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Factors That Affect Alternatively Certified Teachers' Attrition Decisions

Vida Szabat
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Walden University

College of Education and Human Sciences

This is to certify that the doctoral study by

Vida M. Szabat

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University

2023

Abstract

Factors That Affect Alternatively Certified Teachers' Attrition Decisions

by

Vida M. Szabat

MA, Pennsylvania State University, 2013

BS, Indiana University of Pennsylvania, 2009

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Teacher Leadership

Walden University

December 2023

Abstract

In a southern state, 22% of alternatively certified teachers enrolled in the State Alternative Certification Program (STACP) leave the teaching profession within the first 3 years. The purpose of this study was to gain an understanding of demographic, career, personal/family, and school satisfaction factors that influenced STACP candidates to leave the profession. The theoretical framework that grounded the study was the emerging theory of teacher attrition developed by Nguyen et al. The data for the study were collected by administering the U.S. Department of Education Teacher Follow-Up Survey to a sample of 56 STACP candidates. Data were analyzed using the Chi-Square Test of Independence and descriptive statistics to gain an understanding of demographic, career, personal/family, and school satisfaction factors. Survey results indicated that there was no statistically significant association between STACP candidates who decided to stay and STACP candidates who decided to leave the profession regarding demographic factors (subject area, educational level taught [elementary, middle, high], gender, age, years in the program, and race/ethnicity), career, personal/family, and school satisfaction factors. The findings indicated that a high percentage of STACP candidates who stated they were leaving were dissatisfied with teaching (career), change of residence (personal/family), and the heavy workload (school satisfaction). The findings can contribute to social change by providing an understanding of the reasons that STACP candidates cited for leaving the teaching profession, which STACP programs could use to decrease attrition of future STACP candidates.

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Dedication

I dedicate this work with all my heart to my best friend, the love of my life, and the person that sees the best in me: my husband, Christopher. You have stood by my side since day one and have encouraged me to keep working and to keep my head up high when I felt everything was falling apart. I cannot thank you enough for your tough-love attitude and the gentle and sometimes not so gentle reminders to go work on my paper.

I want to thank my two beautiful children, Rosalie, and Ryan, who have literally and figuratively been with me since the very beginning of my studies at Walden University. Know that no matter what you want to accomplish in your life believing in yourself and putting your trust in God will take you as far as you want to go.

I also want to dedicate this paper to my parents: William & Mary Ann Steiner and my in-laws: Edward and Sally Szabat. They have supported me through this process and continued to give me the encouragement to continue with my dreams of become a doctor. I could not have done this without their everlasting love.

This study is lastly dedicated in memory of my grandfather, Rowan, who was so happy to hear I was going for my doctorate, my aunts, Alfrieda and Anna Marie and my uncle Cur who were my biggest supporters in all that I did, and I know continue to support me from the best seat in the house.

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Chapter 1: Introduction to the Study

The demand for teachers in the United States continues to increase rapidly due to the number of students enrolling each year and the potential supply deficit in the teacher labor market (Garcia & Weiss, 2019; Van Overschelde & Wiggins, 2020). Nationally, teacher turnover rates are at about 8% annually (Redding, 2022; Sutchter et al., 2019). The highest turnover rate for teachers occurs in the southern states (Carver-Thomas & Darling-Hammond, 2019). These states demonstrate a turnover rate of 16.7% compared to the rest of the United States that shows a turnover rate of 13%. The issue of teacher turnover has been studied with a focus on alternative certification programs. In this study, I investigated the factors that affect turnover of teachers with alternative certifications.

During the 1980s, state officials realized that the graduation rate from university-based teacher education certification programs enrollment had decreased and predicted that by the early 1990s the nation would experience a national teacher shortage (Redding, 2022; Redding & Henry, 2019). Eight states in the late 1980s began to offer the opportunity for individuals to receive their teaching certification through alternative routes in hopes of alleviating future shortages. Today, every state has implemented a version of an alternative certification program (Grossman & Loeb, 2021; Matsko et al., 2022). Alternative certification programs recruit, prepare, and license individuals who hold at least a bachelor's degree (Garcia & Weiss, 2019; Lucksnat et al., 2022). These programs allow the participants to hold a teaching position while completing online courses and monthly weekend classes that prepare them for their state-required licensing exam (Lucksnat et al., 2022). However, teachers who enter the profession via alternative

certification are 25% more likely to leave within 5 years than teachers who follow the traditional certification path (Carver-Thomas & Darling-Hammond, 2019; Guthery & Bailes, 2022; Ingersoll, 2020).

The demand for P-12 teachers continues to be a growing problem in all states (Garcia & Weiss, 2019; Wiggan et al., 2020). Since the 2016-2017 school year, alternative programs have experienced a 2% increase in enrollment within the study state; however, the state continues to see high attrition rates of alternatively certified teachers within state alternative certification programs (STACP) participants' first year of teaching (Tio, 2018). States cannot afford to lose teachers because teacher attrition affects student achievement overall and it is expensive to replace teachers who leave (Hester et al., 2020; Ingersoll et al., 2021; Ryu & Jinnai, 2021). The results of this study could contribute to social change by identifying factors that cause attrition and allow schools to alleviate these factors to retain more teachers. Retaining alternatively certified teachers within the field may not only benefit the state but also help the students in the classrooms where alternatively certified teachers work. Successful teacher retention will provide the students with a robust and consistent education and school community (Holme et al., 2018).

In the remainder of Chapter 1, I provide an overview of the history related to the ongoing alternative certified teacher turnover seen nationwide. I describe the problem statement, purpose of the study, state the research question, and discuss the theoretical foundation, and nature of the study. I also define definitions related to the study, identify assumptions, scope and delimitations, and limitations, and I describe the significance of

the study.

Background

With the increasing teacher shortage in the United States projected to reach approximately 200,000 teachers each year by 2025, along with the 35% decrease in traditional teacher preparation program enrollment nationwide in the last 5 years (Carothers et al., 2019; Partelow, 2019; Sutchter et al., 2019), alternative teacher certification programs are becoming a necessity (Garcia & Weiss, 2019). As the gap widens between the number of teachers available for the current openings and the number of qualified applicants, administrators will continue to turn to alternative means to assist in filling these positions each year. Many states have responded to this need by turning to programs such as Teach for America, Troops to Teachers, and state certifying agencies to help them fill their openings (Grant & Brantlinger, 2022). Over the past four decades, an increasing number of individuals have sought alternative pathways to teacher certification, a phenomenon brought on by the shortage of qualified teachers (Grossman & Loeb, 2021; Van Overschelde & Wiggins, 2020; Yin & Partelow, 2020; Zugelder et al., 2021). One indicator of this phenomenon is the increase in the number of alternative certified teacher programs. In 2001, the U.S. Department of Education (USDOE) reported approximately 70 alternative certification programs, and by 2014, that number had increased to 674 (USDOE, 2016). As of 2016 school year, the USDOE stated that 50 states and U.S. territories of American Samoa, Guam, Puerto Rico, Virgin Islands, Micronesia, Northern Mariana Islands, and the Marshall Islands had adopted policies to allow alternate routes into teaching run by institutions of higher education. Only North

Dakota did not have approved alternative routes to a teaching credential as of 2022 (King & Yin, 2022; Redding, 2021). As of 2015-2016, nearly one out of every five new public-school teachers nationwide were prepared through an alternative certification pathway (Matsko et al., 2022; McFarland et al., 2018). However, the National Education Association (April 29, 2020) reported that 40% of teachers who entered the field through the alternative certification program left teaching within the first 3 years of their employment.

Throughout this study, I focused on a southern state and the problem of high attrition among STACP candidates within that state. STACP is an alternative certification pathway that the state relies on to certify individuals who hold a bachelor's degree or higher in a non-education field. The program is offered only in the study state and requires the candidates to be employed by a school district before they can enroll in the program. The candidates teach for their districts using a provisional certificate as they complete the program. The requirements for the STACP pathway are as follows: (a) be employed by a school within the state, (b) prepare for and pass the teacher certification test required in the study state, (c) complete coursework online and meet monthly with their cohort, and (d) log 50 hours of practicum experience within a 3 year timeframe of being hired by a district. Teachers who entered through the STACP contributed to 10% of the teacher workforce in the state overall during the 2016-2017 school year. The program has placed teachers into the field successfully and continues to do so (Educator preparation program analyst and delivery specialist, personal communication, December 2, 2019). The gap in practice that I addressed in this study is the need for a deeper,

nuanced understanding of the attrition of STACP candidates within the study state. Such understanding could lead to STACP administrators and school leaders developing programs and practices that would increase the retention of STACP program candidates.

Problem Statement

The high attrition among alternatively certified educators continues to be a concern at the national, state, and local levels (Mason-Williams et al., 2020). Findings from multiple studies have provided evidence of the high attrition rate of alternatively certified teachers who leave within 5 years (Fitchett et al., 2019; Harrell et al., 2019; Ryu & Jinnai, 2021; Hester et al., 2020; Ingersoll et al., 2021). Alternatively certified teachers who entered the profession through alternative certification programs are 25% more likely to leave the profession than their colleagues who completed a traditional certification program (Bacher-Hicks et al., 2023; Futterer et al., 2023; Redding & Henry, 2018; Sorensen & Ladd, 2020). Alternatively certified teachers are valuable assets to the classroom due to their wealth of knowledge from the industry that exceeds what teachers who followed the traditional route can provide to these students (Bowling & Ball, 2018; Futterer et al., 2023). Alternatively certified teachers come into the classroom with real-life knowledge and can teach students to understand how the industry works and what different occupations are looking for in employees (Kwok & Cain, 2021; Shwartz & Dori, 2020). However, with the significant turnover of alternatively certified teachers, there are adverse effects on students. Numerous researchers have found that schools that have the most significant number of alternatively certified teachers who leave have the greatest threat to the academic opportunities of students due to creating unstable learning

environments and negatively affecting the quality of learning (Garcia et al., 2022; Henry & Redding, 2020; Redding & Henry, 2018; Sorensen & Ladd, 2020). Teacher inexperience and high rates of turnover harm student learning (Carver-Thomas & Darling-Hammond, 2019; Podolsky et al., 2019), and attrition reduces instructional continuity (Redding & Henry, 2019; Sorensen & Ladd, 2018). Turnover also affects the instructional developments and teacher collaboration that contribute to student achievement (Henry & Redding, 2020; Palma-Vasquez et al., 2022; Sorsensen & Ladd, 2018). Teacher attrition also interferes with building and maintaining a school culture that contributes to the school being a powerful learning environment (Torres, 2019).

The problem that prompted this study is the high rate of attrition among STACP candidates within a southern state. The gap in practice that was addressed is the need for a deeper, nuanced understanding of attrition of STACP candidates within the study state. According to the State Professional Standards Commission (SPSC), in 2016, 11% of those who began the STACP had left the program by their third year of teaching. Table 1 shows that approximately 84% of alternative certified teachers were still employed by their third year of teaching.

Table 1

In- State Prepared Teachers Completing Programs in AY 2014 or 2015 and employed in State Public K-12 Schools

1 st Year of Employment while in	Number employed in 1 st year	Percentage of 1 st year teachers still employed	Percentage of 1 st year still employed in	Percentage of 1 st year teachers still employed in

STACP		in 2 nd year	3 rd year	4 th year
2008	351	95%	91%	82%
2009	351	95%	91%	86%
2010	679	94%	89%	84%
2011	600	93%	88%	84%
2012	401	94%	83%	74%
2013	544	94%	83%	75%
2014	578	94%	78%	76%
2015	518	91%	84%	76%
2016	595	98%	95%	89%

Note. 4th year percentages for the years of 2017, 2018, 2019, 2020 data is not available.

Table 1 data were released by the study state in 2021 as an extension from previous data. The data show a high rate of teacher attrition for alternative certified candidates and how enrollment has fluctuated over the years. Some of those changes can be related to financial issues occurring during the same time frame, such as the 2008 recession that led to limiting the number of teachers hired due to budget constraint. In 2010 and 2011, the high enrollment numbers could be a factor of the post-recession occurring across the nation. Between 2012 through 2015, the numbers continue to fluctuate with causes unknown. Data for 2016 through 2020 have not been released. As a result, it is impossible to determine if enrollment numbers have increased, decreased, or stayed the same. But it is evident that something is occurring with STACP candidates as the

numbers decrease during the 3rd and 4th year of their employment.

Purpose of the Study

The purpose of this quasi-experimental, cross-sectional survey study was to gain an understanding of demographic, career, personal/family, and school satisfaction factors that influence STACP candidates to leave the profession within the first 3 years. To accomplish this purpose, I explored the attrition intentions of STACP teachers disaggregated by subject area, educational level taught (elementary, middle, high), gender, age, year in the STACP, and race/ethnicity. I also explored the influences of career, personal/family, and school satisfaction factors of STACP candidates who intend to leave. The results of the research study benefit the state and school districts by providing an in-depth understanding of factors that affect the attrition intentions of STACP candidates in the state. The STACP administrators and school and district administrators could use the study results to target policies and programs for specific groups of STACP candidates to better meet their needs and, perhaps, retain them as teachers in the state.

Research Questions and Hypotheses

This study was planned to address the following research questions.

RQ1: To what extent do demographic factors (subject area, education level taught [elementary, middle, high], gender, age, years in the STACP program, race/ethnicity) predict that STACP candidates will stay or leave the teaching profession?

H_{01} : Demographics factors (subject area, education level taught [elementary, middle, high], gender, age, years in the STACP, race/ethnicity) do not significantly

predict STACP candidates' decisions to stay or leave the teaching profession.

H_{a1}: Demographic factors (subject area, education level taught [elementary, middle, high], gender, age, years in the STACP, race/ethnicity) significantly predict STACP candidates' decision to stay or leave the teaching profession.

RQ2: To what extent do STACP candidates who decide to leave the teaching profession attribute their decision to career factors?

H₀₂: Career factors do not significantly contribute to STACP candidates' decisions to leave the teaching profession.

H_{a2}: Career factors do significantly contribute to STACP candidates' decisions to leave the teaching profession.

RQ3: To what extent do STACP candidates who decide to leave the teaching profession attribute their decision to personal/family factors?

H₀₃: Personal/family factors do not significantly contribute to STACP candidates' decisions to leave the teaching profession.

H_{a3}: Personal/family factors do significantly contribute to STACP candidates' decisions to leave the teaching profession.

RQ4: To what extent do STACP candidates who decide to leave the teaching profession attribute their decision to school satisfaction factors?

H₀₄: School satisfaction factors do not significantly contribute to STACP candidates' decisions to leave the teaching profession.

H_{a4}: School satisfaction factors do significantly contribute to STACP candidates' decisions to leave the teaching profession.

Theoretical Foundation

The theoretical framework that grounds this study is the emerging theory of teacher attrition developed by Nguyen et al. (2019). Nguyen et al. built on, updated, and expanded the earlier meta-analysis of Borman and Dowling (2008), who concluded that personal characteristics of teachers and attributes of the schools where teachers work are important predictors of teacher turnover. Nguyen et al. found that three groups of factors are associated with teacher attrition: teacher personal factors, school factors, and external factors.

The theoretical framework informs the study approach in that the data will be collected by a survey that is designed to collect data related to teacher personal factors, school factors, and external factors. The framework also informs the research questions in that they ask teachers how the factors predict their decisions about attrition and retention. A more detailed description of the framework is provided in Chapter 2.

Nature of the Study

I employed a quasi-experimental, cross-sectional survey design for this study. The data for the study came from administration of the U.S. Department of Education Teacher Follow-Up Survey developed by the U.S. Department of Education (2014). I analyzed data using descriptive statistics (frequencies, means, and standard deviations) and inferential statistics to gain an understating of demographic, career, personal/family, and school satisfaction factors that influence the decision of STACP candidates to leave the teaching profession. I planned to use multiple regression to explain the relationship between independent variables (STACP candidates' responses to the survey questions)

and dependent variables (demographic, career, personal/family, and school satisfaction factors).

Definitions

Age: This term refers to participant self-reported age in years at the time of the survey.

Alternative certification: Alternative certification is a program that allows individuals who want to enter the education profession to complete coursework and on-the-job training that will result in obtaining teacher certification status in the public-school system (Bowling & Ball, 2018).

Career factors: Defined by the U.S. Department of Education Teacher Follow-Up Survey as satisfaction as teacher as a career, perusing an education position other than teacher, returning to school, improve career options or change career, needing/wanting better salary other than teaching, more opportunities for professional development, or being laid off.

Educational level taught: This term refers to participant self-reported their educational level taught at the time of the survey (i.e., Elementary [K-5], Middle Grades [6-8], or High School [9-12]; SPCS, 2017).

Gender: This term refers to participant self-reported gender at the time of the survey, where participants identify their gender as either male, female, or other.

Personal/family factors: This term is defined by the U.S. Department of Education Teacher Follow-Up Survey as a change in residence, health related issues, retirement, and pregnancy/childbearing.

Race/Ethnicity: This term refers to participant self-identified Race/Ethnicity at the time they completed the survey (i.e., Black, or African American, White, Hispanic, American Indian, or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and other).

School satisfaction factors: This term defined by the U.S. Department of Education Teacher Follow-Up Survey as satisfaction as their school/teaching assignment, heavy workload, influence over school policy, computer resources, school facilities, lack of administrative support, student behavior, parent support, relationship with colleagues, lack of time for planning, students in a classroom, student motivation, and professional development requirements not lining up to teacher's career goals.

State Alternative Certification Programs (STACP): This term refers to an alternative certification program that can last up to 3 years and is designed for individuals with bachelor's degrees who want to become certified public-school teachers (SPSC, 2023).

State candidates: This term refers to an individual who is currently teaching in a public-school while also being enrolled in the STACP (SPCS, 2023).

Subject area: This term refers to participant self-reported *Subject Area* they are teaching at the time the survey was completed (Science, Career, Technical and Agricultural Education (CTAE), Fine Arts, Foreign Language, Health & Physical Education, English/ELA, and Social Studies/History) (SPCS, 2023).

Years in program: This term refers to participant self-reported years in the program at the time of the survey.

Assumptions

An assumption is an element that connects the space between an argument's stated evidence and conclusion, the piece of support that is not obviously stated but that is required for the outcome to be valid (Simon & Goes, 2013). In my study, I assumed that the participants considered the survey questions seriously and answered the survey questions honestly and completely. It was also assumed that a sufficient number of participants would complete the survey instrument so that the outcomes would have statistical stability or reliability. Further, it was assumed that the sample (those who complete the survey) would be representative of the population.

Scope and Delimitations

The scope of the study is defined as the parameters of the study (Simon & Goes, 2013). The scope of the study was the study state. The study participants were teachers who were enrolled in STACP who agreed to complete the survey.

Delimitations are characteristics that arise from the limitations in the scope of the study (Simon & Goes, 2013). I delimited my study to include only STACP candidates as participants. I delimited my study by choice of the survey instrument, which asks whether participants plan to continue teaching in the following school year as well as participants' reasoning for not choosing to continue teaching regarding the following areas: career, personal/family, and school satisfaction. The survey looked explicitly at components that identify possible reasons for attrition in the areas of career, personal/family, and school satisfaction among individuals and programs. The survey consisted of a limited number of questions to which participants were limited to a choice of response.

Limitations

Limitations are probable weaknesses in a study that are not controlled by the researcher but could affect the outcome (Simon & Goes, 2013). Limitations stem from the methodology and study design and have the potential to limit the direction and results of the study (Simon & Goes). My study design was a quasi-experimental, cross-sectional survey. The limitations of the survey were the limited number of questions to which participants were limited in their choice of response. Another limitation is that surveys that are distributed with time constraints are problematic for people who struggle with real- or perceived-time constraints (Delva et al., 2002; Nayak & Narayan, 2019). This means that people are less likely to respond to surveys because they feel overworked and do not feel they have the time to complete a survey. Surveys also suffer the limitation of forcing respondents into particular response categories, thereby limiting the range of responses (Delva et al.; Nayak & Narayan).

Significance

This quasi-experimental, cross-sectional survey study was designed to gain an understanding of demographic, career, personal/family, and school satisfaction factors that influence STACP candidates to leave the profession within the first 3 years. Many researchers have completed studies on the high attrition rate of teachers in the United States. This study added to the literature by focusing on specifically understanding the attrition of alternatively certified teachers who leave the profession within the first 3 years and the factors that contribute to the departures (Carver-Thomas & Darling-Hammond, 2019; Guthery & Bailes, 2022).

The study provides school districts in the study state with understanding of demographic, career, personal/family, and school satisfaction factors that influence STACP candidates to leave the profession within the first 3 years. The study allows researchers and stakeholders to identify factors that may affect the attrition intentions of similar alternatively certified program candidates in other states. The potential contribution of the study is to advance knowledge in the discipline to understand factors that affect the attrition intentions of STACP candidates in the state. This understanding can be used by school districts and the state to make improvements that will result in better retention of STACP candidates.

Summary

Chapter 1 provided an overview of the problem of high rate of attrition among STACP candidates within a southern state. The gap in practice addressed is the need for a deeper, nuanced understanding of the attrition of STACP candidates within the study state. The purpose of the study was to gain an understanding of demographic, career, personal/family, and school satisfaction factors that influence STACP candidates to leave the profession within the first 3 years.

In Chapter 2, I describe the literature search strategy that I employed. I also explain the theoretical foundation. Next, I review the existing literature concerning attrition of alternatively certified teachers to provide a description of the state of knowledge about the study topic.

Chapter 2: Literature Review

This chapter presents a literature review of current research about alternatively certified teachers and the attrition of alternatively certified teachers to provide context for my research study and establish a clear connection between my research question, theoretical framework, and problem statement. Alternatively certified programs were first implemented as a means of filling the growing number of vacant positions as teacher shortages continued to grow nationwide (Lucksnat et al., 2022; McHenry-Sorber & Campbell, 2019; Pivovarova & Powers, 2022; Redding, 2022). However, many alternatively certified teachers leave after being in the profession for 1 to 3 years (Carver-Thomas & Darling-Hammond, 2019; Guthery & Bailes, 2022; Lucksnat et al., 2022; Zarra, 2019). This attrition of alternatively certified teachers has resulted in an increase in disruptions to the educational process and student learning due to districts having to fill the same position repeatedly (Carver-Thomas & Darling-Hammond, 2019; Redding & Henry, 2019; Sorensen & Ladd, 2020; Zarra, 2019). This literature review aided in understanding the factors that lead to attrition of alternatively certified teachers. The literature review is divided into four sections: (a) alternatively certified teacher attrition, (b) alternative certification preparation programs, (c) alternatively certified teachers, and (d) effectiveness of alternative certification teachers.

Literature Search Strategy

To assemble this comprehensive literature review, I read numerous peer-reviewed scholarly journal articles, reports, and books on topics related to alternatively certified teachers. I used the following databases to locate current research studies appropriate for

this review: Walden University's Thoreau, Education Resources Information Center (ERIC), EBSCOHost, Education Source, Academic Complete, Sage, Google Scholar, and ProQuest Central. I used specific keywords and terms to find the relevant and professional literature: *alternative certification, alternative certification of teachers, teacher shortage, attrition of alternative certification teachers, career changers education, alternative preparation programs of study state, teacher shortage of alternative certification programs, alternative certification program high attrition, teacher shortage nationwide, alternatively certified teachers, alternative teacher candidates, and attrition/retention alternative certification*. To thoroughly examine the literature, I conducted keyword searches of all terms, both individually and in combination, until I found no new references. As a final measure, I used a citation search in Google Scholar to show that all references and their citations were exhausted.

Theoretical Foundation

The study is grounded by the emerging theory of teacher attrition developed by Nguyen et al. (2019). Nguyen et al. found that three groups of factors are associated with teacher attrition: teacher personal factors, school factors, and external factors. He described each of these factors as follows.

- Teacher personal/family factors include teacher characteristics (age, gender, race, marital status, number of and age of children, career satisfaction, and full-time employment, and teacher qualifications (academic degree, highly qualified, internship, certification, and experience).
- School satisfaction factors include school organizational characteristics (size,

location, grade levels, governance, student discipline, administrative support, teacher collaboration, teacher leadership, professional development, classroom autonomy), school resources (class size, teaching materials, classroom assistant), student body characteristics (student achievement, race and socio-economic demographics, size of IAP/LEP enrollment, race/gender congruence).

- External factors include accountability (teacher evaluation, teacher efficacy, principal efficacy, merit) and workforce (employment rate, late hiring, retention bonus, salary, union).

I chose this framework because it is based on an extensive meta-analysis of the most up-to-date research on teacher attrition by Borman and Dowling (2008) that was foundational in understanding teacher retention and attrition.

A few studies have used the framework to understand teacher attrition in local contexts. Fuller and Pendola (2020) used the meta-analyses of Nguyen et al (2019) and Borman and Dowling (2008) to understand the teacher labor market in Pennsylvania. Specifically, they determined the factors that accounted for the annual demand for newly hired teachers within the state. Their results indicated that external factors such as pension benefits and stagnant salaries played a role in the attrition of teachers but that school factors such as the location of the school (rural vs. urban) played a role as well. Rural districts because of lower levels of funding and their distance from the social amenities of cities pay are less able to recruit new teachers. However, rural districts are more likely to retain their teachers than urban districts. Fuller et al. also found that

teacher attrition was greater in large districts and that attrition was greater in districts with large enrollments of students living in poverty. Nguyen (2020) used the meta-analysis from Nguyen et al. and Borman and Dowling to help understand factors that affect teacher attrition in the state of Kansas. Nguyen found that Kansas teachers were substantially more likely to leave their employment than were teachers employed in adjacent states. Factors that influenced teachers' decisions to leave included stagnant and decreasing salaries, student disciplinary issues and administrative support.

In this study, I explored the-level of teacher attrition among STACP candidates within a southern state. The theoretical framework informs the study approach in that the data will be collected by a survey that is designed to collect data related to teacher personal factors, schools' factors, and external factors. Nguyen et al. (2019) emerging theory of teacher attrition explains how three broad groups of factors (personal, school, and external) are associated with teacher attrition. Nguyen et al. emerging theory informs the research questions in that they ask STACP teachers how personal, school, and external factors affect their decisions to stay or leave the teaching profession.

Literature Review Related to Key Concepts and Variables

Research About Alternatively Certified Teacher Attrition

Many critics state that the lack of preparation of alternatively certified teachers entering the profession and the ease of entry into these programs may contribute to the higher attrition rates (Beck et al., 2020; Bowen et al., 2019; Garcia & Weiss, 2019). Researchers have argued that even though the number of alternatively certified teachers hired is increasing, their training and career longevity leaves much to be desired (Zarra,

2019). Growing evidence shows that alternatively certified teachers are 17% more at risk of turnover than traditional certified teachers, especially within the first 3 years (Carver-Thomas & Darling-Hammond, 2019; Redding & Henry, 2018; Redding & Smith, 2019). In particular, turnover was higher than average in specific areas and fields of alternatively certified teachers when observing Title 1 Schools (50%), top 25 schools serving students of color (90%), and special education teachers (80%) (Carver-Thomas & Darling-Hammond, 2019). Math or science alternatively certified teachers have an attrition rate of 20% (Newton et al., 2020), whereas Teach for America had the highest turnover rates of any program especially during the first 3 years (Redding & Henry, 2019; Redding & Smith, 2019).

Researchers have identified multiple factors that may contribute to high turnover among alternatively certified teachers, including feelings of being unprepared, the type of certification program that was completed, lack of content knowledge about how to be successful within the classroom, stigma or frustration, and a loss of desire to continue teaching. Alternatively certified teachers have acknowledged feeling unprepared for the field as a primary reason for choosing to leave teaching as they felt they were hindering the education of their students (Redding & Henry, 2018; Sorensen & Ladd, 2020). In terms of teachers' preparation to handle situations related to curriculum development, pedagogical practice, differentiation of lessons, behavior and classroom management, and discipline situations, traditionally certified teachers have shown a clear advantage due to their training (Bowen et al., 2019). Redding and Smith (2019) also found that alternatively certified teachers felt lower levels of preparedness due to their lack of pre-

service training, which resulted in the teachers not wanting to remain in the classroom. The findings of alternatively certified teachers' feeling of unpreparedness for the classroom as previously cited contradicts research that shows many alternatively certified teachers felt more prepared and more inclined to stay longer, which in return had a positive impact on student learning (Darling-Hammond, 2020).

Researchers have found that the higher turnover rate of alternatively certified teachers is related to alternative certification program inability to adequately prepare teachers by equipping them with the necessary tools and content knowledge that results in their success in the classroom (Cochran-Smith, 2020; Sanders & West, 2020). However, not all researchers have identified alternative teaching certification programs as the main factor contributing to the high attrition rate of alternatively certified teachers. Instead, other research has identified factors including the stigma experienced by some alternatively certified teachers and their resulting frustration with teaching (Van Overschelde & Wiggins, 2020; Van Overschelde & Piatt, 2020), overall lower academic qualification levels and less experience of individuals that come through alternative certification programs (Sorensen & Ladd, 2020), and alternatively certified teachers' unrealistic expectations around student motivation (Kwok & Cain, 2020).

Alternative Certification Preparation Programs at the National, State, and School District Levels

Alternative certification teacher programs were developed in the 1980s during an unprecedented teacher shortage in P-12 education (Mentzer et al., 2019; Newton et al., 2020; Pivovarova & Powers, 2021; Rose & Sughrue, 2020). In 1983, only eight states

reported having an alternative certification program that assisted individuals into the classroom (Boyd et al., 2006; Boyd et al., 2007; Brenner et al., 2015; Grossman & Loeb, 2021; Hawley, 1992; Humphrey et al., 2008; Marinell & Johnson, 2014; Pazyura, 2015; Sanders & West, 2020; Wilson, 2014). By the 1990s, alternative certification programs existed in more than half of the United States primarily because of the overwhelming need for teachers in urban schools (Rose & Sughrue, 2020; Zang & Zeller, 2016). By the early 2000s, 46 states had authorized some variation of a nontraditional certification route (Birkeland & Peske, 2004; Rose & Seghrue, 2020). As of 2021, all 50 states and the District of Colombia had begun to identify and offer some type of alternative certification route to bring more teachers into the profession (Grossman & Loeb, 2021; Matsko et al., 2022; National Council on Teacher Quality [NCTQ], n.d.; National Education Association, April 29, 2020; Sanders & West, 2020; U.S. Department of Education Office of Postsecondary Education, 2016; Zhang & Zeller, 2016).

Within the United States, there are three distinct ways that an individual could become a certified teacher through an alternative certification program: national-based programs, state-based programs, and district-level programs. National-based programs are set up to provide alternative licensure to individuals in multiple states to help school districts obtain qualified and talented educators for the classroom more quickly and in a wide range of subject matters. Some states use national programs that agree to adhere to their state-level education standards when licensing candidates (Hill-Jackson et al., 2021; Redding, 2021). Other states have opted to rely solely on their state- and school district-based alternative teacher certification programs to supply sufficient candidates for their

classrooms. The second type of alternative teacher certification program is offered at the state level. State alternative teaching certification programs are the more common avenue for obtaining alternative certification since they adhere to each specific state's requirements for prospective teachers (Redding, 2021). The third type of alternative teacher certification program is the district-level program, which is the least common route to certification since they are specifically designed for the needs of a particular school district rather than preparing the individual for teaching throughout the state or the country (Day & Nagro, 2023; Redding, 2021). A candidate's success in a district-level program leads to the individual being recommended for full licensure within that state.

The national, state, and school district alternative teacher certification programs vary in duration, format, size, scope, competitiveness, entry requirements, delivery method, group or agency responsibility, and teaching strategies (Carter Andrews et al., 2019; Carver-Thomas et al., 2019; Garcia & Weiss, 2019; Sutchter et al., 2019). The duration of the training in these programs ranges from 2 weeks of intensive study to 2 years of part-time study. Some programs may require candidates to complete coursework through a university, but most programs require candidates to hold a bachelor's degree that is not in the field of education (Clafflin et al., 2022; Sheppard et al., 2020; Wojcik et al., 2023; Yin & Partelow, 2020). States and districts have been forced to develop plans to staff their schools by recruiting two main types of candidates: (a) teachers with no prior experience or individuals who have graduated from college with a degree that is not in education, or (b) individuals who have chosen to leave their prior career to move into teaching (Zarra, 2019).

Alternative Certification National-Based Programs

The American Board, Teach for America, and Moreland University, formerly known as TEACH-NOW, are national programs known to assist individuals seeking teaching positions through an alternative route. The Every Student Succeeds Act of 2015 that replaced the No Child Left Behind Act of 2002 mandated that all states would be given the control to define certification and licensure requirements for their teachers but that alternatively certified teachers had to be equally dispersed between all types and levels of schools (Sheppard et al., 2020). The act also mandated that states must collect data each year to ensure that they are following the requirements (Sheppard et al., 2020). The U.S. Department of Education in 2015 released national data showing that one-third of teachers entering the field were doing so without having completed a traditional teacher preparation program and either had an emergency permit or were enrolled in an alternative certification program (Darling-Hammond, 2020).

The American Board program, founded by the U.S. Department of Education in 2001, provides certification in several different subject areas to individuals who are currently working in careers not related to education through an online self-guided program (American Board, n.d.-a; Cohen & Wyckoff, 2016). As of 2021, only thirteen states had partnered with the American Board to certify teachers: Arkansas, Florida, Idaho, Idaho, Mississippi, Missouri, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, Wisconsin, and West Virginia (American Board, n.d.-b). Only Mississippi and West Virginia have a GPA requirement that is calculated from applicants' bachelor's degree grades before they can be accepted into the program (American Board, n.d.-b).

The American Board is an entirely web-based accreditation program that takes prospective teachers through a self-paced, self-guided program that include two assessments candidates must pass before they are certified within their state (American Board, n.d.-c; Cohen & Wyckoff). One-third of the graduates from the program enter the STEM fields, and principals have reported that they feel the American Board has prepared teachers who are equally effective as graduates of other alternative certification programs (Cohen & Wyckoff). The retention rate of American Board teachers is 85% for the first 3 years (American Board, September 29, 2015).

Teach for America (TFA) was founded in 1990. The intent of the program is to prepare a diverse network of leaders from all fields to lead the fight against educational imbalance in urban and rural communities (Mawhinney & Rinke, 2020; TFA, n.d.-a). The TFA pursues this mission by recruiting undergraduates with non-educational degrees from prestigious colleges across the United States who commit to 2 years in a partnership with a high-needs school (Ho, 2019; Jez, 2020; Mawhinney & Rinke; Zarra, 2019). The TFA program continues to be the most well-known and researched national-based alternative certification program in the United States (Thomas & Mockler, 2018; Wronowski, 2018). Corp members must complete a 5-week summer camp where they learn teaching methodology (Curran, 2017; Mawhinney & Rinke)

Although TFA represents only 29% of the teaching force entering the field of education (USDOE, 2015), the organization has prompted the formation of other alternative routes to teaching and is considered a significant presence in education policy. Teach for America is not designed in the same way as standard alternative certification

programs. Students enter the classroom on temporary teaching licenses, but most states require that the candidates work toward full teaching certification (TFA, n.d.-c). Some states offer an opportunity for candidates to enroll in a state-funded alternative certification program. These programs require additional coursework but enable the candidate to get fully licensed within that state (TFA, n.d.-c). Teach for America is currently available in 29 states and the District of Columbia including Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Idaho, Indiana, Illinois, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Mississippi, Nevada, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Washington (TFA, n.d.-b). Teach for America corps members have the lowest turnover percentage from first year to the second year compared to other alternative certification program, but that the number increases after their 2-year commitment is over (Redding & Henry, 2019). By the end of their third year, 91% of TFA teachers had turned over compared to 69% of alternative entry teachers (Redding & Henry). This notable increase in turnover among TFA participants in the third year is not surprising given that the program only lasts 2 years and many participants approach it as a short-term commitment. Schools that struggle with consistently high teacher attrition may prefer to hire TFA teachers because they are committed to 2 years (Redding & Henry).

Moreland University, formerly known as TEACH-NOW, was created in 2011 under the National Center for Education Information with the objective of teaching individuals how to assess the learning situation and then design and implement

curriculum that meets those learners' needs (Feistritzer & Gollnick, 2018; Moreland University, n.d.-a). The founder of the original TEACH-NOW wanted the online program to be a game changer and a solution to everybody's problem within the industry by offering an inexpensive, universally accessible, and speedy teacher certification matched with the professional standards in the field (Carney, 2019; Cochran-Smith et al., 2020). Moreland University is a 9- or 12-month, online teacher preparation program that exposes participants to activity-based inquiry and fosters collaboration through cohorts of 10-15 candidates (Moreland University, n.d.-b). Prospective candidates are required to have a bachelor's degree and content-area knowledge and must complete an online application that includes essays, transcripts, and identification requirements along with a highly favored 3.0 GPA or higher (Carney, 2021). For candidates to be granted licensure, they must also pass the state's certification exam, which assesses content knowledge and other skills (Carney, 2021; Moreland University, n.d.-b).

Unlike many of the other national-based alternative certification programs, Moreland University sets up its certification-only program in eight modules and requires their teachers to complete a 12-week face-to-face clinical experience with a cooperating mentor in their school or to have a virtual mentor which is provided by the university (Carney, 2021; Moreland University, n.d.-b). During this supervision, Moreland University candidates have their lessons recorded by the Moreland University instructor who can provide immediate feedback to the candidate. The recorded lesson by the candidate is then used as a teaching tool within the online Moreland University class. Moreland University also offers a 12-month training program that is a certification-plus-

degree program that is made up of eleven modules, eight of which must be face-to-face (Carney, 2021; Moreland University, n.d.-b).

Troops to Teachers (TTT) is a national alternative certification program offered in 31 states for those in the military wishing to pursue teaching as a second career (Department of Defense DAN TES program, n.d.). The program was developed by the United States Department of Education in collaboration with the United States Department of Defense in 1993 with the objective of recruiting non-educational degree veterans to teach in low-income critical subject areas, provide financial support, and coursework assistance to meet initial license requirements (Goodrich, 2019; Irvin et al., 2020; Lachlan et al., 2020; U.S. Army, n.d.). Troops to Teachers is comprised of former or retired members of the Army, Air Force, Navy, Marine Corps, Coast Guard, Reserve components, and the National Guard (Proud to Serve Again, n.d.). Troops to Teachers provides counseling and placement assistance for eligible members of the military which consists of guidance on how to meet state teaching certification requirements and on choosing a certification program (Gordan & Parham, 2019; Proud to Serve Again, n.d.). In addition to counseling and placement assistance, TTT also provides help with resume writing, job postings, and letters of recommendation (Proud to Serve Again, n.d.). Troops to Teachers candidates will often go into the areas of math, science, special education, or CTAE programs (Gordan & Parham, 2019).

The program requires veterans to commit to teach for 3 years and provides a bonus as an incentive for them to teach in an eligible or high-need school (Lachlan et al., 2020). Colorado's Troops to Teachers program reported that they advise and place

veterans throughout the state and recorded an 85% retention rate in 5 years, higher than any other alternative certification program (Lachlan et al.).

Unfortunately, as of July 2020, the Department of Defense announced the phasing out of the TTT program (Olmstead, 2021). It was ended completely in May 2021, and the funds have been reallocated to programs aligned with the National Defense Strategy.

Alternative Certification State-Based Programs

Every state offers its own alternative routes and has its own certification requirements for those who hold a bachelor's degree in a subject other than education who want to become teachers. This requirement was established by the passage of Every Student Succeeds Act of 2015 which granted states the ability to define certification and licensure requirements (Sheppard et al., 2020). Alternative certification coursework requirements can vary widely within and between states (Wojcik et al., 2023). States decide the minimum length of time for which alternatively certified teachers are required to train. Some states require a two-week training, some require the candidate to earn their master's degree, and others expect the coursework to be completed within a year or while the candidate is teaching. Some states, such as Texas, California, and New Jersey, rely heavily on alternative certification programs with one-third of teachers hired from these programs (Loeb & Myung, 2020). These states have reported that these alternatively certified teachers possess strong academic backgrounds and life experiences compared to traditional teachers (Carver-Thomas & Patrick, 2022; Loeb & Myung, 2020; Putman & Walsh, 2021).

States such as Louisiana offer three types of alternative teaching preparation

programs: Practitioner Teacher Alternative Certification Program, Master's Degree Program, and the Certification-Only Program (Teach Louisiana, n.d.). The Practitioner Teacher Program requires the candidate to first complete 9–12 credit hours of coursework at a collegiate institute before they teach in the classroom (Woods, 2016). After they complete the initial coursework, the candidate will continue with coursework while also teaching full time. The Master's Degree Program is like the Practitioner Teacher Program, except it results in the candidate's receipt of a master's degree along with certification. The Certification-Only Program is intended for individuals who do not wish to pursue a master's degree or participate in full-time coursework. During the first year of teaching, all new teachers are required to complete a 3-hour seminar each semester and receive one-on-one supervision (Wood).

States such as the study state have implemented the State Alternative Preparation Program (STAP), now known as STACP. The program contributed more than 12% of the overall teacher workforce in 2017-2018 (SPCS, 2019). The program allows individuals to enter the education field by taking education certification tests, completing pedagogical coursework, and logging 50 hours of practicum experiences (SPCS). Final assessment candidates must successfully produce an exit portfolio, which renders the candidate eligible for clear and renewable teacher certification within the state (SPSC). The program is designed for college graduates who hold a minimum of a bachelor's degree but who did not initially complete a traditional teacher preparation program. The program allows candidates to be employed as classroom instructors while they are completing the program, which can take anywhere from 1 to 3 years. Program candidates are each

assigned a candidate support team composed of a school-based administrator, a school-based trained coach, a provider supervisor, and a content specialist (SPSC).

Other states such as Oklahoma offer an alternative placement program that provides an opportunity for those with bachelor's degrees or higher to teach in accredited schools within the state (OK Department of Education, n.d.). To be eligible for the program, candidates must have at least 2 years of work experience related to the subject area of specialization and must pass state testing. Candidates also have no more than 3 years to obtain a standard certification by completing professional education classes, and the hours vary depending on degree level (bachelor's: 18 hours, master's and doctorate: 12 hours). To obtain certification, prospective teachers must complete their professional education hours at a higher-education institution that is approved by the state.

Some states, such as New York, offer alternative teacher preparation programs that are part of a joint program between institutions of higher education and local schools (Zarra, 2019). To be eligible to participate in the program, candidates must have a minimum of a bachelor's degree, which should be in the subject area in which the candidate plans to teach. These programs are typically accelerated and lead to the award of either a master's degree or standard certification, depending on the curriculum completed. New York offers many ways that candidates can enter the teaching field within the state; the individual's education and prior experience will help determine the program that is best suited for them. At the time of research, no recent studies were available pertaining to New York alternative teacher preparation programs beyond the State's Department of Education website.

Alternative Certification District-Based Programs

Many school districts across the United States have decided to start their own certification programs to help fill vacancies within their schools. Most of these programs work closely with the state's Department of Education to ensure they are following all licensure requirements. The New York City (NYC) Teaching Fellows program began in 2000 in the hopes of bringing teachers to the students in areas that needed them the most (NYC Teaching Fellow, n.d.). It is one of the country's largest and most recognized urban alternative certification programs in the United States. The program is designed to encourage college graduates and career changers to teach in high-needs subject areas within the classrooms of New York City. The New York City Teaching Fellows program focuses on equipping teachers with diverse backgrounds with the skills that are needed to be successful. The candidates complete an intensive 7–8-week summer program that focuses on core teaching skills and techniques required to be an effective teacher regardless of content area, setting, or grade level. New York City relies on one other district-based alternative route to certification that focuses on preparing individuals from diverse backgrounds to teach in high-need urban schools by providing mentoring and coaching. This program, the New York City Teaching Collaborative, is a 5-month program that starts in January and ends in June.

Kentucky began its teacher internship program in 1985 with the objective of offering a program that would assist new teachers. In 1990 the Kentucky Teacher Internship Program (KTIP) was supported through the Kentucky Education Reform Act, with the Education Professional Standards Board overseeing and governing all aspects of

the teacher certification (Kentucky State University, n.d.). Every new teacher must succeed in the KTIP program to become a certified teacher within the state (Kentucky State University, n.d.). The program provides support through an individualized professional learning community that includes the principal, local resource teacher, and a teacher educator. Kentucky Teacher Internship Program interns complete the comprehensive program through a year-long course that will verify their ability to assess student performance, plan for effective instruction, and collaborate to meet students' learning needs (Kentucky Department of Education, n.d.; Kentucky State University, n.d.).

The Los Angeles Unified School District (LAUSD) Intern Program was authorized in 1984 as part of educational reform to assist in the critical statewide shortage of teachers in designated fields (Math, English, and Science). Since then, 13,000 teachers have completed the LAUSD District Intern Program and earned full certification (Bruno & Strunk, 2019). The program continues to serve individuals who are interested in pursuing a career as a teacher in urban public schools. The program focus continues to remain on filling positions in Math, Science, and English.

In South Carolina, local school districts have begun to develop partnerships with the State Board of Education to help grow their own teaching labor force. Programs like Greenville Alternative Teacher Education Program (GATE) and TeachCharleston are district-embedded opportunities for local employees to obtain certification through a cohort model focusing on professional development through on-the-job training also known as a teacher residency model (Sanders & West, 2020). TeachCharleston and

GATE both offer a basic training, 2-week program prior to candidates being allowed in the classroom as a teacher. All candidates in both programs must possess degrees in a specified area of need and have successfully passed the state's licensure exams (Sanders & West, 2020; South Carolina Department of Education, 2023). TeachCharleston and GATE programs are designed to increase the number of teachers in Math, Science, English, Social Studies, and World Languages both at the secondary and middle-school level and specifically in high-need schools (Charleston County School District, n.d.; Greenville County School District, n.d.). Both programs follow the state requirements for certification (National Council on Teacher Quality, January 2020). Both programs also require a 3-year commitment to their specific districts as a classroom teacher as well as participation in summer institutes and schoolyear seminars designed for that specific district and taught by district personnel and educators (Charleston County School District, n.d.; Greenville County School District, n.d.). The programs, however, differ regarding their partnerships. The Greenville Alternative Teacher Education Program has a partnership with Public Education Partners (PEP), which is a community program that supports, strengthens, and advances public education and student achievement within the county (Public Education Partners, n.d.).

Boston Teacher Residency is often referred to as the "first" residency programs in the country. The program describes itself as producing the residency model which has been replicated across the country to ensure that new teachers are equipped to effectively lead urban classrooms (Reagan et al., 2021). Boston Teacher Residency does this by placing candidates into specific schools that are high-needs or considered hard-to-staff

schools and by tailoring that candidate's program to specifically prepare them for the subject area.

The Boston Teacher Residency program lasts for 13 months and requires a commitment to teaching in the Boston Public schools for 3 years once the residency is completed. The retention rate after 3 years for the Boston Teacher Residency is 80%, and even after 5 years, the retention rate is still close to 76% (Boston Teacher Residency, n.d.-a; D'Amico et al., 2022; Reagan et al., 2021). Boston Teacher Residency is unlike any district-level program because it requires the candidates to pursue additional licensure in either Special Education or English as a Second Language, making their candidates more diverse in their academic qualifications (Trauth, 2020). The Boston Teacher Residency program not only fill positions into hard-to-staff schools or high-needs areas, but it has also been able to show greater student achievement gains on standardized test scores compared to scores of students of new and veteran teachers (Boston Teacher Residency, n.d.-b; Nava-Laderos et al., 2020).

The study state's support of alternative routes to certification led to the development of small district-based teacher preparation programs that can be found in over nine school districts across the state (SPSC). Gwen County Public Schools has a program titled Teach Gwen and is one of the programs that was approved by the state in 2008 to prepare professionals within their district to become fully certified teachers. The requirements and time length for Teach Gwen are like that of the STACP program. Candidates must be employed full time at Gwen County Public Schools, have earned a bachelor's degree or higher from an accredited institution, completed the SSACE

program admission assessment, passed the SSACE content assessment, and completed the Study State Educators Ethics Entry assessment (SPSC). Teach Gwen was the first program to be established at the district level and is now used as a model for the other district-level programs throughout the state. Teach Gwen has had 493 teachers complete the application to become certified educators, and their retention rate holds at 93% (Farner, September 22, 2016). As of 2021, Teach Gwen had only been researched once; no other programs in the state are mentioned in any research. Therefore, no further evidence can be provided about Teach Gwen or the other eight district-level programs within the state.

Characteristics of Alternatively Certified Teachers

Alternatively certified teachers are sometimes referred to as career changers or career switchers within the field due to individuals changing career paths after years within another occupation or right after finishing a college program (Harris et al., 2019; McLean et al., 2019; Troesch & Bauer, 2020; Varadharajan et al., 2020). A career changer can be described as someone who has been employed in a career other than teaching for 2 years or more, and/or is a mature-age student typically over the age of 25, and/or has entered an alternatively certified program 8 years or more after finishing college (Varadharajan et al., 2020). The original objective of alternatively certified programs in the 1980s was to attract career changers interested in becoming teachers (Redding & Henry, 2019; Redding, 2022; Ruitenburg & Tigchelaar, 2021). In 2016, career changers made up 18% of teachers in the United States (McFarland et al., 2018; NCES, 2018). Dieterich and Hamsher (2020) reported that in the last 20 years there had

been a spike in adults changing careers, with a larger number transitioning into education. Due to their advanced age when entering the teaching profession, research has indicated that career changers typically show more general knowledge, maturity, and professional job preparation which make them viable candidates to districts (Dos Santos, 2019; Surrette, 2020; Varadharajan & Buchanan, 2021; Vanderburg & Fisher, 2022). Many educational leaders think teachers who are alternatively certified add new dimensions and characteristics that help them deal with children differently or more effectively than teachers from traditional programs (Dadvand et al., 2023; Gordon and Newby Parham, 2019). Alternatively certified teachers bring unique skills into the classroom through their ability to help prepare students for entry-levels positions (Bowers & Myers, 2019). Students who are taught by career changers are exposed to the valuable life experiences that teacher brings to the classroom which cannot be replicated in any textbook (Varadharajan & Buchanan, 2021).

Motivations of Career Changers to Transition Into Teaching

Career changers' motivations to transition from their previous career into teaching has been studied by many researchers (Brandt et al., 2019; See et al., 2020; Siostrom et al., 2023; Varadharajan & Buchanan, 2020). Career changers enter the field of education for a variety of reasons including the influence of other people, prior knowledge about teaching (experience or knowing someone who teaches), resources to support the transition (time and money), or a decisive event (Newton et al., 2020). Many alternative certified teachers often state that personal choices are what led them into education, such as family, financial security, and age (Newton et al.). Many career changers felt the need

to seek personal fulfillment in their lives and thought that entering education would provide the fulfillment they desired (Siostrom et al., 2023). Career changers transition into teaching with the desire to make a difference and experience meaningful work (Dieterich & Hamsher, 2020). Researchers have argued that career changers have potential advantages over career teachers as they are motivated to share their subject expertise, bring transferrable skills that are both personal in nature and stem from their previous career, and bring practical experience and real-world application into the classroom (Ruitenburg & Tigchelarr, 2021). The researchers also found that career changers have firm beliefs about teaching and the importance of education in a student's life (Ruitenburg & Tigchelarr). Intrinsic factors (rewards of teaching, feeling a sense of purpose, and social contribution) were more persuasive for alternatively certified teachers than extrinsic factors (job satisfaction, stress, personal/family reasons, and working conditions) (Shwartz & Dori, 2020; Perryman & Calvert, 2019). Motivation factors often influence career changers' decisions to stay in the field or to leave (Omar et al., 2018).

Alternatively certified teachers are motivated by the belief that it is their civic duty to enter the field and share their knowledge of their subject area with the younger generation (Coppe et al., 2021; Siostrom et. al, 2023; Varadharajan et al., 2019). A high percentage of career changers transition into education motivated by the desire to provide a social contribution such as sharing their knowledge and love of their particular subject area (85%), seeking job satisfaction (94%), or due to external factors such as stress from their previous occupation (29%) (Varadharajan et al., 2020). A study was completed on 500 career changers to further expand on the motivations that influenced them to go into

the profession (Varadharajan et al.). They identified the following factors contributing to their decision to enter a career in teaching: qualities of a teacher (94%), career satisfaction (94%), knowledge of subject/content area (87%), social contribution (87%), stable and secure career (81%), share previous knowledge (78%), ease of access into teaching programs (44%), and job stress from previous career (29%). The main reason that career changers transition into teaching was their desire to make a difference and pursue meaningful work (Dieterich & Hamsher, 2020). There are two main factors that influenced career changers to go into teaching, including the social and personal aspects of the career changers' lives (Perryman & Calvert, 2019). Alternative certification programs provide opportunities to candidates to enter teaching, and that if these types of programs were unavailable, those individuals would most likely have never gone into a teaching position (Redding & Smith, 2019).

Challenges Experienced by Career Changers Within the Profession

Extrinsic and/or personal factors help motivate career changers to transition into the field, but they are also the same reason that they leave teaching (Harmsen et al., 2018). Researchers have directly linked teacher retention and attrition to various factors including stressors that lead to burnout (Farmer, 2020; Hester et al., 2020); lack of administrative support (Troesch & Bauer, 2020); challenges with classroom management, time management, and management of grading and paperwork (Vaidya & Thompson, 2020); and teacher mentoring programs (Redding et al., 2019; Varadharajan et al., 2020). Numerous factors that negatively influence alternatively certified teachers' decision to remain in the profession, including: disillusionment with job placement, course load and

the number of students, unsatisfactory responsibilities and workload, lack of knowledge on state mandates, lack of support, lack of respect as a professional, personal view that teaching is temporary, time of year hired, and low salary (Ramos & Hughes, 2020; Chambers Mack et al., 2019). The presence of any of the factors pertaining to either the teacher or the school could result in turnover of alternatively certified teachers (Gilmour & Wehby, 2020).

Second career teachers experienced challenges and difficulties when it came to teaching such as: frustration in trying to explain complex concepts to struggling students, transition from being an expert in their field to being a novice, and the frustration with salary and requirements of the job (Shwartz & Dori, 2020). Another reason that alternatively certified teachers choose to leave is pressure from work that leaves them feeling dissatisfied, demotivated, bored, and unclear of their overall role (Newton et al., 2020; Rose & Sughrue, 2020; Vaidya & Thompson, 2020). Job satisfaction correlated with a teacher's motivation and commitment to the schools, and those who were unsatisfied had a higher chance of relocating to another school or abandoning education altogether (Lopes & Oliveria, 2020). Many alternatively certified teachers described teaching as a "reality shock" when they entered the classroom, stating that the fantasy of feeling fulfilled by the ability to pass on their subject expertise and real-world knowledge quickly diminished when they experienced the reality of teaching (Ruitenburt & Tigchelaar, 2021). Indeed, if the sole reason that career changers transitioned into teaching was to have a positive influence on students and feel fulfilled, these candidates were quickly left feeling unfulfilled, which would potentially influence their decision to

stay or leave (Rose & Surghue, 2020).

Many alternatively certified teachers enter the profession believing their unique skills and life experience is all they need to be a successful teacher (Audrain et al., 2022). What many of these teachers discover instead is that they are unprepared for the hard transition into teaching, which leaves them feeling frustrated and defeated by the high demands that come with teaching (Bridgstock et al., 2019). Extrinsic factors have also been identified as challenges for career changers, including a lack of preparation to enter the classroom and the failure of induction support to prepare them for the professional responsibility involved with teaching, with even the most basic tasks leaving individuals feeling overwhelmed, overworked, and stressed (Dieterich & Hamsher, 2020; Kwok & Cain, 2021). When alternatively certified teachers felt that the stress from the job had become too much, they would make the hard decision to stay, return to their former occupation, or pursue something else entirely (Omar et al., 2018). In addition, when alternatively certified teachers choose to leave, 37% continue to work in education but not in the classroom, 11% choose a noneducation occupation, 27% enter graduate school, and 2% care for a family member (Redding & Smith, 2019).

Effective Administrative Support

Administrative support in education is essential and is frequently associated with teacher dissatisfaction and satisfaction (Redding & Smith, 2019; Toropova et al., 2021). Principals play a pivotal role in the retention of teachers because they can design a school culture that supports their teachers, sets clear goals, and provides their new teachers with the resources they need to succeed (Shuls & Flores, 2020). It has been argued that

administrative support was a critical factor in determining whether teachers left or stayed (Geiger & Pivovarova, 2018). Teachers who felt more supported by their administrator and had positive working relationships with their colleagues were more likely to stay versus those who did not feel supported by their administrator and/or did not have positive working relationships with their colleagues (Geiger & Pivovarova, 2018; Redding & Smith, 2019; Semarco & Cho, 2018).

Alternatively certified teachers were surveyed after they had made the decision to leave and discovered that about one-third cited a lack of support from school administration, displeasure with how the school was overseen, and the heavy workload as reasons they chose to leave the profession altogether (Zalveleisky et al., 2021).

Administrative support in three districts that reported having a high percentage of their teachers choosing to remain in their current positions (Shuls & Flores, 2020). The researchers discovered that each school in all three districts was being led by supportive leaders or administrative teams that supported their novice teachers by creating an environment where they could collaborate, observe, and learn from teachers with more experience. The administrative teams also developed a culture of trust, openness, and academic freedom by respecting and valuing their teachers both inside and out of the classroom (Shuls & Flores). The districts also stressed the importance of developing a culture that supports teachers, but they also expressed that is important for the administrative teams to feel supported by the upper administrators at the district level (Shuls & Flores).

The Effectiveness of Alternative Certification Teachers

Effectiveness of an alternatively certified teacher is measured by two factors: how well the alternative certification program prepared them for teaching (Kwok & Cain, 2021) and how well the alternatively certified teacher has transitioned into their new role (Kwok & Cain, 2021; Rose & Sugrue, 2020). Successful programs require recruits to spend a full school year as apprentice teachers learning the craft from a veteran teacher before they begin to teach in their own classroom (Urban Teacher Residency United, 2023). The program has proven to be successful, with 70% of residents remaining in the classroom after 3 years when they had a year to work under a veteran teacher and to develop the confidence in themselves to be successful in their own classroom (Urban Teacher Residency United). Alternatively certified teachers have a statistically demonstrated need for more assistance with classroom management tasks than traditionally certified teachers (Kwok & Cain).

Researchers have found that those alternatively certified teachers who are effective educators usually enter the classroom with an open mind and are willing to learn as they go and consult with their colleagues when they need assistance (Rowston et al., 2020; Varadharajan et al., 2019; Watters & Diezmann, 2015). Moreover, for an alternative certification teacher to be effective, they must have the ability to collaborate with veteran teachers, be given the opportunity to observe and be observed by other teachers, be able to collaborate on ideas for lessons with others and be afforded the opportunity to learn about best practices and classroom management (Kwok & Cain, 2021; McLean et al., 20219; Varadharajan et al., 2020).

Given that novice teachers generally leave within the first 5 years due to lack of support from colleagues and administrators, it is imperative for schools to provide support to new teachers to encourage their growth and success as teachers and increase their chances of retention (Geiger & Pivovarova, 2018; Zalvelevsky et al., 2021). Furthermore, researchers have found that the lack of consistency in the intent, design, and delivery of alternative certification programs that are available has resulted in some candidates feeling unprepared to operate a classroom effectively (Doran, 2020; Kwok & Cain, 2021; Newton et al., 2020; Rose & Sughrue, 2020). The variation in how programs are set up by districts and administrated by different states, as well as the varying professional norms applied in these programs are what cause such a large divergence between alternatively certified programs throughout the United States (Redding & Smith, 2019). The researchers also stated that it is crucial to ensure alternative certification programs are universal in their approach to preparing candidates for the classroom to continue to produce successful teachers and avoid feelings of unpreparedness or overwhelm once they are in the classroom.

Administrative Support Effect on Retention of Alternatively Certified Teachers

The quality of administrative support was found to be the primary reason that alternatively certified teachers chose to stay or leave (Carver-Thomas & Darling-Hammond, 2019; Olsen & Huang, 2019; Podolsky et al., 2019; Redding et al., 2019). Support from administration and other school leaders in instructional context as well as emotionally and environmentally was the best predictor of whether retention or attrition would occur in teachers (Podolsky et al., 2019). Teachers' abilities to communicate with

staff, their perception of having a voice in decisions affecting their classrooms and students, their appreciation of the positive impact of professional development, and their receipt of overall administrative support as factors that significantly influence teachers' decision to stay (Podolsky et al.). Many administrators believe that alternatively certified teachers can adapt quickly to the school culture, tend to work well with students, and contribute to a more diverse workforce (Bartholomew et al., 2018). Administrators also have positive impressions of alternatively certified teachers and their programs and that they believed these individuals were adequately prepared due to the skills they brought from their previous careers, including collaboration with peers and their ability to engage in professional learning (Fairman et al., 2020).

Benefits of Mentoring Programs for Alternatively Certified Teachers

An effective induction program includes a mentor that helps the new teacher to successfully transition into their new role as a teacher (Kwok & Cain, 2021; Redding & Smith, 2019). Schools and/or districts that have implemented an effective mentoring program that allows novice teachers to feel adequately prepared for the classroom as well as a support system encompassing colleagues and administration have shown to increase the retention of teachers (Goodwin et al., 2019; Podolsky et al., 2019; Squires, 2019; Stolz, 2020). Researchers who have studied the effectiveness of induction programs have identified the following components as important to their effectiveness:

- The program is structured as a form of professional development,
- There is a mentor component,
- Support is tailored to provide information relevant to each specific teacher,

and

- The program teaches necessary skills to be successful in the classroom. (Kraft et al., 2018; Kwok & Cain, 2021; Kwok et al., 2021)

Induction programs with these components have shown positive results in their abilities to promote instructional growth, retain beginning teachers, and demonstrate positive outcomes on teachers' instructional practice and student achievement (Kraft et al., 2018; Kwok & Cain, 2021; Mitchell et al., 2019; Ruitenburg & Tigchelaar, 2021). Additional research found that alternatively certified teachers reported feeling more supported when the mentoring or induction programs included the following components:

- Teacher observations,
- Feedback sessions,
- Support of teachers' professional growth,
- Administrative support or backing of the program,
- An emphasis on building relationships,
- Provision of a mentor that taught in the same content area, and
- Collaboration between experienced and novice teachers. (Bowling & Ball, 2018; Morettini, 2016; Ruitenburg & Tigchelarr, 2021).

In addition, successful mentoring and induction programs should have a focus on social support by mentors and colleagues, instruction of strategies and guidelines for handling challenges in the classroom, and professional development geared toward their individual needs (Kwok & Cain, 2021).

Factors Affecting Alternatively Certified Teachers to Attrite

Factors impacting alternatively certified teachers have been identified in various studies addressing reasons why teachers choose to leave the profession. Alternatively certified teachers feel stressed and overwhelmed by the demands of the field (Chambers Mack et al., 2019). Twelve reasons were identified that alternatively certified teachers cite as the reason for attrition: lack of administrative support, low salary, budget restrictions, lack of academic freedom, lack of respect and apathy from students, lack of equipment, student conduct, lack of opportunity to advance, lack of basic job satisfaction, status in the community, extra duties, and forced participation in extracurricular assignments (Deever et al., 2020). A study completed of STEM alternatively certified teachers and attrition, found that teachers developed distress as a result of experiencing the additional time, planning, resources, and legal responsibilities involved in teaching that fall outside of regular classroom duties (Dicicco et al., 2019).

Researchers identified several motivating factors that help support high teacher retention, including teachers' relationships with students, the responsibilities of teaching, experiencing fulfillment both from a professional and personal standpoint, and having confidence in their abilities (Harmsen et al., 2018; Kraft & Lyon, 2022; Suhaini et al., 2020). Many alternatively certified teachers who had a desire to continue teaching cited positive and rewarding relationships with students in the classroom as their impetus to remain in the profession, acknowledging that they could see the difference they were making in their students' lives (Kelchtermans, 2019). The relationship between a teacher and their students served as a source of self-esteem for the teacher, which translated to

feeling a sense of professional and personal life fulfillment (Kelchterman). Positive relationships between teachers and students also have an impact on student achievement, researchers have found students with a teacher who is confident, effective in teaching their students, and has close interactions with students experienced increases in academic achievement (Kraft & Lyon, 2022; Suhaini et al, 2020).

Given that teacher quality accounts for 30% of student achievement and performance, ensuring that alternatively certified teachers are well prepared is critical. Findings show that students of alternatively certified teachers who have completed a well-developed alternative certification program produced higher state testing scores than students with teachers who completed a less rigorous program (Bowling & Ball, 2018; Mora-Ruano et al., 2019; Whitford et al., 2019).

Research About Subject Area Taught by Alternatively Certified Teachers

States have used alternative certification routes for decades to address many aspects of teacher shortage, including staffing issues at high poverty schools and in Science, Technology, Engineering, and Mathematics classrooms (STEM; Myers et al., 2020). The United States Department of Education showed in 2018 that alternative certification routes help fill the classrooms of Career, Technical and Agricultural Education (CTAE), Natural Sciences, Foreign Languages, English as a Second Language, Mathematics/Computer Science, Special Education, English and Language Arts (ELA), Social Sciences, Arts and Music, Elementary Education, and Health Education classes (National Center for Education Statistics, n.d.-b). CTAE classes reported the highest percentage (37%) of teachers entering the profession through an alternative certification

program (National Center for Education Statistics, n.d.-b). Research suggests that the significant increase in alternatively certified teachers in CTE classrooms is because school districts are beginning to understand the importance of placing teachers in these programs that have real-life occupational experience to share with their students, many of whom do not plan to go to college and will eventually enter the trades that are taught in these programs (McIntosh et al., 2018; Zirkle et al., 2019). The decrease in the number of teacher preparation programs at the collegiate level has contributed to the prevalence of CTAE teachers emerging from alternatively certified programs, many of which do not require candidates to have a bachelor's degree to get certified (Bowling & Bell, 2018). In addition, the STEM field continues to be a high-needs subject area within the United States that school districts are aiming to fill with alternatively certified teachers (USDOE, 2017).

Research About Educational Level Taught by Alternatively Certified Teachers

Alternative certification routes prepare candidates to enter either the elementary, middle school, or high school classrooms. The National Center for Education Statistics (n.d.-a) reported in 2015-2016 that 13% of alternatively certified teachers accepted positions at the elementary level, 19% accepted positions at the middle school level, 25% accepted positions at the high school level, and 20% were reported as accepting positions into a combination of the three. The high percentage of alternatively certified candidates accepting positions at the high school level stems from the fact that the two highest needs subject areas reported by the United States Department of Education are CTAE and STEM, which are both programs that are typically taught at the secondary level to equip

students with skills that will be needed for future occupations and higher education (National Center for Education Statistics, n.d.-b).

Research About Gender of Alternatively Certified Teachers

The National Center for Education Statistics (n.d.-a) reported in 2015-2016 that 68% of individuals who completed an alternative certification route were female while only 32% were male. In Texas, male teachers were statistically more likely to be alternatively prepared than females (Van Overschelde & Wiggins, 2020). The researchers did not have clarity around the reasons why such a high percentage of male teachers in Texas went through an alternatively certified program instead of a traditional certification program. However, it was reported that black male teachers specifically went through alternatively certified programs because they had not taken enough or any rigorous academic courses that would prepare them for a career in education (Underwood et al., 2019). Other reasons the researchers documented included negative views of education stemming from their own experiences, low graduation rates, and disproportionate rates of behavioral discipline. Male alternatively certified teachers are 21% more likely to leave their school than females (Redding & Henry, 2019). Younger female teachers had a higher likelihood of leaving the profession but were also more likely to return to teaching (Toropova et al, 2021; Redding & Henry, 2019).

Research About the Age of Alternatively Certified Teachers

Alternatively certified teachers are often referred to as career changers, which categorizes them as individuals who may have gained life experience coming from another occupation (West & Frey-Clark, 2019). Alternatively certified teachers are

commonly in the middle adulthood stage of life with ages typically ranging from 35 to 65 years old (Ferraro et al., 2018; Perryman & Calvert, 2020). Researchers have also reported that career changers are 25 years and older (Bar-Tal et al., 2020). One study reported that the average age of career changers transitioning into a teaching career and technical education is 44 years of age (Zirkle et al., 2019). Therefore, there is some clear variance in the available research on this topic.

Research About Race/Ethnicity of Alternatively Certified Teachers

Alternative certification programs tend to be geared toward addressing teacher shortages in urban schools and attracting those with diverse backgrounds. Teachers of color can influence all learners both academically and non-academically in a positive way (Rafa & Roberts, 2020). Urban African American students learned better when taught by a teacher of the same race/ethnicity as them (Underwood et al., 2019; Bristol et al., 2020). The *role-model effect*, is where Black students taught by Black teachers are more likely to report a higher desire to attend college and claim their teachers cared and motivated them compared to Black students taught by White teachers (Wallace & Gagen, 2020; Bristol et al., 2020). When teachers of color serve as role models, set high expectations, and support academic growth, they provide learners with improved outcomes in areas such as test scores (reading and math), graduation rates, and students' desires to attend college (Rafa & Roberts, 2020; Warner & Duncan, 2019). The lack of a diverse teacher workforce continues to undermine equal rights within society through the reinforcement of persisting social inequalities (Green & Martin, 2018). In 2015-2016 the National Center of Education Statistics reported that 66% of teachers entering through an

alternatively certified program were White, 13% were Black, 15% were Hispanic, 3% were Asian, 1% were American Indian/Alaska Native, and 2% were a mixture of two or more races (National Center of Education Statistics, 2018). It has been projected that over the next decade, not only would the U.S. experience an overall teacher shortage but that there would also be a decreasing number of teachers of color (Carver-Thomas, 2018). Research has confirmed Carver-Thomas's projection, reporting that within the next 10 years, retirement would remove a large number of African American teachers and that over 300,000 African American teachers would need to enter the field to close the diversity gap that was evident in schools in 2020 (Wallace & Gagen, 2020). These projections are further supported by research that states the higher percentage of white teachers remaining in the classroom compared to their peers of color will result in a shortage of teachers of color (Wiggan et al., 2020). However, another study contradicts these findings: by concluding that alternatively certified White teachers were less likely to stay in the classroom compared to Black (7%) and Latin@ (24%) teachers (Van Overschelde & Wiggins, 2020). In a later study, the same researchers also found that Blacks, Latin@s, and other-ethnicity teachers were more likely to be prepared through alternatively certified programs than White teachers (Van Overschelde & Wiggins), which suggests that turnover may be higher among those ethnicities. The inconsistencies between the data could be due to grouping all teachers of color into a single group versus looking at specific ethnicities; other inconsistencies in the data could relate to the recruitment and sampling methods employed by the researchers (Van Overschelde & Wiggins).

Research About Career Satisfaction

Alternative certification teachers' satisfaction has been linked to career satisfaction as a predictor of attrition. Career satisfaction is defined as the mindset that is controlled by the extent to which teachers view their job-related needs to be met (Aburumman et al., 2020; Toropova et al., 2021). Theoretical models have tried to explain the high career satisfaction within the teaching profession but only discover that career satisfaction is influenced by external and internal factors (Aburumman et al., 2020). The following external factors have been identified that affect career satisfaction: working conditions, salary, fringe benefits, occupational commitment, and work-life balance (Ismail & Miller, 2019). These factors have influenced educators' satisfaction within teaching and determined if they would stay or leave for years (Ismail & Miller). However, career satisfaction and retention are dependent on an individual's professional and personal experiences and how these behaviors are valued in their lives and teaching careers (Clemons & Linder, 2019).

Research About Personal Satisfaction

Alternatively certified teachers identify various factors associated with personal satisfaction which have led them to the classroom from their previous careers. Personal satisfaction came from personal factors which were defined as variables outside of the employment arena that may directly or indirectly influence career decisions, such as what an individual may perceive as a priority (Billingsley, 2019). Family, finances, and age were identified as personal contributors to why alternatively certified teachers enter education (Newton et al., 2020). Career changers and their decisions to enter education

and found that a main reason why they chose that profession was their belief that they would be able to make a difference in their students' lives (Ruitenburg & Tigchelarr, 2021). They described this ability to make a difference in different ways, including being able to pass on their expertise and skills, real-world application of material, and their value of education. However, many alternatively certified teachers' personal satisfaction goals are quickly dashed when they enter the classroom and face the realities of the profession. They also tend to experience a lack of empathy from colleagues and administrators regarding their unrealistic expectations and end up leaving the profession because they feel let down and frustrated (Vagi et al., 2019).

Research About School Satisfaction

Teachers with school satisfaction have been reported to have energy in work and willingness to devote themselves to teaching even when faced with challenges, as well as to claim pride in their work and feel that their time passes quickly when they are absorbed in work (Penttinen et al., 2020). Teachers who have high amounts of school satisfaction can perform better, be more productive, and neglect social life outside of work less than their colleagues who are dissatisfied (Topchayn & Woehler, 2021). Research has found that students' emotional engagement is predicted by the teachers' involvement, with children who have a teacher that is warm and affectionate reported as happier and more enthusiastic in the classroom (Penttinen et al., 2020).

However, alternatively certified teachers' school dissatisfaction may have detrimental effects on their ability to engage at work in relation to work-related performance and personal emotions as well as social and motivational consequences

(Topchayn & Woehler, 2021). More recently, researchers have increased their investigation into the effects that stress, and work engagement levels have on teachers because they are linked to teacher burnout and attrition (Faskhodi & Siyyari, 2018; Berger et al., 2022).

Critical Summary of the Literature

Alternative certification programs have been essential for the last two decades as a means of fast-tracking the certification process and moving qualified teachers into classrooms to address teacher shortages (Bowling & Bell, 2018; Chamberlin-Kim et al., 2019). However, both quantitative and qualitative research have documented numerous discrepancies between alternative and traditional certified routes that often lead to poorer outcomes for alternatively certified teachers (Carver-Thomas, 2017; Whitford et al., 2018; Zara, 2019). Research has explored factors affecting the certification programs, the individuals who select into them, and the schools in which they teach (West & Frey-Clark, 2019). Research on alternative certification programs is often limited to looking at the overall policy or evaluating the efficacy of specific programs such as Teach for America or New York City Teaching Fellows.

Researchers, however, have used a wide variety of means to understand alternatively certified programs as they continue to be an essential tool for reducing the teacher shortage within the United States. In studies comparing the attrition rate of alternatively versus traditionally certified teachers, alternatively certified teachers tend to report higher rates (Gray & Taie, 2015; Redding & Henry, 2018; Redding & Smith, 2019). However, some studies found that traditionally and alternatively certified teachers

showed no difference in attrition rate over a more extended timeframe (Borman & Dowling, 2008; Claflin et al., 2020; Guthery & Bailes, 2022). These contradictory findings point to the need for additional research into alternatively certified teacher attrition. When assessing specific demographic variables, including gender, race/ethnicity, and age, in relation to alternatively certified teacher attrition, the findings have varied too much to draw reliable conclusions. Research exploring the reasons why alternatively certified teachers chose to leave or stay in the profession have identified numerous factors, including feeling unprepared or inadequate for the job, having unrealistic ideas about the reality of being a teacher, and feeling stigmatized and frustrated (Redding & Henry, 2018; Redding & Smith, 2019; Sorensen & Ladd, 2020). However, there is limited research focusing on the attrition factors of alternatively certified teachers in the state of focus for this study, and deeper and more nuanced insights are needed to understand this situation better.

Summary and Conclusions

Alternative certification programs and teachers have a significant impact on helping alleviate teacher shortages within schools as well as on student achievement due to increased teacher turnover (Garcia & Weiss, 2019; McBrayer & Melton, 2018). As the need for teachers continues to grow, it has become crucial to understand the factors that cause high attrition and to find effective methods that will increase retention of alternatively certified teachers (Miller et al., 2019). Extensive research has been conducted on factors that influence the decisions of alternatively certified teachers to stay in or leave the profession; however, questions remain regarding what demographic or

career, personal/family, or school satisfaction factors, if any, influence those decisions. In Chapter 3, I present the research design, rationale, methodology, threats to validity, and ethical procedures concerning my research study.

Chapter 3: Research Method

Previous research on the STACP program revealed that approximately 22% of alternatively certified teachers who completed the program leave the profession within the first 3 years of teaching (SPSC, 2018). The population for my study was the STACP candidates who were currently enrolled through one of the 16 regional State Educational Service Agencies (STESA) located throughout the study state and as of 2020-2021 school year consisted of 1,654 candidates. However, the study state has not systematically collected and analyzed data that would assist in more in-depth understanding of the attrition of STACP teachers within the state. In this study, I attempted to gain an understanding of demographic, career, personal/family, and school satisfaction factors that influence STACP candidates to leave the profession within the first 3 years by conducting a quasi-experimental, cross-sectional survey on the attrition intentions of STACP teachers disaggregated by subject area, educational level taught [elementary, middle, high], gender, age, years in the STACP and race/ethnicity. I also explored the career, personal/family, and school satisfaction factors that research shows influence STACP to leave.

This chapter includes a description of the research design and rationale, the methodology (population, sample, procedures for recruitment, participation, and data collection), the instrumentation, procedures for recruitment, data analysis plan, threats to validity, ethical considerations.

Setting

The setting for this study is a southern state that enrolls potential teacher

candidates in a state-funded program titled STACP. The objective of the program is to decrease the teacher shortage within the study state. STACP is only available within the study state and currently has 1,654 candidates enrolled in the program as of the 2020-2021 academic year (Educator preparation program analyst and delivery specialist, personal communication, August 19, 2020). The state has not been able to provide demographic information about these candidates beyond that they are individuals who hold a bachelor's degree in a field of study that is not education. The study state received a score of 78.8% in 2019 on their CCRPI summary scores. The 2022 data have not been released and data was not collected in 2020 or 2021 due to the study state requesting a waiver of several accountability, school identification, and report card requirements. Due to the STACP candidates being in various schools across the study state and that information not available to the public, it is not possible to determine if that particular school they are in is low or high performing.

Research Design and Rationale

Quantitative research design approaches are appropriate when researchers are trying to determine relationships between variables and outcomes by using numbers and statistical data to summarize findings (Mertler, 2021; Rutberg & Bouikidis, 2018). There are different quantitative designs used depending on the information that the researcher wants to obtain (Mertler, 2021). Several commonly used approaches to conduct quantitative research studies in the field of education involve non-experimental research designs in the form of observational, survey, correlational, and casual comparative (Mertler, 2021). To determine the design and approach of the research, one must use the

study's research questions and the nature of the study to help guide the decision (Mertler, 2021). Survey designs are differentiated by when and to whom they are given. A longitudinal survey employs follow-up research on how perceptions have changed, whereas a cross-sectional refers to a survey that is administered at one point in time (Creswell & Guetterman, 2019; Mertler, 2021). For this study, I utilized a quasi-experimental, cross-sectional group comparison survey design that used survey responses to gain an understanding of demographic, career, personal/family, and school satisfaction factors that influence STACP candidates to leave the profession within the first 3 years.

To accomplish the purpose of the study, I planned to explore the demographic factors that could predict attrition intentions of STACP teachers disaggregated by subject area, educational level taught [elementary, middle, high], gender, age, years in the STACP and race/ethnicity. I also planned to explore the influences of career, personal/family, and school satisfaction factors of STACP candidates' decisions to leave the profession. To collect data from STACP candidates within the southern state, I utilized the U.S. Department of Education Teacher Follow-Up Survey developed by the U.S. Department of Education (2014). The survey addresses various reasons related to career, personal/family, and school satisfaction factors that have been identified by the U.S. Department of Education Teacher Follow-Up Survey.

Methodology

Population Selection

The population for this study was the STACP candidates who were currently enrolled through one of the 16 regional STESA located throughout the study state. The

only criterion that determined participation in the survey study was that candidates were enrolled in the STACP program (all candidates enrolled in the STACP program are required to be full-time teachers). In survey studies, either the entire population or a target population, sometimes known as a sampling frame, is invited to participate (Mertler, 2021). A target population is often used because it is too difficult to involve the entire population. A target population is often made up of individuals who can be easily contacted and who are willing to participate (Mertler, 2021). To conduct this study, I planned to invite the entire population of all currently enrolled STACP candidates to participate.

I used a convenience sample method to select participants for this study. A convenience sample includes participants who are willing and available to participate in a study (Mertler, 2021). Using convenience sampling allowed me the opportunity to invite all currently enrolled STACP candidates to participate in the survey. In 2020-2021, the number of enrolled STACP candidates was 1,654.

To obtain robust data that reflects the perceptions of the currently enrolled STACP candidates as well as understanding the factors of high rate of attrition within the first 3 year, I planned to obtain completed surveys from as many of the STACP candidates as possible. G* Power software is a power analysis program that is helpful in designing and evaluating research studies (Mayr et al., 2007). Using Raosoft, a G* Power online calculator, I inputted a 5% margin of error calculation with an 85% confidence level, and a population size of 1,654 and a response distribution of 50%. The results indicated that a sample size of 185 was needed for a reliable and valid result.

Procedures for Recruitment, Participation, and Data Collection

The original plan was to recruit the STACP candidates via email listserv provided by the STACP regional executive directors and to distribute the U.S. Department of Education Teacher Follow-Up Survey to potential participants by SurveyMonkey, an online survey service provider. This would allow me to collect data in a secure format that would allow STACP participants to answer questions freely without the pressure of time or location (see Bernard & Bernard, 2013; Brannen, 2017; Creswell, 2021). However, this plan was modified because the program directors did not want me to contact the STACP candidates except through them. I followed these steps: I sought permission from Walden University IRB to be given permission to conduct the study (approval no. 03-04-220460989), then I used my Walden University email to reach out to the STACP regional executive directors. The email asked the directors to forward an invitation to the study and what the survey asked of the participants. The email assured that the data would be anonymous, provided the length and time required to answer the survey questions, and explained that by answering the survey questions they were giving consent for me to use their anonymous information. At the end of the invitation email, I provided a link to the survey and told them they had a 10-day period to complete the survey.

Instrumentation and Operationalization of Constructs

For this study, I used a Likert-scale survey developed by the U.S. Department of Education in 1988 and utilized by the National Center for Education Statistics—Teacher Follow-up Survey. Permission to use the survey was obtained and granted by the study

director for the National Center for Education Statistics, though the survey is in the public domain (Appendix A). The survey is divided into three sections:

- Section 1: In the first section of the survey, participants answered six demographic questions that provided information about the variables that were used for the analysis (subject area taught, educational level taught (elementary, middle school, high school), gender, age, years in the STACP program, race/ethnicity).
- Section 2: In this section of the survey, participants were asked to state their intentions about teaching for the 2022-2023 school year.
- Section 3: In the third section of the survey, participants identified factors related to career, personal/family, or school satisfaction that affect their decision to leave or stay in the teaching profession.

The U.S. Department of Education (2014) did not conduct formal reliability and validity measures for their survey. Questions were cognitively tested, and details about the survey methodology were outlined in the Teacher Follow-Up Survey documentation (see Appendix A). The reliability of the Teacher Follow-Up Survey is based on sample survey estimates, which are subjected to two types of errors: non sampling and sampling (Goldring et al., 2014).

Data Analysis Plan

To ascertain the research outcome, SurveyMonkey formatted the results to a spreadsheet, allowing for easy identification of missing or incomplete data, which were discarded. Remaining data that were clean and completed were then uploaded into IBM

SPSS Statistics version 27 for Windows Computers for analysis. I planned to use descriptive statistics (frequencies, means, and standard deviations) and chi-square to analyze the data (see Table 2).

Table 2

Operationalization of Study Variables per Research Question, Hypothesis, Survey Questions, and Analysis

Research Question	Independent Variable	Dependent Variable	Statistical Analysis/ Inferential Test
RQ 1: To what extent do demographic factors (subject area, education level taught [elementary, middle, high], gender, age, years in the STACP program, race/ethnicity) predict that STACP candidates will stay or leave the teaching profession?	STACP participants' responses to the survey questions	subject area taught, educational level taught [elementary, middle, high], gender, age, years in the STACP program, race/ethnicity	Descriptive Statistics (frequencies, means, and standard deviations) Multiple Regression
RQ 2: To what extent do STACP candidates who decide to leave the teaching profession attribute their decision to career factors?	STACP participants' responses to the survey questions	Career Factors	Descriptive Statistics (frequencies, means, and standard deviations) Multiple Regression
RQ 3: To what extent do STACP candidates who decide to leave the teaching profession attribute their decision to personal/family	STACP participants' responses to the survey questions	Personal/family Factors	Descriptive Statistics (frequencies, means,

factors?			and standard deviations) Multiple Regression
RQ 4: To what extent do STACP candidates who decide to leave the teaching profession attribute their decision to school satisfaction factors?	STACP participants' responses to the survey questions	School Satisfaction Factors	Descriptive Statistics (frequencies, means, and standard deviations) Multiple Regression

Threats to Validity

The study had one threat to internal validity in that I did not receive responses from the 185 responses required for the statistical analysis; instead only 56 responses were received. I asked for permission from Walden University to extend the data collection time. However, after many efforts to collect a sufficient number of responses, I stopped the process as I explain in Chapter 4.

External validity limitations refer to the inability to replicate the results of a survey by another researcher. My survey had external validity limitations due to the current climate of education and the ongoing crisis caused by the effects of the Covid-19 pandemic (Bacher-Hicks et al., 2023; Schmitt & DeCourcy, 2022). The pandemic continues to affect state budgets and has resulted in states and district to make drastic cuts in all departments especially throughout the study state (Dorn et al., 2023; McKillip & Sciarra, 2020). Due to budget concerns and the pandemic, participants may express their desire through the survey to leave the profession but in reality, they will stay in their

current positions due to the uncertainty of employment in another district, financial burdens, and/or personal/family reasons. Even though no study can eliminate all threats to validity, care was taken to ensure quality of the research design and execution.

Ethical Procedures

This study followed the guidelines of both the Walden University IRB and the National Institute of Health (NIH) to ensure the ethical research practices and the protection of all human participants. When using human participants, every consideration needs to be made to ensure ethical guidelines are adhered to (see Cohen et al., 2017). Before starting the study, I obtained Walden University IRB approval of my procedures regarding the safety of the participants as well as the safe handling of any records. The invitation email that was sent to STACP candidates contained information about the study's purpose and a link the SurveyMonkey survey as well as a section that informed participants that their participation in the survey was their consent to use their anonymous information. I also utilized the informed consent form required by Walden University IRB.

While data were being collected, they were stored on the SurveyMonkey secured website. According to their website, to ensure confidentiality, data is protected with enhanced security including single sign-on (SSO), and encryption (<https://www.surveymonkey.com>). Information that could be downloaded from the SurveyMonkey site would be saved on my password-protected personal computer that is in my home. Since I am gathering data anonymously, there were no issues concerning breach of confidentiality. Any printed materials are kept in a locked file cabinet, and all

survey responses were viewed only by the researcher and committee members as necessary.

Summary

In this chapter, I reviewed and addressed research design and rationale, the population, and sampling procedures, the data collection instruments, proposed data collection, threats to validity, and ethical considerations. In Chapter 4 I describe data collection, analysis, and the results.

Chapter 4: Results

The purpose of the study was to gain an increased understanding of demographic, career, personal/family, and school satisfaction factors that influenced STACP candidates to leave the profession within the first 3 years. To understand the factors, I utilized a quasi-experimental, cross-sectional group comparison survey design that used survey responses to gain an understanding of demographic, career, personal/family, and school satisfaction factors that influenced STACP candidates to leave the profession within the first 3 years.

It must be noted, and will be explained later in this chapter, that I was not able to conduct the multiple regression proposed in Chapter 3. Due to unforeseen circumstances, only 56 survey responses were received, not enough to conduct a multiple regression analysis. In addition, the variables were categorical. With the committee's supervision, I revised my research questions so that they could be answered using the Chi-Square Test of Independence for Research Questions 1 through 6 and descriptive statistics for Research Questions 7 through 9. This is the analysis reported in this chapter.

The two sets of categorical variables were the STACP candidates' responses to the survey question about their intentions about teaching for the 2022-2023 school and demographic factors (subject area, education level taught [elementary, middle, high], gender, age, years in the STACP program, race/ethnicity), career satisfaction factors (dissatisfied with teaching, education position not K-12, improve career opportunities, change to a career outside of education, better salary or benefits, professional advancement, involuntary staffing, not applicable), personal/family factors (change in

residence, health, retirement, pregnancy/childbirth, death of a loved one, time away from family, not applicable), and school satisfaction factors (poor administration support, problematic student behavior, lack of parent support, relationship with colleagues, not enough planning time, too many students in a classroom, student motivation, professional development, not applicable). I collected data using a survey developed by U.S. Department of Education Teacher Follow-Up Survey to answer the research questions and hypotheses.

Data Collection

A quasi-experimental, cross-sectional group comparison survey design was planned to collect data from survey responses to gain an understanding of demographic, career, personal/family, and school satisfaction factors that influence STACP candidates to leave the profession within the first 3 years. I used the U.S. Department of Education Teacher Follow-Up Survey to collect data.

I received approval to collect data from the Walden University IRB on March 4, 2022. Upon receiving approval from the IRB, invitation emails were sent out to the STACP executive directors and coordinators on March 9, 2022, which included an explanation of the study, directions about how to send information about the study to their STACP enrollees, and an attachment for them to provide to the STACP candidates. The attachment consisted of the introduction letter to the STACP candidates that stated information about the study and what was expected of them if they were to participate, why the study was being conducted, and the link to the study. On March 11, 2022, I heard back from one STACP program requesting that I resend the invitation email with

the attachment for the candidates on how to access the survey. I completed this by resending the invitation email with the attachment for access to the survey.

I followed up with the program via email on March 13 for a 5-day follow-up. I then followed up again on March 18th for the 10-day follow-up, but I did not receive a reply. During this timeframe I received nine responses to the survey. I followed up via email with the other STACP candidate programs that I had not yet heard back from. On March 13, one of the STACP coordinators emailed me with questions concerning the study. The STACP coordinator wanted to know the purpose of the study, where it would be used, and the IRB approval number. I responded to their specific questions about the survey. They never responded to my last email asking if they were interested in participating.

Between March 13-17, I sent out individual emails to the STACP coordinators with the executive directors copied on the emails, and I also resent the same previous email and asked if they had any questions concerning the study. On March 17, 2022, I received an email from one of the STACP executive directors asking questions about the study and the IRB approval number. I responded and sent all materials they requested. I never received an email reply from that STACP executive director. On March 19, 2022, I still had not received any replies from the STACP executive directors beyond the one I heard from on March 11.

At this point, I conferred with my chair about the situation, and she advised contacting the state coordinator who oversees the STACP programs. I contacted the state coordinator on March 25, 2022, asking for guidance about how to proceed with my study.

I did not receive a reply from the STACP state coordinator. I then decided to contact another state coordinator on March 29, 2022, whom I had been in contact with throughout the research design process. She agreed to contact the programs on my behalf via email to let them know what my study was about. From this effort, I received an additional response. At this point I had received a total of 15 responses. Then, I contacted my chair again, and we discussed what additional steps could be taken to reach the STACP programs. We decided to complete a change of procedure form to allow me to contact the STACP programs via phone. On April 6, 2022, I submitted the change of procedure to the Walden IRB and on April 7, I received approval back from the IRB that the change of procedure was approved. I began to call the STACP programs on the same day I received approval. I spoke with one STACP coordinator who said they needed approval from the STACP coordinator at the state level to be able to speak to me. I then contacted the STACP state coordinator again. The state coordinator asked me to do a quick write-up about the study with the who, what, why, when, and how regarding the procedure and the information I wanted from the STACP candidates. The STACP state coordinator wanted me to clearly state in the write-up that this study would not compare candidates to traditional teachers as the STACP programs are cautious about any perception that they are somehow less rigorous or not preparing candidates to be effective educators.

On April 8, 2022, the STACP coordinator at the state informed me that an email was sent to all coordinators to let them know they had permission to speak to me. The STACP state coordinator also informed me that many of the STACP offices were closed

due to spring break. I made phone calls to the coordinators and left messages with those that did not answer. Then, I contacted those who I left messages with as I wanted to make sure I spoke to an actual person from each program to explain the study and answer any of their questions. I spoke to one program whose program director agreed to participate. I sent them the information and followed up on April 22 and April 29. From this conversation I received one response. On April 18, 2022, three STACP programs responded saying they were not interested in participating in the study. On the same day, I reached out to other programs but was unable to speak to anyone.

On April 28, I followed up with the two school districts that I had contacted earlier. One of the programs responded that they needed a signed copy of the IRB approval form before they could proceed, which I provided. That same day, I also received an email back from the other school district stating that I had to go through their own IRB process and the next review date would be July for a September collection if approved. On May 4, 2022, I received the signed copy from the IRB and forwarded that letter to the school district that had requested it. On May 5, 2022, the school district agreed to participate. I followed up with them on the May 12 and May 19. I also reached out to the human resource coordinator at the local district, and they agreed to send the notice out to the STACP candidates. When the human resource coordinator sent out the email to the STACP candidates I was cc'd to the email in case anyone had follow-up questions.

On May 12, I sent out one last request to the three STACP programs who agreed early on to participate, asking if they would send out the invitation one more time to their

candidates. I did not follow up with the 5- and 10-day reminders, as they made it clear they would only send out one email to their candidates.

In total, 56 STACP candidates completed the survey via SurveyMonkey. The sample that I was able to achieve was a small portion of a larger population of STACP candidates within the study state. The sampling procedure for the STACP candidates survey was nonprobability sampling. Nonprobability sampling is the recruitment of participants based on convenience and availability (Creswell & Creswell, 2018). In the end, as mentioned previously, due to the low number of STACP candidates who completed the survey and because the variables were categorical, I was not able to analyze the data using multiple regression as proposed in Chapter 3. After consultation with my chair, second, member and the university research reviewer (URR), I revised my research questions so that they could be answered using the chi square test of independence for Research Questions 1 through 6 and descriptive statistics for Research Questions 7 through 9. The research questions were revised as follows:

- RQ1: Is there a statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decided to leave the profession regarding the demographic factor of subject area?
- H_01 : There is no statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of subject area.
- H_a1 : There is statistically significant association between STACP

candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of subject area.

- RQ2: Is there a statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decided to leave the profession regarding the demographic factor of education level [elementary, middle, high]?
 - H_02 : There is no statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of education level taught [elementary, middle, high].
 - H_a2 : There is statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of education level taught [elementary, middle, high].
- RQ3: Is there a statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decided to leave the profession regarding the demographic factor of gender?
 - H_03 : There is no statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of gender.

- H_{a3} : There is statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of gender.
- RQ4: Is there a statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decided to leave the profession regarding the demographic factor of age?
 - H_{04} : There is no statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of age.
 - H_{a4} : There is statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of age.
- RQ5: Is there a statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decided to leave the profession regarding the demographic factor of years in the STACP program?
 - H_{05} : There is no statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of

years in the STACP program.

- H_{a5} : There is statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of years in the STACP program.
- RQ6: Is there a statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decided to leave the profession regarding the demographic factor of race/ethnicity?
 - H_{06} : There is no statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of race/ethnicity.
 - H_{a6} : There is statistically significant association between STACP candidates who decide to stay in the profession and STACP candidates who decide to leave the profession regarding the demographic factor of race/ethnicity.
- RQ7: What is the percentage of STACP candidates who decide to leave the profession regarding career factors?
- RQ8: What is the percentage of STACP candidates who decide to leave the profession regarding personal/family factors?
- RQ9: What is the percentage of STACP candidates who decide to leave the profession regarding school satisfaction factors?

The sample represented a small percentage of the total number of STACP candidates within the study state (see Table 3).

Table 3

Sample Versus Population

		Sample	Total
		Population	Population
		N= 56	N=1,107
Gender	Male	43%	32%
	Female	57%	68%
Age*	Average	31-39 yrs.	34 yrs.
Ethnicity	White-Caucasian	61%	49%
	Black African American	29%	43%
	Latino/Hispanic	11%	5%
Years in STACP	Average	24 months	18 months

Data Analysis

Data analysis entailed exporting participant questionnaire responses from SurveyMonkey into SPSS v27 statistical software to conduct analysis related to the research questions of this study. I used all available data. A total of 56 participants responded to the study questionnaire. Their background and demographic factors are

reported in Table 4 that shows that there were slightly more female ($n = 32$) respondents and that most participants were between the ages of 20-49 years. Approximately 61% of the participants identified as White. Finally, most participants reported 2 years of participation (38%), 27% of participants reported 1 year of participation, 20% of participants reported less than 1 year of participation, and 16% of participants reported 3 years of participation.

Table 4

Sample Demographics and Characteristics

		<i>N</i>	%
Gender	Male	24	43
	Female	32	57
Age*	21-30	15	27
	31-39	15	27
	40-49	15	27
	50+	10	18
Ethnicity	White-Caucasian	34	61
	Black African	16	29
	American	6	11
	Latino/Hispanic		
Years in STACP	< 1 year	11	20

1 year	15	27
2 years	21	38
3 years	9	16

Note. N=56; *One participant did not report their age

The Participants demographic factors (subject area, educational level, and future teaching intentions) are reported in Table 5. The largest percentage of participants reported CTAE and Science, followed by English/ELA and Social Studies/History. Significantly, 68% of participants reported teaching at the high school level, 18% of participants reported teaching at the elementary level, and 14% of participants reported teaching at the middle school level. Finally, 75% of participants reported their intention to continue teaching and 25% reported their intention was to leave teaching.

Table 5

Participants' Teaching Area, Level, and Future Intentions

		<i>N</i>	%
Subject Area*	Science	7	12
	CTAE	12	21
	Fine arts	2	3
	Foreign Language	1	2
	Health & PE	5	9
	English/ELA	8	14
	Social Studies / History	6	11
	Special Ed.	6	11

	Math	4	7
	STEM	1	2
Level	Elementary	10	18
	Middle grades	8	14
	High school	38	68
Future Intentions	Stay in Teaching	42	75
	Leave Teaching	14	25

Note. N= 56; *three participants did not report subject area.

Career factors that affected participants decision to not stay in teaching are reported in Table 6 shows that 18% of participants who said they were leaving stated as being dissatisfied with teaching as a career. Approximately 9% of the participants identified better salary or benefits as a career factor that affected their decision to not stay in teaching.

Table 6

Participants' Career Factors

	<i>N</i>	<i>%</i>
Dissatisfied with teaching as a career	10	18
Pursue education position other than a K-12 Teacher	2	4
Career opportunities within the field of education	1	2
Change to a career outside the field of education	2	4
Better Salary or Benefits	5	9

Opportunities for professional advancement	3	5
Affected by an involuntary staffing action	2	4
Not applicable	41	73

Personal/Family factors that affected participants decision to not stay in teaching are reported in Table 7 shows that 11% of participants who said they were leaving stated change of residence as being the largest reason. Approximately 4% of the participants identified retirement or death of a loved one as being a personal/family factor that affected their decision to not stay in teaching.

Table 7

Participants' Personal/Family Factors

	<i>N</i>	%
Residence Change	6	11
Retirement	2	4
Pregnancy/Childbirth	1	2
Death of a loved one	2	4
Time Away from family	1	2
Not Applicable	42	75

Note. Some participants responded to multiple items

School satisfaction factors that affected participants decision to not stay in teaching are reported in Table 8 shows that 20% of participants who said they were leaving stated as heavy workload as their main factor. Approximately 14% of the

participants identified poor administration support as a school satisfaction factor that affected their decision to not stay in teaching.

Table 8

Participants' School Satisfaction Factors

	<i>N</i>	%
School or Teaching Assignment	4	7
Heavy Workload	11	20
Lack of influence over school policy	1	2
Computer resources	3	5
School facilities	0	0
Poor administration support	8	14
Problematic student behavior	5	9
Lack of parent support	2	4
Relationships with colleagues	0	0
Not enough planning time	4	7
Too many students in a classroom	1	2
Student motivation	4	7
Professional development	4	7
Not Applicable	41	73

Statistical Analysis

The Chi-Square Test of Independence has four assumptions that must be considered when choosing this statistical analysis. The first three assumptions are related to the study design and should be met prior to conducting analysis (Leard Statistics,

2022). The remaining assumption relates to how the data fits the Chi-Square Test of Independence model by using SPSS statistics.

Assumption One

Assumption one requires that there are two nominal variables. Two nominal variables were used for each research question in this study, which was the independent variable (stay or leave teaching profession) and the dependent variables (subject area, educational level taught [elementary, middle, high], gender, age, years in the program, race/ethnicity, career, personal, and school satisfaction factors). The data for this study met Assumption one because there are two nominal variables being tested.

Assumption Two

Assumption two requires that there is independence of observations which means that there is no relationship between the observations in each group of each variable or between the groups themselves. In this study, the independent groups of STACP candidates who plan to stay or leave the teaching profession shows no relationship between the participants who fall in one group or the other group. The data for this study met Assumption two because there is independence of observations between the groups.

Assumption Three

Assumption three requires that the sampling design be a cross-sectional sampling design. This study utilized a cross-sectional sample design to gain an understanding of demographic, career, personal, and school satisfaction factors that influence STACP candidates to leave or stay in the profession within the first 3 years. The study meets Assumption three because the study utilized a cross-sectional sampling design.

Assumption Four

Assumption four requires that all cells should have expected counts greater than or equal to five to provide valid results. For research questions 1, 3, 4, 5, and 6, I combined categories in order to have expected counts become greater than or equal to five. The data for research question 2 did not meet Assumption four. I will explain this when I show the results for research question 2.

Analysis

I conducted a series of Chi-Square Test of Independence to determine whether there was statistically significant association between STACP candidates who decided to stay in the profession and STACP candidates who decided to leave the profession regarding demographic factors. To answer research questions 7,8, and 9 I conducted descriptive statistics.

Results**Research Question 1**

A Chi-Square Test of Independence was conducted to determine whether there was a statistically significant association between STACP candidates who decide to stay and STACP candidates who choose to leave teaching regarding subject area. In order to meet Assumption Four, I combined the categories into two, academic courses and nonacademic. The nonacademic group was composed teachers of CTAE, Foreign Language, Fine Arts, STEM, and Health and Physical Education. The academic group was composed of teachers of ELA, Social Studies and History, Science, Math, and Special Education. There was no statistically significant association as seen in Table 9

between STACP candidates who planned to stay and STACP candidates who planned to leave regarding subject area, $\chi^2(1) = 2.44, p = .118$. Therefore, the null hypothesis cannot be rejected, and the alternative hypothesis is not accepted.

Table 9

Chi Square of Independence: Subject Area and Plans for Next Year

	<i>Value</i>	<i>Df</i>	<i>Asymptotic Significant (2-sided)</i>
Pearson Chi-Square	2.441	1	.118
Likelihood Ratio	2.404	1	.121
Linear-by-Linear Association	2.395	1	.122
N of Valid Cases	53		

Note. 0 cells (0.0%) have expected count of less than 5.

Research Question 2

All assumptions except for Assumption four for the Chi-Square Test of Independence for RQ2 were met. According to Leard Statistics (2022), if Assumption four is not met the researcher should accept that the results might not be valid, and report that when reporting the results. To meet Assumption four, I first combined middle grades and high school as one category and elementary as another category. This did not allow me to meet Assumption four, then I combined elementary and middle grades as one category and high school as another category. This also did not allow me to meet

Assumption four. I chose to proceed with the Chi-Square Test of Independence with two categories by combining middle grades and high school together. I made the choice to run the test with the understanding that the results might not be valid because I wanted to determine if there was a statistically significant association between STACP candidates who stayed and STACP candidates who choose to leave regarding educational level.

The results show there was no statistically significant association as seen in Table 10 between STACP candidates who stayed and STACP candidates who choose to leave regarding educational level, $\chi^2(1) = 1.46, p = .227$. Therefore, due to assumption four not being met, the null hypothesis cannot be rejected, and the alternative hypothesis cannot be accepted.

Table 10

Chi Square of Independence: Educational Level and Plans for Next Year

	<i>Value</i>	<i>Df</i>	<i>Asymptotic Significant (2-sided)</i>
Pearson Chi-Square	1.461	1	.227
Likelihood Ratio	1.703	1	.192
Linear-by-Linear Association	1.435	1	.231
N of Valid Cases	56		

Note. 1 cell (25.0%) has expected count less than 5. The minimum expected count is 2.50

Research Question 3

A Chi-Square Test of Independence was conducted to determine whether there was a significant association between STACP candidates who decided to stay and STACP candidates who decided to leave regarding gender. All expected cell frequencies were greater than five. There was no statistically significant association as seen in Table 11 between STACP candidates who stayed and STACP candidates who leave regarding gender, $\chi^2(1) = 3.50, p = .061$. Therefore, the null hypothesis cannot be rejected, and the alternative hypothesis cannot be accepted.

Table 11

Chi Square of Independence: Gender and Plans for Next Year

	<i>Value</i>	<i>Df</i>	<i>Asymptotic Significant (2-sided)</i>
Pearson Chi-Square	3.500	1	.061
Likelihood Ratio	3.489	1	.062
Linear-by-Linear Association	3.437	1	.064
N of Valid Cases	56		

Note. 0 cells (0.0%) have expected counts less than 5.

Research Question 4

A Chi-Square Test of Independence was conducted to determine whether there was a statistically significant association between STACP candidates who decided to stay and STACP candidates who leave teaching regarding age. To meet Assumption four for

the analysis, I combined the four categories into two. In order to combine the age groups for the analysis, I attempted to create groups that were equal in number. Fifteen respondents identified their age as 21-30 and fifteen identified their age as 31-39. Fifteen reported their age as 40-49 and ten reported their age as 50+. The first group was composed of respondents ages 21-39 (30 respondents). The second group was composed of respondents 40-50+ years. There was no statistically significant association as seen in Table 12 between STACP candidates who decided to stay and STACP candidates who decided to leave regarding age, $\chi^2(1) = .72, p = .397$. Therefore, the null hypothesis cannot be rejected, and the alternative hypothesis cannot be accepted.

Table 12

Chi Square of Independence: Age and Plans for Next Year

	<i>Value</i>	<i>Df</i>	<i>Asymptotic Significant (2-sided)</i>
Pearson Chi-Square	.719	1	.397
Likelihood Ratio	.728	1	.3963
Linear-by-Linear Association	.706	1	.401
N of Valid Cases	55		

Note. 0 cells (0.0%) have expected counts less than 5.

Research Question 5

A Chi-Square Test of Independence was conducted to determine whether there was a statistically significant association between STACP candidates who decided to stay

and STACP candidates who leave regarding years in the program. In order to meet Assumption four, I combined the categories into two, attempting to make the groups as equal as possible. The first was STACP candidates that reported zero and one year in the program. The second was STACP candidates that reported 2 and 3 years in the program. There was no statistically significant association as seen in Table 13 between STACP candidates who decided to stay and STACP candidates who decided to leave regarding years in the program, $\chi^2(1) = 1.95, p = .162$. Therefore, the null hypothesis cannot be rejected, and the alternative hypothesis cannot be accepted.

Table 13

Chi Square of Independence: Years in the program and Plans for next year

	<i>Value</i>	<i>df</i>	<i>Asymptotic Significant (2-sided)</i>
Pearson Chi-Square	1.951	1	.162
Likelihood Ratio	2.012	1	.156
Linear-by-Linear Association	1.916	1	.166
N of Valid Cases	56		

Note. 0 cells (0.0%) have expected counts less than 5.

Research Question 6

A Chi-Square Test of Independence was conducted to determine whether there was a statistically significant association between STACP candidates who decided to stay and STACP candidates who decided to leave teaching regarding race/ethnicity. To meet

Assumption four, I combined the categories into two. The first was STACP participants that reported their race/ethnicity to be Caucasian/white. The second was STACP participants that reported their race/ethnicity to be African American/Black or Hispanic/Latino. There was no statistically significant association as seen in Table 14 between STACP candidates who decided to stay and STACP candidates who decided to leave regarding race/ethnicity, $\chi^2 (1) = 2.50, p = .114$. Therefore, the null hypothesis cannot be rejected, and the alternative hypothesis cannot be accepted.

Table 14

Chi Square of Independence: Race/Ethnicity and Plans for Next Year

	<i>Value</i>	<i>df</i>	<i>Asymptotic Significant (2- sided)</i>
Pearson Chi-Square	2.496	1	.114
Likelihood Ratio	2.452	1	.117
Linear-by-Linear Association	2.451	1	.117
N of Valid Cases	56		

Note. 0 cells (0.0%) have expected count less than 5.

Research Question 7

Participants' responses to the survey were analyzed to address research question 7 which asked, what is the percentage of STACP candidates who decide to leave the profession regarding career factors? The results reported in Table 15 shows that the most

frequent career reason for leaving the teaching profession was dissatisfied with teaching (64%). The other categories were professional advancement (21%), education position not K-12 teacher (14%), change to a career outside of education (7%), better salary or benefits (7%), involuntary staffing (7%), too much work (7%).

Table 15

Intentions to Leave as a Function of Career Factors

Valid	<i>N</i>	%
Dissatisfied with teaching	9	64
Professional Advancement	3	21
Education position not K-12 teacher	2	14
Change to a career outside of education	1	7
Better Salary or Benefits	1	7
Involuntary Staffing	1	7
Too much work	1	7

Note. Some participants responded to multiple items.

Research Question 8

Participants' responses to the survey were analyzed to address research question 8 which asked, what is the percentage of STACP candidates who decide to leave the profession regarding personal factors? The results reported in Table 16 shows that the most frequent personal reason for leaving the teaching profession was a change of residence (43%). The other categories were health factors (29%), retirement (14%), pregnancy/childbirth (7%), death of a loved one (7%), and time away from family (7%).

Table 16*Intentions to Leave as a Function of Personal/Family Factors*

Valid	<i>N</i>	%
Change in Residence	6	43
Health	3	29
Retirement	2	14
Pregnancy/Childbirth	1	7
Death of a Loved One	1	7
Time away from Family	1	7

Note. Some participants responded to multiple items.

Research Question 9

Participants' responses to the survey were analyzed to address research question 9 which asked, what is the percentage of STACP candidates who decide to leave the profession regarding school satisfaction factors? The results reported in Table 17 shows that the most frequent school satisfaction reason for leaving the teaching profession was heavy workload (71%). The other categories were student behavior (36%), lack of planning time (36%), school or teaching assignment (29%), lack of student motivation (29%), computer resources (21%), professional development requirements (21%), lack of parent support (14%), lack of school influence (7%), poor administration (7%), too many students (7%), lack of training/support (7%). No STACP participants reported school facilities or relationship with colleagues as reasons for leaving the teaching profession.

Table 17

Intentions to Leave as a Function of School Satisfaction Factors

Valid	<i>N</i>	%
Heavy Workload	10	71
Student Behavior	5	36
Lack of Planning Time	5	36
School or Teaching Assignment	4	29
Computer Resources	3	21
Professional Development Requirements	3	21
Lack of Parent Support	2	14
Lack of Influence	1	7
Poor Administration	7	7
Too Many Students	1	7
Lack of Training/Support	1	7
School Facilities	0	0
Relationship with Colleagues	0	0

Note. Some participants responded to multiple items.

Summary

I conducted the Chi-Square Test of Independence to gain an understanding of demographic factors that influenced STACP candidates to decide to leave the profession with the first 3 years. Analysis of this data allowed me to answer research questions 1-6 and accept or reject the null hypothesis and the alternative hypotheses.

The research questions regarding subject area, educational level taught, gender,

age, years in the program, and race/ethnicity findings indicated that there was no statistically significant association between STACP candidates who decided to stay and STAP candidates who decided to leave the profession regarding demographic factors.

Research questions 7, 8, and 9 regarding personal, career, and school satisfaction factors were answered using descriptive statistics. The descriptive statistics table for personal factors provided the following information, 43% of leavers stated that a change of residence was the reason they were leaving. The descriptive statistics table for career factors showed that 64% of leavers stated they were leaving due to being dissatisfied with teaching as a career. School satisfaction factors descriptive statistics table showed that 71% of leavers stated that they were leaving due to the heavy workload.

Chapter 5 will include discussion and interpretation of the findings, limitations, implications, and recommendations.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of the study was to gain an understanding of demographic, career, personal/family, and school satisfaction factors that influenced STACP candidates to leave the profession within the first 3 years. The study was originally designed as a quasi-experimental, cross-sectional survey design. The data for the study were collected by administering the U.S. Department of Education Teacher Follow-Up Survey. I analyzed the data using Chi-Square Test of Independence and descriptive statistics to gain an understanding of demographic, career, personal/family, and school satisfaction factors that influenced STACP candidates to leave the profession within the first 3 years. Data analysis indicated that there was no statistically significant association between STACP candidates who decided to stay and STACP candidates who decided to leave the profession regarding demographic factors (subject area, educational level taught [elementary, middle, high], gender, age, years in the program, and race/ethnicity), career, personal/family, and school satisfaction factors. In this chapter, I provide an interpretation of the research findings. I also discuss the limitations associated with the research study. I make recommendations for future research, address the social change implications of the findings, and provide a conclusion emphasizing the key points of the study.

Interpretation of the Findings

Demographic Factors

The demographic factors that were examined in the study were subject area, educational level [elementary, middle, and high school], gender, age, years in the STACP

program, and race/ethnicity.

Subject Area

The findings of the study indicated no statistically significant association between STACP candidates who decided to stay and STACP candidates who decided to leave the profession regarding subject area (Science, CTAE, Fine Arts, Foreign Language, Health/Physical Education, English/ELA, Social Studies/History, Special Education, Math, and STEM). The percentages of stayers and leavers as it relates to the subject areas reported in Table 18. The highest number of leavers as indicated by the STACP candidates was CTAE (21%) and Social Studies/History (21%).

Table 18

Stayers and Leavers: Subject Area

	Number of Stayers	Percentages of Stayers (%)	Number of Leavers	Percentage of Leavers (%)
Science	6	15	1	7
CTAE	9	23	3	21
Fine Arts	1	3	2	14
Foreign Language	1	3	0	0
Health/Physical Education	3	8	2	14
English/ELA	6	15	2	14
Social Studies/History	3	8	3	21
Special Education	6	15	0	0

Math	4	10	0	0
STEM	0	0	1	7

Teachers who teach STEM or special education had a higher statistically significant turnover rate than teachers in other content areas (Nguyen et al., 2020). My study showed that no STACP candidates indicated they were leaving special education and only one (7%) STACP candidate indicated they were leaving taught STEM. Attrition rates were higher among teachers who taught English/Social Studies (7.3%), Math/Science (7.2%), ESOL (6.9%), and Special Education (5.6%) (Carver-Thomas & Darling-Hammond, 2019). I found in my study that 14% of STACP candidates who were leaving taught English/ELA, 21% of STACP candidates taught Social Studies/History and 7% taught STEM. Even though there is no statistically significant association for subject area between STACP candidates who decide to stay and STACP candidates who decide to leave the profession, subject area continues to be heavily researched to determine what subject areas are associated with teacher attrition.

Educational Level

The findings of my study indicated that there was no statistically significant association between STACP candidates who decided to stay and STACP candidates who decided to leave the profession regarding educational level. In the study, 68% of total STACP candidates identified that they taught high school level courses. Of the 68% total STACP candidates who taught high school level courses, 71% of the participants reported their intention was to leave the profession. Research has identified that middle

school teachers were 51% more likely to attrite than elementary school teachers and high school teachers were 27% more likely to attrite than elementary (Nguyen et al., 2020). Other research has reported a statistically significant difference between elementary teachers who intended to leave than high or middle school level teachers (Chambers Mack et al., 2019). The attrition rate in Rhode Island was higher for teachers who taught high school (43%) followed by middle school (40%) (Bailey et al., 2020). Even though there is no statistically significant association for educational level between STACP candidates who decide to stay and STACP candidates who decide to leave the profession in my study, it is evident from other studies that educational level factors into teachers' decisions to leave or stay.

Gender

The findings of the study indicated no statistically significant association between STACP candidates who decided to stay and STACP candidates who decided to leave the profession regarding gender. Nguyen et al. (2020) found that gender did not have a significant relationship with turnover in their study. Chambers Mack et al. (2019) found that females (76%) reported they intended to leave compared to males (24%) who reported they intended to leave. Redding and Henry (2019) reported that male alternatively certified teachers are 21% more likely to leave their school than females. Van Overschelde and Wiggins (2020) found that there was no statistical significance difference regarding gender between alternative certified and traditional prepared teachers. Even though there is no statistically significant association for gender between STACP candidates who decide to stay and STACP candidates who decide to leave the

profession in my study, it is evident in other studies that gender factors into teachers' decisions to leave or stay.

Age

The findings of the study indicated no statistically significant association between STACP candidates who decided to stay and STACP candidates who decided to leave the profession regarding age. The findings of the study showed that the majority of STACP candidates who intended to leave were 21–39-year-old. Elsayed and Roch (2021) stated that there was a statistical significance of the mean between leavers (35.6) and stayers (34.2) regarding age. Redding et al. (2019) reported that there was a statistical significance of the mean regarding age between stayers (28.34) and leavers (27.48). Chambers Mack et al. (2019) found that there was a statistical significance of the mean between leavers (43.82) and stayers (46.29) regarding age. Nguyen et al. (2019) found that the odds of teachers who are more than 28 years old leaving decreased by 30% compared to teachers who were younger than 28 years. Carver-Thomas and Darling-Hammond (2019) found that the youngest (under 30 years of age) and oldest (older than 50 years of age) groups of teachers have the higher rates. Although there is no statistically significant association for age between STACP candidates who decide to stay and STACP candidates who decide to leave the profession in my study, it is still evident from other studies that age factors into teachers to leave or stay.

Years in the STACP Program

The findings of the study indicated no statistically significant association between STACP candidates who decided to stay and STACP candidates who decided to leave the

profession regarding years in the STACP program. The study findings showed that none of those candidates with 3 years' experience in the STACP program indicated they would leave the teaching profession and nearly half of the candidates who had 2 or less years' experience indicated they would leave the teaching profession. Nguyen et al. (2020) found the odds of turnover are 54% higher with less than 3-years of experience. Redding and Henry (2019) found that 7% of alternatively certified teachers' left during their first year, 22% left during their second year, and 69% left during their 3rd year. My study found that 16% of STACP candidates who completed 3 years of the STACP program are more likely to stay.

Race/Ethnicity

The findings of the study indicated no statistically significant association between STACP candidates who decided to stay and STACP candidates who decided to leave the profession regarding race/ethnicity. My study reported in Table 19 that of the 14 STACP candidates who indicated they were leaving, 6 identified as White/Caucasian, 7 identified as Black/African American, and 1 identified as Hispanic/Latino.

Table 19

Stayers and Leavers: Race/Ethnicity

	Number of Stayers	Percentage of Stayers (%)	Number of Leavers	Percentage of Leavers (%)
White/Caucasian	28	67	6	43
Black/African American	9	21	7	50

Latino/Hispanic	5	12	1	7
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Chambers Mack et al. (2020) found no statistical difference between Caucasian teachers who left (63.6%) and Caucasian teachers who stayed (69.3%). Chambers Mack et al. (2020) did, however, find that there was a significant difference between Hispanic teachers who left (25%) and Hispanic teachers who stayed (10.8%). Carver-Thomas and Darling-Hammond (2019) found there were a statistical significance difference in the overall turnover rate of teachers that identified as non-white (18.9%) including, Asian American, Pacific Islander, Black, Latino, Native American, or any combination, including one or more of those identifications and Caucasian (15.1%) teachers. Even though there is no statistically significant association for race/ethnicity between STACP candidates who decide to stay and STACP candidates who decide to leave the profession, it is evident from other studies that race/ethnicity is a factor in teacher attrition.

Career Factors

Nguyen et al. (2019) stated that career factors is associated with teacher attrition. I used descriptive statistics to determine what career factors were cited as the most frequent reason for STACP candidates to leave. The findings of my study showed that the career factors that were the most frequent reason for STACP candidates to leave were dissatisfied with teaching (64.3%), better salary or benefits (35.7%), and professional advancement (21.4%). Ismail and Miller (2019) identified working conditions, salary, fringe benefits, occupational commitment, and work-life balance as external factors. Vaidya and Thompson (2021) found that 78% of career changers stated they work longer

and harder for little pay and had become increasingly dissatisfied with teaching. Hurst and Brantlinger (2022) found that alternatively certified teachers stated that the top two reasons for leaving were dissatisfied with the requirement of teaching (33%) and low salary or insufficient benefits (16%). Darling-Hammond et al. (2019) found 67% of teachers who left the profession stated they left due to low salary but did say they would consider coming back if there was a salary increase. Career factors continue to be a large part of research as it relates to attrition and continues to be a topic that is discussed frequently in terms of teacher retention (Amitai & Van Houtte, 2022; Deever et al., 2020; Dreer, 2021; Newton et al., 2020)

Personal/Family Factors

Nguyen et al. (2019) stated that personal factors is considered one of the factors that is associated with teacher attrition. I used descriptive statistics to determine what personal/family factors were cited as the most frequent reason for STACP candidates to leave. The findings of my study showed that the personal/family factors that were the most frequent reason for STACP candidates to leave were: Change of residence (43%), Health (29%), Retirement (14%) and time away from family (14%). The other personal factors were pregnancy/childbirth (7%), and death of a loved one (14%). Brantlinger (2021) found that 7% of career changers left during their first year citing change in residence compared to 22% of career changers that left after their first year of teaching for the same reason. Carver-Thomas and Darling -Hammond (2019) found that teachers stated pregnancy/childbirth (37%) was associated with the largest percentage of teachers who leave. Darling-Hammond et al. (2019) found that 68% of leavers stated they left due

to the inability to maintain teaching retirement benefits, and 30% left due to not having childcare options, which would allow them to balance home and work life. The research literature shows that personal/family factors are related to teacher attrition.

School Satisfaction Factors

I used descriptive statistics to determine what school satisfaction factors were cited as the most frequent reason for STACP candidates to leave. The findings of my study showed that the school satisfaction factors that were the most frequent reason for STACP candidates to leave were: heavy workload (71.4%), poor administration (50%), and problematic student behavior (35.7%). The other school satisfaction factor choices were computer resources (21.4%), lack of influence (7%), school facilities (0%), and lack of parent support (14.3%). These findings are consistent with research that shows a heavy workload and lack of administrative support have been found to be critical factors in determining whether alternatively certified teachers left or stayed in the profession (Geiger & Privovarova, 2018; Zavelevsky et al., 2021; Zang & Zeller, 2016). Teachers are marginally more likely to turnover in schools with disciplinary problems, unfavorable working conditions, weaker administrative support, and a lack of induction/mentoring opportunities than teachers who did not have these issues (Nguyen et al., 2020). Nguyen et al. (2019) found that “teachers who indicated they had good in-service professional development have 16 % lower odds of leaving than those without” (p.9). Carver-Thomas and Darling-Hammond (2019) found that teachers who had a lack of administration support were twice more likely to leave teaching than those with supportive administration. Hurst and Brantlinger (2022) stated that 44 out of 134 participants who

reported they were leaving teaching stated the reason as teaching being too difficult. Carver-Thomas (2019) found that there was no significant effect on turnover in terms of workplace conditions, including reports of student behavior, parental support, school resources, duties and paperwork, collegial support, and job safety, classroom control, or teacher influence over school decisions. School satisfaction factors is a large part of research on reasons for teacher attrition and continues to be a topic that is discussed frequently in studies of teacher retention (Amitai & Houtte, 2022; Deever et al., 2020; Dreer, 2021; Newton et al., 2020)

Limitations of the Study

General limitations of the study described in Chapter 1 were limited number of survey questions, limited number of response choices, limited range of survey responses, and time constraints that faced respondents. The study suffered from several apparent methodological limitations beyond the general limitations outlined in Chapter 1.

The first methodological limitation in the study was the low number of participants as described in Chapter 4. Sampling is used to gain insights and observations about a population group (Busetto et al., 2020). However, when the sample size does not meet the minimum requirement, it can result in undermining the internal and external validity of a study as well as reducing the power of a study and increasing the marginal error, which results in rendering the study meaningless (Faber & Fonseca, 2014; Meyvis & Van Osselaer, 2018). However, even though the sample size was low the study approximated the population. The sample size indicated that the average age of the participants was 31-39 yrs. and the total population was 34 yrs. The average years in the

STACP program in months was 24 and for the total population the average was 18 months.

The second methodological limitation was the potential for self-selection and acquiescence bias. Self-selection bias occurs when only people who are interested in a topic participate in a study (Schaurer & Weiß, 2020). In the study, STACP candidates may not have felt the need to participate in the study due to having no intention of leaving at the time that the survey was distributed. In the study, it could have been that the participants who self-selected did so because of self-selection bias. Acquiescence bias refers to participants' having the tendency to agree with survey statements, without the action being a true reflection of their own position (Primi et al., 2019; Mandić et al., 2021; DeSimone & Harms, 2022). This type of bias can conflate individuals' true attitude and behaviors with agreeableness responses (Kazamer et al., 2023; Peer & Gamliel, 2019). Some STACP participants may not have felt comfortable reporting their true intentions of whether they were leaving or staying for the 2022-2023 school year.

The final methodological limitation that was observed was that the survey was delivered online. In my study, completing an online survey was the simplest method to reach the participants in a timely manner due to the various locations of the STAP program within the study state. Even though the online survey was the most effective method for my study to collect data the validity of an online questionnaire can be undermined by the impersonal nature (Evans & Mathur, 2018). Andrade (2020) stated that online questionnaires allow participants to easily answer the questions but also can limit the ability for the researcher to ask in-depth follow up questions to the responses as

an interviewer is able to do. Another disadvantage of using online surveys is the response rates are extremely poor compared to the offline survey methods (Nayak & Narayan, 2019). Even though online surveys can be a quick way to get questionnaire sent out it can also prevent the researcher's ability to judge the participants' seriousness about the questionnaire while expressing an open opinion (Nayak & Narayan).

Recommendations

Multiple researchers have stated that attrition can be reduced when four principal factors that characterize the workplace environment occur: school/administrative support, teacher morale, teachers' influence in schools and control in classroom, and fewer overall school problems (Carver-Thomas & Darling-Hammond, 2019; Darling-Hammond et al., 2019; Garcia & Han, 2022; Nguyen et al., 2019; Ondrasek et. al, 2020) Yet the literature review revealed that alternatively certified teachers face challenges in both career and school satisfaction factors that influence their decision to leave. Alternatively certified teachers that left teaching stated they left due to a lack of support from school administration, displeasure with how the school was overseen, and the heavy workload (Zalveleysky et al., 2021). This study was designed specifically to understand the reasons STACP candidates stay or leave the teaching profession within 3 years. The results show that common attrition reasons stated in the literature are also evident in my study on the reasons STACP candidates stated they were choosing to leave. The study also revealed that demographic factors had no statistical significance in understanding why STACP candidates stay or leave the teaching profession. However, the small sample size of STACP candidates does not provide enough data to generate generalizable findings.

Further research would be necessary to corroborate and expand the limited findings within this study. I would recommend that a study be completed at a larger scale to provide a more accurate intentions of STACP participants that would be collected.

The literature review revealed that preparation methods of alternatively certified teachers can be related to the retention and/or attrition of alternatively certified teachers (Redding & Henry, 2018; Sorensen & Ladd, 2020). Even though this study did not look at preparation program, I would recommend that a future research study be designed to study the preparation of STACP teachers and how it relates to the retention and/or attrition of STACP candidates. An additional recommendation would be to conduct a qualitative study to understand lived experiences of STACP candidates and how they perceived these experiences to have an overall effect on their decision to stay or leave the profession. A qualitative design would allow the researcher to either conduct interviews and/or focus groups with STACP teachers to delve further into their experience in the profession/program and what recommendations they must help improve retention rates of STACP teachers.

Implications

The findings of the study could contribute to positive social change by providing an understanding of the reasons that STACP candidates cited as reasons for leaving the teaching profession relating to career, personal/family, and school satisfaction factors at the organizational level by allowing the study state and the STACP programs to use the data to make changes to their programs to aid in decreasing attrition. I recommend that STACP programs utilize the reasons that the STACP participants gave for leaving and try

to determine what lead to those decisions to be made and identify ways to retain STACP candidates within the organization to continue to improve their programs and increase their retention rates.

I would recommend that school satisfaction factors be the first that the study state should focus on. School satisfaction has been linked to job retention and decreased teacher turnover (Olsen & Mason, 2023). School satisfaction is an area that can easily be looked at it and make changes to help decrease attrition. To be able to determine factors associated with school satisfaction factors have been related to the quality of teaching and to students' learning (Fütterer et al., 2023).

Conclusion

The purpose of this study was to collect data from survey responses to gain an understanding of demographic, personal/family, career, and school satisfaction factors that influence STACP candidates to leave the profession within the first 3 years. Multiple researchers have argued (Chambers Mack et. al, 2019; Darling- Hammond & Podolsky, 2019; Loeb & Myung, 2020; Podolsky et al., 2019; Shankar & Nayaken, 2020) that to retain teachers, professional organizations must understand why teachers choose to leave and must develop strategies to stop them from leaving. This study examined the attrition intentions of a sample of 56 STACP candidates and disaggregated them by personal, career, and school satisfaction factors. The findings from the study indicated that the most frequent characteristics of STACP candidates who stated they were leaving were men, aged 21-39 years of age, Black/African American descent, and taught at the high school level. The findings also indicated that the most frequent reasons that STACP

candidates who stated they were leaving were dissatisfied with teaching (career), change of residence (personal/family), and the heavy workload (school satisfaction). Despite the methodological limitation of a small sample size, the study still provided valuable insights on demographic, career, personal/family, and school satisfaction factors as it relates to the attrition of STACP candidates. Research has found that school satisfaction factors such as heavy workload, lack of administrative support, and planning time are large decision factors of teachers who choose to leave the teaching profession (Ansley et al., 2019; Billingsley & Bettini, 2019; Jerrim & Sims, 2021; Madigan & Kim, 2021; Mullen et. al, 2021; Perrone et. al, 2019; Sutchter et al., 2019). The findings of my study contribute to positive social change by providing an understanding of the reasons that were cited by STACP candidates for leaving the teaching profession as it relates to personal, career, and school satisfaction factor at the organizational level. The results of the study could contribute to social change at the organizational level by allowing the study state and the STACP programs to use the data to make changes to their programs to aid in decreasing teacher attrition. This is positive social change as retaining alternatively certified teachers within the field not only benefits the state but also the students within the classrooms of alternatively certified teachers.

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Appendix A: Permission to use Teacher Follow-Up Survey

From: Vida Szabat <[REDACTED]>
Sent: Friday, July 31, 2020 10:11 AM
To: Spiegelman, Maura <[REDACTED]>
Subject: U.S. Department of Education NCES Teacher Follow Up Survey
Permission

Dear Ms. Spiegelman,

My name is Vida Szabat and I am a doctoral candidate at Walden University. I am at the stage of finalizing my dissertation study and have decided to study the retention of STACP teachers in the study state under the direction of my dissertation committee chaired by Dr. Salina Shrofel. I came across a study that referenced the U.S. Department of Education Teacher Follow-Up Survey developed by the U.S. Department of Education (2014). I am asking for permission to use the study to focus on the reason teachers choose to leave the profession each year. I am also looking to identify what the reliability and validity of the Teacher Follow Up Survey are so that I am able to reference those numbers in my study. I will make sure to acknowledge the US Department of Education within the study as well. I will also do the following:

- I will use the survey only for my research study and will not sell or use it with any compensated or curriculum development activities
- I will send a copy of my completed research study to your attention upon completion of the study.

Please indicate your permission and reliability and validity of the survey by replying to me through this email [REDACTED]. I look forward to hearing from you. Thank you in advance for your consideration of my request.

Sincerely,

Vida M. Szabat
Doctoral Candidate

From: **Spiegelman, Maura** <[REDACTED]>
Date: Tue, Aug 18, 2020 at 2:48 PM
Subject: RE: U.S. Department of Education NCES Teacher Follow Up Survey
Permission
To: Vida Szabat <[REDACTED]>
Cc: Merlin, Julia <[REDACTED]>

Hi Vida,

The questions asked in the TFS are considered to be in the public domain, and can be viewed on our website (for example, <https://nces.ed.gov/surveys/sass/question1213.asp>). The restricted-use license is needed if you are interested in obtaining data from an NCES TFS collection.

We do not conduct formal reliability or validity measures for this survey. Questions are cognitively tested, and details about the survey methodology are included in our documentation, for example, <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2014077>.

Best,
Maura

Maura Spiegelman
Study Director
National Center for Education Statistics

Appendix B: Sample Invitation Email to STACP Candidates

Dear [STACP Candidate],

My name is Vida Szabat. I am a doctoral candidate at Walden University. I am asking for your participation in a doctoral study that I am conducting titled: Factors That Affect Alternatively Certified Teachers' Attrition Decisions. The purpose of this quantitative study is to determine what factors attribute to the attrition of STACP candidates within the first 3 years. The intention is to gain an understanding of why STACP candidates are leaving teaching before they finish the STACP program.

You will be asked to complete a short 10 question survey to provide information about your intention to stay or leave the teaching profession for the 2022-2023 school year. This survey should take approximately 15-20 minutes to complete. You will be asked to complete basic demographic information, intentions for the 2022-2023 school year, as well as career, personal/family, or school satisfaction factors that may have led to your decision for the 2022-2023 school year. The survey will be structured off the National Center for Educational Statistics Teacher Follow-Up Survey (2014).

Participation is completely voluntary, and you may withdraw from the study at any time. The study will be completely anonymous; therefore, it does not require you to provide your name or any other identifiable information. If you would like to participate in the study, please read the informed consent letter below. By participating in the survey, you will be giving me consent to use your anonymous responses in the study.

Thank you in advance for your time and participation. If you have any questions, please feel free to contact me at [REDACTED] Survey link:

Sincerely,

Vida M. Szabat

Doctoral Candidate

Appendix C: Fifth Day Follow-Up Sample Email to STACP candidates

Dear [STACP Candidate],

You were recently invited to participate in a survey for my doctoral study, aimed at determining what factors attribute to the attrition of STACP candidates within the first 3 years. Your response is critical as I strive to gain an understanding of why STACP candidates are leaving teaching before they finish the STACP program.

As always, your responses are confidential, and is completely voluntary. You can access the survey at: _____ . Thank you for your time and participation.

Sincerely,

Vida Szabat

Doctoral Candidate

Appendix D: Survey

STACP Alternatively Certified RetentionSection 1

1. Indicate subject area that you teach

- Science
- CTAE
- Fine Arts
- Foreign Language
- Health & Physical Education
- English/ ELA
- Social Studies/ History
- Other (please specify)

2. Indicate Educational level you teach

- Elementary (K-5)
- Middle Grades (6-8)
- High School (9-12)

3. Indicate your gender (optional)

- Female
- Male
- Other

4. Indicate your age category (optional)

- 21-25
- 26-30
- 31-39
- 40-49
- 50-59
- 60+

5. Indicate the number of completed years in the STACP program

- 0 years
- 1 year

2 years

3 years

6. Indicate your race/ethnicity

White or Caucasian

Black or African American

Hispanic or Latino

Asian or Asian American

American Indian or Alaska Native

Native Hawaiian or other Pacific Islander

Other (please specify)

Section 2

7. Indicate your plans to continue teaching in the 2022-2023 school year.

Yes, I am planning to teach and will stay in the SAME school.

Yes, I am planning to teach, but I will TRANSFER districts.

Yes, I am planning to teach, but I will TRANSFER within the SAME district.

I have not decided if I will be teaching during the 2022-2023 school year.

No, I am not planning to teach

Section 3

8. If you do NOT plan to continue teaching or if you have NOT decided if you will continue teaching indicate your career reasons influencing your decision (check all that apply)

I am dissatisfied with teaching as a career

I plan to pursue an education position other than a K-12 teacher.

I plan to return to school to improve career opportunities WITHIN the field of education

I plan to return to school to change to a career OUTSIDE the field of education.

I need or want a position with better salary or benefits.

I want more opportunities for professional advancement.

I am affected by an involuntary staffing action (e.g., reduction-in-force, lay-off, school closing, school organization, reassignment).

Not applicable

Other (please specify)

9. If you do NOT plan to continue teaching or if you have NOT decided if you will continue teaching indicate the Personal/Family reasons for influencing your decision (check all that apply)

Change in residence

Health

Retirement

Pregnancy/Childbearing

Not Applicable

Other (please specify)

10. If you do NOT plan to continue teaching or if you have NOT decided if you will continue teaching indicate the School Satisfaction reasons for influencing your decision (check all that apply). I am dissatisfied with...

my school or teaching assignment.

my heavy workload

my lack of influence over school policy.

computer resources.

school facilities.

poor administration support.

problematic student behavior.

lack of parent support.

relationships with colleagues.

not enough planning time.

too students in a classroom.

student motivation.

professional development requirements not matching my career goals.

Not Applicable

Other (please specify)