toward completion (Swail, 2003). Addressing the issues of persistence and retention through selective admission practices places the problem solely on the student while ignoring the institution's role and the bureaucratic system of higher education in perpetuating the problem (Espenshade & Radford, 2009).

In the sixth era of student enrollment and retention, retention was a common concern for higher education leaders. As enrollments were predicted to fall, the focus of

higher education leaders shifted to retaining students once they enrolled. Spady's (1971) article "Dropouts from Higher Education: An Interdisciplinary Review and Synthesis" examined the interaction between the student and the college environment (Berger et al., 2005). This study focused on traditional undergraduate students, and the findings indicated that if there is alignment with the student and their environments, the student will assimilate both socially and academically, leading to a higher likelihood of persistence (Spady, 1971). Encouraging assimilation is problematic as students may feel pressure to hide or ignore parts of their cultural identity to be more like the people around them, which further oppresses minoritized students, especially considering that higher education predominately serves white students (Rambaut, 2015). Vincent Tinto built upon Spady's Undergraduate Dropout Process Model (1971) to include psychological and organizational theoretical models. Tinto's model (1975, 1993) indicates that persistence is tied to student characteristics and their initial commitment to the institution and graduation. Tinto focuses on the assimilation of first-year undergraduate students into their new environment. Tinto indicates that for students to persist, there must be academic and social integration (Tinto, 1975, 1993). Other researchers who approached the study of persistence from a sociological and psychological lens are Kamens (1971, 1974), Astin (1977, 1985), and Pascarella and Terenzini (1979, 1980). Kamens (1971, 1974) argued that student retention is linked to the status privilege their college can guarantee them in the broader social order (p. 294). Astin (1977, 1985) indicated that the greater the student's involvement in their academic institution, the greater their persistence rate. Pascarella and Terenzini (1979, 1980) tied student retention to student social and academic life, including informal interactions between students and faculty. Retention

through the psychological lens places the onus of stopping out on the student instead of shared ownership of student departure on both the student and institution. These theories focus on the shortcomings or weaknesses of the student and exclude the influence social or external factors may play in persistence and retention. The sociological perspective on retention moves beyond student attributes and incorporates their social status within the institution and society.

In the 1980s, as enrollments were expected to level off, the study of retention increased. As the supply of students decreased, the demand for institutions to attract the best and the brightest increased (Berger et al., 2005). While attracting and enrolling the best and brightest students is subjective, the highly sought-after students were often from privileged backgrounds, white, male, and those with higher socioeconomic status (Carnevale & Rose, 2013). The need to attract this elite student population was a focus of higher institutions, and thus the practice of Enrollment Management emerged (Hossler, 2002). Jack Maguire, the Dean of Enrollment for Boston College, coined the term Enrollment Management in 1976 (Hossler, 2002). He and others knew that not only was it becoming increasingly important to recruit new students, but it was now critical to retain those students an institution had admitted (Berger et al., 2005). The practice of enrollment management encompasses the vital role of an institution in admitting and retaining its students. Bean (1980, 1983) offered a new theoretical retention model adapted from organizational studies of worker turnover (Price & Mueller, 1981). By the end of the 1980s, several models and theories were established across several institutional types (Berger et al., 2005). I will cover the six most-cited retention models in depth later

in this chapter. Refer to Appendix C for a summary of many of the highly cited retention models, frameworks, and key concepts.

In the 1990s, era eight of student enrollment and retention, retention was now receiving substantial attention from academic institutions, policymakers, and researchers alike (Berger et al., 2005). Much of the focus of retention was on students' social and academic integration; however, in the 1990s, researchers began to look at retention from other lenses, including the impacts finances may have on retention (Berger et al., 2005). Also, higher education institutions began to pay greater attention to the retention of minority populations, especially predominantly white institutions (Berger et al., 2005).

In the ninth era of student enrollment and retention—the current era of retention; the concept of retention is well established and is a noteworthy policy agenda within higher education. College enrollment has increased from two million students to 20 million students in just over 60 years (Carnevale et al., 2015). There are widespread efforts to serve and retain students, especially in highly competitive higher education spaces, as retaining an institution's students is cheaper than recruiting and finding new students (Marsh, 2014). Refer to Appendix D for a historical look at the retention timeline within the American Higher Education system.

More research is needed on the retention of unique student populations, including the retention of underrepresented minority students, first-generation students, community college students, students from lower socioeconomic backgrounds, adult students, and online students (Berger et al., 2005). One size does not fit all when it comes to student retention, and the efforts to serve and retain students should be as diverse as the students who attend our higher education institutions (Cabrera et al., 1993). As student

populations diversify across college campuses, so do these institutions' retention issues. While much work and progress have been made on student retention research, more research is needed to address retention in higher education institutions, especially institutions serving adult learners.

Retention Theory

Having reviewed the history of retention as well as efforts to address retention gaps and the foundation for this program evaluation, I will turn to the six most-cited student retention theoretical models that serve as the framework for retention theory as cited by available research. I determined the following retention theories as the most cited by verifying citation counts in Google Scholar for each retention model listed in Appendix C. These theoretical models are the Undergraduate Dropout Process Model (Spady, 1970, 1971), the Institutional Departure Model (Tinto, 1975, 1993), the Student Attrition Model (Bean, 1980, 1982), the Student-Faculty Informal Contact Model (Pascarella, 1980), the Nontraditional Student Attrition Model (Bean & Metzner, 1985) and the Student Retention Integrated Model (Cabrera & Castaneda, 1993). I present these theories chronologically according to their publication dates. Refer to Appendix C for a summary of these and other influential retention models, frameworks, and their key concepts.

Undergraduate Dropout Process Model (Spady, 1970, 1971)

Many authors and researchers consider The Undergraduate Process Model (Spady, 1970, 1971) the first theoretical model and one of the main seminal articles on student retention (Berger et al., 2012). William Spady's work laid the foundation for student retention theory, which considers the relationship between the student and institution and

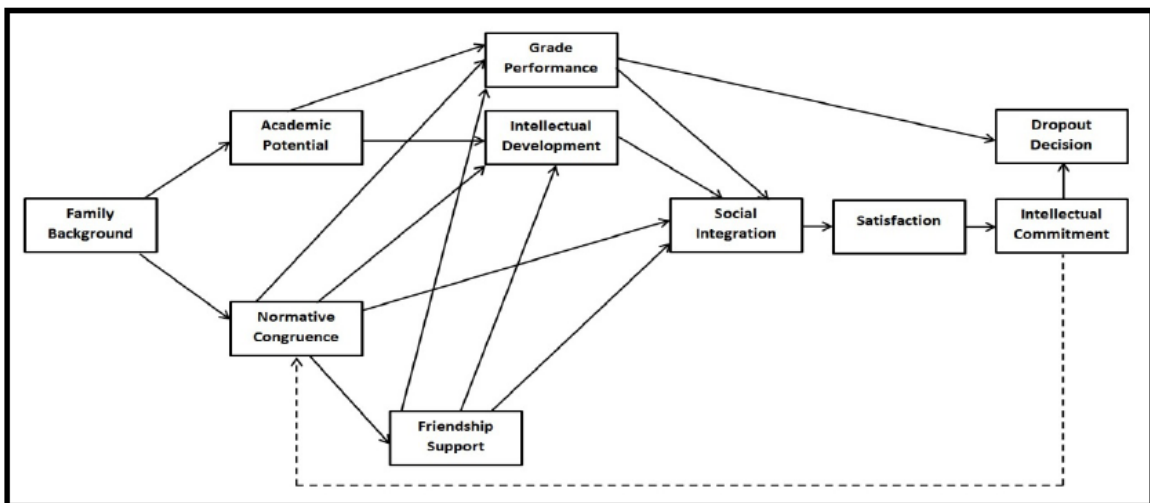
the influence this relationship has on student retention and attrition. The Undergraduate Process Model, coined by Spady (1970, 1971), linked the process of student attrition to Durkheim's Suicide Theory of social integration. Early retention models, including Spady 1970, 1971; Tinto, 1975, 1993, have linked the idea of student retention to Durkheim's theory (Aljohani, 2016). While the results of Spady's and others' research are important to retention, the idea of suicide or the death of a student associated with the departure from a college is problematic. The linkage suggests that a student who does not follow the prescribed path for attaining education through the higher education system is committing figurative suicide or death. This narrow understanding of educational success does not account for the differences in student types, influences, obstacles they may face, experiences, or paths of education and socioeconomic growth. In 1970, Spady claimed that to explain the dropout process of undergraduate students; one must take an interdisciplinary approach that examines the interaction between the student and the college environment. Interactions that provide students with opportunities to assimilate academically and socially are most beneficial for the student persisting (Spady, 1970, p. 77). The act of assimilation is problematic as students may feel pressure to hide or ignore parts of their cultural identity to be more like the people around them, which in higher education is a predominantly white population, further oppressing minoritized students (Rambaut, 2015). Spady concluded that a student's decision to continue or withdraw from their current institution is influenced by two factors in each system, academic and social. The two main factors within the academic system are grades and intellectual development (Spady, 1970, p. 77-78). Within the social system, normative congruence (where attitudes, interests, and personality dispositions are compatible with the attributes and

influences of the environment) and friendship support align with Durkheim’s (1951) concept of social integration (Spady, 1970, pp. 77-78).

Spady (1971) tested his assumptions of the interactions between student characteristics and the campus environment and adjusted his model after testing 653 traditional-aged undergraduate students who entered the University of Chicago in 1965. Spady’s findings revealed that intrinsic rewarding academic activities and the establishment of personal contact with faculty and peers are fundamental components of integration, satisfaction, and commitment to the institution they are attending (Spady, 1971, p. 62). Many retention theorists cite Spady’s research, and while it is a seminal study in retention theory, his work focused on traditional undergraduate students and extrapolating results to the post-traditional learner does not address the differences in student populations. See Figure 2.1 for the final version of Spady’s Undergraduate Process Model.

Figure 2.1

The Undergraduate Dropout Process Model



Note. From “A Comprehensive Review of the Major Studies and Theoretical Models of Student Retention in Higher Education,” by O. Aljohani, 2016, *Higher Education Studies*, 6(2), p. 5. (<http://dx.doi.org/10.5539/hes.v6n2p1>). Copyright 2016 by author.

Institutional Departure Model (Tinto, 1975, 1993)

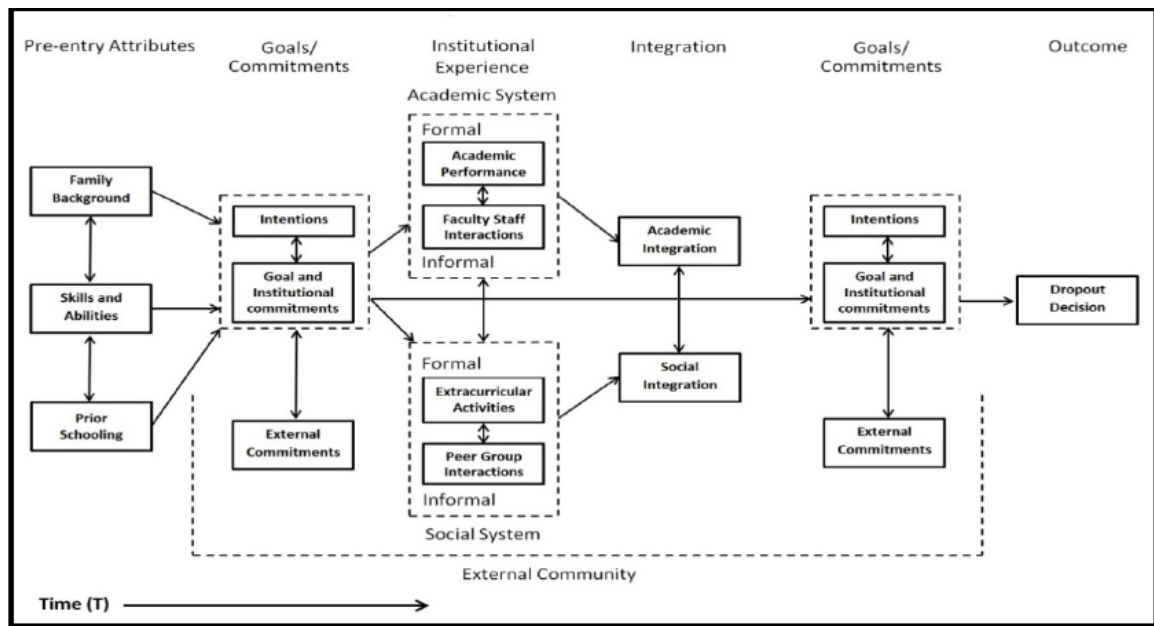
Tinto (1975) explained the motivations of students to leave college prior to completion by building upon Spady’s (1970, 1971) model and Durkheim’s (1951) Theory of Suicide. Tinto (1993) also incorporated the rites of passage of tribal societies’ views of social anthropologist Van Gennep (1960) into his work. Tinto links students’ incorporation into their academic institutions into three stages of passage: – separation, transition, and integration. A gap in Tinto’s Institutional Departure Model (1975, 1993) is the role of external factors such as finances, hours of employment, family responsibility, outside encouragement, and outside commitments, and their influence on student persistence. Later retention theories by Bean and Metzner (1985) and Cabrera and colleagues (1993) incorporate more intentionally the external factors that influence student retention; I cover these theories later in this section.

According to Tinto (1975, 1993), persistence is a function of the match between the student’s motivation, academic ability, and the institution’s academic and social characteristics. The match between the student’s and the institutions’ characteristics shapes the student’s commitment to completing college–“goal commitment,” and commitment to their institution–“institutional commitment.” Tinto’s model indicates that the student’s goals and commitments are constantly changing based on their experience at college. The stronger the student commitments, the higher the probability of that student persisting and completing their degree.

Tinto's final model (1993) states that colleges consist of two systems – academic and social, and students who persist integrate into both systems. In his model, Spady measured academic integration by students' grade performance and intellectual development, while he measured social integration by students' interactions with peers and faculty. Tinto critiqued his own 1975 model, stating that “it does not adequately distinguish between those behaviors that lead to institutional transfer and those that result in permanent withdraw from higher education” (Tinto, 1982, p. 689). See Figure 2.2 for Tinto's Institutional Departure Model.

Figure 2.2

The Institutional Departure Model



Note. From “A Comprehensive Review of the Major Studies and Theoretical Models of Student Retention in Higher Education,” by O. Aljohani, 2016, *Higher Education Studies*, 6(2), p. 6 (<http://dx.doi.org/10.5539/hes.v6n2p1>). Copyright 2016 by author.

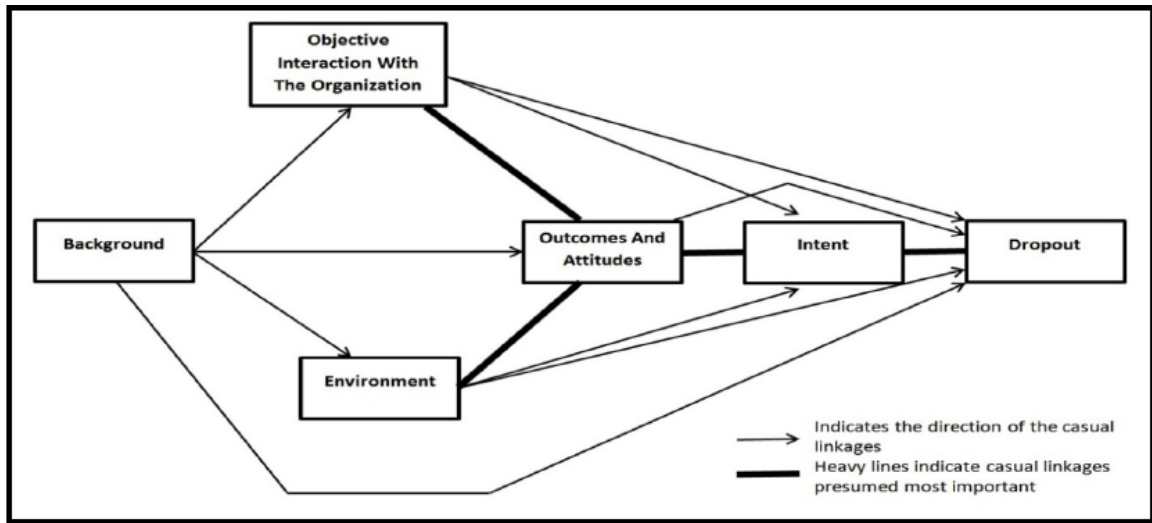
Student Attrition Model (Bean, 1980, 1982)

Bean's Student Attrition Model (1980, 1982) builds upon James L. Price's 1977 organizational turnover models of organizational turnover. Bean argues that a student's decision to stay at or leave the institution they are attending is like an employee's behavior and decisions within work organizations. Bean suggests that organizational determinates influence student and employee satisfaction and their decision to persist or stay. In Price's research, he argued that employee satisfaction which leads to employee turnover, misses the mark by itself, and both integration and salary or pay also influence turnover. Instead of using the pay variable as Price (1977) did when thinking about the influence of salary on employee retention, Bean (1980) used educational indicators, including student GPA, student development, institutional quality, and overall value.

Bean (1982) built upon his own model, suggesting a linkage between student attitudes and behavior, and used intentions and attitudes to predict the retention and persistence of students. Bean's model modifies Fishbein and Ajzen's (1975) Social and Personal Beliefs Model (SPBM). The key ideas of SPBM include the importance of student intention, beliefs, and behavioral influences. Bean (1982) argues that when developing a model of student attrition, four variables should always be present – background, organizational outcomes and attitude, and environment. See Figure 2.3 for Bean's (1982) Student Attrition Model.

Figure 2.3

The Student Attrition Model



Note. From “A Comprehensive Review of the Major Studies and Theoretical Models of Student Retention in Higher Education,” by O. Aljohani, 2016, *Higher Education Studies*, 6(2), p. 8. (<http://dx.doi.org/10.5539/hes.v6n2p1>). Copyright 2016 by author.

Student-Faculty Informal Contact Model (Pascarella, 1980)

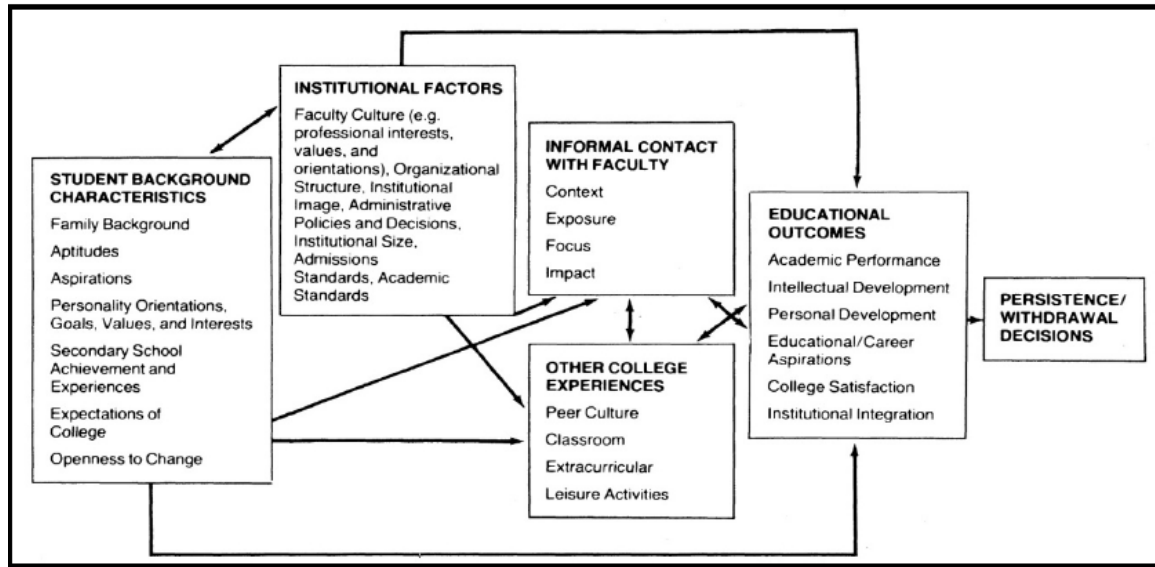
Pascarella (1980) developed a conceptual model of students stopping out where he emphasizes the importance of informal contact with faculty. Based on Spady’s (1970, 1971) and Tinto’s (1975) theoretical models, Pascarella argues that interactions between students and faculty members influence student’s integration into both social and academic systems. The model hypothesizes that students who have positive relationships with their faculty outside the classroom, referred to as informal interactions, positively impact student retention, especially in the first year. Pascarella (1980) argued that there are different forms of student-faculty interactions, each with different levels of influence. The most substantial influence on student retention comes from informal interactions that extend beyond the knowledge shared in the classroom. Various factors influence this

interaction, including student background differences, faculty culture, classroom experiences, peer involvement and culture, and the institution's size.

Pascarella's work (1980) suggests significant associations between student-faculty informal contact and education outcomes, and the quality of the informal contact leads to better educational outcomes and, thus, continued persistence (p. 564-565). Not all student-faculty informal contact is as influential as those focusing on intellectual/literary or artistic interests, value issues, or future career concerns (Pascarella, 1980, p. 565). According to Pascarella, factors such as initial student differences/background characteristics, the faculty culture and classroom experiences, peer culture, and the institution's size influence the quality of informal student-faculty informal contact. Pascarella's model is centered around the traditional student and thus extending the Student-Faculty Informal Contact Model to post-traditional learners without considering other influencing factors is problematic. Most adult learners are not fully immersed in the campus, and their faculty interactions differ significantly from traditional students. See Figure 2.4 for Pascarella's student-faculty informal contact model.

Figure 2.4

The Student-Faculty Informal Contact Model



Note. From “A Comprehensive Review of the Major Studies and Theoretical Models of Student Retention in Higher Education,” by O. Aljohani, 2016, *Higher Education Studies*, 6(2), p. 9 (<http://dx.doi.org/10.5539/hes.v6n2p1>). Copyright 2016 by author.

Nontraditional Student Attrition Model (Bean & Metzner, 1985)

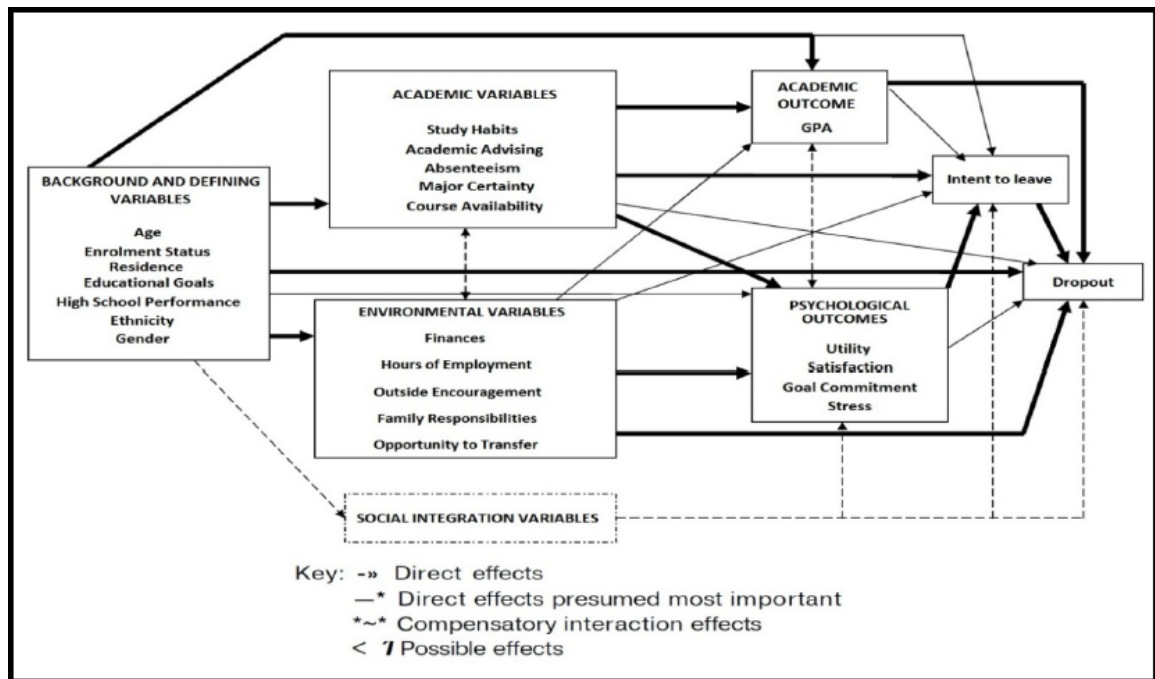
Bean and Metzner (1985) argue that retention models neglect to examine the experience of post-traditional undergraduate students. Early retention models established by Spady (1970), Tinto (1975), Astin (1977), and Pascarella (1980) focus on socialization and social integration which neglects the post-traditional learner as there is often a lack of integration as students often commute to campus—and today are often online and therefore are not fully immersed into the social activities and norms of the physical campus environment. To fill this gap in the research, Bean and Metzner built the Nontraditional Undergraduate Student Attrition Model. Bean and Metzner derived this model from the Student Attrition Model of Bean (1982) and other theorists (Bentler & Speckart, 1981; Fishbein & Ajzen, 1975; Lewin, 1935; Locke, 1976). The Nontraditional

Student Attrition Model postulates that post-traditional students are different from traditional-aged; therefore, external factors influence post-traditional learners more than institutional socialization. Bean and Metzner's conceptual framework is based on academic performance, intent to leave, background and defining variables, and external environmental variables.

According to Bean and Metzner (1985), external environmental factors the institution has little to no control over including –finances, hours of employment, outside encouragement, family responsibilities, and opportunity to transfer most directly affect student retention and attrition for post-traditional students. Bean and Metzner claim these external factors play a more significant role in retention for the post-traditional learner than academic variables. While the Nontraditional Student Attrition Model focused on post-traditional undergraduate students, the model can also be extended to examine post-traditional learners at the graduate level. There are more similarities than differences between post-traditional undergraduate and graduate learners; they face many of the same obstacles of outside obligations of work and family; thus, this model could be extending to test the retention of post-traditional graduate students. I will discuss this theory in further detail as a part of the theoretical framework for this study. See Figure 2.5 for Bean and Metzner's Nontraditional Student Attrition Model.

Figure 2.5

The Non-Traditional Undergraduate Student Attrition Model



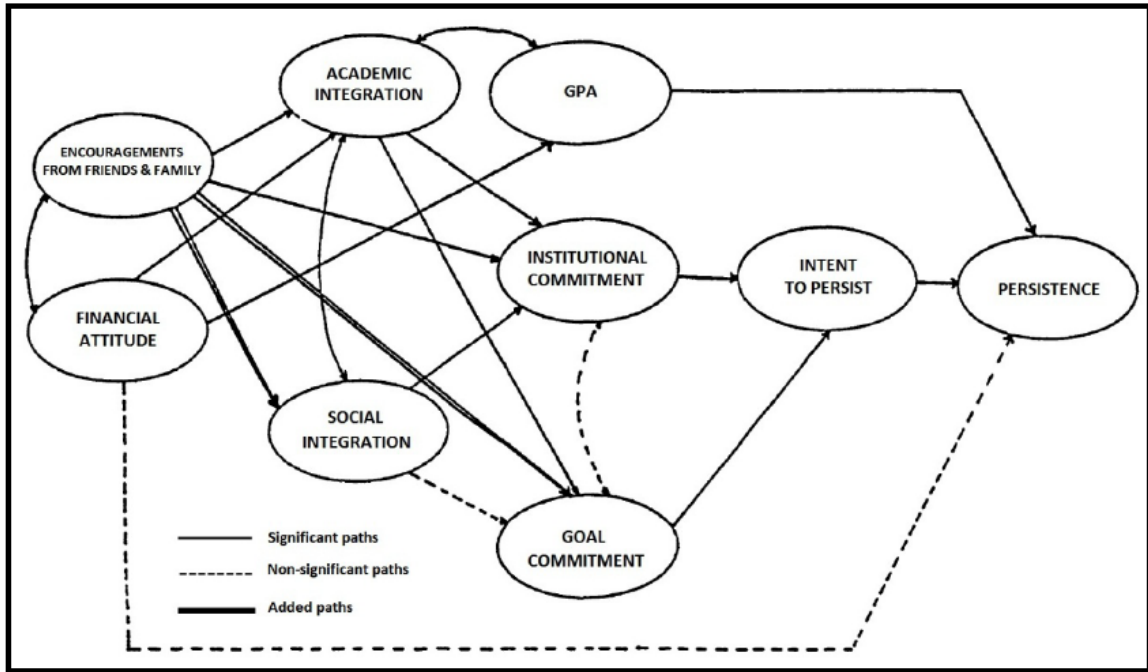
Note. From “A Comprehensive Review of the Major Studies and Theoretical Models of Student Retention in Higher Education,” by O. Aljohani, 2016, *Higher Education Studies*, 6(2), p. 10, (<http://dx.doi.org/10.5539/hes.v6n2p1>). Copyright 2016 by author.

Student Retention Integrated Model (Cabrera et al., 1993)

Cabrera and colleagues (1993) suggested studying student retention through an integrative framework by merging the variables of retention models from Tinto (1975) and Bean (1982). Cabrera and colleagues conducted an empirical study to test the convergence of these two theories in predicting student retention. The findings of Cabrera and colleagues’ longitudinal study indicated the convergence of these two distinguished retention models with a few amendments to provide a better understanding of the student attrition process than either model on its own. The Student Retention Integrated Model included all statistically significant variables from both theories; the model excluded those variables that were insignificant (see Figure 2.6).

Figure 2.6

The Student Retention Integrated Model



Note. From “A Comprehensive Review of the Major Studies and Theoretical Models of Student Retention in Higher Education,” by O. Aljohani, 2016, *Higher Education Studies*, 6(2), p. 11 (<http://dx.doi.org/10.5539/hes.v6n2p1>). Copyright 2016 by author.

Cabrera and colleagues (1993) study confirmed through a two-step structural equation modeling strategy (a technique used to analyze structural relationships) the assumptions from both theories to be valid. The Student Retention Integrated Model also found that a more comprehensive understanding of student attrition results from complex interactions, characteristics, and institutional fit. This study included the following external variables: Encouragement from Friends and Family and Finance Attitudes and the following internal variables: Academic Integration, Social Integration, and Institutional Commitment. This study supports the claims made by Bean (1982) on the importance of external environmental factors to student retention. Cabrera and colleagues recommend that higher education professionals design student retention plans around the

variables most strongly influencing and encouraging student persistence. Cabrera and colleagues recommend that academic institutions constantly revisit retention plans to address student retention within their academic units, and these retention plans may need to differ across units. This strategic approach to retention aligns with the decision to lean into Hallie Preskill's *Evaluative Inquiry for Learning in Organizations* as a strategic evaluation approach for this program evaluation. I address *Evaluative Inquiry for Learning in Organizations* in detail in Chapter Three.

Higher education administrators and policymakers focus on retention efforts across campuses nationwide, as retention is a key indicator of institutional effectiveness. There are many studies on persistence and retention, with a vast majority of the theoretical student retention models focusing on traditional-aged students who are often integrated into the campus community as a part of attending college and earning a degree; however, these models do not explain the experience of adult learners who spend little if any time on campus and have commitments outside of their academics to family and often full-time employment (Graham et al., 2000). The differences between post-traditional and traditional learners have been well established, and thus examining the persistence and retention patterns of post-traditional learners in the same way traditional students are examined is ineffective. To understand the patterns of persistence for the adult learner, research must align with the characteristics and demographics of the population.

External Factors Impacting Retention

The focus of many of the retention theories has been and continues to remain on social and academic integration; however, for the adult student population, this focus

does not consider the environmental factors that Bean and Metzner (1985) focused their research on. Bean and Metzner (1985) and Bergman and colleagues (2014) found that more than student entry characteristics or social integration, external environment factors played a vital role in the persistence of adult students. Bean and Metzner identify five external environmental factors that directly affect post-traditional student retention. These external factors are finances, hours of employment, outside encouragement, family responsibility, and the opportunity to transfer. While no one factor is the sole contributor to adult student retention and degree completion, examining financial factors is especially important in this unique population (Bergman et al., 2014). The environmental factor of finances is also the only one that the institution can have some influence on. Generally, post-traditional learners are financially independent and carry the burden of financial responsibility for themselves and others. A lack of financial support, including financial aid, scholarships, or employer tuition funding, could deter an adult learner from starting or completing their degree.

A significant gap in the research on persistence and retention is the role of external factors—specifically finances, in shaping a student’s commitment to retaining toward degree completion. Financial assistance for low-income community college students who are often more affected by college pricing (McKinney & Burrige, 2015) has been shown to strongly influence the retention of community college students (Barrow et al., 2014). Castleman & Long (2016) studied the effects of need-based grant eligibility on college completion. While Castleman & Long focused their research on traditional undergraduate students, the results suggest that need-based aid has a positive impact on persistence and degree attainment. Additional studies and research are needed

to explore the effects of finances on persistence for the adult student population. With increases in employer tuition benefits offered from companies studying tuition support through employer funding and its effects on the persistence of adult learners is an important and relevant study across the higher education system.

Retention is a key indicator of institutional effectiveness, and the pandemic has forced more institutions to intensify their retention efforts. The National Student Clearinghouse Research Center (2022) shows a 7.4% drop in total enrollment across all higher education institutions since 2020, partly attributed to Covid. Enrollment in adult learners fell by 5.8%, with half of the decrease coming from the community college system (National Student Clearinghouse Research Center, 2022). Higher education reform has shifted from access to cost and completion as there is a higher scrutiny on the cost of higher education and the retention rates of students, especially minoritized populations (Carnevale et al., 2015). Colleges are suffering from historic enrollment declines during the pandemic, suggesting the importance of retention and re-engaging adult learners looking to complete degrees they began years ago and advance their education through certificates and graduate degrees (Causey et al., 2023). Higher education institutions are implementing retention efforts for post-traditional learners through programs designed for the adult student population, online platforms, and the implementation of systems to track student retention and success.

The Gallup and Lumina Foundation conducted a survey in 2021 to explore the risks to the enrollment and retention of adult learners. They surveyed 5,215 adults pursuing a bachelor's or associate degree and 3,002 who had never enrolled in postsecondary education. Over half of all unenrolled adults surveyed reported cost as a

fundamental reason for not continuing education (Gallup Lumina, 2021). Cost is the most significant barrier to the never-enrolled student population and those who stopped out after enrolling. The study also found that over half of currently enrolled students continued in their educational pursuits because of the financial aid they received. Examining the barriers finances place in the way of adult learners and the benefits of more skilled and educated workers to employers and the economy can lead to a more strategic approach to employer tuition assistance programs. These programs can benefit more than just the students or employees who are taking advantage of them, but can also benefit higher education institutions, companies, and the communities these students and employees live in.

Employer Funding Impact on Retention

To help fill the skills gap, employers within the United States spend approximately 17.7 million dollars on tuition assistance providing access to postsecondary degrees and credentials (Gallup-Lumina Foundation, 2016). Employers of all sizes offer these educational benefits; while the policies and caveats associated with the educational benefits vary across employers, the benefits for the employees and companies are apparent (Pelletier, 2019). The Lumina Foundation (2016) published a report showing that investing in current employees can be one of the best returns on investment and creates a competitive advantage. This report revealed that Cigna helped control talent management costs through its educational assistance program; for every dollar spent, Cigna saved \$1.29. These tuition assistance programs led to a substantial return on investment—129% for Cigna and 144% for Discover, in reducing hiring costs as more employees were retained.

In recent years organizations like Fed Ex Express, JP Morgan, Starbucks, Target, Walmart, and The Walt Disney Company have received media attention for their educational assistance programs offered to employees. Starbucks and FedEx Express have direct partnerships with Arizona State University (Go to College, on us, 2022) and the University of Memphis (LiFE: Learning inspired by FedEx, 2022), respectively, where employees can earn online degrees tuition-free. In 2022 Waste Management extended their employee tuition benefits to dependents and spouses (Waste Management, 2021). Waste Management is among the first employers to extend educational benefits beyond their employees at this scale. Chipotle, Target, Walmart, The Walt Disney Company, and many others are partnered with various higher education institutions through their partnership with Guild (Guild Website, 2022).

When surveyed, employers report that upskilling offers the employee the possibility to meet personal and often professional goals of earning a degree or credential along with opportunities for career advancement, higher wages, and higher levels of job satisfaction (Gallup-Lumina Foundation, 2021). The companies that offer tuition assistance also benefit from having more skilled workers, advantages in a highly competitive environment with a strong pool of candidates, and often higher employee retention and job satisfaction (Gallup-Lumina Foundation, 2021).

Carnevale and colleagues (2015) identified tuition assistance as the most important factor for working students because

in the absence of financial support from an external source, such as need-based grants, parental support, or student loans, the majority of workers simply could not afford the cost of tuition and fees for postsecondary enrollment each semester. (p. 20)

The economy is pushing for a more educated workforce, as are companies; however, without funding to assist with tuition, specifically for working adults, it is unlikely they will start, let alone complete their degrees, based on the financial pressures this student population faces. Some financial pressures these students face is housing, childcare, bills, incurring additional debt, caring for aging parents, and other financial needs, each impacting adult learners' pursuit of education (Deutsch & Schmertz, 2011). Carnevale and colleagues (2015) identified tuition assistance as the most crucial component in removing barriers for working learners, as most workers could not afford the cost of tuition without financial support. Financial constraints of the adult learner are a significant concern and often play a more prominent role in the pursuit of higher education than traditional-aged students.

Tran and Smith (2017) researched the impacts of employer-sponsored educational assistance benefits on community college students. Tran and Smith took a quantitative approach to determine the impact of funding for 5,201 community college students who began at a public community college from 2003-04. This national study found that 90% of community college students did not receive educational benefits from employers; however, those who did have better retention and attainment outcomes (Tran & Smith, 2017). Trans and Smith found that those who received employer funding were 2.7% less likely to stop-out and 2.6% more likely to continue onto a four-year degree after completing their associate degree (p. 88). Tran and Smith also found evidence that employer-sponsored education assistance positively impacts on longer-term student outcomes, such as completion of their program over more immediate ones, such as GPA and completed credit hours at the end of their first year (p. 93). Across the United States,

post-traditional learners—ages 25 and up comprise 56% of the students enrolled in postsecondary education (National Center for Educational Statistics, 2022). Continued research on employer funding models, student retention, and degree completion for post-traditional learners is vital to serving this growing student population.

Employer tuition programs are often as different as the employers themselves; however, recently, there has been a push for employers to provide programs that offer up-front tuition funding rather than reimbursing employees afterward (Guild website, n.d.). A two-year study conducted by the Lumina Foundation (2023), found that tuition reimbursement programs have a return on investment (ROI) of 1.29 dollars for every dollar spent. While the average ROI for Guild partners, each offering up-front tuition funding, is 3 dollars for every dollar spent (Guild, 2023). The high up-front out-of-pocket costs of the tuition reimbursement model may prevent some from utilizing the benefits if their employer refunds the employee versus paying the tuition up-front (St. Amour, 2020). The policy of requiring employer reimbursement versus the employer paying up front disproportionately impacts those employees of lower socioeconomic status. A 2012 review of tuition assistance programs found that only 40% of programs offered up-front funding instead of tuition reimbursement, and notably, the companies that offered up-front funding had 3% more employees taking advantage of the benefit (EdAssist, 2012). Recently, employers have been making changes to modernize their tuition assistance programs, offering tuition funding up-front instead of as a reimbursement. Employers are also increasing tuition funding levels and the pool of eligible employees, where employees are eligible for education benefits 60-90 days after employment (versus nine months) – Tyson Foods recently announced that employees are eligible for tuition

funding benefits on day one of employment. Many employers, including but not limited to Amazon, Bank of America, Home Depot, McDonalds, Target, and UPS even extend tuition benefits to part-time employees (Higher Ed Insight, 2021). New and emerging partnerships between employers and postsecondary institutions also lead to more innovative programs. Some employers are developing these tuition benefit programs through a direct relationship with higher education institutions, and others are creating partnerships through third-party companies such as Guild, Education at Work, Ed Assist, and others. As companies refine their education benefit packages finding the right fit for these adult learners is key, and many are turning to institutions or colleges that specialize in serving adult learners.

Professional, Continuing, and Online Education Units

Higher education institutions no longer serve just those who live in or near the communities in which their campus is located, and the ages of the student population extend beyond the 18-23-year-old traditional student. According to the National Center for Education Statistics (NCES, 2020), the adult student population in the United States grew from 5.1 million in 2000 to 6.2 million in 2017. Post-traditional enrollment numbers are expected to continue in their upward trajectory. Predictions expect this student population to increase by 11% from fall 2017 to fall 2028 (NCES, 2020). The composition of higher education institutions has shifted to a population that is more diverse, is typically working part or full-time, has greater financial and family commitments which create competing priorities for students (Osam et al., 2017). These student predictions and the changing landscape of higher education emphasize the need

for studying adult students instead of clumping them in with the traditional student population or overlooking them completely.

Many private and public institutions have divisions or departments where lifelong learning is at their core, focusing their work on adult learners often hidden in plain sight across many campuses. Many names are used to refer to these units; however, in this program evaluation, I will categorize all these units as Professional, Continuing, and Online Education (PCO) units. These PCO units are geared toward serving post-traditional learners through alternative educational pathways and advocating for those who often do not have a voice on campus and are distinctly different from traditional full-time students (UPCEA, 2017). PCO units often function quite differently from the traditional units on campus, with extended operational hours, different or varied policies, and various course modality offerings to provide the flexibility a post-traditional student needs to balance work, family, and academics. The faculty and staff in these units serve as the champions for this growing population of adult learners' unique needs in all aspects of their educational journey (UPCEA, 2017). PCO units offer a variety of professional programs characterized by the rapid invention of new jobs and categories of work; careers that span 60 years and involve numerous job changes across many distinct areas; the knowledge that provides immediate value in jobs; and regionalized and localized occupational needs (UPCEA, 2017, p. 8). With the connection of each of these characteristics to the jobs and careers of the students who attend these units, researching the connection of employer funding to the success and completion of these students is not only essential but necessary.

Theoretical Framework

The theoretical framework for this program evaluation is comprised of Bean and Metzner's Conceptual Model, Human Capital Theory, and Evaluative Inquiry for Learning in Organizations. Each of these models and theories are essential in providing structure to the program evaluation as they each serve as a cog in the wheel of understanding persistence and retention for post-traditional learners. Utilizing Bean and Metzner's Conceptual Model shows the differences between traditional and post-traditional learners, pointing to the need to explore external environmental factors further when researching persistence and retention for post-traditional learners. Bean and Metzner's Model was built upon organizational turnover and speaks to overall perceived value of a student earning their degree. I used Human Capital Theory to address a student's perceived value in education. Human Capital Theory allows the program evaluation to examine students as product consumers and explain the cost-benefit analysis of post-traditional learners, which impacts the decision to start a degree, continue toward completion of a degree, or stop-out. Finally, Hallie Preskill's Evaluative Inquiry for Learning in Organizations (EILO) allowed for a reflective practice of strategic organizational practices and applying results to improve persistence for adult learners. Utilizing EILO allows the results of this program evaluation to become a catalyst for growth for each of the stakeholders as the program evaluation was designed to create transformative learning. Figure 2.7 highlights the major points for each model or theory as a foundation for this program evaluation. Each model and theory will be discussed in turn.

Figure 2.7

Theoretical Framework Used for Program Evaluation

<u>Bean and Metzner's Conceptual Model</u>	<u>Human Capital Theory</u>	<u>EILO</u>
<ul style="list-style-type: none">• Impact of external factors on adult learners• Focus on financial impacts for adult learners• Built on the underpinnings of organizational turnover (Bean & Metzner, 1985)	<ul style="list-style-type: none">• Adult learners approach education as a business decision• Cost-benefit analysis or return on investment (ROI) (Long, 2007; Becker, 1975)	<ul style="list-style-type: none">• Evaluation as a catalyst for growth• Evaluation aimed at transformative learning.• Ongoing, reflexive, and embedded into organizational practice (Preskill & Torres, 1999)

A full visual representation of the theoretical framework is available in the Appendix, listed as Appendix A.

Bean and Metzner's Conceptual Model

Retention efforts are a significant focus of nearly every college campus nationwide, as retention is often considered an indicator of institutional effectiveness (Berger et al., 2005). Many unresolved problems in student retention highlight the need to build upon the contributions of the early retention theorist Spady (1970), Tinto (1975), Astin (1977), and Pascarella (1980), who have led the way in developing theories and models around the persistence and retention of students, specifically traditional-aged students. Early retention theorists focus on how social belonging, connectedness, and the internal college environment impact students'—typically traditional-aged, persistence and retention. Social interaction and connectedness to campus are key elements for traditional learners but are often not as relevant for adult learners. In contrast to the importance of

the social integration factors for traditional students Bean and Metzner (1985) argue that these social integration factors are far less important than external environmental factors for post-traditional learners. While institutions have little control over these external factors, understanding each and their influence on the persistence of adult learners is key to closing the gap in retention and persistence for adult learners.

To address the differences between traditional and post-traditional students, Bean (1980, 1983) offered a new theoretical retention model adapted from organizational studies of worker turnover (Price & Mueller, 1981), which Bean and Metzner expanded on in 1985. Bean and Metzner's research focused on the non-traditional (termed post-traditional or adult learner in this paper) undergraduate students, concluding that the external environment affects this student population more than social integration variables (p. 530). Bean and Metzner define the environmental variables as finances, hours of employment, outside encouragement, family responsibilities, and opportunity to transfer. Bean and Metzner demonstrate that each factor influences the persistence of adult learners and that further research on adult learners is needed to continue to understand the persistence of this student population.

While Bean and Metzner's (1985) work focused on post-traditional aged undergraduate students extending this model to post-traditional graduate students makes sense as the external factors remain relevant. Understanding the role finances plays for adult learners is critical to increasing the persistence and retention of post-traditional learners within higher education institutions. Many variables can be used to measure the ability to finance education, often related to the socioeconomic status of the student's parents, income (student or parent), perception or uncertainty around finances, and access

to financial aid. Many studies have concluded that financial stress positively relates to students' decision to stop-out (Lenning et al., 1980; Marsh, 1966; Pantages & Credon, 1978; Summerskill, 1962). While many adult learners also work full-time, and employers shift toward a more progressive tuition benefits model, examining the effects of employer tuition funding will provide a better understanding of the influence of finances as an external environmental factor on persistence and retention. Cabrera and colleagues (1990), Ability to Pay model indicates that students with a greater ability to pay for college integrate themselves into college life and are more likely to succeed. By applying Bean and Metzner's (1985) model with the understanding of how the increased financial ability to pay positively influences students' persistence, this program evaluation will take a closer look at the environmental factor of finances and specifically employer tuition funding as a source of funding and the influence it has on adult learners' persistence, retention, and time to degree completion.

Human Capital Theory

Human capital theory suggests that a student's decision-making process is grounded in establishing a return on investment associated with the decision to begin and continue the pursuit of a higher education degree or stop-out (Long, 2007; Becker, 1975). If or when the cost-time and money outweigh the reward-economic gain, the student is likely to stop-out instead of persisting through to completion. Opinion polling data shows that 74% of adults agree two-and four-year degrees are now equally or more important in securing a successful career than 20 years ago (Gallup Lumina, 2023). The same research also shows that many Americans have doubts about the cost and quality of a college education leading to the return on investment of a student's time and money. While there

are many benefits—increased social and economic mobility, increased access to job opportunities, and marketability to those who earn a college degree, if those benefits are not evident or are not perceived by students to outweigh the growing costs of higher education, students are unlikely to begin or stop-out instead of persisting through to completion of their program.

Consumers consider both the cost of a purchase as well as the perceived value of that purchase. Perceived values are “what consumers get for what they give” or a cost-benefit evaluation that includes prices and the time and effort invested (Hoyt & Howell, 2011, p. 23). Students are consumers, and their decision to pursue a college degree follows the pattern of other large purchases, often associated with a cost-benefit evaluation. Their decision-making process continues each quarter as they assess their perceived value when deciding to re-enroll in the next quarter. This is a decision they continue to revisit as they pay with their time and money each time registration rolls around. Students are not obligated to continue based on their decision to begin a program and therefore assess the value of their education before registering for each quarter, similar to a repeat buyer of any other product. The groundwork for the impacts of removing financial barriers to improve retention through studies by Alberto Cabrera 1990, 1992, 1993; Amaury Nora 1992, 1993; Edward St. John 1997, 2002; and Michael Paulsen 1997, 2002. Through the examination of the Financial Nexus Model, Paulsen and St. John (2002) support the view that students engage in a series of choices regarding college choice and re-enrollment, and each state of their decision is affected by financial factors. According to their model, the ability of financial aid to affect decisions depends upon both the availability of student aid and the student’s perception of the overall cost

(Paulsen & St. John, 1997, 2002). Students are more likely to complete their degrees when the value of the benefits exceed the cost of attending.

Chen and Hossler (2017) suggest that non-traditional students of two-year institutions are more likely to drop out in the third year of college and that each type of financial aid studied—Pell Grants, subsidized student loans, and unsubsidized student loans—appeared effective for reducing stop-out risk. Reducing the monetary cost of tuition can be the tipping point in one’s perception of their return on investment. Employer funding provides an immediate financial benefit to balance the out-of-pocket costs associated with higher education. In addition, the immediate reduction in financial costs allows for the vision of long-term benefits associated with earning a degree—whether undergraduate or graduate- including advancement or promotion in their current position or increased opportunities with new employers. One way the cost of education can be reduced for post-traditional students is with employer tuition funding. Reducing the cost of education increases the return on investment for adult learners deciding to return to higher education or persist through to completion.

Other businesses evaluate consumer satisfaction by examining repeat purchases and willingness to recommend a product or service to others to measure customer loyalty. In higher education, customer loyalty is often measured through persistence, retention, and referrals. For students to persist, retain, or provide referrals to others, they need to perceive value in their purchase and see a positive evaluation of the cost-benefit analysis they complete—literally or figuratively each quarter they decide to re-enroll or stop-out.

Bringing the Theories Together

The theoretical framework composed of Bean and Metzner's Conceptual Model, Human Capital Theory, and Evaluative Inquiry for Learning in Organizations is essential to this program evaluation. Thinking of each model or theory as a gear that interlocks with the others gives the analogy that explains the importance of each theory as they are interdependent. When studying the retention and persistence of adult learners, the absence of any of these theories leaves a gap in understanding of this unique student population. Bean and Metzner's (1985) conceptual model emphasizes the impacts of external environmental factors on the post-traditional population and speaks to the financial impacts felt by adult learners. Their study is built upon the underpinnings of organizational turnover, and one of the educational factors is the overall value perceived by the student for earning or completing their education. This overall perceived value can be explained through Human Capital theory. Human Capital theory shows how adult learners—based on the definition, approach returning to higher education as a business decision. Returning to college, whether for the bachelor's degree they never completed or earning a master's degree or graduate certificate, is a business decision based on evaluating the return on investment on themselves. These theories serve as the foundation for this program evaluation as they strengthen the argument for the need for employer tuition funding for adult learners and the ultimate impacts on increasing the persistence and retention of adult learners.

Conclusion

There are widespread efforts to serve and retain students, especially in highly competitive higher education spaces, as retaining an institution's students is relatively

cheaper than recruiting and finding new students. Many unresolved issues around retention include retention of underrepresented minority students, first-generation students, community college students, students from lower socioeconomic backgrounds, adult students, and online students (Berger et al., 2005). Through the exploration of the history of retention and retention theories, research specific to adult learners is necessary as the post-traditional student population continues to grow and the enrollment cliff for traditional-aged undergraduate students is quickly approaching. One-size-fits-all models will not work for student retention, and efforts to serve and retain students should reflect the diverse student populations our higher education systems serve. While much work and progress has been made, there is more to addressing retention in our higher education institutions, especially regarding the adult learner population.

To navigate and understand student retention and persistence of adult learners, one must consider the many complex variables that contribute to the academic journey of adult learners. A plethora of research is conducted on persistence and retention; however, much of the research focuses on traditional undergraduate students, often leaving out the surging population of adult learners (Spady, 1970, 1971; Kamens, 1971, 1974; Tinto, 1975, 1993; Astin, 1977, 1985; Pascarella & Terenzini, 1979, 1980). With the shift in the higher education landscape toward a more diverse and older student population, there has been an increase in post-traditional students returning to higher education, and these learners are flocking to our institutions as career-focused professionals. As funding is an obstacle that impacts adult learners' ability to begin, persist, retain, and complete their degrees, we must explore ways to reduce these financial pressures and increase the return on investment allowing adult learners to return to higher education and complete the

degrees they start. This evaluation fills a gap in the research by researching the effects of up-front employer tuition funding on persistence, retention, and time to degree completion for adult learners.

The Human Capital Theory examines the return on investment, asking does the cost—both time and money—outweigh the benefits of perceived career advancement? While the answer to this question is individual for each student, it is a part of the decision-making process when a student decides to return, continue, or stop pursuing their degree. Finally, as the partnership between University College and Guild is current and ongoing, understanding the outcomes of funding on adult learners can be used for transformative learning and can impact strategic planning and organizational change moving forward, thus impacting not only the adult learners who are entering University College through this partnership but those who have not yet committed to investing in themselves both through the Guild partnership or through organic channels. A visual representation of the theoretical framework is available in Appendix A. Chapter Three will discuss the methodology used to test each research question and the hypothesis based on previous research.

CHAPTER THREE: METHODOLOGY

This chapter describes the data and methodology of the program evaluation. First, I discuss the guiding framework used to guide the research questions and analysis of this program evaluation and the importance of this framework for transformative change. Second, I revisit the problem statement, research questions, and hypotheses of this program evaluation. Third, I discuss the research design, including the site description, and participant selection. I then move on to discuss my methodological approaches, which include the use of descriptive statistics, *t*-tests, the Kruskal Wallis Test, and multiple regression. Next, I describe my approach to the cleaning of the data as well as the analysis I then state the limitations of the program evaluation. Finally, I share my positionally as a researcher and how it informed my approach to this program evaluation and the methodological decisions throughout.

Evaluation Theory

The guiding framework for this evaluation was Evaluative Inquiry for Learning in Organizations (EILO). Hallie Preskill (1999) derived this theory which focuses on organizational learning and development. Preskill spent over 20 years in academia teaching graduate-level courses in program evaluation, training design and development, and organizational learning. Her research has focused on evaluation capacity building, transfer of learning and training, evaluation use, and evaluation as a catalyst for growth for individuals, teams, and organizations. Several elements of EILO align with other

stakeholder and collaborative evaluation modes; however, Preskill stresses that evaluation should be ongoing and reflexive, and the research should also embed evaluation in organizational practice (Preskill & Torres, 1999). Learning from the evaluation process is an important goal, and the evaluator should work with all stakeholders to apply the learning from the techniques and findings. Preskill envisions EILO as an ongoing process for analyzing and understanding critical issues; this process becomes a catalyst for continued growth and improvement for the organization and the individual employees (Preskill & Torres, 1999). She acknowledges that evaluation occurs within a complex system and is influenced by the organization's infrastructure.

Conducting this significant program evaluation on the effects of employer tuition funding on the persistence, retention, and time to degree completion for adult learners loses meaning if the outcomes are not relevant, practical, and used to further organizational learning and development. Evaluation should be a mechanism for gaining knowledge, and there is much yet to be learned about the persistence and retention of adult learners across all higher education institutions. Program stakeholders should use the outcomes of this evaluation to strategically plan how the organization—in this case, University College continues to approach the problem of persistence and retention for post-traditional learners with a solutions-oriented approach.

The evaluation emphasized using this data for both University College moving forward and other higher education institutions that serve post-traditional learners. I designed this program evaluation with EILO specifically to provide results that can guide strategic planning and organizational change when navigating the complex problem of persistence, retention, and time to completion for adult learners within a complex

organizational system. This evaluation aimed to create transformative learning, defined by Preskill and Torres (2000), as a process where individuals, teams, and organizations identify, examine, and understand the information or process needed to meet specific goals. I intend to align strategy and evaluation to create learning opportunities for higher education leadership and administration serving the post-traditional student population beyond the University of Denver's campus. Shulha and Wilson (2003) explain:

When adults are immersed in challenging contexts where learning is supported by a social structure such as a collaborative partnership, the conditions are ripe for the development of knowledge structures that transcend that task. In the context of social program evaluation, collaborative inquiry has demonstrated the ability to inspire participants to think and act in new and productive ways. (p. 653)

The partnership between University College and Guild is ongoing; thus, conducting the evaluation based on a theory of use was appropriate for internal growth and learning opportunities. It is plausible that sharing the knowledge learned from this program evaluation beyond University College with other stakeholders, including Guild or other higher education institutions, will allow for more learning and understanding of the influence employer tuition funding and cost has on adult learners' persistence, retention, and time to completion. An outcome of designing this evaluation with an emphasis on use was that doing so would "result in more useful recommendations and enhance the use of evaluation findings" (Preskill et al., 2003, p. 424).

One of the goals of this evaluation was to influence learning and strategy and move from simply having outputs to establishing meaningful outcomes. Evaluating from the use perspective allows stakeholders to implement the evaluation's results or outputs to influence change and strategy, as referred to by Preskill. Every program evaluation or study has results or outputs, but when stakeholders act upon those outputs, they become

outcomes. Implementing these outcomes allows an organization to progress and improve strategic decisions. The outputs or results of this program evaluation can provide a framework for University College's next strategic planning cycle. From course planning and predictions to possible policy changes, understanding how cost influences the adult learners can facilitate change that positively impacts the students, University College, and the University of Denver. Preskill explains that the potential for positive change and impact increases when strategy and evaluation are interwoven. She explains that evaluation and strategy should not be mutually exclusive, and instead they should be fluid and reinforce each other (Alkin, 2012) (see Appendix E). Taking a use approach allows for the program evaluation to serve as a model for change and addressing obstacles surrounding persistence, retention, and time to degree completion for adult learners. Preskill explains that strategic evaluation often focuses on different questions than program-level evaluations (Alkin, 2012, p. 331). Some of the questions she focuses on are: to what extent are we making the right strategic choices; what are we learning about how well our programs are progressing in implementing our strategy; what else should we be doing; how should we refine our strategy in the future? I have shaped my research questions with these focuses in mind as they have served as a framework for examining data and delivering results and implications.

The partnership between Guild and University College was a strategic approach to propel University College forward to serve the growing number of adult learners who may not have previously had access to higher education. Using Preskill's evaluation model allows a reflexive look at the strategic decision to partner with Guild, what University College has learned from the implementation of the partnership, and what

changes need to occur to meet the goals of this partnership. A strategic approach needs to be continually tested and refined and conducting this essential program evaluation allows for a data-informed approach toward improving persistence, retention, and degree completion for both Guild and Organic adult learners.

Problem Statement

Understanding student persistence and retention, particularly focusing on post-traditional learners, is critical to implementing changes and strategies to serve this unique population. Much of the research and retention theories focus on traditional learners, pointing to social connection, self-efficacy, and belonging as essential factors in the study of retention (Spady, 1970, 1971; Tinto, 1975, 1993; Pascarella, 1980; Cabrera et al., 1993). While these are important factors for traditional students, they miss the mark when examining persistence and retention for the post-traditional student population. Finding the solutions to the retention problems faced across higher education needs to be as unique as the student populations served. With the growing percentage of adult learners returning to higher education, we must look at how this population is influenced by external environmental factors which are different from traditional learners. Bean and Metzner (1985) define environmental variables such as finances, hours of employment, outside encouragement, family obligations, and the opportunity to transfer as having the most significant impact on adult learners, and Bound et al. (2010) demonstrated that financial support has a positive effect on college completion. Based on previous persistence and retention research, continued research on the effects of employer tuition funding on persistence and retention is critical to serving the adult learner and the institutions enrolling these learners into their programs.

Theoretical Framework

This program evaluation was supported by a theoretical framework composed of three different theories, which are all essential in exploring and solving the problem of persistence and retention of post-traditional learners. I expanded upon EILO earlier in this chapter and used EILO and Bean and Metzner's (1985) Conceptual Model and Human Capital Theory to ground my research. Bean and Metzner's Conceptual Model establishes the differences between traditional and post-traditional learners and the need for further research to understand the effects of external environmental factors when researching the impacts of persistence and retention for post-traditional learners.

Organizational turnover is the groundwork for their study, and one of the educational factors for completing one's degree is the perceived value of earning the degree. I explain the perceived value of earning one's degree with the use of Human Capital Theory.

Human Capital Theory establishes the cost-benefit analysis or business decision adult learners make each quarter as they move toward or away from degree completion. The combination of these theories strengthens the argument that employer tuition funding positively affects post-traditional learners' persistence and retention.

The theoretical framework of Bean and Metzner's (1985) Conceptual Model, Human Capital Theory, and Evaluative Inquiry for Learning in Organizations are essential to this program evaluation. Each theory or model is interdependent like interlocked gears. When one gear moves, each of the others moves along as if none functions independently. Bean and Metzner's model and Human Capital Theory illuminate the influence cost and funding have on adult learners, and EILO provides the

approach to strategically think about how higher education leaders approach the retention and persistent problems of adult learners. This program evaluation's design and methodological approach were intended to provide results that can impact strategic planning and organizational change to address the persistence and retention problem for post-traditional learners.

Research Questions and Hypotheses

This program evaluation explored how employer tuition funding increases persistence and retention and decreases time to degree completion for post-traditional learners. The following research questions align with the established theoretical framework, which guides the evaluation of the external partnership between the University of Denver's University College and Guild.

- 1) How does the retention of post-traditional students who receive funding through the Guild partnership compare to students who do not receive this funding?
- 2) How does time to time to degree completion for post-traditional students compare across different funding levels?
- 3) How is the retention of post-traditional students affected by age, GPA, race, gender, and employer tuition funding?

While many independent variables can influence persistence, retention, and degree completion for post-traditional learners, I hypothesize that the most significant influence on persistence, retention, and degree completion can be attributed to tuition funding from one's employer (Long, 2007; Becker, 1975). According to Bean and Metzner (1985), adult learners are most directly affected by external environmental

factors, one of which is finances. These research questions focus on the importance and influence of the external factor of finances for adult learners. I expect the relationship between up-front employer tuition funding (independent variable) and the dependent variable of persistence/retention to be positive. Therefore, I expect to see Guild students retain and persist at higher rates as they have up-front employer tuition funding where Organic students do not (Frankfort-Nachmias & Leon-Guerrero, 2011). I also expect the relationship between employer tuition funding (independent variable) and time to completion (dependent variable) to be negative, such that as tuition funding from employers increases the time to completion of the student's program decreases (Frankfort-Nachmias & Leon-Guerrero, 2011). Finally, I hypothesize that up-front employer funding will have the greatest influence on retention (dependent variable) when examining the independent variables of age, GPA, race, gender, and up-front employer funding for tuition and fees.

The theoretical framework discussed in Chapter Two established the differences between post-traditional learners from traditional learners and a need for more research on this unique population. Understanding the differences between post-traditional and traditional-aged learners shows that extrapolating from retention theories that focus on traditional students (Spady, 1970, 1971; Tinto, 1975, 1993; Pascarella, 1980, Cabrera et al., 1993) may not be helpful when examining the post-traditional student population. Instead, the differences in these student populations illuminate the need for further research on external environmental factors to describe and understand the persistence and retention of adult learners. Each research question in this program evaluation focuses on the external environmental factor of finances and, more specifically, on the impact of up-

front employer tuition funding. Understanding how employer funding influences adult learners' decision—a cost-benefit analysis, to pursue education and continue toward completion is essential if higher education leaders want to address the persistence and retention of post-traditional students. If students find value in their degree and do not carry the financial burden, they are more likely to begin a degree, persist through it, and finally complete it.

Research Design

I used a quantitative approach, specifically descriptive statistics, *t*-tests, Kruskal Wallis Test, and multiple regression, to study the relationship age, GPA, race, gender, and employer tuition funding (independent variables) have on persistence/retention and time to degree completion (dependent variables). I examined the relationship between the dependent variables and the five independent variables using a multiple regression model, which provided the ability to estimate and predict future outcomes (Mendenhall & Sincich, 2012). The program evaluation used archival data from 2017-2022 to compare two separate groups of adult learners: those students who entered a University College academic program through the partnership with Guild—referred to as Guild students, and those students who are not a part of the partnership—referred to as Organic students. I examined Guild and Organic students across University College's academic programs to understand and gain further insights on the importance of employer tuition funding. I was interested in the linear relationship between these variables, so I analyzed the data using *t*-tests, correlation, and multiple regression models (Mendenhall & Sincich, 2012).

To examine how employer tuition funding levels affect post-traditional learner time to degree completion, I conducted Kruskal Wallis Test. In this test, I tested three

different levels of employer tuition funding: unlimited employer tuition funding, some employer tuition funding, and no employer tuition funding. Those students who receive employer tuition receive between 10,000 and 3,000 dollars per calendar year for tuition, and fees were all grouped into the employer tuition funding group labeled as some employer tuition funding. While the funding range is relatively large, this grouping was necessary for testing purposes due to the lower population numbers of students with some employer tuition funding compared to unlimited employer tuition funding and no employer tuition funding.

Using multiple regression models, I tested each of the five independent variables—age, GPA, race, gender, and employer tuition funding for tuition and fees, against the dependent variables—persistence/retention and time to degree completion. I tested various subsets of the archived dataset. The subsets included testing the data by level (graduate (Master of Science and Master of Arts only) and undergraduate) and degree (Master of Science, Master of Arts, and Bachelor of Arts). This program evaluation does not examine the independent variables separately, as they are all expected to have varying levels of influence on each dependent variable. This allowed for the ability to control the effects of each variable independently of each other (Frankfort-Nachmias & Leon-Guerrero, 2011).

The dependent variable of time to degree completion represents a generic unit of time to provide comparison across all groups. I created a unit of time by taking the completion quarter minus the beginning quarter for every student across the dataset. Throughout this program evaluation, I will refer to “unit of time” when describing the results on tuition retention and time to degree completion, as time is not equivalent to

months or quarters and instead to an arbitrary unit of time that is consistent across all students regardless of program or level. An example of this conversion is a student who began their program in winter 2019 (201910) and completed it in spring 2021 (202130) quarter would have their unit of time represented as 220 or 10 quarters.

Site Description

University College is the College of Continuing and Professional Studies at the University of Denver (DU). Its mission is to deliver enduring professional growth and personal development by providing adult learners access to DU through alternative educational pathways (University College Website, 2022). In the mission statement, the word “access” is used, but what is not mentioned but is found in University College policies and business rules is the word support. University College has built support systems and procedures that differ from the rest of the DU campus. These systems and procedures are designed for post-traditional learners to transition back into higher education and persist toward their personal, professional, and academic goals. University College offers career-focused content through both credit and non-credit academic pathways. This program evaluation focuses on the credit-bearing academic programs offered through University College, which are a part of the Guild partnership. University College provides a variety of degree paths for adult learners; I chose to focus on adult students pursuing master’s degrees, graduate certificates (both six-course and four-course), and bachelor’s degrees through a Bachelor of Arts Completion program. The similarities across these programs allowed for more reliability in the overall program evaluation and results. Although University College students are DU students, they do not fit the traditional mold of other DU students. University College students are often

balancing work and family obligations while attending school, and many are completing their coursework fully or mostly online. To cater to the adult learner University College has adjusted policies, procedures, and best practices to account for the differences of this unique student population.

Each quarter, 80% of University College enrollments are online in synchronous and asynchronous modalities. Most University College students complete over 70% of their program requirements online, and many complete their entire program online without stepping foot on campus until graduation day. These students are more than numbers and segmented categories; however, it is helpful to understand the post-traditional learners in this program evaluation and the diversity they bring to the DU campus by a variety of classifications. The students in this program evaluation represent diversity in a variety of ways and are representative of other Professional, Continuing, and Online Education (PCO) units—90% have full-time jobs while enrolled in classes, 65% reside outside the state of Colorado, 64% identify as female, 25% identify as students of color, 10% are active duty or veteran students, and the average age is 32 (University College Enrollment Report, 2022).

Guild serves as the conduit between employers and higher education institutions—often through Professional, Continuing, and Online Education (PCO) units, by building strategic education and reskilling experiences. Guild’s mission is to unlock opportunities for America’s workforce through education and reskilling by working to bridge the gap between education and employment for working adults in the United States to help them succeed in the future of work (Guild Website, 2022). Guild focuses on transforming traditional tuition reimbursement into a strategic investment that aligns employees with

company needs, increasing recruiting, retention, upskilling, and brand equity (Guild Website, 2022). The partnership between University College and Guild began in 2017, and the number of students in the program continues to grow as Guild adds new employers to their portfolio. During the timeframe of this program evaluation, University College admitted 100-150 new students each quarter through the Guild partnership across all their academic programs—master’s, graduate certificates, and the Bachelor of Arts Completion Program (Guild Admissions Report, 2022). University College continues to admit 50-70 new Guild students each quarter; the numbers of new students fluctuate with the changes in employers and funded programs. Once a Guild student is approved, by Guild and their company, for employer tuition funding and admitted into an academic program, they are grandfathered into this funding if they remain with the employer. These students are more than the companies they are associated with; however, it will be helpful to understand the employer population associated with the Guild student population and when each employer began their partnership with Guild. Table 3.1 provides a complete list of all Guild employer partners associated with University College, listed alphabetically. The table demonstrates many industries Guild has partnered with, including but not limited to healthcare, financial, hospitality, fast casual, and supply chain and transportation. The diversity of companies Guild partners with shows the company’s commitment to upskilling America’s workforce across various industries. Each employer works with Guild to set funding levels and approved portfolios of academic programs and educational partners based on the company’s available budget, goals, and best practices.

Table 3.1*Guild Employer Partners and Launch of Partnership*

Guild Employer	Launch of Partnership
AdventHealth	December 2022
Baylor Scott and White	January 2023
Bon Secours Mercy Health	September 2021
Children’s Hospital of Colorado	March 2022
Chipotle Mexican Grill	October 2019
DaVita	June 2017
Discover Financial Services	January 2020
Fidelity	December 2022
Gentiva	October 2022
Guild Education	January 2019
Herschend Enterprises	February 2022
Humana	July 2022
JP Morgan Chase	December 2020
Lowe’s	August 2020
Lyft	October 2017
OSF Healthcare	April 2023
PepsiCo., Inc.	January 2022
PNC	October 2022
Promedica	November 2022
Providence	January 2023
Rock Family of Companies	April 2020
Sentara Healthcare	March 2022
Sharp Healthcare	January 2023
Ship	July 2021
Smithfield Foods	April 2023
Sunrun	July 2021
Taco Bell Corporate and Franchise	July 2020
Target Corporation	July 2021
Trilogy	January 2023
Tyson Foods, Inc.	June 2022
University of Colorado Hospital Authority	February 2022
UW (Wisconsin) Health	May 2023
Walt Disney Company	August 2018
Waste Management	January 2021

Note. Not all Guild partner employers are represented within this program evaluation.

Selection of Participants

University College has approximately 3,200 active credit-bearing students during any given year (not including students in the Frontline Manager Leadership Program, (FMLP)). Thirty to 35% of new credit-bearing students each quarter enter University College through the Guild partnership. In this evaluation, I tested different samples as subsets of the entire archived dataset to generalize observations back to the overall University College student population (Frankfort-Nachmias & Leon-Guerrero, 2011). To ensure the reliability of the program evaluation, I used representative samples for various subsets across the population. These subsets included students who have completed master's, graduate certificates, and bachelor's degrees, thus allowing for generalization back to the greater population for these program samples. Ensuring that each sample was representative of the larger population allowed for generalizations of the relationships of the variables back to the larger population (Mendenhall & Sincich, 2012). This program evaluation does not include any students admitted to the FMLP program as the program is a bespoke corporate program and, therefore, not available to Organic students. This program evaluation did not use randomized sampling as the dataset only included students who meet the program evaluation criteria, meaning they completed their degrees between fall 2017 and fall 2022. I examined the results by level (graduate and undergraduate) as well as degree (Master of Science, Master of Arts, six-course Graduate Certificates, four-course Specialized Graduate Certificates, and Bachelor of Arts) to account for possible differences that may occur in different subsets of the overall population.

The program evaluation did not limit or categorize data based on the demographics of students. While demographic data was available and included in the reporting of individuals in each sample, decisions on whom to include or exclude were not determined based on these demographics. Rather, the ability to speak to the relationship of employer tuition funding on persistence, retention, and time to degree completion for adult learners was not limited by age, race, ethnicity, gender, or the program the student completed. The program evaluation included only those students who completed one credential between fall 2017 and fall 2022. It is common for students to stack degrees at University College or complete multiple degrees simultaneously. The stackable credentials at University College allow students to begin with a smaller credential and then use those credits earned toward a master's degree or to add a graduate certificate onto their master's degree without taking six additional courses. Accounting for the overlap in courses will reduce the reliability of the results; thus, students who completed multiple degrees during the timeframe of the program evaluation were not used in the data.

I thoroughly cleaned the data to ensure the reliability and validity of the results. Participant inclusion criteria included having available data for all variables—dependent and independent. There were no inclusion or exclusion data required for the following variables: Student ID, Student Name, Level, Ethnicity, Race, Completion Quarter, Guild, Award Category Description, Degree, Gender, GPA Level, Credits Earned, Credits Passed, and Credits Attempted. I excluded any student with the program variable of 'TRMG' as this program does not align with the program evaluation. 'TRMG' is a cohort program, and this program is not a part of the Guild portfolio of programs, meaning

Guild students may not choose this program of study. I excluded any student with a concentration variable of 'LBA' as this concentration is associated with a specific partnership through Centura. The 'LBA' concentration is not a part of the Guild portfolio of programs, meaning Guild students may not choose this concentration of study. I excluded six students from the GPA variable who did not graduate and therefore did not meet the criteria of the dataset. I excluded two students from the Transfer Hours variable who did not graduate and therefore did not meet the criteria of the dataset. I excluded two students from the Credits Attempted variable who did not graduate and therefore did not meet the criteria of the dataset. I excluded 17 students from the GradStatusDesc variable who did not graduate and therefore did not meet the criteria of the dataset. I kept a log reporting all demographic and variable data for those individuals removed from the student population. The dataset only includes students who have completed programs, as predicting graduation dates for the post-traditional learner population who are in progress toward their degree would produce less reliable data and impact the program evaluation results.

Instrumentation

This program evaluation examines the relationship of different sample groups (Guild students and Organic students) using archival data and a statistical program—Stata. First, I ran *t*-tests to compare the mean of Organic and Guild students to determine if there was a significant difference between the two groups. Once I determined that there was a significant difference between the two groups, I ran multiple regressions using Stata to examine the relationship between the independent variables (age, GPA, race, gender, and employer tuition funding for tuition and fees) on each of the dependent

variables (persistence/retention and time to degree completion). Finally, I used the Kruskal Wallis Test to test the effects of different funding levels on time to degree completion.

The alpha—the level of probability for this program evaluation was set at .05. It is customary to set the alpha for a quantitative study at .05, .01, or .001 (Frankfort-Nachmias & Leon-Gerrero, 2011). As .01 and .001 are more cautionary levels of risk often used within clinical assessments, a probability of .05, allowing for a five percent error in sampling, is appropriate for this evaluation (Frankfort-Nachmias & Leon-Gerrero, 2011). I also used Cronbach's alpha of .80 to show the measure of reliability across the program evaluation (Mendenhall & Sincich, 2012). I also tested the effect size of each sample using Stata. I ensured the validity of the results by testing multiple runs of the data to compare results for consistency. I tested the data as a large sample and smaller subsample sets across different levels and degrees to ensure that the independent variable—employer funding for tuition and fees- was the primary influence on each dependent variable (persistence/ retention and time to degree completion). The subsamples of levels and degree remained consistent throughout all testing to assure that there were not differences across different student or degree types. Similar results across different subsets demonstrated both reliability and validity.

Assumptions

I verified the following assumptions independence, normality, and equal variance, which are all needed to produce effective results. Independence indicates there is no relationship between observations in each group, normality indicates the distribution of scores is normally distributed along a bell curve, and equal variance is when the

variances are approximately the same across the samples (Mendenhall & Sincich, 2012). The variances of the two populations (Guild and Organic) were unequal, and therefore I used Welch's formula for unequal variances when running *t*-tests on each of these populations. I had planned to examine the relationship of employer funding levels on time to degree completion, using analysis of variance (ANOVA) to test the various levels of Guild employer funding. The data did not allow for ANOVA testing as the distribution across the three employer funding levels was not evenly distributed. This violates the assumptions that must be met to conduct an ANOVA, as the *n* is not high enough across the three levels. There were still violations at three funding levels (zero employer tuition funding, some employer tuition funding, and unlimited employer tuition funding). Therefore, I used the non-parametric Kruskal Wallis Test to test the influence of funding levels on time to degree completion.

I ensured the following six assumptions before running regression model tests to produce effective and reliable results (Mendenhall & Sincich, 2012, pp. 110-111):

1. The relationship between the dependent variable and independent variables is linear.
2. The error term has a mean of zero.
3. The error term has a constant variance.
4. The errors are uncorrelated.
5. The errors are normally distributed.
6. The independent variables are fixed; therefore, the least-squares method is the best linear unbiased estimator.

Data Processing and Analysis

The data for all University College students—Guild and Organic, is available and stored as archival data in several university systems. I requested permission to use this data and pulled reports based on the data via a formal letter addressed to the then Assistant Dean of Enrollment, Marketing, and Partnerships of University College (see letter in Appendix F). Dr. Chris Nicholson is now the Associate Dean of Enrollment, Marketing, and Partnerships.

In the first research question of the evaluation, I examined the relationship between persistence and retention of post-traditional learners who receive employer tuition funding through the Guild partnership compared to those students not in the Guild partnership. I ran *t*-test analyses to determine if there was a significant difference between the retention of Guild and Organic students. Once I determined there was a significant difference in the retention of Guild and Organic students, I used different sample sets to examine students across levels (graduate and undergraduate) and degrees (master's, graduate certificates, and bachelor's degrees) to ensure accurate comparisons. I expected that there would be a positive relationship between employer funding and persistence for adult learners. The null hypothesis states the difference in group means is zero and the alternate hypothesis that the different in the group means is different from zero.

$$H_0: \mu_{\text{Guild}} - \mu_{\text{Organic}} = 0$$

$$H_a: \mu_{\text{Guild}} - \mu_{\text{Organic}} > 0$$

In the second research question of the evaluation, I examined how different funding levels affect the time to degree completion for post-traditional learners. To account for the violations in assumptions, I ran a Kruskal Wallis Test, a non-parametric

test, to compare funding at three different levels. I grouped the funding levels into three categories: unlimited up-front employer tuition funding, some up-front employer tuition funding, and zero up-front employer tuition funding. I grouped those students who receive employer tuition funding between 10,000 and 3,000 dollars per calendar year into the employer tuition funding group labeled as some employer tuition funding. Table 3.2 shows employer tuition funding levels distribution across each funding level from this program evaluation. I hypothesized that the time to completion would decrease as up-front employer tuition funding increased.

H₀: Time to degree completion is equal across all funding levels.

H₁: There is a significant difference in time to degree completion across different funding levels.

Table 3.2

Guild Funding Level

Guild Funding Level	<i>n</i>
\$0	3,649
\$3,000	2
\$5,000	4
\$5,250	5
\$6,000	1
\$7,500	2
\$10,000	21
Unlimited	970

In the third research question, I ran multiple regression analyses to determine the relationship using each independent variable (age, GPA, race, gender, and employer funding for tuition and fees) on the dependent variable of time to degree completion. Once the relationship for each independent variable was determined, I examined and

compared across the same sample sets used in the previous research questions. I hypothesized that age, GPA, race, gender, and employer funding for tuition and fees would all affect persistence; however, employer tuition funding would have the greatest effect on persistence/retention for post-traditional students. I expected that there would be a negative relationship between employer funding and time to degree completion.

$$H_0: \beta_{\text{employer funding}} = \beta_{\text{age}} = \beta_{\text{GPA}} = \beta_{\text{race}} = \beta_{\text{gender}} = 0$$

$$H_1: \text{At least one of the coefficients} \neq 0$$

I examined research questions one and three across all levels and degrees using archival data, thus allowing for comparison across program levels and degree types. I hypothesized that the greatest determinant of improved persistence rates for post-traditional students would be employer tuition funding aligning with Bean and Metzner's (1985) Conceptual model of Non-traditional Undergraduate Student Attrition. Therefore, I expected to see post-traditional students who receive employer funding through the Guild partnership persist and retain at higher rates than the Organic post-traditional learners who do not receive tuition funding through the Guild partnership. I also expected the results to indicate that post-traditional students receiving employer tuition funding (Guild students) have quicker completion times than those not receiving tuition funding through their employer (Organic students).

Limitations and Delimitations

As with all research, limitations exist, and I address the limitations of this program evaluation in this section. Within the dataset, some Organic students had tuition funding from the U.S. Department of Veteran Affairs (VA), outside scholarships, or their employers as tuition reimbursement. Although these students had some funding, they

were not admitted to University College through the Guild partnership and therefore were classified as Organic in this program evaluation. While some organic students may receive funding from outside funding sources, including their employer, the vast majority who receive employer tuition funding receive that funding as a reimbursement versus receiving up-front tuition funding like Guild students. I chose not to remove these Organic students from the program evaluation, as I did not expect the small number of Organic students who received outside funding to influence or compromise the program evaluation results. The inclusion of these Organic students who may have outside funding means that the results of this program evaluation may be understated as the tuition cost to these Organic students would be lower as they may not be funding their education entirely on their own or through the use of financial aid.

It is also important to recognize that this program evaluation spans a time in which Coronavirus Disease 2019 (COVID-19) impacted the globe. While there are many global impacts of COVID-19, including but not limited to economic and social, it is not yet determined to what extent COVID-19 has impacted higher education as a whole and this program evaluation particularly. Everything during the pandemic shifted, including how students engaged with higher education. PCO units, including University College, saw a greater demand for education during the peak of COVID-19 (National Center for Educational Statistics, 2021). As the world moved from a pandemic to an endemic, the demand for higher education decreased, and the competition for attracting students across higher education institutions increased, with more programs now offering online programming. While there are a variety of impacts of COVID-19 to consider, it is

important to recognize that we still do not fully understand the extent of the economic, social, and higher education repercussions.

The United States faced historic unemployment rates during these times, 26.4 million Americans filed for unemployment between March, 2020 and April, 2020 (Soergel, 2020). Researchers projected that 54 million jobs were vulnerable to reductions in hours or pay temporary furloughs, or permanent layoffs (McKinsey & Company, 2021; Strada Education, 2020). This economic shift because of COVID-19 impacted higher education as higher education enrollment tends to follow a countercyclical trend to the U.S. economy (Barr & Turner, 2013; Kantrowitz, 2010). As individuals faced uncertainty in employment, many adult learners sought higher education to help them reskill, upskill, and retool (National Center for Educational Statistics, 2021). With the massive layoffs across the United States, many used the opportunity to make a career shift or pivot. This influx in the post-traditional student population and the changes Guild employer partners made to their tuition funding may have influenced the results of this program evaluation.

Many of the Guild students who pursue their education through University College as a part of the Guild partnership are or were employed by The Walt Disney Company (Disney) and used Disney Aspire funding to fund their education., Disney laid off many employees during the COVID-19 pandemic and reduced tuition funding for those who remained employed to counter the financial impacts from many months of park closures. Furloughed employees, who had already been admitted to programs, still received benefits through Disney, including their educational benefits through the Disney Aspire program; however, thousands of employees were laid off and no longer eligible for benefits. University College provided a \$500 per course tuition relief grant to provide

financial and academic support for those University College students who lost their jobs because of the pandemic. University College offered this tuition relief grant to Guild students who lost funding and Organic students alike. As these changes occurred in the middle of the program evaluation and COVID-19 was still impacting our world, it is unclear if and how COVID-19 influenced this program evaluation. Before COVID-19, Disney funded all employees who wished to pursue higher education with unlimited tuition funding. Disney implemented a course cap to their funding model for all Disney employees including those furloughed as a result of the pandemic. This course cap reduced the employer tuition funding for Disney students from unlimited funding, prior to covid. The reduced employer funding afforded graduate-level students tuition funding for one course per quarter, and undergraduate students funding for two courses per quarter. Disney implemented the funding course cap from the winter 2021 quarter through the fall 2021 quarter, which could have influenced the results of each research question in this program evaluation.

Finally, University College experienced an influx of organic students during the fall 2020 quarter who returned to education to upskill due to layoffs and economic uncertainty. It is unclear how the influx of fall 2020 organic students may have affected the study as this is an anomaly in the data and deviates heavily from the number of new Organic students in any other quarter prior to or since fall 2022.

Positionality

Over the past nine years, I have dedicated my professional efforts to serving adult learners in their academic journey. Whether they are returning to education to complete a degree, they began years ago, upskilling to advance their career, or retooling for a career

pivot, serving this growing population is my passion. I stumbled into a job as an academic advisor in May of 2014 at University College and have now made a career of serving adult students. I advise students in our Bachelor of Arts Completion Program (BACP), many of whom have entered through the partnership with Guild. I also oversee the Enrollment Management team and co-lead University College's Guild partnership alongside our Associate Dean of Enrollment, Marketing, and Partnerships. I have been heavily involved with the Guild partnership since its inception in 2017 and have experienced the growing pains of establishing a large (both monetarily and student headcount) partnership and the benefits for University College, the University of Denver, and the students who entered our programs through the Guild partnership. My deep knowledge and understanding of the Guild partnership and the Guild and Organic student populations give me the insider's perspective needed to analyze the data. I can bring the statistical analysis to life through my understanding of the intricacies of both the Guild and Organic student populations. This knowledge and understanding allowed me to approach the dataset from a point of view others do not have as they do not have the intimate knowledge of the partnership or the student populations, I have gained over my time with University College and specifically my in-depth work with the Guild partnership.

I currently hold the Director of Enrollment Management position at University College and have served in this position since August 2020. My roles and responsibilities as the Director of Enrollment are as complex as the adult students we enroll and serve. Having a complete understanding of enrollment best practices, including providing access and implementing strategies, policies, and systems to retain students once they

begin their program is vital to my position within University College. I collaborate with University College leadership to predict enrollment numbers and ensure we meet enrollment and new student goals. While I often report on numeric goals, I approach my position and responsibility from a mindset of creating an exceptional and inclusive student experience for each learner, whether admitted organically or through the Guild partnership. Increasing persistence and retention not only benefits the University of Denver and University College's bottom line but also benefits the learner, their families, their communities, and our overall economy.

Conclusion

This program evaluation analyzes the effects employer tuition funding has on post-traditional learners and their persistence, retention, and time to degree completion. I used *t*-tests and multiple regression models to test the relationship between employer tuition funding and persistence/retention and the time to degree completion for students entering the program through the Guild partnership and students who entered the program outside of the partnership. This evaluation demonstrates how influential employer tuition funding can be for post-traditional learners. I will share the results of this program evaluation with stakeholders for organizational learning and strategic planning. In Chapter Four, I provide an in-depth explanation and breakdown of the results of this program evaluation.

CHAPTER FOUR: RESULTS

In this chapter, I present the results from my program evaluation of the University College and Guild partnership. I took a quantitative approach to examine the partnership and the potential effects of employer tuition funding on adult learners' persistence and retention. My results are based on descriptive analysis, *t*-tests, Kruskal Wallis Test, and multiple regression models. Throughout this chapter, I frame the results using each of my research questions.

Program Evaluation Purpose and Research Questions

The purpose of this program evaluation was to acquire knowledge of employer tuition funding and its effects on the persistence and retention of adult learners. Bean and Metzner's (1985) Nontraditional Student Attrition Model supports the need for further research and this program evaluation. Understanding the effects of employer funding is vital to serving the growing adult learner population. By examining the University College and Guild partnership, I was able to compare different subsets of post-traditional student populations and how employer funding affected time to completion and retention compared to students who do not have similar funding. The following research questions guided my evaluation of the University College and Guild partnership.

- 1) How does the retention of post-traditional students who receive funding through the Guild partnership compare to students who do not receive this funding?

- 2) How does time to time to degree completion for post-traditional students compare across different funding levels?
- 3) How is the retention of post-traditional students affected by age, GPA, race, gender, and employer tuition funding?

Analyses of Guild and Organic Retention

Research Question One: How does the retention of post-traditional students who receive funding through the Guild partnership compared to students who do not receive this funding?

$$H_0: \mu_{\text{Guild}} - \mu_{\text{Organica}} = 0$$

$$H_a: \mu_{\text{Guild}} - \mu_{\text{Organic}} > 0$$

To examine this hypothesis, I conducted an independent-sample *t*-test with unequal variances for the overall population and sub-sets of the population. The variances of the two populations (Guild and Organic) were unequal, and therefore I used Welch's formula for unequal variances when running *t*-tests on each of these populations. I used the *t-test* command in Stata 17 (StataCorp., 2023) to calculate *t*-tests comparing time to completion for Guild and Organic students. Table 4.1 reveals the average time to completion among Guild students ($M = 181.0204$, $SD = 66.05064$) is significantly lower than that of Organic students ($M = 204.4223$, $SD = 121.0128$), $t(2394) = 7.0655$, $p < .001$. I used the *esize* command in Stata 17 (StataCorp., 2023) to calculate the effect size. Cohen describes the measures of magnitude in effect size and breaks them down effect into three categories small ($d = 0.2$); medium ($d = 0.5$); and large ($d \geq 0.8$) (Cohen, 1977). The effect size result for this first *t*-test was small (Cohen's $d = .211$). According to Cohen (1977), a small effect of .2, while noticeably smaller than a

medium effect size, does not make the result trivial. Even with a small effect size, the results suggest that Guild students are more likely to be retained at higher rates than Organic students when examining the entire population.

Table 4.1

Two-Sample T Test With Unequal Variances - Guild/Organic All levels NumCred=1

Variable	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]	
Organic	2,709	204.4223	2.325021	121.0128	199.8633	208.9813
Guild	784	181.0204	2.358951	66.05064	176.3898	185.651
Combined	3,493	199.1698	1.886403	111.4894	195.4712	202.8683
diff		23.40189	3.312155		16.9069	29.89688
diff = mean (N) - mean (Y)						t = 7.0655
H0: diff = 0						Welch's degrees of freedom = 2394
Ha: diff < 0						Ha: diff > 0
Pr(T < t) = 1.0000						Pr(T > t) = 0.0000
						Pr(T > t) = 0.0000

I continued testing retention for Guild and Organic students by level (graduate and undergraduate) as well as by degree [Master of Science (MS), Master of Arts (MA), six-course graduate certificate (CRTG), four-course graduate certificate (CRTM), and Bachelor of Arts (BA)] to examine the effects of employer funding on these different subsets of the overall population.

Table 4.2 reveals that the average time to completion among Guild graduate students (which includes MS, MA, CRTG, and CRTM) ($M = 178.6301$, $SD = 63.94689$) is significantly lower than that of Organic graduate students ($M = 198.8868$, $SD = 105.359$), $t(1941.7) = 6.4597$, $p < .001$. The effect size was small ($Cohen's d = .207$). While the effect size of these results was small, they do suggest that Guild graduate students are retained at higher rates than Organic graduate students. When comparing the results from this sub population to the overall population, the mean

difference of time to complete decreased by 3.145 units of time, and the effect size decreased slightly by .004 compared to the overall population. The removal of the undergraduate students decreased the overall mean difference in time to complete between the Guild and Organic students, suggesting undergraduate students were influenced more by employer tuition funding than graduate students.

Table 4.2

Two-Sample T Test With Unequal Variances - Level = Grad NumCred=1

Variable	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]	
Organic	2,673	198.8868	2.057181	105.359	194.8529	202.9206
Guild	730	178.6301	2.366781	63.94689	173.9836	183.2767
Combined	3,403	194.4766	1.695794	98.19509	191.1517	197.8015
diff		20.25663	3.135864		14.10662	26.40665
diff = mean (N) - mean (Y)						t = 6.4597
H0: diff = 0				Welch's degrees of freedom = 1941.7		
Ha: diff < 0		Ha: diff != 0		Ha: diff > 0		
Pr(T < t) = 1.0000		Pr(T > t) = 0.0000		Pr(T > t) = 0.0000		

Table 4.3 reveals that the average time to completion among undergraduate Guild students ($M = 213.333$, $SD = 84.0485$) is significantly lower than that of Organic undergraduate students ($M = 373.2558$, $SD = 307.148$), $t(104.589) = 4.5640$, $p < .001$. The effect size was medium (*Cohen's d* = .648). These results suggest that undergraduate Guild students are more likely to be retained than Organic undergraduate students. When comparing the results from this sub population to the overall population, the mean and effect size increased drastically. The mean increased by 136.521 units of time, and the effect size increased by .437 compared to the overall population. These results suggest differences in the effects of employer funding in the graduate-level and undergraduate-level student populations. As such, the results suggest that undergraduate

students are more significantly influenced by employer tuition funding benefits than graduate students.

Table 4.3

Two-Sample T Test With Unequal Variances - Level = UG NumCred=1

Variable	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]	
Organic	86	373.2558	33.12062	307.148	307.4032	439.1085
Guild	54	213.333	11.43755	84.0485	190.3925	236.2742
Combined	140	311.5714	21.79232	257.8502	268.4841	354.6584
diff		159.9225	35.03987		90.4417	229.4033
diff = mean (N) - mean (Y)						t = 4.5640
H0: diff = 0						Welch's degrees of freedom = 104.589
Ha: diff < 0						Ha: diff > 0
Pr(T < t) = 1.0000						Pr(T > t) = 0.0000
						Pr(T > t) = 0.0000

Table 4.4 reveals that the average time to completion among Master of Science (MS) Guild students ($M = 184.8872$, $SD = 58.05809$) is significantly lower than that of MS Organic students ($M = 218.4265$, $SD = 97.72358$), $t(567.064) = 7.7186$, $p < .001$. The effect size was small (*Cohen's d* = .361). These results suggest that MS Guild students are retained at higher rates than MS Organic students. When comparing the results from this subpopulation to the overall population, the mean and effect size increased. The mean increased by 10.137 units of time, and the effect size increased by .15 compared to the overall population. These results suggest that the retention of students pursuing MS degrees is influenced by employer funding but not by the same magnitude as undergraduate students were retained. The mean and effect size also increased when comparing MS students to the overall graduate-level (MS, MA, CRTG, CRTM) results. The mean increased by 13.283 units of time, and the effect size increased

by .154. These results suggest differences in the effects of employer funding among different types of graduate-level student populations based on degree type.

Table 4.4

Two-Sample T Test With Unequal Variances - Degree = MS if Num Cred=1

Variable	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]	
Organic	1,538	218.4265	2.491846	97.72358	213.5388	223.3143
Guild	226	184.8872	3.55977	58.05809	177.545	191.8962
Combined	1,804	213.4812	2.205854	93.6904	209.1549	217.8075
diff		33.53931	4.345257		25.00455	42.07407
diff = mean (N) - mean (Y)						t = 7.7186
H0: diff = 0						Welch's degrees of freedom = 567.064
Ha: diff < 0		Ha: diff != 0				Ha: diff > 0
Pr(T < t) = 1.0000		Pr(T > t) = 0.0000				Pr(T > t) = 0.0000

Table 4.5 reveals that the average time to completion among Master of Arts (MA) Guild students ($M = 190.8635$, $SD = 60.8054$) is significantly lower than that of MA Organic students ($M = 235.4545$, $SD = 111.5526$), $t(703.98) = 7.1790$, $p < .001$. The effect size was much closer to medium yet is still considered small (*Cohen's d* = .483). These results suggest that MA Guild students are more likely to be retained at higher rates than MA Organic students. When comparing the results from this sub population to the overall population, the mean difference in time to complete increased by 21.189, and the effect size increased by .272 in this group compared to the overall population. The mean and effect size also increased when comparing MA students to the overall graduate-level (MS, MA, CRTG, CRTM) results. The mean difference in time to complete increased by 24.334, and the effect size increased by .276. The results indicate that employer funding has a greater influence on students in a MA program than an MS

program. While the results for both the MS and MA student populations are significant, indicating Guild students are more likely to be retained, the mean difference in time to complete and the effect size were larger for MA students than MS students. While MA students are more greatly influenced by employer tuition funding than MS students, employer tuition funding has the greatest influence on persistence at the undergraduate level.

Table 4.5

Two-Sample T Test With Unequal Variances - Degree = MA if NumCred =1

Variable	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]	
Organic	440	235.4545	5.318062	111.5526	225.0025	245.9066
Guild	359	190.8635	3.209186	60.8054	184.5523	197.1747
Combined	799	215.4193	3.355648	94.85271	208.8323	222.0062
diff		44.59104	6.211333		32.39608	56.78599
diff = mean (N) - mean (Y)						t = 7.1790
H0: diff = 0				Welch's degrees of freedom = 703.98		
Ha: diff < 0		Ha: diff != 0		Ha: diff > 0		
Pr(T < t) = 1.0000		Pr(T > t) = 0.0000		Pr(T > t) = 0.0000		

Table 4.6 reveals that the average time to completion among six-course graduate certificate (CRTG) Guild students ($M = 142.9032$, $SD = 53.20505$) is higher than that of CRTG Organic students ($M = 136.4618$, $SD = 85.29227$), $t(102.851) = -0.8371$, $p = .040$; however, the results are not significant. The effect size was insignificant (*Cohen's d* = -0.078). These results suggest no significant difference in the retention of CRTG Guild and Organic students.

Table 4.6

Two-Sample T Test With Unequal Variances - Degree = CRTG if NumCred = 1

Variable	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]	
Organic	537	136.4618	3.680633	85.29227	129.2316	143.6921
Guild	62	142.9032	6.757048	53.20505	129.3917	156.4148
Combined	599	137.1285	3.372566	82.54178	130.505	143.7521
diff		-6.441401	7.694463		-21.70182	8.819015
diff = mean (N) - mean (Y)						t = -0.8371
H0: diff = 0						Welch's degrees of freedom = 102.851
Ha: diff < 0						Ha: diff > 0
Pr(T < t) = 0.2022						Pr(T > t) = .07978
						Pr(T > t) = 0.4045

Table 4.7 reveals that the average time to completion among four-course graduate certificate (CRTM) Guild students ($M = 89.30233$, $SD = 50.01882$) is higher than that of CRTM Organic students ($M = 82.03704$, $SD = 54.88747$), $t(86.1265) = -0.7831$, $p = .436$; however, the results are not significant. The effect size was insignificant (*Cohen's d* = -0.136). These results suggest no significant difference in the retention of CRTM Guild and Organic students.

Table 4.7

Two-Sample T Test With Unequal Variances - Degree = CRTM if NumCred=1

Variable	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]	
Organic	108	82.03704	5.281549	54.88747	71.56698	92.50709
Guild	43	89.30233	7.627799	50.01882	73.9088	104.6958
Combined	151	84.10596	4.352332	53.48235	75.50616	93.70576
diff		-7.265289	9.277827		-25.70861	11.17804
diff = mean (N) - mean (Y)						t = -0.7831
H0: diff = 0						Welch's degrees of freedom = 86.1265
Ha: diff < 0						Ha: diff > 0
Pr(T < t) = 0.2179						Pr(T > t) = 0.7821
						Pr(T > t) = 0.4357

As the previous results showed no significant difference in retention for CRTG and CRTM students, I decided to examine the difference between graduate-level degree-seeking students, excluding those in CRTG and CRTM programs. Table 4.8 reveals that the average time to completion among graduate Guild students (MS and MA only) ($M = 188.32$, $SD = 59.67777$) is significantly lower than that of Organic graduate students (MS and MA only) ($M = 222.2144$, $SD = 101.1824$), $t(1805.88) = 10.2785$, $p < .001$. The effect size was small (*Cohen's d* = .365). These results suggest that Guild students pursuing MS or MA programs are more likely to be retained at higher rates than Organic students in the same programs. When comparing the results from this sub population to the overall population, the mean difference in time to complete increased by 10.492 units of time, and the effect size increased by .154 in this group compared to the overall population. By removing the CRTG and CRTM students from the overall graduate calculations that included both CRTG and CRTM, the mean difference in time to complete increased by 13.638 units of time, and the effect size increased by .158. This suggests that the overall time to completion of a degree may influence the effects of employer tuition funding on retention for post-traditional learners. CRTG students only have six courses to complete their program, CRTM students only have four courses to complete their program, while MS and MA students need 12 courses to complete their program. This aligns with the premise that students make educational decisions based on return on investment used from the Human Capital Theory. The investment of time and money for CRTG and CRTM students is less than that for MS and MA students.

Table 4.8

Two-Sample T Test With Unequal Variances - Level = GR (MS and MA only) NumCred=1

Variable	Obs	Mean	Std. err.	Std. dev.	[95% conf. interval]	
Organic	1,978	222.2144	2.275056	101.1824	217.7526	226.6761
Guild	625	188.32	2.387111	59.67777	183.6323	193.0077
Combined	2,603	214.0761	1.843109	94.03471	210.462	217.6902
diff		33.89436	3.297601		27.42684	40.36187
diff = mean (N) - mean (Y)						t = 10.2785
H0: diff = 0						Welch's degrees of freedom = 1805.88
Ha: diff < 0						Ha: diff > 0
Pr(T < t) = 1.0000						Pr(T > t) = 0.0000
						Pr(T > t) = 0.0000

Student Retention. Given these results, the hypothesis that Guild students would retain at a higher rate than Organic students was supported for all student populations except those in graduate certificates (CRTG and CRTM). Based on the results of the previous tests, I determined that examining the relationship between the number of courses needed to complete the degree and employer tuition funding would be relevant. The results support the idea that the more courses a student needs to complete their degree, the more employer tuition funding affects retention. CRTG and CRTM Guild students were not found to be retained at higher rates than Organic students. These results may be partly due to the shorter time and smaller financial commitments for CRTM and CRTG students, as the cost associated with these programs is far less than that incurred by students completing a master's or bachelor's degree. The analysis indicates that employer tuition funding has the greatest influence on retention for undergraduate students, followed by students in MA programs, and finally by students in MS programs.

Research Question Two: How does time to time to degree completion for post-traditional students compare across different funding levels?

H₀: Time to degree completion is equal across all funding levels.

H₁: There is a significant difference in time to degree completion across different funding levels.

I used the Kruskal Wallis Test to evaluate the differences across the three funding levels (unlimited up-front employer tuition funding, some up-front employer tuition funding, and no up-front employer tuition funding) on time to degree completion for post-traditional learners. The test results revealed a statistically significant difference in time to completion across the three funding levels, $\chi^2 (2, N = 3,493) = 12.35, p < .002$. Time to degree completion was fastest in the unlimited up-front employer tuition funding ($Md = 160$) followed by those who had no up-front employer tuition funding ($Md = 180$), and finally those who had some up-front employer tuition funding ($Md = 210$). These results align with my theoretical framework used to support this program evaluation. Those students who receive unlimited funding complete their degrees quicker than the other two groups of students suggesting that employer tuition funding does affect retention and time to degree completion and is consistent with the results from research question one. Initially, I had expected those students who receive some tuition funding to finish quicker than those with no tuition funding; however, these results may suggest that the decision to return to higher education is strongly influenced by the tuition funding benefit offered by their employers. Based on the results of this research question, students with some funding are taking a slower approach to completing their degree to maximize their funding from their employer. As students with some funding have a capped tuition model from their employer they are choosing to go at a slower pace even taking quarters off waiting for their funding to return at the beginning of the calendar year. This aligns

with the Human Capital theory, where the students weigh higher education and the return on investment (ROI) partially on funding and proceed through the program at a slower rate to maximize employer tuition funding benefits.

Research Question Three: How is the retention of post-traditional students affected by age, GPA, race, gender, and employer tuition funding?

$$H_0: \beta_{\text{employer funding}} = \beta_{\text{age}} = \beta_{\text{GPA}} = \beta_{\text{race}} = \beta_{\text{gender}} = 0$$

$$H_1: \text{At least one of the coefficients} \neq 0$$

To examine this hypothesis, I conducted a multiple linear regression analysis to evaluate the relationship between the independent variables (age, GPA, race, gender, and employer tuition funding) on the dependent variable of time to completion for the overall population as well as sub-sets of the overall population. I used the *regress* and *beta* commands in Stata 17 (StataCorp., 2023) to calculate all regression models. As the *t*-test results suggested, there was no significant difference in the retention of Guild and Organic students completing either of the graduate-level certificates (CRTG and CRTM); I excluded these students from all regression models.

I followed the same sequence of testing throughout the entire program evaluation, examining the overall population (MS, MA, and BA students), followed by graduate-level only (MS and MA), followed by undergraduate only (BA). As the *t*-test results indicated, tuition funding had a greater influence on MA students' completion time than on MS students; I also tested each of these populations separately. The first regression examines the independent variables tuition funding (*Guild*), age, GPA, race, and gender on the dependent variable time to completion for the entire population (MS, MA, and BA), $n = 2,743$. The proportion of variation accounted for by the independent variables

in this model was 20% ($Rsq = .201$). The results showed a significant influence for each independent variable on time to completion (dependent variable) except for gender, which was not significant. The independent variables of Guild and GPA had a negative relationship with time to completion, whereas tuition funding and GPA increase, the time to completion decreases. The *Beta* coefficients show each independent variable's relative rank order of contribution to the model. While tuition funding significantly decreases time to completion, a student's overall GPA has a greater influence on the dependent variable of time to completion. The results suggest that both GPA and employer tuition funding affect the time to degree completion for post-traditional learners. Students with higher GPAs may be able to register for more courses at a time leading to quicker completion times than those with lower GPAs. Table 4.9 provides all results for the entire population of MS, MA, and BA students.

Table 4.9

Regression Time to Completion Guild_Age_GPA_Race_Gender if Degree=MS, MA, BA Num Cred=1

Source	SS	df	MS	Number of obs	=	2,743
				F(5, 2737)	=	137.88
Model	6742950.44	5	1348590.09	Prob > F	=	0.0000
Residual	26769785.1	2,737	9780.70336	R-squared	=	0.2012
				Adj R-squared	=	0.1997
Total	33512735.5	2,742	12222.0042	Root MS	=	98.897

Time to Completion	Coefficient	Std. err.	t	P> t	[95% conf. interval]	Beta
Guild	-19.90671	4.468769	-4.45	0.000	-28.66921 -11.14421	-0.0777269
Age	32.48085	1.533043	21.19	0.000	29.47481 35.48689	0.3705752
GPA	-109.1397	7.573507	-13.86	0.000	-124.5784 -93.70112	-0.2404696
Race	9.503363	3.344702	2.84	0.005	2.944967 16.06176	0.0490455
Gender	-3.192482	3.944442	-0.81	0.418	-10.92687 4.541902	-0.0140437
_cons	557.7133	30.62367	18.21	0.000	497.6655 617.7611	

The second regression model examines the same independent and dependent variables for the graduate student population (MS and MA), $n = 2,603$. The proportion of variation accounted for by the independent variables in this model was 18% ($Rsq =$

.181). The results mirror those of the entire population in that each independent variable significantly influences time to completion (dependent variable). The independent variables of Guild and GPA again had a negative relationship with time to completion; therefore, as tuition funding and GPA increase, the time to completion decreases. The *Beta* coefficients show each independent variable's relative rank order of contribution to the model. While tuition funding significantly influences decreasing time to completion, a student's overall GPA has a greater influence on the dependent variable of time to completion. The results suggest that GPA contributes to time to degree completion for graduate-level students; however, it was not as significant as for undergraduate-level students. Table 4.10 provides all results for the graduate population of MS and MA students.

Table 4.10

Regression Time to Completion Guild_Age_GPA_Race_Gender if Degree=MS, MA Num Cred=1

Source	SS	df	MS	Number of obs	=	2,603
				F(5, 2597)	=	114.95
Model	4169416.38	5	833883.277	Prob > F	=	0.0000
Residual	18838836.6	2,597	7254.07646	R-squared	=	0.1812
				Adj R-squared	=	0.1796
Total	23008252.9	2,602	8842.52611	Root MS	=	85.171

Time to Completion	Coefficient	Std. err.	t	P> t	[95% conf. interval]	Beta
Guild	-18.37829	3.996986	-4.6	0.000	-26.21589 -10.54069	-0.0834986
Age	28.56396	1.374799	20.78	0.000	25.86814 31.25977	0.3785133
GPA	-72.39268	7.791806	-9.29	0.000	-87.67146 -57.1139	-0.1681318
Race	8.4806	2.98064	2.85	0.004	2.635929 14.32527	0.0511981
Gender	-2.41914	3.491872	-0.69	0.489	-9.266275 4.427995	-0.0124962
_cons	422.8064	30.07756	14.06	0.000	363.828 481.7848	

The third regression model examines the same independent and dependent variables as the previous two models for the undergraduate student population (BA), $n = 140$. The proportion of variation accounted for by the independent variables in this model was 29% ($Rsq = .293$). The results of this regression model differ from the previous

two models. The results showed a significant influence of age and GPA on the dependent variable of time to completion. The independent variables of Guild ($p = .06$), race ($p = .54$), and gender ($p = .81$) were shown not to be significant. The results of employer tuition funding influencing retention fall slightly outside the $p < .05$ baseline. This may be partly due to one of the limitations of this program evaluation and the change enforced by Disney on employer tuition funding mid-evaluation, limiting undergraduate students to taking two courses per quarter instead of the unlimited funding they received prior to winter 2021 due to COVID. The limitation of taking two courses aligns with the two-course requirement for any undergraduate student utilizing financial aid, creating some similarity in the number of courses registered for across Guild and Organic students. If Disney employees wished to go beyond the course cap, they would have to pay for the additional courses. The *Beta* coefficients again show the relative rank order of contribution of each independent variable to the model, with overall GPA indicating the greatest influence on the dependent variable of time to completion. Table 4.11 provides all results for the undergraduate population of students.

Table 4.11

Regression Time to Completion Guild_Age_GPA_Race_Gender if Degree=BA Num Cred=1

Source	SS	df	MS	Number of obs	=	140
				F(5, 134)	=	11.09
Model	2704830.54	5	540966.11	Prob > F	=	0.0000
Residual	6536823.75	134	48782.26680	R-squared	=	0.2927
				Adj R-squared	=	0.2663
Total	9241654.29	139	66486.7215	Root MS	=	220.87

Time to Completion	Coefficient	Std. err.	t	P> t	[95% conf. interval]		Beta
Guild	-76.4325	40.72856	-1.88	0.063	156.9865	4.121484	-0.1448056
Age	66.84191	13.615	4.91	0.000	39.91382	93.77001	0.38257
GPA	-181.1248	42.42835	-4.27	0.000	-265.0406	-97.20886	-0.3211153
Race	19.03941	30.98038	0.61	0.540	-42.23438	80.31321	0.0459591
Gender	-9.328666	38.72192	-0.24	0.810	-85.91388	67.25654	-0.0179287
_cons	797.6706	167.7357	4.76	0.000	465.9186	1129.423	

The fourth regression model examines the same independent and dependent variables as the previous models for the graduate-level MS student population, $n = 1,804$. The proportion of variation accounted for by the independent variables in this model was 17% ($Rsq = .170$). The results of this regression model differ from the overall population and the graduate-only (MS and MA) population. The results showed a significant influence of Guild, age, and GPA on the dependent variable of time to completion. The independent variables of race ($p = .07$), and gender ($p = .64$) are not significant. The *Beta* coefficients again show the relative rank order of contribution of each independent variable to the model, with overall GPA indicating the greatest influence on the dependent variable of time to completion for graduate students pursuing an MS degree. Table 4.12 provides all results for the graduate MS population of students.

Table 4.12

Regression Time to Completion Guild_Age_GPA_Race_Gender if Degree=MS Num Cred=1

Source	SS	df	MS	Number of obs	=	1,804
				F(5, 1798)	=	73.6
Model	2688815.12	5	537763.023	Prob > F	=	0.0000
Residual	13137723.2	1,798	7306.85386	R-squared	=	0.1699
				Adj R-squared	=	0.1676
Total	15826538.4	1,803	8777.89149	Root MS	=	85.48

Time to Completion	Coefficient	Std. err.	t	P> t	[95% conf. interval]		Beta
Guild	-21.23186	5.733051	-3.70	0.000	-32.47601	-9.987721	-0.0803704
Age	27.51166	1.634661	16.83	0.000	24.30562	30.71769	0.368239
GPA	-70.18742	9.457947	-7.42	0.000	-88.73714	-51.6377	-0.1618925
Race	6.603187	3.63183	1.82	0.069	-0.519864	13.72624	0.039503
Gender	1.926167	4.070985	0.47	0.636	-6.058193	9.910527	0.103073
_cons	410.4833	36.70806	11.18	0.000	338.4884	482.4782	

The final regression model examines the same independent and dependent variables as the previous models for the graduate-level MA student population, $n = 799$. The proportion of variation accounted for by the independent variables in this model was

22% ($Rsq = .222$). The results of this regression model mirror the results from the overall population (MS, MA, and BA) and the graduate-only (MS and MA) population. The results showed a significant influence of all independent variables, Guild, age, GPA, and race, on the dependent variable of time to completion. The independent variable of gender ($p = .30$) was not significant. The *Beta* coefficients show the relative rank order of contribution of each independent variable to the model, with overall GPA indicating the greatest influence on the dependent variable of time to completion for graduate students pursuing a MA degree. Table 4.13 provides all results for the graduate MA population of students. The proportion of variance R-squared ranged from 18%-29% across the populations tested. This is a relatively low R-squared indicating there are other independent variables affecting time to completion and retention. Post-traditional learners are juggling many responsibilities, including family and work obligations, and these regression models only consider one environmental factor, funding. Adding additional environmental factors such as hours worked, marital status, children, and others would likely increase the proportion of variance for adult learners.

Table 4.13

Regression Time to Completion Guild_Age_GPA_Race_Gender if Degree=MA Num Cred=1

Source	SS	df	MS	Number of obs	=	799
				F(5, 793)	=	45.17
Model	1591454.77	5	318290.954	Prob > F	=	0.0000
Residual	5588179.77	793	7046.88496	R-squared	=	0.2217
				Adj R-squared	=	0.2168
Total	7179634.54	798	8997.03577	Root MS	=	83.946

Time to Completion	Coefficient	Std. err.	t	P> t	[95% conf. interval]		Beta
Guild	-23.69697	6.200037	-3.82	0.000	-35.86739	-11.52654	-0.1243488
Age	30.86515	2.535789	12.17	0.000	25.8875	35.8428	0.3968436
GPA	-74.75596	13.74445	-5.44	0.000	-101.7358	-47.77617	-0.1762018
Race	12.76432	5.194894	2.46	0.014	2.56695	22.96169	0.078587
Gender	-7.472158	7.21813	-1.04	0.301	-21.64106	6.696742	-0.0326679
_cons	436.6191	52.56656	8.31	0.000	333.433	539.8051	

Student Retention. Given these results, the hypothesis that Guild students would show higher retention than Organic students and that the independent variable of employer tuition funding would have the greatest influence was not supported in any of the populations tested. The results support that employer tuition funding does influence retention in the overall population (MS, MA, and BA) and the graduate-level population (MS and MA); however, tuition funding was not significant across the undergraduate population. GPA was the greatest indicator of retention across each of the populations tested. Therefore, one would expect that graduate students who have higher GPAs, as well as employer tuition funding, would retain at higher rates than those students who have employer tuition funding and lower GPAs or higher GPAs and no employer funding (Cabrera et al., 1990; Pearson, 2019). Other environmental factors that may influence time to degree completion and retention that were not considered in this program evaluation are hours of employment, outside encouragement, family obligations, and the opportunity to transfer (Bean & Metzner, 1985).

Summary of Results

The results of this program evaluation indicate that the independent variable of employer tuition funding significantly influences time to degree completion for all populations tested except for six-course and four-course graduate certificate students. Guild students in MS, MA, or BA programs retained at higher rates, and thus, their time to degree completion was shorter than Organic students in similar programs. While employer tuition funding was shown to affect time to completion and retention, it was not shown to be the highest contributing factor. In each population, GPA was shown to have the most significant influence on time to completion.

Employer tuition funding was not found to influence the time to degree completion for those graduate students pursuing only graduate certificates (CRTG and CRTM). This may be partly due to the length and cost of these programs compared to master's or bachelor's degree programs. Each MS and MA program requires 12 total courses, double that of a CRTG degree and triple that of a CRTM degree. The BA program is a completion program where students must have transferable credit hours to be admitted into the Bachelor of Arts Completion Program; depending on the number of transferable credit hours, students would have somewhere between 12-39 courses to complete their BA degree. In this program evaluation, I accounted for transfer credits for those students who transferred credits into their degree. Aside from the length and cost of these programs, it is important to note that four-course graduate certificates (CRTM) do not qualify for Title IV funding, meaning that students who pursue these degrees will need to pay without the assistance of financial aid and therefore are likely from high socioeconomic backgrounds. While the demographics of CRTM students resemble the demographics of the overall and sub-populations, this program evaluation did not consider socioeconomic status as that variable was not available in the dataset. Table 4.14 displays all descriptive data for each independent variable used throughout this program evaluation.

While the results show the significance of employer tuition funding, they do not show that it has the greatest influence on retention and time to degree completion. This result does show the importance of external environmental factors on the persistence and retention of post-traditional learners. Continuing to understand the complex adult learner and that their persistence and retention to degree completion is influenced by more than

academic and social factors is essential to addressing the retention needs of this unique population. In the next chapter, I will elaborate on my conclusions and interpretations and provide suggestions for further research.

Table 4.14

Descriptive Statistics for Independent Variable by Degree

Independent Variable by Degree	<i>n</i>	<i>M</i>	<i>SD</i>	Min	Max
Master of Science Population	3,493				
Guild		0.22	0.42	0	1
Age		2.28	1.3	1	5
GPA		3.82	0.24	2.19	4
Gender		1.38	0.49	1	3
Race		1.7	0.56	0	2
Master of Science Population	1,804				
Guild		0.15	0.35	0	1
Age		2.22	1.25	1	5
GPA		3.83	0.22	3	4
Gender		1.43	0.5	1	3
Race		1.69	0.56	0	2
Master of Arts Population	799				
Guild		0.45	0.5	0	1
Age		2.04	1.22	1	5
GPA		3.82	0.22	3	4
Gender		1.22	0.41	1	2
Race		1.69	0.58	0	2
CRTG Population	599				
Guild		0.10	0.3	0	1
Age		2.65	1.38	1	5
GPA		3.81	0.24	3.05	4
Gender		1.46	0.51	1	3
Race		0.178	0.5	0	2
CRTM Population	151				
Guild		0.28	0.45	0	1
Age		2.63	1.34	1	5
GPA		3.87	0.21	3	4
Gender		1.34	0.49	1	3
Race		1.73	0.58	0	2
BA Population	140				
Guild		0.39	0.49	0	1
Age		2.54	1.48	1	5
GPA		3.56	0.46	2.19	4
Gender		1.42	0.5	1	2
Race		1.65	0.62	0	2

CHAPTER FIVE: DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

In this chapter, I discuss the results from the program evaluation of the University College and Guild partnership. I compare the retention between Guild and Organic students, dive into the different levels of employer tuition funding, and discuss how the independent variables of age, GPA, gender, and employer tuition funding influence retention. I tie the results back to the theoretical framework used to guide the evaluation. Then I move on to stakeholder recommendations and conclude with suggestions for further research.

Introduction

Across the United States, post-traditional learners account for 56% of the students enrolled in postsecondary education (National Center for Educational Statistics, 2022). The percentage of adult learners continues to grow as higher education enrollments of traditional students is approaching higher education enrollment cliff (Nathan Grawe, 2018). The enrollment cliff is predicted to begin in 2025 as there is a dramatic drop in traditional-aged students due to the low birthrates. The need for higher educational institutions to begin adjusting to the adult learner is past due. The need for updated policies, procedures, and student supports that align more appropriately with the adult learner is essential for higher education institutions. This is not to say that higher education leaders and administrators should ignore traditional-aged students but to understand that serving the adult learner is quite different from serving the traditional-

aged learner as the needs of this population do not align with the needs of traditional-aged students. Many colleges and institutions will face declining and stagnant student enrollment numbers. Taking a strategic approach to the shift in student demographics will be necessary for the vitality of higher education institutions (Campion, 2022).

Much of the research on persistence and retention has focused on traditional-aged students pointing to social connection, self-efficacy, and belonging as essential factors (Spady, 1970, 1971; Tinto, 1975, 1993; Pascarella, 1980; Cabrera et al., 1993). These theories fail to include environmental factors that influence post-traditional learners. The groundwork for the removal of financial aid and tuition cost barriers that affect retention has been laid by many theorists (Cabrera et al., 1990, 1992, 1993; Lenning et al., 1980; Marsh, 1966; Nora, 1992, 1993; Pantages & Credon, 1978; Paulsen, 1997, 2002; St. John, 1997, 2002; Summerskill, 1962). This program evaluation builds upon these theories by examining the influence up-front employer tuition funding has on persistence, retention, and time to degree completion for post-traditional learners. The results of this program evaluation begin to fill the gap in the research on how employer funding affects post-traditional learners' persistence through to completion.

Research Questions

This program evaluation explored how employer tuition funding increases persistence and retention and decreases time to degree completion for post-traditional learners using an Evaluative Inquiry for Learning in Organizations (EILO) approach (Preskill, 1999). The following research questions align with the established theoretical framework, which guides the evaluation of the external partnership between the University of Denver's University College and Guild.

- 1) How does the retention of post-traditional students who receive funding through the Guild partnership compare to students who do not receive this funding?
- 2) How does time to time to degree completion for post-traditional students compare across different funding levels?
- 3) How is the retention of post-traditional students affected by age, GPA, race, gender, and employer tuition funding?

As students who enter an academic program through the Guild partnership use up-front education funding, provided by their employer, comparing these students to Organic students who do not have this type of funding provides valuable insight into the effect funding and cost have on persistence and retention for the post-traditional population. Reducing the financial costs for the adult learner and the relationship it has to their persistence and retention and time to degree completion is critical to recruiting more adult learners back to higher education and increasing the retention rates of this unique student population (Chen & Hossler, 2017; Tran & Smith, 2017). Understanding the effects of employer funding is vital to serving the growing adult learner population. Conducting this program evaluation in a way that allowed for comparison across different subsets of the post-traditional student allows University College to evaluate the different types of adult learners they serve strategically.

In this chapter, I provide a high-level summary and interpretation of the results of this program evaluation. I tie the results to existing literature and the theoretical model I used to frame this program evaluation. Finally, I provide implications, recommendations for the program evaluation stakeholders, and suggestions for future research.

Summary of Results

Research Question One: How does the retention of post-traditional students who receive funding through the Guild partnership compare to students who do not receive this funding?

$$H_0: \mu_{\text{Guild}} - \mu_{\text{Organica}} = 0$$

$$H_a: \mu_{\text{Guild}} - \mu_{\text{Organic}} > 0$$

The results supported the hypothesis that Guild students would retain at higher rates than Organic students. When comparing across programs, the results supported the hypothesis that Guild students retain at higher rates than Organic students in MS, MA, and BA programs. The results did not support the hypothesis that Guild students retain at higher rates than Organic students for those who completed graduate certificate programs (CRTG or CRTM). When ranking levels of influence employer tuition funding had on retention, the greatest influence was found for BA students, followed by MA students, and finally, MS students.,

Research Question Two: How does time to time to degree completion for post-traditional students compare across different funding levels?

$$H_0: \text{Time to degree completion is equal across all funding levels.}$$

H_1 : There is a significant difference in time to degree completion across different funding levels.

In the second research question, the results supported the hypothesis that there is a significant difference in time to completion across different employer funding levels. The results of this testing indicated that students with unlimited tuition funding had the shortest time to degree completion; each student in this category of the program

evaluation was a Guild student. Those students with no employer tuition funding had the second shortest time to degree completion; each student in this category was an Organic student. Finally, the students who had some tuition funding had the longest time to degree completion; each student in his category was a Guild student.

Research Question Three: How is the retention of post-traditional students affected by age, GPA, race, gender, and employer tuition funding?

$$H_0: \beta_{\text{employer funding}} = \beta_{\text{age}} = \beta_{\text{GPA}} = \beta_{\text{race}} = \beta_{\text{gender}} = 0$$

$$H_1: \text{at least one of the coefficients} \neq 0$$

The third research question indicated that employer tuition funding significantly influences retention; however, GPA had the greatest influence across all levels of students tested (MS, MA, and BA). Although the results were significant, the hypothesis that employer tuition funding would have the greatest influence on retention was not supported. In the next section, I will discuss the results, implications, and recommendations for each research question in depth.

Discussion of Results and Recommendations

In this section, I discuss all results of the program evaluation and ground them within previous research and the theoretical framework I used. As the guiding framework for this evaluation was Evaluative Inquiry for Learning in Organizations (EILO), I also present recommendations to the program stakeholders as a catalyst for growth and improvement.

Comparison of retention between Guild and Organic students. The results supported the hypothesis that Guild students would retain at higher rates than Organic students. While the results of the overall population were still significant when including

all degree levels, removing the CRTG and CRTM students from the overall graduate calculations increased the mean difference of time to complete by 13.638 units of time, and the effect size increased by .158. The lack of significant retention differences in the CRTG and CRTM students may be due in part to the length and cost of the programs. CRTG students are committing to half of a master's degree, and CRTM students are committing to a third of the time and money of a master's degree. Human Capital Theory can be used to explain the difference between CRTG and CRTM students. The cost-benefit analysis students make when applying for one of these shorter programs differs from those contemplating a 12-course master's degree. While cost plays into a student's decision, students pursuing a six-course or four-course graduate certificate have half or a third, respectively, of cost considerations of time and money. It is also important to note that four-course graduate certificates do not qualify for federal financial aid. Therefore, it would be fair to say that the Organic students choosing to enter one of these certificates have the financial means to support out-of-pocket costs of four graduate courses of approximately 11,500 dollars. As CRTG students have no option for financial assistance, the cost is likely not a determining factor in returning to higher education.

Employer tuition funding greatly influenced students within the Bachelor of Arts Completion Program. When comparing the results from the students pursuing a BA to the overall population (which includes CRTG and CRTM), both the mean and effect size increased drastically. The mean increased by 136.521 units of time, and the effect size increased by .437 compared to the overall population. Accounting for the insignificant results for CRTG and CRTM students, I also compared the results of the BA population to the MS and MA students only, and the mean still increased drastically, by 126.028

units of time; however, the effect size only increased slightly by .072. These results suggest differences in the effects of employer tuition funding in the graduate-level and undergraduate-level student populations. These results support Bean and Metzner's (1985) model that external environmental factors, including finances, influence the retention of post-traditional undergraduate students. While Bean and Metzner's study did not include graduate students based on the results of this program evaluation, the Non-traditional Student Attrition Model aligns with students in master's degree programs. Thinking about the results through the lens of Human Capital Theory, it also makes sense that employer tuition funding would have a greater influence on retention for BA students as their path toward completion is longer than that of graduate-level students. While the per-course cost is less for an undergraduate student, the number of courses needed to complete could be double or triple that of a graduate-level student. Bean and Metzner's Non-traditional Student Attrition Model and Human Capital Theory can be used to explain these results. Human Capital Theory suggests students consider ROI in decisions of enrollment and Bean and Metzner's model suggests that post-traditional learners are heavily influenced by external environmental factors.

Employer tuition funding levels. I would have liked to evaluate each employer tuition funding level separately; however, due to the low numbers of students within certain funding levels, I needed to assess tuition funding levels at three different levels, unlimited employer tuition funding, some employer tuition funding (between 10,000 and 3,000 dollars), and no employer tuition funding. Initially, I was shocked by the results because those students who had some employer tuition funding completed their degrees slower than those students who had no employer tuition funding. While the result was

surprising, it indicates that cost is a significant determining factor for post-traditional students. As the students with some employer tuition funding completed the slowest, they were likely making registration decisions based on the amount of tuition funding available to them through their employers. As these students had capped employer tuition funding that refreshes on January 1 of every year, they were likely taking a slower approach and even taking quarters off to maximize the amount of tuition funding received by their employer (Bowers & Bergman, 2016). This premise aligns with my theoretical framework that environmental factors influence post-traditional learners (Bean & Metzner, 1985), and post-traditional learners make higher education decisions based on a cost-benefit analysis (Becker, 1975; Long, 2007). This leads me to wonder how many of these students chose to return to higher education regardless of degree program due to the funding available from their employer. This raises the question of whether the social and economic mobility of earning a credential was now more attractive and attainable for the student due in part to the financial support of their employer? The results of testing the employer tuition funding levels mimics the vignette at the start of this paper; maybe the tuition funding from their employer, even though it was capped, was the push they needed to jump back into higher education.

Independent variables, Age, GPA, race, gender, and employer tuition funding influence on retention. The results showed that employer tuition funding does influence retention for adult learners except for BA students. While it was surprising that employer tuition funding was insignificant ($p = .06$) for undergraduate students, this result could be related to the COVID-19 limitations of this program evaluation which were discussed at length in chapter three. Based on employer tuition funding levels results, it is plausible

that if a course cap did not limit Disney students, they would have completed their degree even quicker, resulting in a higher difference between the Guild and Organic student groups. The course cap for undergraduate students also likely influenced the effect size and mean difference in time to completion results of research question one. The limitation of taking two courses for Disney undergraduate students aligns with the two-course requirements for any undergraduate student utilizing financial aid, creating some similarity in the number of courses registered for across Guild and Organic students. Further studies are needed to understand if and how COVID-19 impacted this program evaluation of post-traditional students' time to degree completion and the effects of employer tuition funding.

The hypothesis was not supported that employer tuition funding would have the greatest influence on retention; instead, GPA was shown to have the greatest influence on retention for undergraduate and graduate-level post-traditional learners of this program evaluation. The influence of GPA on retention was unsurprising as it aligns with previous research indicating the correlation between GPA and retention (Bean, 1980, 1983; Cabrera et al., 1993; Pascarella & Terenzini, 1979; Pearson, 2019; Tinto 1975, 1982). The results demonstrated a positive relationship between the independent variables employer tuition funding and GPA and retention for graduate-level students. Therefore, one would expect that graduate students who have higher GPAs, as well as employer tuition funding, would retain at higher rates than graduate students who have employer tuition funding and lower GPAs or higher GPAs and no employer funding (Cabrera et al., 1990; Pearson, 2019).

Stakeholder Recommendations

The stakeholder recommendations are grounded in the evaluation theory used to frame this program evaluation, Evaluative Inquiry for Learning in Organizations (ELIO). The goal of this program evaluation was to provide results that could be implemented and used as a catalyst for growth. As University College enters into a new strategic planning cycle the hope is that the results of this study are imbedded into future decision making. This program evaluation should be seen as a living document as the Guild and University College Partnership is ongoing and the results can be imbedded into strategic planning and can inform practice moving forward.

Based on the program evaluation results, I recommend that University College leadership evaluate how they can reduce costs for all students, particularly organic students, to increase the marketability of academic programs and the retention of students. A few considerations on how University College could increase the ROI for adult learners and increase persistence and retention include locking tuition rates for those who remain active with continuous enrollment and increasing scholarship opportunities for MS and MA students (National Adult Learner Coalition, 2017). Reviewing transfer policies for undergraduate students to increase the courses allowed as transfer credits, creating articulation agreements with statewide community colleges, and awarding Prior Learning Assessment (PLA) credit for college-level level knowledge and competencies at both the undergraduate and graduate-levels (Pearson, 2019; Bergman et al., 2014; Gast, 2013; National Adult Learner Coalition, 2017). Providing discount tuition for the University of Denver undergraduates to return to and complete graduate-level degrees within three years of completing their undergraduate degree, and reengaging

students who have stopped out by offering discounted or locked tuition to return (Erisman & Steele, 2015).

Based on the program evaluation results, I also recommend considering tuition price-point as part of the strategy for attracting and recruiting post-traditional learners through the Guild channel. As the competition to attract adult learners continues to rise, University College could increase the number of Guild students by reducing the financial costs for Guild students and their employers. Reducing the price point for Guild students further would provide value to all stakeholders including the University of Denver, University College, the employer partner, and the students. Reducing the per-credit-hour cost even further will likely increase the number of employer partners who include University College in their portfolio of academic partners and may influence the number of academic programs covered along with funding level. While the price point for Guild students would be lower University College would make up the tuition dollars with increased volumes of students.

Employer tuition funding for Guild students has been shown to significantly influence retention rates, considering other partnerships could prove fruitful. Cultivating the relationship with local or state employers outside of the Guild partnership may provide a pipeline of students with employer tuition. The results of this study can be used with other outside partnerships to show the benefits of employer tuition funding to the employers as well as the students.

The Guild partnership should continue to be evaluated to assess if and how the partnership influences student access to DU and retention of these students. I would also encourage a full assessment of University College scholarships and grants to determine

how influential those dollars have been for Organic students and what changes could be made to create a greater impact across the Organic student population. Understanding the enrollment and retention patterns of adult learners at University College allows institutional leaders to strategically implement department changes that increase access and support for this growing population.

Suggestions for Further Research

As this program evaluation utilized data from fall 2017 through fall 2020, the data does not allow for high degrees of testing on the various funding levels. Since fall 2020, Guild has continued adding new employer partners at various funding levels. I recommend that further research be conducted on Guild employer tuition funding levels and the effects it has on time to degree completion and retention for post-traditional adult learners. Based on the results of my first and third research questions, it would also be essential to test each tuition funding level instead of grouping them into three level. This could provide further insight into the funding amount needed to influence students in different programs. As more students enter University College through the Guild partnership and complete their degrees, research should be conducted on each employer funding level instead of the three this program evaluation used. As the average time to complete a master's degree at University College is three years, I recommend revisiting my second research question or some variation of the question utilizing archived data, once available, from fall 2017 through fall 2024. Further research with a larger dataset would also allow for testing the populations pre-COVID-19, during COVID-19, and post-COVID-19. The outcomes of these findings could help all stakeholders understand how employer funding levels influence post-traditional learners' ROI on deciding to return to

higher education and then return toward completion and the implications and effects of COVID-19.

Another potential research area would explore just the graduate-level post-traditional student. While the demographics of the post-traditional learners in this program evaluation were similar, there are likely differences in socioeconomic status between those who do not already have an undergraduate degree and those who do. The time to degree completion for a master's degree is much shorter than for bachelor's students, and therefore, the cost-benefit analysis would likely be different across these different populations. Considering a mix-methods approach could provide insights on student's decision to return to higher education and the extent to which employer tuition funding influenced their decision.

Another potential research area would be to explore motivation and how motivation influences post-traditional learners' decision to return to higher education or complete their degree (Gardner et al., 2022; Sogunro, 2014; Yoo & Huang, 2013). Understanding how motivation could be influenced by employer funding, socioeconomic status (SES), as well as how career or salary outcomes after earning one's degree. Studying motivation, SES, and employer tuition funding and the possible interdependence of these three independent variables and the influence on persistence and retention of adult learners may provide some insightful results in how to best attract and serve this population.

This program evaluation focused on up-front employer tuition funding and the influence on post-traditional learners' persistence, retention, and time to degree completion. There are many outside factors that have been shown to affect post-

traditional learners' persistence and retention including but not limited to hours of employment, outside encouragement, family responsibilities, opportunity to transfer (Bean and Metzner, 1985), childcare, and policies and guidelines of corporate tuition funding. Understanding the influence of each of these variables independently as well as holistically will continue to add to the understanding of post-traditional learners' persistence, retention, and time to degree completion. I hope the results of this study ignite further research to more fully understand this growing population. Having greater information on the differences in traditional and post-traditional learners will help leaders within higher education as well as companies derive strategic approaches to help this unique population instead of hindering their academic, personal, and professional growth.

Further research is necessary to determine if employer tuition funding during and outside COVID reveals similar effects on persistence, retention, and time to degree completion for post-traditional learners. Further research can explore the University College Guild partnership, other institutions that partner with Guild, or other similar third-party partnerships to understand more fully if and how the pandemic influenced or potentially influenced the results of this program evaluation. As higher education leaders are thinking strategically about providing access to the millions of adult learners through different paths, including micro-credentials and other short-form courses and certificates, studying the factors influencing graduate-level learners could be valuable in launching these program options.

Evaluation Conclusion

Evaluative Inquiry for Learning in Organizations (EILO) is an ongoing process for analyzing and understanding critical issues; this process then becomes a catalyst for

continued growth and improvement for the organization and the individual employees (Preskill & Torres, 1999). This study's results fill the research gap focusing on the growing student population of adult learners while highlighting the important work of PCO units. Connecting the job and career-focused educational approach of PCO units to employer tuition funding is not only important research but necessary. The knowledge gained will help institutions strategically approach admitting, serving these students, and increasing retention rates.

In 2017, Guild and University College began their partnership. This partnership was intended to propel University College forward in serving the growing adult learners and provide access to many post-traditional learners who have previously not had access to higher education. I intend to align strategy and evaluation to create learning opportunities for higher education leadership and administration serving the post-traditional student population beyond the University of Denver's walls.

As financial aid shrinks and the cost of higher education increases, leveraging employer funding can help offset the financial strain for adult learners. Employer funding is not a one-size-fits-all answer to solving the persistence and retention problems across the higher education system for adult learners; however, it does play a role in the decision-making process for this unique student population. To effectively serve this unique population we as educators and practitioners must understand the academic journey of adult learners and how it differs from traditional-aged students.

Adult students are returning to higher education to upskill, reskill, or make career pivots and ultimately increase their socioeconomic status, yet the financial burden may be too large of an obstacle to overcome leading to higher rates of stopping out and thus

lower rates of retention for institutions. While not every post-traditional or continuing education unit can or should partner with Guild or another similar external partner to address persistence and retention problems for post-traditional learners, understanding how cost affects adult learners is important to serve this growing population effectively.

These program evaluation results align with Bean and Metzner's Non-Traditional Attrition Model (1985) and Human Capital Theory and advance the understanding of cost on post-traditional learners. Understanding the effect of cost on post-traditional learners can lead to more strategic conversations addressing tuition, scholarships, and other financial benefits to attract and serve this unique student population.

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APPENDIX A: VISUAL REPRESENTATION OF THEORETICAL FRAMEWORK

Bean and Metzner's Conceptual Model

THEORETICAL FRAMEWORK

- Impacts of external factors on persistence and retention of post traditional learners.
- Focusing on the influences of the financial factor.



REMOVE WATERMARKS

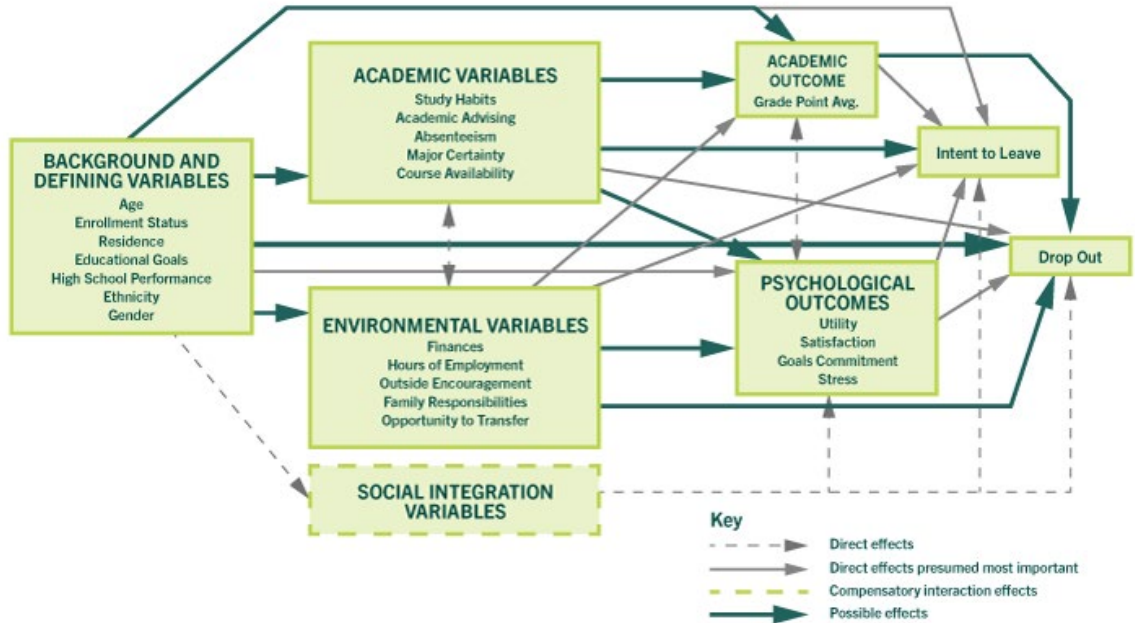
- Adult learners return to higher education to advance in their career or make career pivot.
- ROI on themselves.
- When the reward (economic gain, career advancement) outweighs the cost (time and money) an adult learner is likely to persist and retain.

EVALUATIVE INQUIRY FOR LEARNING IN ORGANIZATIONS

- Guild is a current and continuing partnership for University College.
- Outcomes of financial impacts can be seen and used for transformative learning to impact strategic planning and organizational change.

Human Capital Theory

APPENDIX B: BEAN AND METZNER (1985) CONCEPTUAL MODEL OF
NONTRADITIONAL UNDERGRADUATE STUDENT ATTRITION



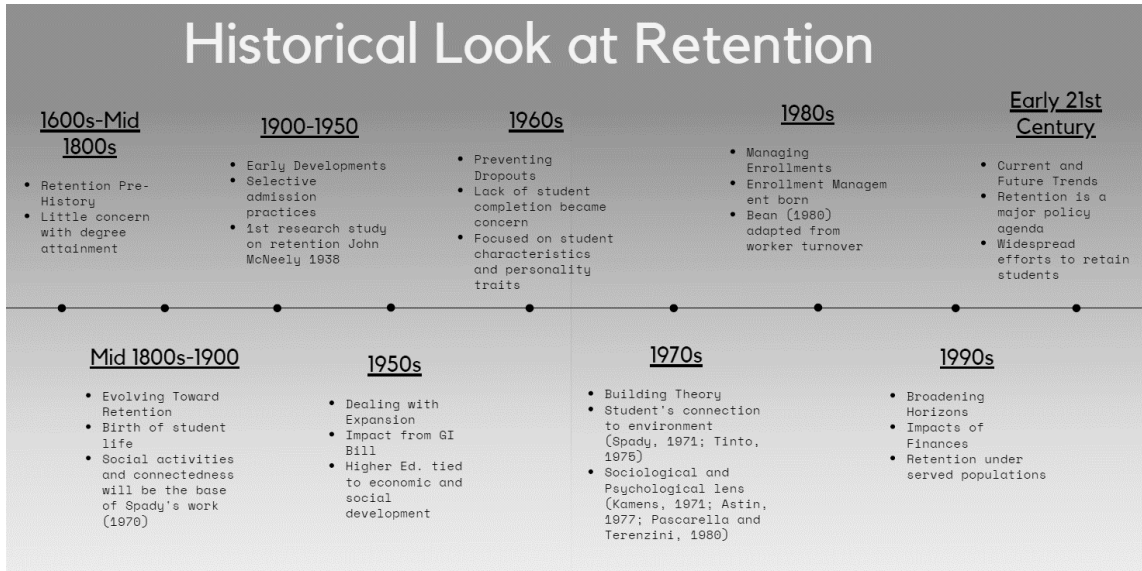
From: Bean, J., & Metzner, B. (1985). a conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485-540.

APPENDIX C: SUMMARY OF PERSISTENCE/RETENTION MODELS,
FRAMEWORKS AND KEY IDEAS

Models	Framework	Contributing Factors to Retention	Key Reference(s)
Student Mortality Model		Dismissal for failure in work; financial difficulties, death/sickness; needed at home, & lack of interest.	McNeely (1937)
Student Attrition Model(s)	Interaction between student & college environment	Intellectual development, social integration, satisfaction, and institutional commitment.	Spady (1970, 1971)
	Social transition	Academic & non-academic factors including pre-college variables. Combination of personal goals and institutional commitment.	Tinto (1975, 1982)
	Organizational workplace	Institutional commitment, GPA, development, institutional quality, student intentions, motivations, and experiences.	Bean (1980, 1983)
	Non-Traditional Undergraduate	Non-traditional students are impacted by environmental factors (finances, hours of employment, outside encouragement, family obligations, & opportunity to transfer). These factors play a larger role than social impacts.	Bean and Metzner (1985)
	Integration of Tinto and Bean	Environmental factors play a more complex role than perceived by Tinto.	Cabrera et al. (1993)
Student Integration Models		Students' navigation of stages (separation, transition, and incorporation). Integration into the academic and social systems.	Tinto (1987, 1993)
		Student social life and academic life.	Pascarella & Terenzini (1979)
Adult Persistence in Learning Model		Personal issues of the adult learner, learning process issues, and environmental issues.	MacKinnon-Slaney (1994)
Student Involvement Theory	Enhancing student development & learning environment	The greater the student's involvement in their academic institution the greater the rate of their persistence.	Astin (1968, 1985)
Student-Faculty Interactions		Informal interactions between students and faculty.	Pascarella (1980)
Dropout Syndrome Model		Combination of student's intent to leave, actually leaving, and actual attrition.	Bean (1985)
College Dropout Model		The level of external commitments (family & jobs) affects goals and commitments.	Tinto (1975)

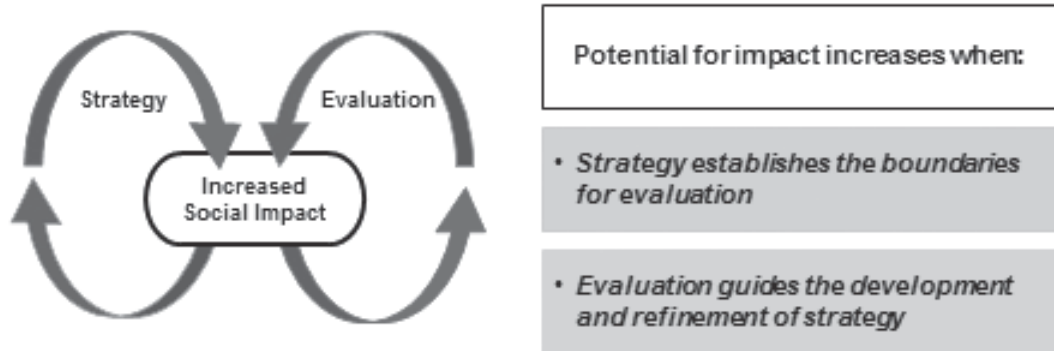
Conceptual Framework	Synthesis of Astin (1985, 1993), Tinto (1975, 1993), and Pascarella (1985)	Student precollege characteristics and experiences, organizational context, peer environment, and student's individual experiences.	Terenzini and Reason (2005)
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APPENDIX D: HISTORICAL LOOK AT RETENTION



APPENDIX E: HALLIE PRESKILL (2012) THE MUTUALLY REINFORCING
RELATIONSHIP BETWEEN STRATEGY AND PROCESS

**The Mutually Reinforcing Relationship between
Strategy and Evaluation**



Strategy and evaluation are intrinsically related; an engagement might start off as an evaluation, but quickly shift to becoming strategy focused and vice-versa

Figure 1: The Mutually Reinforcing Relationship between Strategy and Process (Alkin, 2012, p. 332).

APPENDIX F: LETTER REQUESTING USE OF ARCHIVED DATA

June 5, 2020

Dr. Nicholson,

I am a doctoral student at the University of Denver pursuing my EdD in Higher Education through the Morgridge College of Education. I am writing to ask permission to use archived student data for University College students from 2017 through 2021 to be used for my dissertation research project. My dissertation research project is being chaired by Dr. Cecilia Orphan. All data will be de-identified and reported as such.

The focus of my research is geared towards gaining a greater understanding of persistence, retention, and time to degree completion for adult learners and the relationship employer funding has on each.

I would like to evaluate adult learners who are admitted into University College and compare those students who were admitted through the external partnership with Guild Education and those students who were not. As the researcher I would be analyzing the data and comparing Guild versus non-Guild students to better understand the relationships that exist between employer tuition funding and increased persistence, retention and decreased time to degree completion for adult learners.

I would greatly appreciate your consent to my request. If you require additional information, please do not hesitate to contact me. I would be happy to share all findings with you and your colleagues to help better serve adult students. Thank you in advance for your consideration.

Sincerely,



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