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The Relationship between Teacher Retention and Original Career Goals, Teacher Efficacy and Empathy: A Study of Teach For America Alumni

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THE RELATIONSHIP BETWEEN TEACHER RETENTION AND ORIGINAL
CAREER GOALS, TEACHER EFFICACY AND EMPATHY:
A STUDY OF TEACH FOR AMERICA ALUMNI

by

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ABSTRACT
THE RELATIONSHIP BETWEEN TEACHER RETENTION AND ORIGINAL
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Tyra N. Hildebrand

Marquette University, 2018

Retention of urban teachers is important in order for students attending high-poverty schools to achieve significant academic and social gains (Boyd et al., 2008). This quantitative study sought to determine if a relationship existed between teacher retention and original career goals, teachers' sense of self-efficacy, and self-reported level of empathy. Seven cohorts of Teach for America (TFA) alumni who completed their program between 2011-2017 in the same urban region were surveyed to learn about the TFA experience and specific career decisions after their two-year program ended. Lent, Brown and Hackett's (2002) Social Cognitive Career Theory (SCCT) was utilized as the theoretical framework to better understand the complexities behind career decision making of TFA alumni.

The results of a survey taken by 131 alumni provided answers to four research questions. In the first question, chi-square analysis indicated that original career goals had a relationship with teacher retention. Results of independent samples t-tests indicated that teacher efficacy did not have a relationship with teacher retention, nor did empathy, although all alumni rated themselves high in both the teacher efficacy measure (TSES, Tschannen-Moran & Hoy, 2001) and in the empathy measure (IRI – Davis, 1980). The results of logistic regression in the final question initially showed a significant relationship with an original career goal of being a teacher with retention. However, that significance did not carry over into the full logistic regression model, yet being an alumni of color and entering the TFA program after pursuing other work opportunities were both significant predictors of teacher retention. The findings from this study showed that 73% of the sample remained in the teaching profession after the TFA program concluded.

Recommendations for the local TFA region and the national TFA region include making teacher retention a program goal, continue recruiting alumni of color and continue recruiting individuals with prior work experience. Recommendations for further research include conducting more regional TFA studies to examine retention rates and the different reasons for remaining a teacher. Exploring the constructs of teacher efficacy and empathy with both traditionally trained and alternatively certified teachers new to the education profession warrants research.

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CHAPTER ONE

INTRODUCTION

Teachers depart from the education profession at an alarming pace in the United States. Forty-one percent of new teachers leave the education profession within five years (Perda, 2013). Reportedly, 500,000 teachers of the 3.5 million public school teachers in the country, leave their schools each year either quitting the profession entirely, or transferring to teach in another school (Haynes, 2014; Simon & Johnson, 2013). While some natural attrition from any profession is expected and normal, and at times can be positive, the rate of departure from teaching has been increasing since the mid-1980's (Ingersoll & Merrill, 2012) and attrition in the teaching profession is higher than in the nursing, law, engineering and academic professions (Ingersoll, Merrill & Stuckey, 2014). Teacher retention in K-12 schools has become a critical topic even more recently, as some school districts throughout the country are experiencing a teacher shortage particularly in certain subjects like math, science, special education and bilingual education (National Commission on Teaching & America's Future, 2016). Additionally teacher certification programs of all types have seen a major decrease in the number of applications – in one recent year, applications dropped from 623,190 to 499,800 (Sawchuk, 2015; NCTAF, 2016). Teacher attrition is a growing problem, and the costs of attrition cannot be ignored.

Costs of Teacher Attrition

Teacher attrition is the full departure of educators from the teaching profession. Conversely, teacher retention refers to those educators who remain in the teaching

profession and continue to teach each year, even if they relocate from one school to work in another school. The research literature classifies educators involved in teacher turnover as *stayers* - teachers who remain at their school, *movers* - teachers who relocate to work in other schools, and *leavers* - teachers who leave the profession entirely (Ingersoll, 2001). For the purposes of this research study, *stayers* and *movers* are grouped together to represent teacher retention.

It is important, however, to delineate the difference between *stayers* and *movers*, as changing from school to school is also disruptive for the students, the school community and involves financial costs (Ingersoll et al., 2014). In fact, Ingersoll and colleagues report a high amount of annual reshuffling of teachers moving from high-poverty schools to more affluent schools, from high-minority schools to low-minority schools and from urban to suburban schools (Ingersoll, 2011; Ingersoll & May, 2012; Ingersoll et al., 2014). While *movers* remain in the teaching profession, there are still transactional costs associated with relocating to teach in other schools.

Research shows that teachers are able to achieve higher academic results with students after several years of teaching experience (Boyd, Grossman, Lankford, Loeb & Wyckoff, 2008; Darling-Hammond, Holtzman, Gatlin, & Heilig, 2005; Simon & Johnson, 2013). Thus, when beginning teachers leave the classroom before students can benefit from their enhanced teaching skills, such high levels of new teacher attrition becomes problematic for student performance (NCTAF, 2016).

Financial Impact

High rates of teacher attrition result in significant annual costs for individual schools and school districts (Boyd et al., 2008; Planty, Hussar, Snyder, Provasnik, 2008;

Ronfeldt, Loeb & Wyckoff, 2013) and collectively up to $2.2 billion annually for the entire country (Haynes, 2014). Regular teacher turnover also means time and resources are shifted from increasing student academic achievement and improving teacher performance to recruitment efforts. The cost of such recruitment efforts are staggering. One estimate shows that approximately $7.34 billion was spent nationally each year replacing teachers (Barnes, Crowe & Schafer, 2007; Simon & Johnson, 2013). Other research reported that Chicago Public Schools spent $86 million annually for new teacher recruits to fill vacated positions (Allensworth, 2007). Particular types of schools are impacted more by the steep financial cost of teacher attrition than others. When comparing the costs related to attrition, including recruitment, training and professional development, Simon and Johnson (2013) reported that individual high-poverty urban schools spend significantly more on attrition related costs - on average $70,000 each year - while higher income schools spend on average $33,000 annually.

Academic Impact for Students

Beyond the negative financial impact, large teacher turnover in high-poverty school settings also means students in these schools are more likely to be taught by a series of inexperienced teachers, which negatively impacts their academic achievement (Boyd et al., 2008; Darling-Hammond et al., 2005; Simon & Johnson, 2013). Studies show that teacher turnover occurs at a greater rate in low performing, high-poverty schools with a large population of students of color (Ingersoll et al., 2014; Planty et al., 2008; Ronfeldt et al., 2013). In fact, in high-poverty schools, the teacher attrition rate is 20% annually - 50% higher than more affluent schools (Haynes, 2014). Further, in some schools, teachers resign during the school year, which creates additional instability for

students (Simon & Johnson, 2013). Research indicates that students taught by more experienced teachers make stronger academic gains than students taught by new teachers (Boyd et al., 2008; Papay & Johnson, 2011) thus the lack of experienced teachers in high-poverty school settings simply increases the achievement gap between students in high-poverty schools and students in more affluent schools.

Additionally, many students attending high-poverty schools present unique challenges due to the stress of poverty and/or trauma in their lives, making the regular churn of less experienced teachers in and out of these schools particularly troubling since these students need the expertise of experienced teachers to help them make academic and social gains (NCTAF, 2016). The challenges in many of America's schools are vast, especially in high-poverty schools, given that over the past few decades, the income and academic gap has grown wider between students in high-poverty areas and students living in higher income areas (Children's Defense Fund, 2017). For example, the Children's Defense Fund (2017) reported that in 2015, over 75 percent of low-income fourth and eighth graders from public schools cannot read or compute at grade level, compared to less than 55 percent of higher-income students (Children's Defense Fund, 2017). In 2016, one in five children lived in poverty, which corresponded to over 13.2 million children (Children's Defense Fund, 2017).

Additionally, the number of students from diverse backgrounds has grown significantly, with approximately 11.2 million students speaking over 450 first languages that are not English and currently there are over six million students identified with special education needs (NCTAF, 2016). High-poverty schools in urban districts desperately need experienced quality educators in order to ensure students make

significant academic gains. Instead, high poverty schools are also often the schools that cannot attract or keep qualified educators, and these schools end up with a revolving door of teachers with minimal experience (NCTAF, 2016).

Impact on Experienced Teachers

Costs to academic success for students and financial costs to school districts are not the only consequences of teacher attrition. When experienced teachers leave a school, the school loses important curricular resources, institutional resources and institutional memory that is difficult to quantify (Haynes, 2014). The few remaining experienced educators who continue to work in schools with such high teacher turnover face additional challenges, as they lose the ability to collaborate regularly with highly experienced and skilled teachers and consequently often face heavy demand from new teachers who need mentoring (Ronfeldt et al., 2013). Simon and Johnson (2013) analyzed six studies of teachers' working conditions to determine how school leadership, collegial relationships and components of school culture impact teacher turnover and noted the broader school costs associated with a revolving door of teachers and found:

> ". . . a pattern of chronic turnover exacts instructional, financial, and organizational costs that destabilize learning communities and directly affect student learning" (p. 6).

Accordingly, significant teacher attrition rates in high-poverty school settings negatively affects the students, the remaining teachers and the schools in multiple ways.

Alternative Pathways into the Teaching Profession: Teach For America

Beginning in the 1980's, local school districts and a variety of education

programs in a number of states began developing alternative certification and licensure programs to address: 1) the need to diversify the teaching force; 2) the teacher shortage in specific content areas; and 3) the teacher shortage in hard-to-staff school settings (Walsh & Jacobs, 2007). Alternative certification programs vary significantly in duration and curriculum content. However, regardless of format or length, alternative certification programs have grown significantly over the years, exist in 47 of 50 states, and prepare almost one in five teacher candidates (Walsh & Jacobs, 2007).

While the emergence of non-traditional routes into teaching has certainly increased the supply of teachers over the past few decades, teacher attrition remains a problem, particularly in high-poverty schools. Thus, the sole focus of many alternative routes into teaching is to place teachers in hard-to-staff schools, and thereby educators from alternative certification routes disproportionally work with low-income students of color from high-poverty schools (Grissom, 2008), which tend to be the same schools with high attrition rates (Planty et al., 2008). Consequently, it follows that those teachers prepared by alternative routes into the teaching profession, often leave the profession at a higher rate than traditionally trained teachers (NCTAF, 2016). Overall, however, high rates of teacher attrition is clearly happening in both alternatively certified and traditionally certified populations (NCTAF, 2016; Perda, 2013). The present research study focuses on in-service teachers who have completed a non-traditional route into the teaching profession, the Teach For America (TFA) program. To that end, the relationship between teacher retention among TFA alumni and a specific set of variables will be explored.

The Teach For America program was created by Wendy Kopp, who as a

Princeton University senior in 1989, wrote her thesis on an idea for a teaching program based off of the Peace Corps concept. Kopp recognized the need for high quality teachers in hard-to-staff school settings and believed that high caliber recent college graduates could make a critical difference for students in these school settings. She believed that having a consistent teacher for two years was better than students cycling through several substitute teachers regularly.

Consequently, Kopp developed an expedited program for training well-educated, recent college graduates - who she called corps members - to serve as teachers for two years in high-need schools, which had a shortage of educators. She created a five-week intensive Summer Institute training program which provided corps members with the opportunity to team teach and learn about lesson planning and classroom management. After five weeks of training, corps members were placed as the lead teacher in a classroom at a high-need school for two years, while continuing their training with professional development, coaching and in some cases graduate education coursework leading to teacher certification.

TFA has become a regular contributor of short-term in-service teachers throughout the country. What initially began in 1990 as a group of 384 corps members serving six regions in four states has exploded to a high of 4100 in-service teachers in the 2014-15 school year, currently serving 53 regions, in 36 states (Heilig & Jez, 2014; TFA, 2018). Over the past 28 years, TFA has attracted more than 50,000 academically talented young men and women to heed its mission - to end educational inequality (TFA, 2018). TFA currently reports on its website that they have 6400 corps members actively working in schools throughout the country (TFA, 2018).

What may attract some to join TFA is the selectivity of the program. For example, in 2008, 35,000 candidates - many from Ivy League schools - applied for the 4000 available spots in the TFA program (Eaton, 2010). TFA seeks candidates with high undergraduate grade point averages, who have both the evidence of leadership skills and the ability to work "relentlessly" towards the TFA mission (Farr, 2010; TFA, 2017).

TFA is one of many nontraditional - or fast track pathways - into the teaching profession in the United States. However, what makes TFA unique among alternate route-to-teaching programs is that TFA alumni are not expected to remain in the teaching profession after the two-year program, but instead the experience is often viewed as two years of service. While most alternative certification programs are seeking to recruit individuals to the teaching profession for a long-term career, TFA views itself as a leadership development program. The TFA website also states: "Teach For America alumni are building on what they learned in the corps to lead, drive change, and advocate for equity in many different career sectors" and website viewers are provided with photos and bios of alumni serving in different career fields (TFA, 2017). Thus, TFA distinguishes that they are not training academic teachers for the long term, but instead are training leaders, for a variety of professions to influence the direction of education. TFA uses the "two years of service in the classroom" as a recruiting tool for the program and explains, "our mission is to enlist, develop, and mobilize our nation's most promising future leaders to grow and strengthen the movement for educational equity and excellence" (TFA, 2017). TFA communicates a clear message to its recruits that their role in the classroom is to close the achievement gap between their students in high-need, low-income settings and students from higher-income schools (Farr, 2010) and then

following the two-year experience, move into other positions to exercise leadership

(TFA, 2017).

      TFA clearly recognizes that their alumni move into other professions after the

two-year program ends. TFA asserts that the teaching experience profoundly impacts the

corps member and as a result, all alumni, regardless of whether or not they remain as

classroom teachers, remain committed to the mission of ending educational inequality

(TFA, 2017). Hence, TFA believes their program assists corps members in the

development of leadership skills, but equally or more importantly, the program serves as

motivation for alumni to support educational equity in future career endeavors, as

evidenced by the following quote on their website:

> We recruit remarkable and diverse individuals to become teachers in low-income communities…We train and support corps members in the practices of great teachers and leaders. With hard work, perseverance, and strong partnerships with their students, students' families, and communities, corps members can dramatically increase the opportunities available to their students in school and in life. Corps members don't just teach their students, they learn from them. At the end of two years, they use those lessons to choose their path forward. Many stay in the classroom. Others move into politics, school leadership, nonprofit work, advocacy, and more. All of their paths matter because together they form a network—connecting, expanding, and strengthening the movement to give all kids access to a great education (TFA, 2017).

However, the TFA alumni who remain in the classroom for any length of time after their

TFA service appear to be the exception, not the norm (Heilig & Jez, 2014; Veltri, 2010).

      Due to the limited-term commitment to the teaching profession, some critics

assert that TFA corps members use the two-year experience simply to build their resumes

to launch into more high profile careers (Heilig & Jez, 2014; Veltri, 2010). Critics also

suggest that while TFA may have originally started as a solution to address the problem

of unqualified substitute teachers and regular teacher turnover - the two-year fixed

commitment instead simply leads to built-in teacher attrition (Darling-Hammond, 2006; Heilig & Jez, 2014; Labaree, 2010; Veltri, 2010). Education researchers also argue that staffing America's most struggling schools with minimally trained young adults weakens public education in the very schools where high quality teaching is seriously needed, as well as jeopardizes employment in high-need settings for more qualified and experienced educators (Kretchmar, Sondel & Ferrare, 2014; Heilig & Jez, 2014; Veltri, 2010). Accordingly, critics question if TFA is simply extending the problem it set out to solve (Heilig & Jez, 2014; Veltri, 2010).

Some TFA alumni do in fact, remain as classroom teachers (TFA, 2017). Yet for a program that has existed for over twenty-five years, the research on retention rates of TFA alumni is limited and conflicting. For example, one researcher reported that over 50% of TFA corps members left after the initial two-year commitment and over 80% left teaching after three years (Heilig & Jez, 2014). However, another study reported higher retention data and concluded that 61% of TFA teachers continued teaching for a third year, 45% continued into their fourth year and 36% were still teaching in their fifth year (Donaldson & Johnson, 2011). The discrepancy in these two data comparisons could be due to using different data sets, i.e. a national set of data compared to a regional set of data, or even researcher's positionality. Clear retention rates and patterns are difficult to identify as few regional retention studies of TFA alumni exist (Gottfried and Straubhaar, 2015; Heineke, Mazza, & Tichnor-Wagner, 2014; Ready, 2014) and only three studies drawing from one national TFA dataset have been published (Donaldson, 2012; Donaldson & Johnson, 2011; Donaldson & Johnson, 2010). Given the widespread use of TFA teachers in high poverty schools nationally and the need to learn more about factors

which may influence teacher retention in high-poverty school settings, researching retention of TFA alumni is warranted.

Interest in the Topic

Personal interest in urban teacher retention stems from over twenty years working in the field of urban education. At the beginning of my educational career, I taught urban middle school students for a total of six years in two different cities. In each school, teacher turnover was the norm, even during the school year, which was highly disruptive. I eventually moved into a school administrator position for two years in a high-poverty school, where part of my duties included managing regular teacher absences and resignations during the school year, which resulted in a great deal of substitute teaching on my part, due to teacher shortages and turnover. The amount of time and resources required for recruiting and training new teachers was difficult for a small school to manage. I witnessed firsthand the impact an unstable teaching staff can have on both the school community and on academic achievement of students. For the past fourteen years – including seven with TFA in-service candidates, I have worked in teacher education, managing elementary and secondary licensure programs for graduate students, where I continue to witness the effects of teacher attrition on hard-to-staff urban schools.

Keen interest in the career paths of in-service teachers developed during the last seven years given my role working directly with TFA in-service educators. I observed that many TFA alumni moved out of teaching right away into different career fields, while others remained classroom teachers. I wondered what influenced alumni to either stay in or depart from the teaching profession. Did some TFA teachers feel highly successful in the classroom (i.e. have high teacher efficacy) and did that play a role in

their career decision-making? Were TFA teachers able to develop strong relationships with their students and understand the challenges their students faced (i.e., have strong empathy) and did that influence career decisions? Did the corps members have original career goals which influenced their decision-making after the TFA program ended? I served as part of the research team on a prior research study that found for several first-year TFA science teachers, having high teacher efficacy and having empathy for one's students were important for student success (McNew-Birren, Hildebrand & Belknap, 2017). I was curious not only about the retention patterns of the TFA alumni in this region, but was also interested in specifically how original career goals, teachers' sense of self-efficacy, and empathy level played into the decision to either remain a classroom teacher or depart from the profession.

Overview of the Theoretical Framework and Research Questions

Social Cognitive Career Theory (SCCT) is the theoretical framework for this study. SCCT focuses on career decision-making based on three core variables: self-efficacy, outcome expectations and personal goals (Lent, Brown & Hackett, 2002). For this study, two of the three key variables, self-efficacy and personal goals were included in the research, as well as empathy, a third variable, also present in the SCCT framework as a personal attribute. Measuring teacher efficacy and empathy levels were conducted by utilizing an existing self-reporting instrument. SCCT will be described in further detail in the next chapter.

To determine what kind of relationship teacher retention of TFA alumni have with original career goals, teacher efficacy, and empathy, four central research questions for this quantitative study were developed:

1) Does a relationship exist between original career goals of TFA alumni and teacher retention?

2) Is there a significant difference in teacher efficacy between the TFA alumni who remained in teaching and the TFA alumni who left the teaching profession?

3) Is there a significant difference in empathy for the TFA alumni who remained in teaching and the TFA alumni who left the teaching profession?

4) Are original career goals, teacher efficacy, and empathy significant predictors for teacher retention among TFA alumni?

Significance of the Study

A regional study focusing on retention of TFA alumni provides important data to complement existing studies about urban teacher retention and specific studies about career paths of TFA alumni. Retaining new teachers in urban classrooms is clearly a challenge, given that one in five teachers leave high-poverty schools each year (Haynes, 2014). Examining teacher retention of TFA corps members may seem ironic, given that these in-service educators only commit to teaching for a fixed duration of two years. Determining if prior career goals, teacher efficacy, and empathy have any relationship to teacher retention will add to the research base and could possibly lead to recommendations for ways to obtain higher teacher retention rates for this specific TFA region.

This study will not address the controversial topic of whether TFA teachers can achieve better academic outcomes for their students as compared to traditionally trained teachers. Earlier studies have examined this question and some of the empirical research indicated that students of TFA teachers showed slightly higher academic gains in math than students of non-TFA teachers (see Raymond, Fletcher & Luque, 2001; Darling-Hammond et al., 2005; Decker, Mayer & Glazerman, 2004). Nor will this study delve

into analyzing the quality or length of training that TFA corps members receive when compared to other routes into the teaching profession, as other researchers have examined the impact of program differences (see Boyd et al., 2006; Walsh & Jacobs, 2007). Nor will this study critique or analyze TFA as an organization (see Brewer & DeMarrais, 2015; Veltri, 2010). These topics are worth examining, however, the present study focuses on the relationship between TFA alumni retention and original career goals, teacher efficacy and empathy.

TFA, the employing school, and the higher education institution all partner to invest time, money and personnel resources in training each TFA corps member. Assuming teacher retention is a benefit, investigating career decisions of TFA alumni will provide solid evidence to support whether a broader benefit exists for students and schools beyond the two-year program duration. This study provides important evidence to determine if a relationship exists between TFA alumni retention and original career goals, teachers' sense of self-efficacy and self-reported empathy. Results will not only expand the knowledge base regarding TFA corps members' career decisions, but the findings also have the potential to provide the regional TFA staff and its partners with information about the characteristics of TFA teachers who may choose to teach beyond the two-year program duration. The findings from this study are important to this particular TFA region, the employing schools, the local TFA staff and the university partners. Additionally, the findings may be useful for TFA programs outside of this specific region. The need to explore potential factors that may have a relationship to teacher retention is clearly important given the costs to the schools, students and other teachers. This research attempts that exploration.

CHAPTER TWO

LITERATURE REVIEW AND THE THEORETICAL FRAMEWORK

The problem of teacher attrition in high-poverty urban schools is clear and problematic. However the reasons for high teacher turnover are numerous and complicated. This chapter briefly summarizes the variety of individual and school based factors involved in teacher retention and attrition in general. Next, research specifically focused on retention of Teach for America (TFA) corps members and alumni will be discussed. The chapter concludes with an explanation of the theoretical framework used in the study, Social Cognitive Career Theory (SCCT), with a focus on the three variables under investigation – original career goals, teacher efficacy, and empathy.

Factors Influencing Teacher Retention and Attrition

As shared in chapter one, teacher attrition refers to the educators who leave the teaching profession entirely – also known as *leavers* (Ingersoll, 2003). Teacher retention, on the other hand, refers to those educators who remain teaching, also known as *stayers* (Ingersoll, 2003). For the purposes of this study, retention also includes those teachers who move to teach in other schools, also known as *movers* (Ingersoll, 2003). Thus, I group *movers* and *stayers* together in the category of retention.

Research shows that teacher retention and attrition involve a variety of complex factors at both the individual level and school level. Many variables at the individual level have been studied to determine their relationship to retention, such as gender, age, race, background characteristics, geography, and academic abilities (Rinke, 2008). For young teachers especially, decisions to remain or depart from the teaching profession are also influenced by typical personal and life cycle factors (Rinke, 2008). Factors at the

school level, for example, the size of the school, class size, student population, and administrative support, have been researched to determine if they influence retention (Rinke, 2008). While the present study is not delving into these different factors, it is important to understand the broad research landscape regarding teacher retention and attrition.

Individual Factors

Researchers have noted general trends and have investigated how individual factors such as age, gender, race, academic background, and prior teaching experience, can impact teacher retention. For example, studies show that younger and older teachers leave the profession at a faster rate when compared to middle aged teachers (Guarino, Santibanez, & Daley, 2006; Hanushek & Rivkin, 2007; Ingersoll et al., 2014). Young teachers often leave the profession due to childcare needs (Public Policy Forum, 2016; Watson, Harper, Ratliff & Singleton, 2010). Many older teachers leave due to retirement, approximately 14% (Ingersoll et al., 2014). Gender also impacts retention – but research is unclear as some studies report more men stay in the profession, while others report more women stay in the profession (Borman & Dowling, 2008; Rinke, 2008). The recent ballooning of the teacher work force makes it more difficult to determine the retention and attrition patterns based on gender.

Some research points to White teachers leaving the profession at a faster rate than other racial groups (Rinke, 2008), however it is also important to understand that White teachers also make up the majority of the teaching force, roughly 83% (Ingersoll et al., 2014). In 2011-2012, only 17.3% of teachers were classified as teachers of color and while currently there are more teachers of color than ever before, due to the ballooning of

the teacher work force, the departure rate for minority teachers is also high (Ingersoll et al., 2014). However, teachers of color are also more likely to work in high poverty, hard-to-staff urban schools (Ingersoll et al., 2014). Thus, here again studies have mixed results regarding whether or not more teachers of color remain in the classroom when compared to White teachers (Borman & Dowling, 2006; Boyd, 2005; Ingersoll et al., 2014).

Further, research shows that individual academic background and teaching experience impact attrition. For example, new teachers with high undergraduate grade point averages or who attended more selective universities tend to leave the profession at a higher rate (Allensworth, 2009; Boyd et al., 2005). Additionally, the amount of practice teaching experience and undergraduate education coursework also affects retention. A study of over 2200 teachers, utilizing data from the 2003-2004 Schools and Staffing Survey (SASS) and the 2004-2005 Teacher Follow-up Survey (TFS) found that the teachers who had at least 12 weeks of supervised student teaching, were three times less likely to leave the profession than those teachers who did not have any practicum experiences (Ingersoll, et al., 2014). Additionally, four other factors of pedagogical training enhanced retention, 1) coursework in child psychology or learning theory, 2) preparation in selecting and modifying instructional materials, 3) observing other teachers teaching and 4) obtaining formal feedback on one's teaching (Ingersoll et al., 2014). Even amidst the plethora of research, it is difficult to determine which factors are the most important to teacher retention and attrition. As indicated by the research, multiple individual factors influence the decision to depart from or remain in the teaching profession.

School Based Factors

Research shows that a number of factors at the school level influence teacher retention and attrition in all school settings. In examining research related specifically to attrition of urban teachers, findings showed that teachers in high-poverty schools were departing the profession at higher rates than teachers in higher income schools. Some interpreted this attrition to indicate these teachers did not want to work with the students in high-poverty schools - often a high concentration of low-income, students of color (Simon & Johnson, 2013). However, Simon and Johnson (2013) propose an alternate perspective after their review of evidence from six major studies about urban teacher retention. They claim the poor working conditions present in high-poverty schools are the real reasons for teacher departures. They argue that teachers are not necessarily "fleeing" their students, but instead are choosing to depart from the very difficult working conditions present in high-poverty schools. Simon and Johnson (2013) believe that teacher retention can improve in high-poverty schools if the school environment improves specifically in the areas of school leadership, collegial relationships and school culture.

Grade level assignment and content area also affect teacher attrition and retention. Research demonstrates that more elementary teachers remain in the profession compared to secondary teachers (Ingersoll et al., 2014). Additionally, secondary math and science teachers depart the education profession at a higher rate than teachers of other subject areas, possibly due to having more career opportunities (Borman & Dowling, 2006; Ingersoll, et al., 2014).

Additionally, middle school teachers reportedly leave the teaching profession at higher rates than both elementary and secondary teachers (Brill & McCartney, 2008; Marinell & Coca, 2013). In a study tracking retention in New York City public middle schools, data showed that during a seven-year period between 2002 and 2009, 59% of middle school teachers left the profession, and 41% changed to different schools, with only 12% choosing to remain in a middle school (Marinell & Coca, 2013). The researchers claim that this high turnover and regular attrition in urban middle schools demonstrates that middle schools may be more challenging environments in which to teach (Marinell & Coca, 2013).

Further, research has shown that a number of additional school based factors impact dissatisfaction with the teaching profession, leading to increased teacher attrition in urban schools. One study utilized 25,000 responses to a 2008 statewide survey (MassTeLLS) and data from the Massachusetts Department of Elementary and Secondary Education (DESE). The research indicated that the social conditions of high-need schools - including the school culture, principal's leadership and relationships with colleagues - influenced teacher retention more than other working conditions, such as clean facilities or access to technology (Johnson, Kraft & Papay; 2012). If these three social conditions were strong, they allowed teachers to teach more effectively and to remain at their schools at higher rates (Johnson, Kraft & Papay; 2012).

Collectively, multiple factors have been identified at the school level that influence attrition. These factors include: lack of mentoring and support from the principal and/or school leadership; ongoing difficult student behavior issues; low salary; low sense of success with students; poor student academic performance; and little

influence over school decisions (Allensworth et al., 2009; Borman & Dowling, 2008; Boyd, 2008; Johnson et al., 2004; 2005; 2012; Marinell & Coca, 2013; Public Policy Forum, 2015; Simon & Johnson, 2013; Tamir, 2013). Other factors influencing attrition decisions include, having large class sizes, working with inadequate supplies and materials, poor school facilities, including safety concerns, little parent engagement and lack of collaboration with experienced colleagues (Allensworth et al., 2009; Borman & Dowling, 2008; Boyd, 2008; Johnson et al., 2004; 2005; 2012; Marinell & Coca, 2013; Public Policy Forum, 2015; Simon & Johnson, 2013; Tamir, 2013).

Clearly, multiple factors, at both the individual and school level, are at play in the decision to remain a classroom teacher in an urban school setting. The next section provides detailed insight into the research on teacher retention and teacher attrition for both TFA corps members and TFA alumni.

TFA Retention and Attrition

Not all TFA corps members complete the two-year program. Some corps members exit the program before the two years are finished, which means resources spent on recruitment and training are wasted, schools are left with unanticipated vacancies to fill, and K-12 students are left without a teacher. The reality of being a TFA corps member, with very little training in a challenging school setting and often with few curricular resources can be stressful and traumatic to the teacher (Brewer, 2014). As a result, not every TFA corps members fulfills their two-year commitment.

TFA Corps Member Attrition before Program Completion

T. Jamison Brewer, a former TFA corps member and education researcher, asserts TFA's theoretical framework, the Academic Impact Model (AIM) actually causes

accelerated burnout, leading to corps members quitting before the two-year program ends or immediately after (Brewer, 2014). Brewer conducted an ethnography, based on interviews of 20 corps members, during the summer of 2011, when he worked for the TFA Summer Institute program in Atlanta, Georgia. Brewer's sources of data included data from TFA, and interviews of corps members. Brewer's study focused on determining if a correlation existed between TFA's data on corps members who quit during the two-year commitment and who left TFA immediately after the program ended with "corps members' attitudes about accountability", and the "possibility of burnout" (Brewer, 2014, p. 253). Utilizing data provided by TFA, in addition to the interviews he conducted, Brewer (2014) concluded that overall, 11% of TFA corps members across the country dropped out of the TFA program before program conclusion. His data showed that between the years of 2005-2010, 2,119 corps members out of 19,699 (11%) left their teaching positions and did not complete the two-year program (Brewer, 2014). Additionally, he shared the national average completion rate for TFA corps members who finished the full two-year program between 2005 and 2009 ranged between 86.5% in 2005 to 90.1% in 2009 (Brewer, 2014).

The pressure on corps members to follow and support pre-determined academic achievement goals for students creates a challenging directive. Brewer (2014) proposes that the Academic Impact Model (AIM) sets corps members up for failure and does not allow them to take into consideration the external realities impacting their student's lives, such as how living in poverty impacts classroom behavior and academic performance. Instead, the AIM framework holds up models of successful corps members who hold

Saturday or evening tutoring sessions, who work relentlessly, and embody the notion that the "teacher is solely responsible for student actions" (Brewer, 2014, p. 249).

Of course, TFA teachers are not the only new educators who quit teaching positions in high-poverty urban schools. However, Brewer (2014) provides valuable data, which shows that approximately 1 in 10 corps members do not complete their two-year program. While the present research study focuses on retention of TFA corps members once they *complete* the program, it is noteworthy to understand that there is regular attrition *during* the two-year program.

TFA Alumni Retention and Attrition

Research specifically focused on TFA alumni teacher retention is limited. TFA alumni have been included in some large-scale quantitative studies about retention (Boyd et al., 2005; 2009; Darling-Hammond et al., 2005; Ready 2014). These studies generally show that TFA alumni leave the profession at higher rates than teachers who are not in TFA, which is not surprising. Qualitative research exploring the reasons behind TFA retention and attrition is finite (Brewer, 2014; Labaree, 2010; Ready, 2014). As suggested earlier, regular teacher attrition is a problem throughout the United States, as 41% of all new teachers leave the profession within five years (Ingersoll, 2014), and teacher attrition is a more significant problem in high-poverty schools (Planty et al., 2008; Ingersoll et al., 2014). Thus, higher attrition among TFA educators in urban settings makes a problematic situation even worse.

TFA teachers have been included in a few broad regional studies of teacher retention and attrition, which sheds some light on the high attrition rates of TFA alumni when compared to non-TFA teachers. For example, reportedly 58-81% of TFA teachers

from the late 1990's left the Houston school district by the end of the second year,

compared to 23-51% of non-TFA teachers who left after two years (Darling-Hammond et

al., 2005; Ready, 2014). Further, between 85-96% of TFA teachers left Houston public

schools after three years, compared to 35-55% of non-TFA teachers in Houston (Ready,

2014; see Darling-Hammond et al., 2005).

Several other TFA regions besides Houston also show high levels of attrition. In

Baltimore, Maryland, reportedly 60% of TFA teachers left after teaching for three years,

and 80% left after teaching for five years (Heineke et al., 2013, see MacIver & Vaughn,

2007). In New York City, TFA alumni showed particularly high levels of attrition after

the two-year program ended, three times higher than traditionally certified teachers and

twice the rate of those certified through other alternative routes (Heineke et al., 2013; see

Boyd et al., 2008). After four years, only 15% of TFA teachers remained teaching in New

York City (Heineke et al., 2013; see Boyd et al., 2008). In Louisiana, 96% of TFA

teachers had left after teaching for five years, compared to the non-TFA teachers rate of

35% attrition after five years (Ready, 2014; see Noell & Gansle, 2009). These statistics

certainly shed light on the higher attrition of TFA alumni however, the reasons behind the

attrition rates were not investigated. The following section will provide a synthesis of

other studies that reported on TFA retention and attrition. Sources include Teach for

America reports, several studies from one national data set and three regional studies.

Reports from TFA. The TFA national organization requests alumni complete a

survey each year. Based on results from the 2016-17 alumni survey data, TFA claims that

of their 50,000 alumni, 13,500 are preK-12 teachers, 1120 are principals, and 360 are

school system leaders (TFA, 2018). TFA does not utilize the annual survey results to

share how many consecutive years alumni have been teaching or working in other roles in K-12 schools, they simply provide a yearly snapshot. TFA reports that for 2016-17 1) 69% of their alumni "continue to work in education", 2) 83% work "in roles impacting education of low-income communities", and 3) 79% of alumni work in jobs that "impact education" (TFA, 2018). However, TFA's definition of "work in education" is broad and does not necessarily mean 69% are still teaching in the classroom, but instead the percentage could represent alumni who are in graduate school or who work for an education related non-profit organization or could represent the high number of alumni who work for the TFA organization. Additionally, to demonstrate alumni influence and reach, TFA shares on their website that 150 of their alumni have roles as elected officials, 500 alumni work as leaders in policy, advocacy or organizing, and 190 of their alumni are social entrepreneurs (TFA, 2018).

In an unpublished article titled *Unsung Teaching*, only available on the TFA website, Miller and Perara claim that the majority of TFA alumni teach at least three years, i.e. teach one additional year beyond the TFA commitment (TFA, 2017). They also claim that more than half of the TFA alumni from 1990-2000 taught for five or more years (TFA, 2017). Miller and Perara based their analysis on the TFA alumni survey, which typically has a 70% response rate (TFA, 2017). They suggest that existing TFA retention studies have not taken into account how many alumni transition to teach in schools different from their original placement, nor how many alumni return to teaching after taking a year or more off (TFA, 2017). For example, they claim the data they reviewed showed that over 10% of alumni returned to teaching after taking a break (TFA, 2017). While Miller and Perara have educational research backgrounds, the article is not

published in an education journal, but instead is only available on the TFA website, which makes their conclusions somewhat less credible.

National TFA studies. The only national source of TFA retention and attrition data comes from studies conducted by Donaldson and colleagues (Donaldson & Johnson, 2010, 2011; Donaldson, 2012). Donaldson and Johnson surveyed TFA alumni across the country from the 2000, 2001 and 2002 cohorts, who had completed the TFA program two, three or four years earlier. Out of a possible 3,283 TFA alumni, 2,029 (62%) responded to the survey which included questions relating to demographic information and details about the TFA teaching assignment and subject matter preparation. Donaldson and Johnson also used information from TFA placement records in order to track the schools where corps members were originally placed. This set of national, longitudinal data revealed a number of variables influencing retention, discussed in three different publications.

First, Donaldson and Johnson (2010) looked specifically at the type of teaching placement and found that TFA corps members who were placed in more challenging teaching assignments - multiple grade elementary teachers or multiple subject secondary teachers without a major in the subject they were teaching - were more at-risk of leaving the profession. The researchers suggested that a challenging teaching assignment, i.e. having multiple different classes to prepare for or working with multiple grade levels, led to a lower self-reported sense of teacher efficacy, which then led to voluntarily leaving the profession. They recommended placing TFA elementary teachers in a single grade placement and placing TFA secondary teachers in a subject area matched to their college

major in order to improve teacher efficacy and possibly enhance retention (Donaldson &

Johnson, 2010).

The next analysis conducted with this same data set revealed that several alumni

remained in teaching after program completion, but many moved to teach in a different

school than their original placement, seeking better overall working conditions – see

Table 2.1 (Donaldson & Johnson, 2011). Donaldson and Johnson (2011) found that 885

teachers or 44% of the alumni remained at their original placement for a third year, out of

a total of 1227 alumni or 61% who continued to teach. By the 4th year, the percentage

decreased to 457 alumni, or 23% who remained at their original placement, out of a total

of 904 alumni or 47% who continued to teach. By the 5th year, the number decreased

again, with only 300 alumni, 15% teaching at their original placement, out of a total 720

alumni or 36% of the sample who continued to teach. By the 6th year, 564 alumni, 28%

were still teaching, and by the 7th year, 485 alumni or 24%, were still teaching

(Donaldson & Johnson, 2011).

Donaldson and Johnson's data (2011) in Table 2.1 shows a major contribution of

educators to the teaching force after the TFA program concluded (1227 or 61% of the

sample), and a sustained number of teachers continuing each year, which serves as a

contrast to the TFA studies discussed earlier which showed higher attrition rates.

Although the number of teachers drops significantly each year, providing hundreds of

teachers each year to the teaching profession, in hard-to-staff school settings is certainly a

major contribution to the education profession overall.

Table 2.1 *Retention Rates of TFA Teachers in Original Placement or in Another School*
(adapted from Donaldson & Johnson, 2011, p. 49)

Year	Teachers who continued teaching in original placement school	Teachers who continued to teach (% of sample) either in original school or any other public school
2nd- still in TFA	1828 (90%)	1923 (95%)
3rd- First year after TFA	885 (44%)	1227 (61%)
4th- Second year after TFA	457 (23%)	905 (45%)
5th- Third year after TFA	300 (15%)	720 (36%)
6th - Fourth year after TFA	174 (9%)	564 (28%)
7th - Fifth year after TFA	106 (5%)	485 (24%)

These higher retention findings (Donaldson & Johnson 2010, 2011; Donaldson 2012) contradict other research stating the majority of TFA teachers leave after the program ends (Heilig & Jez, 2014; Ready, 2014). The data in Table 2.1 indicate however, that many alumni left their original school placement, presumably to seek out working in a school with better working conditions. The reasons alumni provided for leaving the initial placement were based on teaching assignment, student discipline issues, school philosophy or principal's leadership (Donaldson & Johnson, 2011), which mirror some of the same school based factors related to attrition cited earlier. The mobility of teachers moving to work in other schools is a trend found in all populations of teachers, not just TFA alumni, who are working in high-poverty schools (Simon & Johnson, 2013).

Donaldson and Johnson (2011) also examined if original career plans influenced retention. They found that over half of their respondents, 57%, planned to teach solely for the two-year program duration. In fact, 9% of alumni in their sample had deferred graduate school in order to complete the TFA program. However, 43% of alumni indicated they planned to teach more than the required two years. Additionally, 11% of the sample (230 alumni) noted that they planned to become teachers for the long term.

They also found that those alumni who showed an early commitment to teaching, by taking education classes or completing part or all of a teacher certification program prior to joining TFA, taught for more years than their peers.

The final study conducted with this national, longitudinal data set indicated that corps members older than 25 were more likely to stay at their placement school, more likely to stay in teaching and more likely to remain in school-based positions than the TFA teachers younger than 25 years old (Donaldson, 2012). The older TFA alumni in this sample were more likely to be male, African-American or residents in the area where their TFA placement was, all factors which research claims adds to higher retention (Boyd, 2005; Donaldson, 2012). The findings also revealed that older TFA alumni were more likely than the younger alumni, to move into K-12 administrative roles (Donaldson, 2012). Lastly, the reasons for departing from the profession were different from younger alumni. The older alumni cited family or health issues as reasons to depart from the profession (Donaldson, 2012).

Collectively, these three studies are important to the literature base on TFA retention and attrition, as the findings show that more TFA teachers stay in teaching than originally concluded by other researchers. These three studies reveal a number of critical variables that influence retention, older age of program entry, being an older, African-American male, living in the community where one is placed, having a single grade and single subject teaching assignment, and teaching in a subject that was one's college major (Donaldson 2012; Donaldson & Johnson, 2010; 2011). The next section discusses the regional research conducted in Florida, Arizona, and California.

Regional TFA Studies

Three regional studies of TFA corps members' career decisions also shed light on retention rates specifically in Duval County, Florida (Ready, 2014), in Arizona (Heineke, Mazza, & Tichnor-Wagner, 2014), and in Los Angeles, California (Gottfried & Straubhaar; 2015).

Florida. One source of TFA retention data comes from a report examining the outcome of a three-year Race to the Top grant from the U.S. Department of Education. One goal of the grant was to initiate programs and policies to increase retention and performance of TFA teachers. Researcher Douglas D. Ready, of Teachers College at Columbia University, surveyed 319 alumni who were in the TFA program between 2008-2013 in Duval County, Florida and compared TFA teacher retention rates with 1476 new non-TFA teachers (Ready, 2014). Ready concluded TFA teachers left at a higher rate than non-TFA teachers did, but he noted that TFA teachers were also placed in more difficult school settings.

Ready (2014) found that across five years or five cohorts of TFA teachers, a total of 32%, or 102 teachers, returned for a third year to the Duval County Public School (DCPS) system, compared to a total of 64%, or 940 of non-TFA teachers. The odds of a non-TFA teacher returning to teach for a third year were four times greater than a TFA teacher returning for a third year (Ready, 2014), clearly demonstrating the large retention gap between TFA alumni and non-TFA teachers. Collectively, only 25 TFA alumni out of 217 (12%) taught for a fourth year. The number decreased to 12 alumni out of 157 (8%) who remained teaching for a fifth year (Ready, 2014).

After controlling for different teacher characteristics, such as gender, age, ethnicity, and educational background, Ready (2014) found that TFA teachers when compared to non-TFA teachers were still less likely to continue teaching for a third year. Ready concluded that one explanation for the lower retention rates of TFA teachers could be due to the more difficult school settings they worked in. Ready acknowledged that some teachers left to teach outside of the DCPS system, but he was not able to obtain that data. So one could assume the TFA retention rates could be slightly higher when taking into account those who continued to teach, but left the district. Overall, Ready's Duval County data from TFA cohorts in 2008-2012 showed that TFA teachers left at a much faster rate than Donaldson's national alumni data from program participants who began TFA between the years of 2000-2002.

Arizona. Heineke, Mazza and Tichnor-Wagner (2014) conducted a mixed-methods study and examined survey data from 73 respondents and completed follow up interviews with seven TFA teachers who were all nearing the end of their two-year TFA experience in Arizona. Their survey results showed that 23 teachers (32%) – also known as *leavers* - planned to depart from teaching at the completion of their second year. The reasons provided for departure by the leavers included prior obligation to graduate school in law, medicine, business or the humanities, or to work in nonprofits such as working for the TFA organization, or in educational publishing (Heineke et al., 2014). *Lingerers*, included 13 teachers (18%) who planned to teach for just one more year. This group did not have set goals prior to program entry and the majority in the group, 64%, remained teaching in their placement schools. Some lingerers indicated they needed one more year before applying to graduate school and also indicated the difficulty in obtaining a job in a

poor economy (Heineke, 2014). The final group of teachers in this study were the *lasters*, 37 teachers (51%) who planned to teach beyond their third year (Heineke et al., 2014). The *lasters* indicated several positive environmental factors at multiple levels; in the microsystem, with students and with teaching; in the mesosystem, supportive school staff and leaders; and in the macrosystem, having a passion for teaching (Heineke et al., 2014). Collectively, a total of 50 teachers (69% of their sample) continued teaching for a third year (Heineke et al., 2014), which is close to Donaldson & Johnson's 61% rate for those teaching a third year (Donaldson & Johnson, 2010).

The authors delved into which historical, environmental and external factors - before, during and after the two-year commitment - impacted TFA corps member decision-making. They concluded that many retention and attrition factors were present even before each TFA corps member began their two-year experience, for example, a prior commitment to graduate school (Heineke et al., 2014). The authors report that the commitment to their original professional goals surpassed their commitment to TFA or to the teaching profession (Heineke et al., 2014).

Given the high attrition rates of new teachers, the authors suggest that TFA steer away from those college graduates with fixed career plans outside of teaching, in order to ensure higher retention rates of TFA teachers. They also suggest increasing the two year teaching commitment to a three or five year time-frame, as well as ensuring that TFA place their corps members in schools which have highly supportive environments for novice teachers (Heineke et al., 2014).

A significant limitation of this study is that the researchers surveyed and interviewed TFA corps members as they approached the conclusion of their two-year

commitment, which means their actual career trajectory could have changed from their intended career goals. Thus, this study sheds light on *intended* career plans, not actual career moves. Based on their sample of 73 respondents, 69% of the teachers planned to continue teaching a third year and 51% planned to teach for a fourth year. It is important to determine if these original career plans were followed. These potential retention rates are higher than the TFA retention rates in both Donaldson's and Ready's studies. In Florida, the 3rd year teaching rate was 32% and 12% for a 4th year, which is significantly lower than the rates reported in this study.

What is difficult to ascertain in these regional studies are the programmatic or regional differences between the two programs. Determining which factors led to a higher retention rate in Arizona compared to Florida could be attributed to a variety of differences within the regions. One rationale could be that Arizona was a well-established TFA region when compared to a newer region such as Duval County, Florida. Another possible explanation for different retention rates between regions could be different levels of support provided at the placements, or perhaps different higher education partner support or professional development. One other area to consider is the differences in sample size. The Arizona study had a sample size of 73, not all of whom were alumni yet, while Florida's study included a sample size of 351 alumni and Donaldson's sample included 2,029 alumni.

California. The final regional study available is based on a qualitative study of 25 TFA teachers in their first, second and third year of teaching in Los Angeles, California (Gottfried & Straubhaar, 2015). Authors interviewed 5 teachers from a 2010 cohort who had completed TFA one year prior, 15 teachers in their second year of TFA from the

2011 cohort and 5 teachers in their first year of the program, from the 2012 cohort. The

authors concluded that the TFA experience did not change any intended career plans

(Gottfried & Straubhaar, 2015). Authors found that the participants adhered closely to the

original career plans they had in mind before joining TFA. Results showed that the

majority wanted to remain in teaching, while the remaining respondents had varied career

plans, between for example, law school, moving into K-12 administration, and business.

Figure 2.1 indicates the results of their data analysis (Gottfried & Straubhaar, 2015).

These results indicate that some alumni possibly viewed TFA as a way into the

profession, as 32% wanted to remain teaching. However, the results also show that about

52% of the sample in this study wanted to pursue other occupational fields not related to

K-12 education.

Figure 2.1 *Intended Career Plans of TFA Corps Members and Alumni from Los Angeles,*
         CA (Gottfried & Straubhaar, 2015)

Intended Career Plans of TFA corps members, n of 25

Legend:
- Remain in Teaching
- Law School
- Admin Role in K-12
- Business
- Nonprofit
- Speech Pathology
- Social Work
- Medical School
- Engineering

32%, 20%, 16%, 8%, 8%, 4%, 4%, 4%, 4%
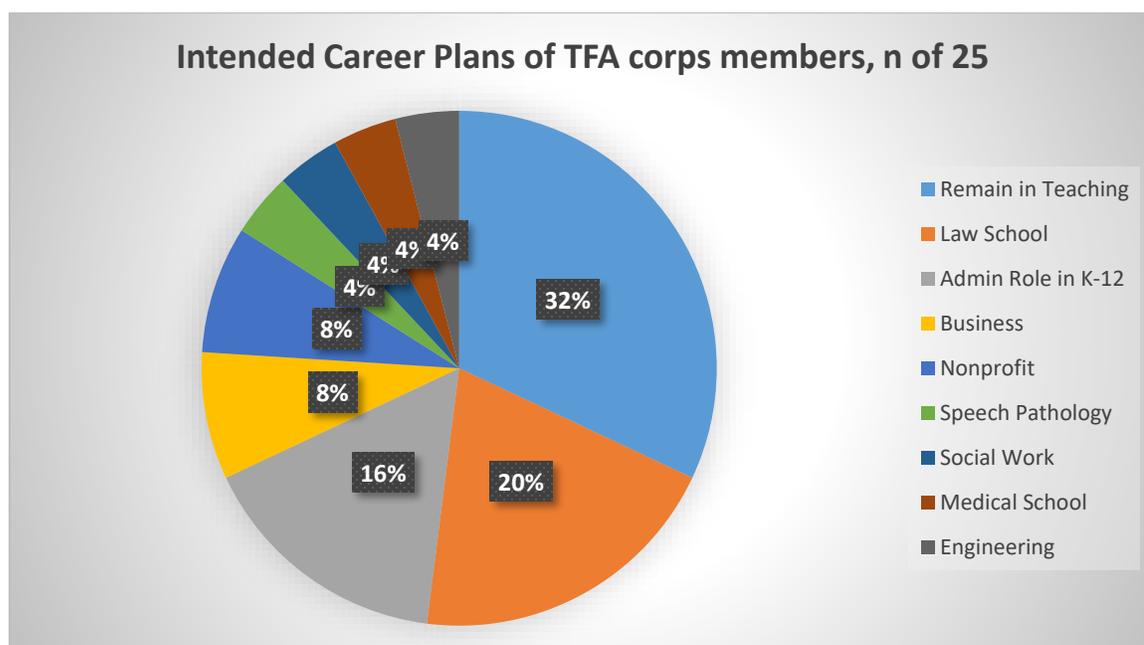
The researchers attributed corps members' willingness to stay for one or two extra years to having a supportive school placement where they made strong connections with students and teachers. The authors ultimately conclude their study reinforces the perception that TFA recruits people for a short-term commitment to teaching, but who have a long-term commitment to educational equity and access (Gottfriend & Strabhaar, 2015).

An interesting point to consider is that 32% of the sample, or eight of the twenty-five participants, entered TFA in order to become a teacher for the long term. However, the TFA experience actually made half of the eight individuals rethink their original plans. Two teachers indicated that teaching was too difficult and two teachers wanted to pursue leadership positions in education in order to have a broader impact beyond the classroom (Gottfried & Straubhaar, 2015). TFA encourages leadership opportunities for alumni and provides incentives for internships and graduate studies after TFA (TFA, 2017). In fact, TFA provides a number of resources to corps members in order to demonstrate the variety of available career pathways for alumni have after they complete their two-year teaching experience (TFA, 2017).

This small study of 25 students from a TFA program in California represents only a portion of students who had actually finished the program, similar to the Arizona study, thus the results are more about *intended* career plans than actual career plans. Following a greater number of alumni for several years after program completion would provide more data for definitive career plans after TFA. The Florida study, on the other hand, provides important data illuminating the retention and attrition patterns in one school district over several years, yet no other context is provided for the reasons behind the retention and

attrition rates. The national data set analyzed by Donaldson & Johnson (2010, 2011) and Donaldson (2012) demonstrated the most analysis of reasons behind attrition and retention. For an organization that has existed for over twenty-five years, Teach for America has shared surprisingly limited evidence about alumni teacher retention.

In summary, these six studies focused on details of TFA alumni retention provide rather mixed results. Two studies indicate a higher retention rate moving into the third year of teaching, the first year out of TFA. Donaldson's national studies showed 61% of TFA completers remained teaching into their third year (Donaldson & Johnson, 2011). In Arizona, 50 TFA alumni, 69% of the sample, planned to continue teaching (Heineke et al., 2014). Two additional studies show much lower retention rates. Ready's (2014) Florida study of five cohorts of TFA corps members, showed 32% of 319 corps members remained teaching in Duval County Public Schools compared with a 64% retention rate of non-TFA teachers in the same school system. Gottfried & Straubhaur's qualitative study (2015) indicated that eight of twenty-five corps members, 32%, from Los Angeles, California planned to remain teaching after program completion. As a whole, these three national studies and three regional studies indicate more research is warranted to explore both retention rates and reasons behind the retention and attrition of TFA alumni.

The present research study contributes to the gap in the research by not only sharing an overall teacher retention rate in this region, but also determining if a significant relationship exists between teacher retention and original career goals, teacher efficacy, and empathy. Examining these three specific variables in relationship to TFA alumni career decisions is a different approach to examining potential factors related to teacher retention.

Theoretical Framework

The majority of corps members begin the TFA program immediately after completing college, thus in most cases, the teaching experience is their first professional career. Some TFA teachers had a career trajectory planned out prior to joining TFA, such as pursuing graduate school in the legal or medical fields after their TFA experience concluded (Labaree, 2010; Veltri, 2008). Other TFA alumni joined TFA in order to pursue teaching as a long-term career, while others viewed TFA as an important service opportunity to work for social justice and educational equity (Straubhaar & Gottfried, 2014; Veltri, 2008). While TFA teachers are not necessarily committing to a lengthy educational career when they join the program, they are nevertheless "trying on" the teaching career for two years, as they are hired by individual schools as the teacher of record and are paid the same as first-year teachers. Social Cognitive Career Theory (SCCT) provides a helpful lens to understand the decision-making of the TFA alumni who have stepped into the teaching profession.

The development of SCCT emerged from a desire to link multiple career theories together into a more comprehensive framework (Lent et al., 2002). SCCT allows researchers to examine the broader links between the person, the context and factors influencing career behavior (Lent, et al., 2002). This theory, developed in 1994, was built with the goal of linking three interacting elements of career development together: 1) career interest, 2) choice and 3) performance, in order to show the cognitive processes involved in career-making decisions (Lent & Brown, 1996; Lent et al., 2002). Specifically, Lent, Brown and Hackett developed their theory to explain "how basic academic and career *interests* develop, how educational and career *choices* are made and

how academic and career *success* is obtained" (Lent et al., 2002, p. 750).

The SCCT model is based on prior theoretical frameworks for career development. For example, Krumboltz's social learning theory of career decision-making was influential in developing the SCCT framework, by examining how variables such as genetic factors, special abilities and environmental conditions help shape career decisions (Krumboltz, 1979; Lent et al., 2002). Additionally, Bandura's social cognitive theory (1986) is a significant component of SCCT. Lent, Brown and Hackett adopted Bandura's three main variables of: 1) self-efficacy beliefs, 2) outcome expectations, and 3) personal goals, which interact with one another, the person and the environment (Lent et al., 2000; 2002), as highlighted in Figure 2.2. Additionally, Lent, Brown and Hackett utilize Bandura's social cognitive theory that human behavior is self-regulating, pro-active and a function of the triadic interactions of 1) personal attributes 2) external environmental factors (supports, barriers) and 3) overt behavior (Bandura, 1986; Lent et al., 1994; 2002).

Figure 2.2, *Social Cognitive Career Theory*
 Adapted from R. W. Lent, S.D. Brown, and G. Hackett (1994)
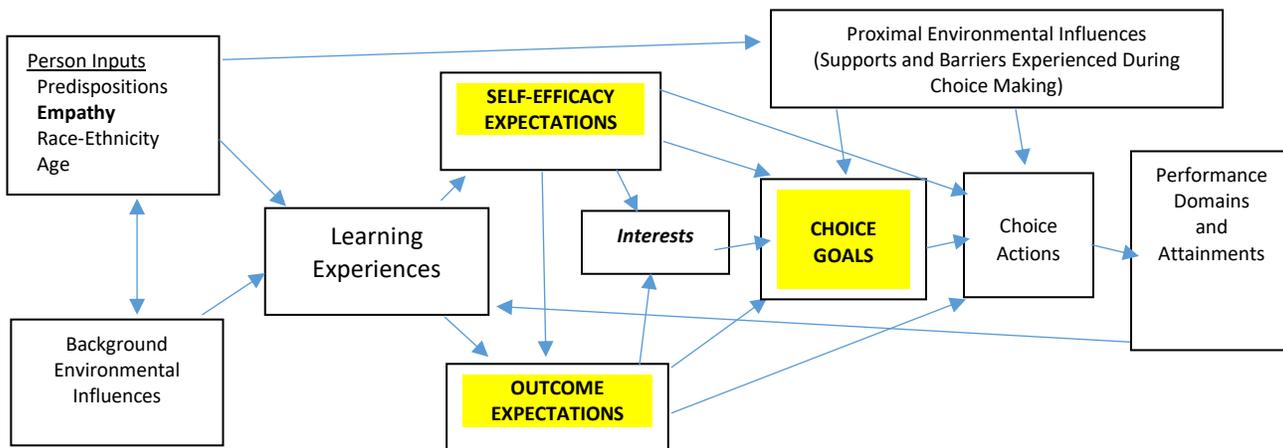
The full SCCT model includes ten components, which are involved in three interlocking models for career development: an interest model, a choice model and a performance model (Lent et al., 1994; 2002). Before delving into all ten components, the

building blocks of the SCCT framework - self-efficacy, outcome expectations, and

performance goals will be explained.

Building Blocks of the SCCT Model

      Self-efficacy expectations. The first building block of the SCCT framework is

self-efficacy or the belief an individual holds about his or her capability for a specific

task. Lent, Brown and Hackett (2002) define self-efficacy as

> not a unitary, fixed, or decontextualized trait; instead, it involves a
> dynamic set of self-beliefs that are specific to particular performance
> domains . . . that interact in a complex way with other person, behavior,
> and environmental factors (p. 262).

It follows that success in the specific task or domain increases one's self-efficacy,

while failure in the specific task can lower one's self-efficacy for that domain

(Lent et al., 2002). Self-efficacy then is not fixed, but specific to a task, and thus

self-efficacy can change depending on the activity. A strong sense of self-efficacy

influences other variables in the model, such as interests, goals and ultimately

actions taken in a particular field. Self-efficacy can also influence outcome

expectations, the next building block of the SCCT model.

      Lent, Brown and Hackett (2002) utilize Bandura's efficacy theory (1986) that

one's self-efficacy beliefs develop and are modified by four different sources 1) personal

performance accomplishment, 2) vicarious learning 3) social persuasion and 4)

physiological and affective states (Lent et al., 2002), but the first source, personal

performance accomplishment, is the most influential. As Lent and Brown (2006) point

out, self-efficacy can be enhanced by learning from observation (vicarious learning) or

receiving positive praise (social persuasion). Further examination of the model, Figure

2.2 demonstrates that learning experiences, one of the SCCT elements, can inform self-

efficacy expectations. Additionally, self-efficacy can inform specific interests (another variable in the SCCT model) and inform choice goals.

Outcome expectations. The second building block for SCCT is outcome expectations, which relates to the belief one holds about the consequences or outcomes one might have for a particular career choice (Lent et al., 2002). If an individual believes future involvement in a particular activity will have a positive outcome, they may be more prone to follow through with that activity. For example, if a person thought about participating in the TFA program, they might anticipate both intrinsic rewards (feeling good about helping others) and extrinsic rewards (prestige from being a TFA corps member) from the experience. Learning experiences and self-efficacy also influence outcome expectations. As Figure 2.2 shows, outcome expectations influences other variables in the model, such as interests, choice goals and choice actions, similar to self-efficacy.

Choice goals. The final building block of the SCCT framework is choice goals. Lent, Brown and Hackett (2002) define goals as "the determination or intention to engage in a particular activity or to effect a particular future outcome" (p. 263). Lent, Brown and Hackett (2002) believe that personal goals assist in guiding and sustaining people's actions over time. Additionally they describe two types of goals, choice-content goals (type of activity) or performance goals (level of quality). Setting goals assists individuals to "organize, guide, and sustain their own behavior, even through overly long intervals, without external reinforcement" (Lent et al., 2002, p. 263). Both self-efficacy and outcome expectations influence goals (Figure 2.2). For example, if a college student has a strong feeling in their ability (self-efficacy) to make a difference in the lives of children,

he or she might set a goal to apply for TFA. Perhaps a prior learning experience influenced their self-efficacy in the teaching arena. Additionally, this person might assume that being part of the TFA program would be a good career foundation (outcome expectation). Success or failure in a goal can modify self-efficacy and outcome expectations (Lent et al., 2002). Self-efficacy expectations, outcome expectations and choice goals work together and are influenced by other elements of the model.

The SCCT model contains a total of ten components, as seen in Figure 2.2. Besides the interplay of the three cognitive-person variables (self-efficacy expectations, outcome expectations and choice goals) the other central components in the framework include *Learning Experiences, Interests, Choice Actions* and *Performance Domains and Attainments* (Lent et al., 2000). Additionally, contextual factors are involved in career decision-making, so another variable in the model is *Proximal Environmental Influences*, which include the supports and barriers experienced during choice-making (Lent et al., 2002). The final two components consist of *Background Environmental Influences* and *Person Inputs*, which includes predispositions, such as age, gender, and socio-economic status. Person Inputs are inherent characteristics of the individual, while Background Environmental Influences would include for example, prior knowledge, i.e. exposure to different career role models.

Interest Model, Choice Model and Performance Model

Lent, Brown and Hackett (2002) describe three models, based from Bandura's social cognitive theory (1986) which exist within the larger SCCT framework - the *interest model*, the *choice model* and the *performance model*. These three models explain how "career interests develop, how they make career choices, and how they determine

their level of performance" (Swanson & Fouad, 2010, p. 187). At the core of each model is the triad of self-efficacy, outcome expectations and choice goals, in addition to other influencing components of the SCCT model. Individuals develop *interest* in a specific career path due to having a high confidence or self-efficacy in the tasks involved in a career and assume that participating in that career will provide a valued outcome (Lent et al., 2002). Further, Lent and Brown (1996) state, "As people develop an affinity for an activity for which they feel efficacious and expect positive outcomes, they are likely to form goals for sustaining or increasing their involvement in the activity" (p. 310).

On the other hand, an individual may not develop an interest in a specific career because they do not have a high self-efficacy for a specific career, and pursuing this career may have a negative anticipated outcome (Lent et al., 2002). Thus interest development becomes a cycle - interacting with self-efficacy, outcome expectations and choice goals - and is malleable, changing over time. Self-efficacy is weighted heavily in this interest cycle, as Lent, Brown and Hackett (2002) suggest that how someone feels about their ability to pursue a career has more influence than exposure to a career (*background environmental influences*) or past *learning experiences* about that career.

The choice model is similar to the interest model except it extends the model further. In the choice model a specific goal is created, based off of interest development, which then leads to taking action. In the choice model, other elements of the SCCT model also factor into choice making. Person inputs (i.e. age, race, gender) and background environmental influences impact learning experiences which shape both self-efficacy expectations and outcome expectations. Additionally, environmental influences - supports and barriers during choice making - influence the choice model.

The final of the three interlocking models within the SCCT framework is the performance model. Two components exist within the performance model – the level of achievement one gains in their work tasks, as well as how well they persevere in the career path given different obstacles that emerge. Performance is influenced by motivation and ability (a component of self-efficacy), as well as self-efficacy, outcome expectations and performance goals. A loop develops between performance attainments and behavior.

The following example shows the interlocking models of interest, choices and performance. A young girl who is from a middle-class background (*person inputs*) has parents who encourage her to read, take her to museums, and who offer the opportunity for her to attend summer science camps (*background environmental influences*). These different *learning experiences*, shaped by her socioeconomic background, help develop not only an *interest* in science, but also a high *self-efficacy* in science. She believes pursuing science, as a woman, would be beneficial and science careers have the potential to be lucrative (*positive outcome expectations*). She then develops a *goal* to major in science in college, based on her high self-efficacy and outcome expectations for the field. She takes *action* steps to complete that goal, by majoring in science. Due to her high self-efficacy in science, she earns high grades in her science major, thus meeting *performance expectations* (Swanson & Fouad, 2010).

Through the building blocks of the SCCT, self-efficacy expectations, outcome expectations and choice goals, as well as other SCCT variables, people develop *interests* in certain career strands, make *choices* towards specific career strands and then *perform* at some level in the tasks related to the career. Thus, the interests influence the choices

and goal development, which ultimately lead to choice action (pursuing a career) which then leads to a specific level of performance attainment.

Variables in the Study

The broader teacher retention literature focuses on a variety of individual factors and school-based factors related to teacher retention. This study focuses on exploring four individual factors, also present in the SCCT model, to determine the relationship with teacher retention. The first variable under examination is *choice goals* (one of the SCCT building blocks) in the form of the original career goals TFA alumni held prior to starting their TFA program. The second variable is *self-efficacy* (another SCCT building block) in the form of teachers' sense of self-efficacy – also known as teacher efficacy. The third variable under consideration in this study is one's level of empathy, which is a predisposition of the individual and consequently a component of the *Person's Input* category. The final variable under review in this study is *Choice Action*, which is essentially the decision to remain in (showing retention) or depart from (showing attrition) the teaching profession. The following section will not only define the variables, career goals, teacher efficacy, and empathy, but also will explain empirical research related to each variable. Retention, the choice action, was discussed earlier in the chapter.

Choice Goals

For the purpose of this study, choice-content goals are the focus - not performance goals. TFA alumni identified their original career goals prior to entering TFA. Determining if original career goals had a relationship to retention for those who 1) had no career goal 2) intended to continue teaching and 3) held a career goal outside of K-12 education will add to the research base on TFA alumni intended career trajectories.

Research on career goals and teaching. Limited information exists regarding

career goals and retention of TFA teachers, however, Donaldson and Johnson's study

(2011) identified elements within the SCCT framework related to career decision-

making. Their findings can be viewed through the SCCT framework. For example, they

report out on TFA alumni original intent (SCCT's interests and choice goals), career

plans (also SCCT's choice goals and choice actions) and prior background (SCCT's

learning experiences and interests). They reported that 71% of those alumni who had

majored in education remained teaching beyond four years, compared to 36% of the

sample who stayed longer than four years (Donaldson & Johnson, 2011). This

discrepancy in retention rates could be attributed to the prior coursework in education

leading to a higher sense of teacher efficacy in the classroom. Table 2.2 provides a

breakdown of the sample of 2,029 TFA alumni who completed in 2002, 2003 and 2004

and their original intent, career plans, and prior background and interest in education.

Clearly, those TFA alumni who had taken education coursework or considered

working in another teaching program had a stronger intention to stay in the profession.

Table 2.2 indicates that 43% of the national sample planned to teach beyond the two-year

TFA program duration, and 11% of the sample planned to become life-long teachers.

Table 2.2: *Career and Prior Background Information from TFA Alumni* (from cohorts
          2000-2002), Donaldson & Johnson (2011, p. 49-50)

Original Intent	Number of Alumni	/ Percent of Alumni
Planned to teach for two years only	1,156	57%
Planned to teach beyond the two years	872	43%
Career Plans		
Teaching will be my lifelong career	223	11%
Deferred graduate school enrollment to do the TFA program	183	9%
Prior Background and Interest in Education		
Applied to another teaching program in addition to TFA	142	7%
Took undergraduate education courses	122	6%
Majored or minored in education	101	5%
Already completed a teacher prep program	61	3%

This indicates that some individuals viewed the TFA program as an entry mechanism into the teaching profession. Only a small percentage of the alumni indicated prior education coursework. It would be interesting to find out if those individuals who had taken education courses in college remained in teaching at higher rates than their peers who did not take any education courses. The evidence shows that many of the TFA alumni in this sample intended to have a longer commitment to the teaching profession overall (Donaldson & Johnson, 2011).

Self-Efficacy Expectations

If someone has a high self-efficacy towards a certain career, he or she would feel competent and confident in the required tasks in that career. As explained earlier, social cognitive theory views human ability as a dynamic - not a fixed attribute - which requires both competent observable skills in the desired task, in addition to a strong efficacy level (Lent, Brown & Hackett, 1994; see Bandura, 1991). Thus, self-efficacy can change depending on the occupational domains (Lent et al., 2002).

Research on teacher efficacy. For this study, self-efficacy relates specifically to the context of teaching, thus the term 'teacher efficacy' is used. Having a high teacher efficacy, a strong belief that one's teaching capabilities can engage students and positively influence their academic achievement, impacts a number of variables in the classroom, including student achievement and student motivation (Tschannen-Moran & Hoy, 2001). Educators with a high sense of teacher efficacy feel they have the capability to improve academic outcomes for students and are not overwhelmed by external, uncontrollable factors. Conversely, the teachers with a low sense of teacher efficacy feel they have little control over helping their students achieve and often blame external

factors for low student academic performance. To be clear, teacher efficacy does not measure actual teacher performance in the classroom. Teacher efficacy is simply a self-report on *perceived* teaching effectiveness.

In reviewing teacher efficacy, Tschannen-Moran and Hoy (2001) synthesize the research on teacher efficacy in order to situate the development of their TSES instrument. They conclude that educators with a high sense of teacher efficacy impact students and teaching in a multitude of positive ways; such as, taking more time with struggling students, trying new teaching methods, having more enthusiasm for the profession, having strong planning and organizational abilities, and ultimately staying in the profession longer (Tschannen-Moran & Hoy, 2001). Additionally, high efficacy beliefs affect teacher actions to persist and be resilient when faced with setbacks and challenging situations (Tschannen-Moran & Hoy, 2001). They also reported that novice teachers who hold a high sense of efficacy experienced less stress, had a more positive perspective on teaching, and were more satisfied overall with the teaching profession (Tschannen-Moran, Hoy & Hoy, 1998).

Tschannen-Moran and Hoy (2001) analyzed several teacher efficacy measures, detailed the issues with each and ultimately developed their own teacher efficacy instrument, the Teachers Sense of Efficacy Scale (TSES), sometimes referred to as the Ohio State Teacher Efficacy Scale. The TSES asks respondents to answer questions related to three specific areas of teacher efficacy - instructional strategies, student engagement and classroom management. Two versions of the TSES exist, the long form, with 24 questions and the short form, with 12 questions. The short version of the TSES

instrument was chosen for this research study in order to ensure the entire survey did not become too lengthy.

Clearly, a high sense of teacher efficacy is desirable for a multitude of reasons. One study demonstrated that having a student teaching placement at an urban school led to a lower sense of teacher efficacy, which could ultimately lead to overall dissatisfaction with the teaching career (Knoblauch & Chase, 2014). Using the shortened form of the TSES, researchers Knoblauch and Chase (2014) analyzed 200 student teacher's responses before and after a 16-week student teaching experience in one of three school settings; urban, suburban or rural. While all three groups of student teachers showed increased sense of efficacy scores after the student teaching experience, the student teachers who taught in urban schools showed an overall lower sense of efficacy and specifically showed lower efficacy for classroom management.

While this study did not make a correlation with teacher retention, the research brings up an important consideration of how the student teaching placement influences teacher's sense of efficacy. The student teachers placed in more difficult schools have lower teacher efficacy, which could ultimately affect their desire to remain in the profession. Ronfeldt's study (2012) of approximately 2800 New York City pre-service and in-service educators showed that learning to teach in easier-to-staff school settings had a stronger benefit to retention than learning to teach in a hard-to-staff school setting. Given that TFA teachers are placed in challenging school settings, sometimes in schools that cannot attract quality teachers, their efficacy level may be lower than new teachers who work in suburban or rural school settings. For those TFA teachers who may have been planning to stay in the profession, having a challenging teaching placement could

ultimately harm their long-term intentions to remain in the teaching profession. Determining if a relationship exists between TFA alumni retention and teacher efficacy is important.

Empathy

Teachers exhibiting empathy express concern for their students and are able to examine issues from their students' perspective (Rychly & Graves, 2012; Tettegah & Anderson, 2007). Teachers with a strong sense of empathy are concerned about their student's social and emotional well-being (Cooper, 2010). In the context of teaching, empathy is recognized as an important emotional and intellectual dispositional trait of successful teachers in urban school settings (Johnson & Reiman, 2007; McAllister & Irvine, 2002; Warren, 2013). Many believe empathetic dispositions begin developing as a child (Warren, 2013). In this study, empathy is viewed as a predisposition of the individual and is therefore located in the Person Inputs category of the SCCT model (see Figure 2.2).

Mark Davis, who created the empathy instrument used in this study, the Interpersonal Reactivity Index (IRI), defines empathy as, "the reactions of an observer to the experiences of a target" (Davis, 1994, p. 221). Thus, in the teaching context, the observer is the teacher and the target is the student. Further, Davis (1994) states that empathizing "gives equal status to both cognition and emotion, process and outcome, disposition and situation" (Warren, 2013, p. 394; see Davis 1994). Davis' IRI instrument measures the emotional domain, or sympathetic dispositions, with a series of Empathic Concern (EC) questions (Davis, 1980; 1994). The intellectual domain is measured with the Perspective Taking (PT) questions (Davis, 1980; 1994). For the purposes of this

research study, the TFA alumni responded to 14 questions taken from Davis' (1980) Interpersonal Reactivity Index (IRI) specifically in the strands on perspective taking and empathic concern. The responses to these questions then were used to determine if any relationship existed between self-reported levels of empathy and teacher retention.

Teachers react to their students' circumstances in different ways, based on their own sociocultural knowledge and awareness of their student's lives. Recent research suggests that empathy is an important factor not only for teachers of students from diverse backgrounds, but also particularly for middle-class white teachers who work with students of color in high-poverty schools (Warren, 2013). Given that many of the TFA corps members come from a different racial, socioeconomic and/or academic background than their students, having empathy for the life circumstances their students face is important and helps students and teachers build strong relationships, a key factor to student academic success (Warren, 2013; 2015).

Research on empathy. No studies exist discussing the explicit relationship between differing levels of empathy and teacher retention, demonstrating this research study contributes to that gap in the literature. Research exists tying the importance of having strong empathic dispositions in order to work successfully with students from culturally diverse backgrounds (Carter, 2009; Tettegah & Anderson, 2007; McAllister & Irvine, 2002; Warren, 2013, 2015). Given the TFA alumni were working with students from culturally diverse backgrounds, a few studies involving the concept of empathy will be briefly discussed in order to situate the importance of holding empathic dispositions as a teacher working with diverse learners.

McAllister & Irvine's research (2002) examined how a particular program assisted teachers in developing stronger empathy skills. Their sample included 34 practicing teachers who participated in a 40-hour multicultural professional development program for developing culturally responsive practices. After the professional development, the teachers demonstrated "more positive interactions with culturally diverse students, more supportive classroom climates and more student-centered practices" (McAllister & Irvine, 2002, p. 433). Study subjects described their higher empathic tendencies in the classroom translating to more "sensitivity, patience, respect, tolerance, acceptance, understanding, flexibility, openness and humility" (McAllister & Irvine, 2002, p. 439). Empathy, an important component of being an effective teacher, is especially an effective tool for working with students from diverse socioeconomic, racial and cultural backgrounds (Rychly & Graves, 2012; Warren, 2015).

Chezare A. Warren researched how White female teachers incorporated empathy into their work with students of color in urban classrooms (2013, 2015). Warren (2015) discussed the "Perception Gap" (p. 574) present in many White female teachers, who do not necessarily comprehend the many ways institutional racism has created a schooling system which disadvantages students of color. Warren (2015) proposed that empathy is a tool to close that perception gap and minimize the deficit perspective White teachers sometimes hold for students of color (Warren, 2015). Further, Warren (2015) explained,

> Applying empathy requires a degree of selflessness that centralizes the needs, desires and opinions of the receiver in the empathetic response regardless of the effort the response requires. The response is largely determined by one's perception of the condition, and from this perception the helper makes decisions about what action he or she takes to respond appropriately. . . .one's perception is largely shaped by his or her race, experience, and understanding of racism. Similarly, there are likely fundamental differences in the social and cultural perspectives of White

> teachers and the students and families of color they serve. The misalignment of perspective leads to gaps in perception that could have adverse consequences on teachers' decision making regarding how to build relationships with students, discipline alternatives, curriculum development, and negotiating the range of other professional tasks for which the teacher is responsible (p. 574).

Warren concluded that teacher preparation programs who prepare young teachers for urban schools must explore the role of empathy and specifically examine perspective taking, in order to help build effective culturally responsive skills (Warren, 2015). Additionally, Warren (2013) suggests that teacher preparation programs and professional development programs need to help "teachers find creative ways to acquire student social and cultural perspective" (p. 416).

The focus of this research study is neither a discussion of how empathy is enacted in classrooms, nor suggestions for how in-service teachers working in urban classrooms can develop empathic skills. However, Warren's research (2013, 2015) regarding empathy and the perception gap is particularly insightful given that TFA corps members work with students from diverse racial, ethnic and socioeconomic backgrounds, often different backgrounds from the teachers themselves. Clearly, empathic dispositions are necessary for all teachers, but perhaps more important for those working in high-poverty schools.

This chapter provided an overview of how individual characteristics such as gender, age, race, and prior background in teaching influenced retention. Additionally the chapter provided details about how school-based factors, such as administrative support, teaching assignment and working conditions influence a teacher's decision to depart from or remain in the teaching profession. Next, the conflicting research on TFA alumni retention and attrition, from both a national and regional perspective was reported. Higher

retention rates after program completion were reported nationally, 61% of alumni remained teaching after program completion, and in Arizona, 69% remained teaching, compared to lower retention rates, 32% of alumni remained teaching, in Duval County, Florida and in Los Angeles, California (Donaldson & Johnson, 2010, 2011; Gottfried & Straubhaar, 2015; Heineke et al., 2014; Ready, 2014). An overview of Social Cognitive Career Theory was presented - a theory that helps explain the variety of influences to career decision-making - with a specific focus on three variables in the model, career goals, teacher efficacy, and empathy.

While career decisions of TFA alumni have been explored to some extent, research has been quite limited on specific retention rates of TFA alumni. This research study addresses not only the gap in the literature regarding TFA alumni retention in general, but also the study adds to literature specifically for TFA alumni reflections on their teacher efficacy and empathic dispositions. Examining if teacher retention has any relationship with original career goals, teacher efficacy, and empathy is a new and unique approach to investigating the career choice behavior of TFA alumni.

CHAPTER THREE

RESEARCH DESIGN AND METHODS

This quantitative study explored the extent to which, and ways in which, original career goals, teacher efficacy, and empathy predicted teacher retention of Teach For America (TFA) alumni in one particular region. Examining all three variables in relationship to overall teacher retention after program completion is important given the uniqueness of the Teach for America program. Specifically, TFA's program has a fixed two-year duration and therefore does not necessarily cater to individuals who intend to make teaching a career. Determining if original career goals, teacher efficacy and empathy have any relationship to retention for this population of in-service educators is important given the large number of TFA corps members that staff high-poverty schools.

This chapter explains the research design and methods used in this study. After a brief review of the research questions, the chapter will detail the setting and participant selection, the analytic sample, the data collection instrument, the analytic methods utilized, and the limitations of the study design. A quantitative study was selected over a qualitative study in order to provide a more representative picture of the alumni as a whole. A qualitative study, for example, creating case studies would not allow the opportunity to understand how specific variables interacted with retention. This quantitative study was designed in order to determine what kind of relationship exists between teacher retention of TFA alumni with three variables: original career goals, teachers' sense of self-efficacy and self-assessed empathy. Survey responses from 131 participants provided quantitative data to answer the following four research questions:

1) Does a relationship exist between original career goals of TFA alumni and teacher retention?

2) Is there a significant difference in teacher efficacy between the TFA alumni who remained in teaching and the TFA alumni who left the teaching profession?

3) Is there a significant difference in empathy levels for the TFA alumni who remained in teaching and the TFA alumni who left the teaching profession?

4) Are original career goals, teacher efficacy, and empathy significant predictors for teacher retention among TFA alumni?

The research outcomes will determine if the three variables in question have any predictive role in teacher retention.

Research Design

A self-report survey was created on Qualtrics for this research study. The survey asked participants to respond to questions related to career goals before and after the TFA program, as well as questions related to a measurement of teachers' sense of self-efficacy, and a measurement related to empathy. The survey also requested demographic information and included several questions related to the individual teaching placement and opinions about the TFA experience. The survey design was non-experimental, as the independent variables were not manipulated. Additionally, the data collection was anonymous and cross-sectional as the respondents were TFA corps members who completed their program over a span of seven years.

Setting and Participant Selection

The setting for the study was a large urban region in the Midwestern part of the United States. The participants were former TFA corps members who completed two years of teaching in a high-needs public, charter or private school between the years 2011 and 2017. While in the TFA program, per state teacher licensing regulations for individuals teaching on an emergency permit, corps members in this region were required

to be on a certification path to earn licensure in the subjects and grade level they were teaching. Due to this requirement, most corps members enrolled in a graduate degree program at one of the three private universities officially partnered with the local TFA organization. In the majority of cases, corps members completed their graduate licensing program, which resulted in earning both state teaching certification and a Masters' Degree in Education. TFA corps members in this study earned a license in one of the five following areas: special education, bilingual education, early childhood education, elementary education (to teach core subjects in grades 1-8), or secondary education (to teach a single subject in grades 6 through 12).

Due to my role as a TFA program director at one of the three partnering universities, the local TFA office provided me with a list over the years of TFA participants and their email addresses. Thus I had what I believed to be approximately 95% of all alumni email addresses. Once I obtained Institutional Review Board (IRB) approval to conduct my research study, I contacted the local TFA office to request assistance in both identifying and confirming 2011-2017 alumni email addresses.

After waiting four weeks to hear from the local TFA office regarding my request, I learned that the procedure for working with the local TFA office included an approval process with the local TFA Board of Directors, who were not set to meet for another four weeks. If the local TFA Board of Directors determined the findings of my study would frame TFA in a positive light, then the TFA local staff would assist in sending an email out on my behalf to only those alumni from this specific region who lived in the state. They would not be able to provide email addresses for any TFA alumni who had moved out-of-state. If the project was approved, the extra steps of working through the TFA

office would set my research timeline back six-to-eight weeks. I was uncertain if the local

TFA Board of Directors would ultimately approve the collaboration and I decided to

move forward with the study utilizing the email addresses I had in my possession. Thus,

it is possible a small number of alumni (estimated 5%) did not receive the invitation to

participate in the study - specifically alumni who were licensed to teach prior to entering

TFA and consequently not affiliated with any university partner.

An invitation to participate in the research study, which included the survey, was

emailed to 349 alumni who completed the Teach for America two-year program between

2011 and 2017. Every effort was made to include as many alumni as possible, an

example of non-probability purposive sampling (Field, 2013). Potential participants

received one email, which included an introduction to the project, details about both the

purpose of the study and the risks associated, a consent response form and the actual

survey, described below (see Appendix A).

The survey was open on the Qualtrics system for three weeks and regular

reminders were emailed to all participants approximately five days, ten days and fifteen

days after the initial invitation. An incentive to be part of a drawing for one of four $50

Amazon gift cards was offered to alumni who completed the survey. The gift card

incentive still allowed the survey to remain anonymous as participants were guided to

another Qualtrics website to identify their contact information for the drawing, which was

not linked to the survey responses. One week after the survey concluded, with the

assistance of a colleague, 4 participants - out of a possible 123 who entered their name

into the drawing - were randomly selected for the gift card.

After the first round of email invitations was sent, ten email addresses did not successfully reach the intended recipients. Utilizing Google and LinkedIn, I researched names of those individuals whose email addresses bounced back and in five cases I was able to find an alternative email address. I also added a note on my email reminders to all participants, "If you have a TFA alumni friend from your region who has not received the survey, you are welcome to forward this to them. Some email addresses have bounced back. Thank you."

Participants provided informed consent by reading through the study purpose and then clicking the option "Yes, I have read through the study description and agree to participate in this study". After clicking "yes", participants were taken to the survey. If they clicked "No, I have read through the study description and decline to participate in this research study," they were directed to a thank you page and did not have access to the survey. Every effort was made to ensure confidentiality of participants. Each survey response was anonymous and received a random assigned code from Qualtrics. Incomplete surveys were not included in the research data. Survey responses were downloaded and integrated into the SPSS program, version 24. Survey data were stored digitally in a secure location that was password protected. I was the only individual who had access to the data collected from the survey, which were stored in a password-protected computer. No personal identifying information such as a name or IP address was collected. A codebook was created to identify the different variables from each question and the responses to each question.

Analytic Sample

The analytic sample was initially comprised of 143 TFA alumni responses. However, eight respondents started the survey, but did not complete it, and their data were not included in the research analysis. These eight respondents answered very few questions and spent between 14 seconds and seven minutes on the survey, with a range of 4% to 26% of the survey completed. Data were also eliminated for the four respondents who did not complete the full two-year program. Thus, 131 responses out of a possible 349, comprise the analytic sample, which is a response rate of 38%.

The time spent taking the survey was recorded by the survey software program. Fifteen individuals started the survey, then went back to it several hours or days later, so the mean, or average time spent on the survey, was skewed to 51.1 minutes. After taking out those 15 individuals who did not complete the survey at one sitting, the range of response time for the remaining 89% of the sample, 116 individuals, varied between 5.5 minutes to 33.9 minutes. The most frequent amount of time spent on the survey, the mode, was 11.4 minutes. The median, or middle response time of the 131 respondents was 13.8 minutes. The information provided in the invitation stated the survey could take up to 15 minutes to complete.

The survey included a demographic inventory asking respondents to identify items such as the two years they were in the TFA program, which certification they earned, age when they started the program, their gender/gender identity, and their race/ethnicity. Demographic data were collected in case the data would be utilized as potential predictor variables for retention. Additionally, the demographic data were collected to determine how representative the sample was with existing teachers in the

nation and with TFA alumni from a national perspective. Data from the demographic

questions, based on 131 respondents, are presented in Table 3.1.

As indicated, the response rate for this survey was 38%, with 131 respondents out

of a possible 349. With 131 responses, the threshold of 96 responses was met in order to

have a 95% confidence level within 10% margin of error (de Leeuw, E. D., Hox, J. J., &

Dillman, D. A., 2008). This response rate indicates the findings are generalizable to all of

the TFA alumni, within a 10% margin of error, who completed the program in this region

(de Leeuw, et al., 2008). However, the findings may not be generalizable to TFA alumni

outside of this particular region as TFA places their corps members in 53 additional urban

and rural regions throughout the country that vary in licensure requirements and other

local variances (TFA, 2017). This section discusses the analytic sample in detail and

compares it with data available for TFA and for urban teachers across the country.

Cohort size. The demographic data in Table 3.1 shows that the sample includes a

representative group from each cohort. Each cohort group was represented with

minimally 15 respondents, and the highest number of individuals in a cohort group was

29 alumni. Thus, the percentage breakdown of alumni in each cohort ranged from 11.5%

of the sample to 22.1% of the sample.

Licensure area. The licensure areas in the sample were well represented, with the

smallest number of alumni, eight individuals, representing the early childhood category

and the largest number of alumni, 56 individuals, representing secondary education.

Assuming the breakdown of licensure placements did not change significantly between

2011 and 2017, the respondents in the analytic sample (see Table 3.1) closely match the

current regional data for the Bilingual, Early Childhood and Elementary license areas.

Table 3.1: *Demographic Characteristics of Survey Respondents*

Demographic Category:	N	Percentage
Cohort Year		
2009-2011	15	11.5%
2010-2012	15	11.5%
2011-2013	15	11.5%
2012-2014	22	16.8%
2013-2015	29	22.1%
2014-2016	16	12.2%
2015-2017	19	14.5%
Teaching License Pursued		
Secondary Education	56	42.7%
Elementary Education	37	28.2%
Special Education	17	13.0%
Bilingual Education	10	7.6%
Early Childhood Education	8	6.1%
Already licensed	1	0.8%
Initially enrolled, but withdrew	2	1.5%
Age when joined TFA		
20 – 21	21	16.1%
22 – 23	84	64.0%
24 – 25	14	10.7%
26 – 27	6	4.6%
28 – 29	2	1.6%
30 – 34	2	1.6%
35 – 39	0	0.0%
40 and older	1	0.8%
Joined TFA		
immediately after college	100	72.0%
1 year after college	10	7.6%
2 years after college	7	5.3%
3 years after college	4	3.1%
4+ years after college	10	7.6%
Gender/Gender Identity		
Woman	95	72.5%
Man	36	27.5%
Race/Ethnicity		
White/Caucasian	102	77.9%
Latino/Latina/Latinx	13	9.9%
Black/African-American	6	4.6%
Asian-American	5	3.8%
Multiracial	5	3.8%
American Indian or Alaskan Native	0	0.0%

For example, the respondents who completed Bilingual certification were 7.6% of the sample - and currently represent 7% of the regional TFA corps group; the Early Childhood alumni represented 6.1% of the respondents and currently - 9% of TFA corps members in this region are pursuing Early Childhood licensure (TFA, 2017). Elementary certified alumni represented 28.2% of the respondents and currently represent 34% of the TFA corps members (TFA, 2017). However, the Special Education teachers in the analytic sample were underrepresented, as the sample had 13% who completed Special Education licensure, while the region currently has double that number, 26% (TFA, 2017). Additionally, the secondary teachers in the analytic sample were overrepresented, comprising 43% of the sample, while the local region shows only 24% are currently secondary candidates (TFA, 2017).

Age when joining TFA. The majority of TFA corps members in the sample (80.1%) were aged 20-23 when they started the program and 72% of TFA alumni in the sample joined TFA immediately after completing college. Outside of this young majority, this sample included older individuals (18%), who did not join TFA immediately after college. For example, 14 alumni in the sample (10.7%) were between the ages of 24 and 25 when they started and six students were between the ages of 26-27 when they joined TFA. Additionally, two students were either 28 or 29 when they joined and 2 students were between the ages of 30-34 when they started the program. One student in the sample was 40 or older. The sample is composed of less older teachers, when compared nationally to new teachers entering the profession. Ingersoll et al., (2014) reported that in 2011-12, up to one-third of new teachers were over 29 years old and one tenth of the new

teachers were over 40 years old. TFA does not report out the ages of their corps members, so there was no available data as a comparison point in this category.

Gender/Gender identity. The sample was composed of 95 individuals who identified themselves as a woman and 36 individuals who identified themselves as a man. Thus, the sample was 73% women and 28% men. In a 2014 study, Ingersoll et al., revealed that the teaching force was 76.1% female, thus the sample is consistent with the national statistics on teacher gender.

Race/Ethnicity. This sample includes 102 individuals (77.9%) who identified as White/Caucasian. Additionally, the sample consisted of collectively, 29 alumni of color (24%) which is higher than a national report indicating teachers of color represented 17.3% of the nation's teaching force in 2011-12 (Ingersoll et al., 2014). Specifically, the sample included 13 individuals (9.9%) who identified as Latinx. Black/African-American alumni represented 4.6% of the sample, with six alumni identifying as Black/African-American. The sample consisted of five Asian-Americans (3.8%). Five individuals (3.8%) identified themselves as multiracial. This research sample has more White respondents and fewer alumni of color when compared to current 2017 TFA corps members. The 3500 individuals who entered the 2017 TFA program nationally identified as 51% White, 17% African American, 14% Latinx, 6% Asian, 6% multiracial, 4% other race, and 1% American Indian, Alaskan Native or Hawaiian (TFA, 2018).

Survey Design and Data Collection Instrument

The data for this project were collected through the completion of an anonymous survey administered online through Qualtrics. The survey for this research study (Appendix A) had a total of 50 questions and included five discrete sections; (1) Career

Decisions after TFA (2) TFA Teaching Assignment and Reflections on Teaching Ability

(3) Individual Background, Prior Experience and Career Goals (4) Interpersonal Self-

Assessment and (5) Opinions about the TFA Experience. Two existing scaled instruments

were incorporated into the survey, as well as additional questions related to career

choices after TFA, the specific school placement and opinions about the TFA experience.

Variables

Four variables were utilized in this study. Teacher retention after program

completion was the dependent categorical variable. Independent variables were (1)

original career goals, a categorical measure, (2) teachers' sense of self-efficacy, a

continuous measure and (3) empathy, a continuous measure. Figure 3.1 shows the

variables and specific quantitative methodology.

Retention. The survey included questions related to career decisions after TFA.

Participants were asked if they continued to work as a teacher after the TFA program

concluded. Specifically, alumni responses to Question #9, "I left the teaching profession

after completing my two-year program with TFA", guided the remaining survey

questions the participant received. I created two groups of alumni based on these

responses, one group of alumni who left teaching, thus showing attrition after program

completion and a second group of individuals who remained in K-12 teaching, thus

showing retention after program completion. The four individuals who initially left the

teaching profession and then returned to K-12 teaching, were grouped with those who

remained in the profession. The three individuals who left the profession, but indicated

they were planning to return to teaching, were grouped with those who left the

profession. Those who responded that they left teaching immediately after the program

Figure 3.1 *Variables and Quantitative Methodology*

| | ORIGINAL CAREER GOAL |
| | Independent Categorical Variable |

TEACHER RETENTION AFTER
TFA PROGRAM

Dependent Categorical Variable

TEACHER EFFICACY
(measured with the TSES)

Independent Continuous
Variable

EMPATHY
(measured with the IRI)

Independent Continuous Variable

RQ 1: Chi-square analysis, Original Career Goals

RQ 2: Independent samples t-test, Teacher Efficacy

RQ 3: Independent samples t-test, Empathy

RQ 4: Logistic Regression with all three variables

concluded were guided to three additional questions, which asked about their career

choices. For the respondents who left the teaching profession, a sample question

was "If you left the K-12 profession immediately after the TFA program ended, please

select the different fields of work you have been involved in since completing the

program." Respondents could identify twelve different career occupations pursued, for

example, work in nonprofit, business, medical school, and/or social work. They could

also write in a career choice not on the list in the "other" box.

If a participant responded that they remained teaching after their TFA

commitment ended, they were directed to ten additional questions about their teaching

career. Questions in this section included, "Currently, I teach at a) my original TFA placement school, b) a K-12 school in the same city, c) another urban school in the state of ___, d) a suburban school in the state of ___, or e) a rural school in the state of ___". Another sample question for participants to respond yes or no included, "I have pursued or completed additional teacher or administrator licensing options beyond the initial state certification earned with the TFA program." Participants were also asked to identify how many years total they have been teaching and to identify what their career goal was in the next three years. While not central to the research questions, a retention profile was created based on these responses (Appendix E) because it identifies contextual information from survey respondents who remained teaching. This profile illustrated that the retention rates decreased each year, and also identified that many alumni moved to work in other schools after program completion. Further details from this retention profile will be discussed in Chapter 5.

Original career goals. Respondents were asked to respond to two questions related to career goals. Question #44 read, "Please identify the original career goal you planned to pursue after you completed the TFA program. This is your perspective before you started the TFA program." Possible responses included: "I did not have a career goal in mind when I started the TFA program"; "I planned to continue teaching or working in K-12 schools after the TFA program"; "Education work outside of K-12"; and a list of other career fields such as graduate school, non-profit work, business, and technology. Responses to these questions can be found in Appendix E. Another question asked, "By the end of your TFA program, did your original career goal change from what you anticipated when you started the program?" Possible responses were, "No, I pursued the

original career goal I planned for before I started the TFA program" or "Yes, I decided to teach for a longer amount of time than I had originally planned" or "Yes, I originally thought I would stay in teaching, but decided to leave the teaching profession after my program ended." For analysis purposes, the alumni were placed into one of three groups; no career goals, planned to continue to teach, or planned to leave teaching profession.

Teacher efficacy. The component of the survey measuring teachers' sense of self-efficacy included 12 questions from the short form of the Teachers' Sense of Efficacy Scale (TSES), also known as the Ohio State Teacher Efficacy Scale (OSTES). Tschannen-Moran and Hoy (2001) developed four questions in three specific areas of teacher efficacy: Student Engagement, Instructional Strategies, and Classroom Management. Respondents ranked their ability to be successful or efficacious in twelve different teacher actions. An example of a Student Engagement question was, "How much can you do to get students to believe they can do well in school work?" An example of an Instructional Strategies question was "To what extent can you provide an alternative explanation or example when students are confused?" An example of a Classroom Management question was "How well can you establish a classroom management system with each group of students?" Possible responses to the TSES are based on a 9-option Likert scale, ranging from Nothing = 1, Very Little = 3, Some Influence = 5, Quite a Bit = 7 to A Great Deal = 9.

The TSES was selected due to the high content validity and reliability of the instrument. The reliability of the entire scale is .90, and the subscale reliability is .81 for Student Engagement, .86 for Instructional Strategies and .86 for Classroom Management, which all demonstrate a strong scale (Tschannen-Moran & Hoy, 2001). In this study,

minor modifications in wording the TSES questions from present tense to past tense were necessary, as the respondents for this study were reflecting back on their self-efficacy when they were a TFA teacher. Thus, a question originally worded as "how much can you do to get students to follow classroom rules?" was changed to: "how successful were you in having your students follow classroom rules?"

To ensure that the scale accurately measured the three intended categories of teacher self-efficacy in the sample, I conducted a principal components factor analysis (PCA) using Oblimin rotation of the responses to the twelve questions which comprised the short form of the TSES (Appendix C). The correlation matrix showed the majority of coefficients above .3, indicating suitability for factor analysis (Field, 2013). The KMO Measure of Sampling Adequacy was .852, well above the recommended .6 value (Field, 2013). Additionally, Bartletts' Test of Sphericity demonstrated the scaled measure was significant. The analysis showed three components with eigenvalues over 1: 45.22%, 15.24% and 8.90% respectively, demonstrating the three factors together explained 69.38% of the variance. Factor loadings for the 12-item scale ranged from .903 to -.770. The scale's items are found in Appendix C. The scree plot also showed a clear shift after three components. I conducted a reliability analysis, which was $\alpha = .88$, demonstrating high reliability and a similar reliability (.90) from the authors analysis in 2001 (Tshchannen-Moran & Hoy, 2001). The result of the Item-Total Statistics demonstrated that all items could be kept in the scale, as the Cronbach's alpha did not increase if any of the items were deleted.

I assessed the normality of the TSES scale by using SPSS to examine the skewness and kurtosis of the sample. Skewness was -0.352, indicating a cluster of scores

at the high end of the graph (Field, 2013). The Kurtosis value was .407, demonstrating a

close to normal distribution (Field, 2013). Additionally, I examined a test for normality

with a Kolmogorov-Smirnov statistic. For this data set, the Kolmogorov-Smirnov statistic

was above .05, indicating a normal data set. Further examination of the histogram and the

normal probability plots also indicated a normal distribution of data. Table 3.2 shows the

minimum, maximum, mean, median and standard deviation of the TSES scores based on

this study's sample of 131 respondents.

Table 3.2 *Means and Standard Deviations for Continuous Variables in Sample*

Continuous Variables	Min.	Max.	*M*	Median	*SD*
Teachers' Sense of Efficacy Scale (TSES)	12	108	73.37	74	12.63
Interpersonal Reactivity Index (IRI)	42	70	57.17	57	5.91

Empathy. The second scale utilized in this survey included 14 questions from the

Interpersonal Reactivity Index (IRI) developed by Mark Davis (1980). IRI questions

utilized in the study derived from two areas of dispositional empathy: Perspective Taking

and Empathic Concern. The full instrument also included the additional categories of

Personal Distress and Fantasy, but those areas were not measured in this study, as I felt

those categories were not directly relevant to measuring empathy of classroom teachers.

The means, standard deviations and Cronbach's alpha for the original IRI are provided

below in Table 3.3.

The IRI was selected to measure empathy due to the high validity and reliability

of the instrument (Davis, 1980). Cronbach's alpha for the two categories of Perspective

Taking and Empathic Concern ranged from a low of .68 to a high of .75 between women

and men (see Table 3.3).

Table 3.3: *Descriptive Statistics, Interpersonal Reactivity Index (IRI)* (Davis, 1980)

	M Females	*M* Males	*SD* Females	*SD* Males	α Women	α Men
Perspective Taking (PT)	17.96	16.78	4.85	4.72	.75	.71
Empathic Concern (EC)	21.67	19.04	3.83	4.21	.73	.68

An example of a Perspective Taking (PT) question was "I sometimes find it difficult to see things from the other person's point of view." An example of an Empathic Concern (EC) question was "I often have tender, concerned feelings for people less fortunate than me." Responses for the IRI were on a five-point Likert scale, ranging from "does not describe me well" to "describes me very well". Five questions were reverse coded.

To assess both construct validity and reliability of the data set from my reduced version of the IRI scale, a Confirmatory Factor Analysis was conducted on the responses to the 14 questions. Prior to the analysis, I recoded five negatively worded items, then I conducted a principal components factor analysis of the overall scale, using Oblimin rotation and found that four components had eigenvalues over 1. One factor explained 26.11% of the variance, followed by 14.63%, 8.03%, and 7.22% respectively, demonstrating the four factors together explained 56.0% of the variance. The KMO Measure of Sampling Adequacy was .753, well above the recommended .6 value (Field, 2013). Additionally, Bartletts' Test of Sphericity demonstrated the scaled measure was significant. Factor loadings for the 14-item scale ranged from .824 to -.830. The scree plot showed a clear shift after two components, which does not match up with the principal components analysis finding four components contributing to the variance, thus

a forced two-component confirmatory factor analysis was conducted. With the two-component confirmatory factor analysis, factor loadings ranged from .746 to -.321 (see Appendix D). The new pattern matrix identified eight items loading onto the Empathic Concern component and seven items loading onto the Perspective Taking component. This result was a marked improvement from the original factor loadings, which resulted in six items loading on component 1 (empathic concern), four items loading on component 2 (perspective taking), four items loading on component 3 (empathic concern and perspective taking), and four items loading on component 4 (empathic concern and perspective taking).

Reliability of the scale with my sample showed a Cronbach alpha coefficient of .77, demonstrating reasonable reliability. Reliability values above .7 are acceptable, however values above .8 are preferred (Field, 2013). The reliability for this sample, .77, was slightly higher than the reliability of the reported scale development, which ranged from Cronbach alpha coefficients of .68 to .75. The result of the Item-Total Statistics showed that only one item, if deleted, would increase the Cronbach alpha from .773 to .774. The item in question was #4, "I try to look at everybody's side of a disagreement before I make a decision." Given that the difference was only .001 if the item was deleted, the decision was made to keep the item in the scale.

Similar to the efficacy scale, the data in my sample for the two components of the IRI scale also indicated a normal distribution of data and thus, did not violate the assumption of normality. Several procedures were utilized to determine whether or not the data from the sample was normal. First, skewness and kurtosis were analyzed. Skewness was -0.013, indicating a cluster of scores at the high end of the graph (Field,

2013). The Kurtosis value was -0.446, demonstrating a close to normal distribution

(Field, 2013). Additionally, the Kolmogorov-Smirnov statistic was above .05, also

indicating a normal data set. Lastly, examining both the histogram and the normal

probability plots indicated a normal distribution of data. Table 3.4 shows the minimum,

maximum, mean, median and standard deviation of the empathy scores based on the 131

respondents.

Ideally in logistic regression, continuous variables should not relate to one

another (Field, 2013). A correlation analysis showed that there was no relationship

between the continuous scores of the self-efficacy measure and the scores of the empathy

measure in the data, thus the concern about multicollinearity was not an issue in this

case, as described below.

The relationship between the continuous scales of the Teachers' Sense of

Efficacy (TSES) and the Interpersonal Reactivity Index (IRI) was investigated using

Pearson product-moment correlation coefficient. In order to ensure no violation of the

assumptions of normality, linearity and homoscedasticity, preliminary analyses were

performed. There was no relationship between the two sets of variables, $r = .08$, $n = 131$,

$p = .35$. In order to show a positive relationship between the two scales, the Pearson

correlation coefficient would need to be close to one. A result close to zero (.08)

indicates there is no overlap between the two continuous scales (Field, 2013; Pallant,

2010).

Prior to launching data, the final survey was shared with dissertation committee

members for feedback, as well as a quantitative researcher. Suggestions were provided to

modify the sequencing of questions for better flow of the distinct categories within the

survey. In addition, some questions were condensed or eliminated in order to avoid

redundancy. The survey was piloted with five people familiar with the teaching

profession and the TFA program in order to determine the face and content validity of the

entire survey. This last review resulted in suggestions to reorder certain questions and

reword a few questions for clarity.

Data Analysis Procedures

This section details the data analysis procedures used in the study. Each research

question was suited to a particular statistical method. The statistical analyses were

conducted using SPSS, version 24. As described earlier in this chapter, the data analysis

began with a review of the descriptive statistics, as well as a review of missing data, an

examination of normality, and a determination if any significant outliers existed in the

data set. Next, a bivariate correlation was conducted of the two continuous variables, the

TSES and IRI. Third, an analysis of the reliability and construct validity of the two

predetermined scales used in the survey was conducted, utilizing confirmatory factor

analysis. The following section describes the hypotheses for each research question as

well as the statistical analysis method used.

Research Question One: Does a relationship exist between original career goals of TFA alumni and teacher retention?

Null Hypothesis: No relationship exists between original career goals and teacher
retention.

Alternate Hypothesis: A relationship exists. Original career goals established prior to the
TFA program have a relationship to teacher retention.

The first goal was to determine what kind of relationship existed between original

career goals and teacher retention. It was hypothesized that original career goals, which

included leaving K-12 teaching, would negatively affect teacher retention. Alternatively,

having an original career goal to remain in teaching would positively impact teacher retention. The chi-square test for independence determined if any kind of relationship existed between original career goals and retention. One assumption for the chi-square test for independence was that each respondent was represented by only one observed frequency, i.e. one respondent cannot be in two different categories. For a chi-square analysis, the SPSS program computes a contingency table, which tests the "difference between two proportions from independent samples" (Coladarci, Cobb, Minum & Clarke, 2008, p. 391). The output of interest when conducting the chi-square analysis in SPSS is the Pearson Chi-Square value. If this value is .05 or smaller, the result is significant, and an association does exist between original career goals and teacher retention.

Research Question Two: Is there a significant difference in teacher efficacy between the TFA alumni who remained in teaching and the TFA alumni who left the teaching profession?

Null Hypothesis: No difference in teacher efficacy exists between the two groups.

Alternate Hypothesis: A difference exists. Teacher efficacy is higher in those who remained teaching.

In order to determine if a true difference existed between the two groups of TFA alumni, those who remained teaching and those who left the profession, an independent samples t-test was conducted. The t-test compared the mean scores on the teachers' sense of self-efficacy instrument for each group. The assumption for this question is that those alumni who remained teaching had a higher teacher efficacy level compared to those alumni who left the profession.

Research Question Three: Is there a significant difference in empathy for the TFA alumni who remained in teaching and the TFA alumni who left the teaching profession?

Null Hypothesis: No difference in empathy level exists between the two groups.

Alternate Hypothesis: A difference exists. Empathy level is higher in the teachers who remained teaching.

Similar to question #2, an independent samples t-test was conducted for this question in order to determine if a true difference in empathy level exists between the two groups of TFA alumni. The t-test compares the mean scores on the Interpersonal Reactivity Index measurement (IRI, Davis, 1980) for each group. The assumption for this question is that those alumni who remained teaching had a higher empathy level compared to those alumni who left the profession.

Research Question Four: Are original career goals, teacher efficacy, and empathy significant predictors for teacher retention among TFA alumni?

Null Hypothesis: No difference exists between the variables and teacher retention.

Alternate Hypothesis: The three variables predict teacher retention.

The final goal of this study was to determine if any of the three variables individually or collectively predicted teacher retention of TFA alumni. It was hypothesized that all three variables predicted retention. The hypothesis was that an original career goal to remain in the teaching profession would predict retention, while an original career goal to depart from the teaching profession would negatively impact teacher retention. Also, it was hypothesized that those alumni with a higher sense of teacher efficacy and a higher level of self-reported empathy would remain in the teaching profession at higher rates than those who immediately departed from the teaching profession.

This question was answered utilizing logistic regression, as logistic regression provides the opportunity to determine the strength of the relationship with each variable.

Retention was the dichotomous categorical dependent variable and the three independent variables were a combination of continuous and categorical variables. Logistic regression allows one to determine which variables either predict the outcome or affect the outcome in any way (Tabachnick & Fidell, 2007). Logistic regression also provides the opportunity to enter in other demographic variables into the model to determine their relationship to retention.

Limitations

There are limitations in this study. As shared in chapter one, my direct role working with a TFA graduate program at a partner university for the past seven years in this region could bias the research analysis. Conducting a quantitative study, as opposed to a qualitative study, provides less opportunity for researcher bias, however, bias can still remain. In order to control for this, the initial analysis of the research findings was shared with dissertation committee members, as well as a quantitative researcher to ensure the reporting of the findings showed objectivity and as little bias as possible.

Utilizing former participants of the TFA program, instead of current participants, ensured that respondents did not feel obligated to answer in specific ways, as they were no longer enrolled in their university coursework or part of the TFA program. Ensuring anonymity in the survey responses addressed this concern.

Another possible limitation of this study is those who completed the program several years ago may have a challenging time remembering how they truly felt about their teaching abilities during the TFA experience as it may have been several years since they completed the program. It is quite possible those respondents who recently completed the program provided a more accurate analysis of their feelings about their

teaching experience. An additional limitation is that some of the TFA alumni may still be teaching and it is possible they may confuse their reflection on teacher efficacy while a TFA corps member with how they currently feel about their teaching performance in the classroom.

Additionally, while this research study focuses on responses from 131 alumni of the Teach for America program in one region, 218 individuals did not respond to the survey request. Thus, the findings would likely be different if more alumni had responded to the survey. It is possible that the survey responses received were overrepresented by those individuals who remained in the teaching profession. The other area to consider is how well represented the sample was, which based on Table 3.1, indicates the sample was varied and for example, represented all five license areas.

There is always a concern when administering a survey that people speed through their responses or do not accurately rate themselves in a self-report assessment. These concerns are always present in a research study solely based on survey results. Ideally, a research study utilizing a survey would include another method to triangulate the research findings. For this study, however, the findings all derive from a survey, which can be limiting.

This survey utilized two self-report measures, which could mean respondents may not have answered as honestly as possible, which is a concern when utilizing a self-report instrument. Some individuals may judge themselves more critically, while others may judge themselves more favorably. Utilizing self-report instruments, such as the TSES and the IRI, with high validity and high reliability was important in order to address this limitation.

To be clear, this study is not measuring actual teacher efficacy in the classroom, based on teacher performance, teacher evaluations or student academic achievement scores. Instead, this study is simply reporting on individual reflections upon *perceived* teacher efficacy during a specific two-year period. Further, this study is not measuring any other means of determining one's empathy level, other than the self-report with the IRI.

Additionally, the scope of this study will not allow for a deeper examination of the subscales within both the TSES and the IRI measures. The TSES has three subscales to measure different forms of teacher efficacy - Efficacy in Student Engagement; Efficacy in Instructional Strategies; and Efficacy in Classroom Management. In addition, the IRI has two subscales to measure different forms of empathy, Perspective Taking (PT) and Empathic Concern (EC). Conducting further statistical testing at a later date with the different subscales would be useful to obtain specific information about the kind of relationship each sub-scale has with teacher retention.

This chapter identified the overall research design of the study, which included the setting, participant selection, and the sample under analysis. The chapter also provided details about the creation of the data collection instrument, the variables under analysis, as well as the data analysis procedures and the limitations of the research study. Chapter Four will provide the overall results of the data analysis while Chapter Five will provide a discussion of the results, including implications for theory, practice and research.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

The purpose of this quantitative study was to understand the relationship between teacher retention of Teach for America alumni with three variables; original career goals, teacher efficacy and empathy. This chapter provides an overview of the research questions and the results of the data analysis.

Research Question One: Does a relationship exist between original career goals of TFA alumni and teacher retention?

The first research question was addressed using chi-square analysis to examine the relationship between two categorical variables, teacher retention and original career goals. Original career goals had three possible responses categories: no career goals; goal to remain a teacher; and goal to leave the teaching profession.

A chi-square test for independence was conducted to examine the relationship between teacher retention and three varied original career goals; no career goals, goal to remain in teaching, and goal to have a career outside of teaching. The relationship between these variables was significant, x^2, (2, n=131) = 5.94, p = 0.05, Cramer's V = .21. Thus, the chi-square analysis demonstrated with 95% confidence that the relationship between career goals and retention was not due to chance, which allowed for rejecting the null hypothesis. A relationship existed between original career goals and teacher retention. Table 4.1 identifies the frequencies provided in the chi-square analysis. Post Hoc power analysis was conducted using G power (Faul, Erdfelder and Buchner, 2007). With an effect size of 0.3, a sample size of 131, and 95% probability of finding a significant difference, the power was computed as .88 (Faul, Erdfelder and Buchner, 2007). An effect size of 0.3 means the effect was small (Cohen, 1988).

Table 4.1 *Chi-Square Analysis - Original Career Goals*

Original Career Goal	Left Teaching after TFA	Remained in Teaching after TFA	Total
No Career Goal	7 alumni - 37%	12 alumni – 63%	19 alumni – 15%
Planned To Remain Teaching	6 alumni - 14%	38 alumni – 86%	44 alumni – 34%
Planned to Leave Teaching	22 alumni - 32%	46 alumni – 68%	68 alumni – 52%
Total	35 alumni – 27%	96 alumni – 73%	131 alumni

Examining the percentage breakdown within the three groups of alumni with differing career goals assisted in understanding the specific numbers involved in this analysis. Overall, out of the 131 respondents representing cohorts who completed the TFA program between 2011 and 2017, 96 alumni, or 73% of the sample, remained teaching after program completion. The data revealed that 12 of the 19 alumni, or 63% with no career goals decided to continue teaching.

Out of the 44 individuals who originally planned to continue teaching, 38 alumni, or 86%, followed through with their career goal, indicating this group was very committed to their goal of remaining in the profession. However, the TFA teaching experience resulted in six alumni changing their minds and ultimately deciding not to teach. Chi-square analysis also revealed that 46 of 68 alumni, or 68% of those who originally planned to work in fields outside of K-12 education, changed their original career plans and decided to continue teaching.

Research Question Two: Is there a significant difference in teacher efficacy between the TFA alumni who remained in teaching and the TFA alumni who left the teaching profession?

An independent samples t-test was conducted to compare the means of the self-efficacy scores for those who remained teaching after program completion and those who departed from teaching immediately after program completion. There was no significant difference in scores between those who remained teaching ($M = 73.55$, $SD = 13.14$) and

those who left teaching (*M* = 72.86, *SD* = 11.27); t (129) = -.28, p =.78 (two-tailed). The

magnitude of the differences in the means (mean difference = -.69, 95% CI: -5.64 to

4.26) had a very small effect size (Cohen's d =.06). Table 4.2 summarizes the t-test

results. Results of the t-test showed that no difference existed between the groups, thus

the alternate hypothesis was rejected and the null hypothesis was accepted. Post Hoc

power analysis was conducted using G power. The effect size was calculated to be 0.06,

which is very small (Cohen, 1988). With an effect size of 0.06, a sample size of 131, and

95% probability of finding a significant difference, the power was computed as .10

(Erdfelder, Faul and Buchner, 2007). Table 4.2 shows the results of the independent

samples t-test.

Table 4.2   *T-test Results for Teachers' Sense of Self-Efficacy Scale (TSES)*

| | Alumni who continued to teach | | Alumni who left the teaching profession | |
	M	*SD*	*M*	*SD*
Teachers' Sense of Self-Efficacy	73.55	13.14	72.86	11.27

The results of the twelve question Teachers' Sense of Self-Efficacy measure

(Tschannen-Moran & Hoy, 2001), based on a 1-9 Likert scale, had a low total possible

score of 12 "no influence, unsuccessful" to a high possible score of 108 "highly

influential & successful". The mean for those who remained in teaching was 73.55, while

the alumni who left the teaching profession had a mean of 72.86. These numbers

indicated that both groups, those who remained and those who left teaching, rated

themselves on average approximately a six on each question, which was in between the

five rating, "some influence or success" and the seven rating "quite a bit of influence and

success".

**Research Question Three: Is there a significant difference in the means of the
empathy scores for the TFA alumni who remained in teaching
and the TFA alumni who left the teaching profession?**

An independent samples t-test was conducted to compare the empathy scores for
those alumni who remained teaching after program completion and those who departed
from teaching after program completion. There was no significant difference in scores
between those who remained teaching (M = 56.96, SD = 5.67) and those who left
teaching (M = 57.74, SD = 6.59); t (129) = .67, p=.50 (two-tailed). The magnitude of the
differences in the means (mean difference = .78, 95% CI: -1.53 to 3.10) was small
(Cohen's d =.13). Table 4.3 summarizes the t-test results. Results of the t-test showed
that no difference in empathy level exists between the two groups, thus the alternate
hypothesis was rejected and the null hypothesis was accepted. Post Hoc power analysis
was conducted using G power. The effect size was calculated to be 0.13, which is very
small (Cohen, 1988). With an effect size of 0.13, a sample size of 131, and 95%
probability of finding a significant difference, the power was computed as .32 (Erdfelder,
Faul and Buchner, 2007).

Table 4.3   *T-test Results for Empathy (Interpersonal Reactivity Index)*

	Alumni who continued to teach		Alumni who left the teaching profession	
	M	*SD*	*M*	*SD*
Empathy	56.96	5.67	57.74	6.59

The results of the fourteen question Interpersonal Reactivity Index (IRI) (Davis,
1980) based on a 1-5 Likert scale, had a low total possible score of 14 points, "no
influence, unsuccessful" to a high possible score of 70 points, "highly influential &
successful". As shown in Table 4.3, the mean score of those who remained in teaching

was 56.96, compared to a mean score of 57.74 for the alumni who left the teaching profession. This result indicated the TFA alumni rated themselves approximately a four for each question, on a scale of one to five, which was in between the three rating, "neutral" and the five rating "describes me very well". Thus, the TFA alumni, both those who remained in teaching and those who did not, rated themselves as empathetic individuals, specifically in empathic concern and perspective taking.

Research Question Four: Are original career goals, teacher efficacy, and empathy significant predictors for teacher retention among TFA alumni?

The final research question was addressed using logistic regression in order to determine which variables individually and collectively predicted the likelihood that TFA alumni would remain teaching after program completion. Results showed that of the three variables, only having an original career goal to be a teacher was a predictor to retention and the full model with all three variables did not predict retention. Given the initial non-significant result of this model, I wanted to explore if other variables predicted teacher retention, thus four demographic variables from the data collection were added to the model. Findings revealed two demographic variables predicted retention - being a teacher of color and entering the TFA program after at least one year of work after college. The full model with seven variables was statistically significant.

In order to determine specifically how much each variable contributed to the model the sequential or block entry method of logistic regression was utilized, as opposed to the forced entry method. The first test of analysis, which included the block of original career goals, teacher efficacy and empathy, demonstrated that the relationship between retention of TFA alumni and the three independent variables together was not statistically

significant x^2 (3, N=131) = 6.85, p =.08. However, original career goals emerged as a significant independent variable with a significance of 0.02 (Table 4.4). The model with the three variables explained between 5.1% (Cox and Snell R square) and 7.4% (Nagelkerke R squared) of the variance and correctly classified 73.3% of cases. The significance of original career goals was small, and thus did not weigh heavily enough to make the entire model significant. The first step of the model explained that alumni who originally planned to remain in teaching were over three times more likely to stay in the teaching profession, recording an odds ratio of 3.18.

Table 4.4 *Logistic Regression Analysis Predicting TFA Alumni Retention*

	B	S.E.	Wald	*df*	*p*	Odds Ratio - Exp (B)	95.0% C.I. for Odds Ratio Lower	Upper
Block 1								
Original Career Goal prior to TFA	1.16	0 .50	5.44	1	0.02*	3.18	1.20	8.42
Teachers' Sense of Self-Efficacy	0.01	0.02	0.04	1	0.85	1.00	0.97	1.04
Empathy	-0.03	0.03	0.55	1	0.46	0.98	0.91	1.04
Constant	1.93	2.21	0.77	1	0.38	1.74		
Block 2								
Original Career Goal prior to TFA	1.11	0.59	3.58	1	0.06	3.04	0.96	9.59
Teachers' Sense of Self-Efficacy	-0.07	0.02	0.14	1	0.71	0.99	0.96	1.03
Empathy	-0.01	0.04	0.08	1	0.78	0.99	0.92	1.07
Race/Ethnicity	-2.10	0.80	6.89	1	0.01*	0.12	0.03	0.59
When Joined TFA	-1.41	0.73	3.71	1	0.05*	0.24	0.06	1.02
Undergraduate Education Courses	-0.02	0.53	0.00	1	0.97	0.98	0.35	2.80
Prior Teaching Experience	1.03	0.56	3.41	1	0.07	2.81	0.94	8.42
Constant	4.03	2.84	2.01	1	0.16	56.01		

*p $\leq$.05

Given the model with the three variables was not statistically significant, I wanted to explore if adding demographic variables to the model would provide insight into other possible influential predictors to retention. Thus, the next step was to build the second block of the model, in order to determine how much the model improved from the first block. The second test of analysis involved adding four demographic variables to the original model resulting in a total of seven variables in the full model.

Research about TFA alumni retention has shown that the following four factors have a relationship to teacher retention: corps members who do not begin the TFA program immediately after college, corps members of color, corps members who completed one or more education courses in college, and individuals with prior teaching experience (Donaldson, 2012; Ingersoll et al., 2014). The full model with all seven variables was statistically significant x^2 (7, N=131) = 23.70, p <.001 (Table 4.4). The full model explained between 16.5% (Cox and Snell R square) and 24.1% (Nagelkerke R squared) of the variance, which compared to the first block, increased a great deal from 5.1% and 7.4%. Additionally, the full model correctly classified the same percentage of cases accurately, 73.3%.

The full model explained that alumni of color were more likely to stay in teaching, recording an odds ratio of 8.20 (after inverting the Exp(B)), indicating that alumni of color were over 8 times more likely to remain in the teaching profession. Additionally, the model indicated that the other significant predictor of teacher retention was not joining TFA immediately after college, recording an odds ratio of 4.10 (after inverting the Exp(B)), indicating that those alumni who did not go straight into TFA after college were four times more likely to remain in teaching. As seen in Table 4.4, the other five factors in the model were not significant to predicting teacher retention of TFA alumni in the logistic regression model.

As seen in Table 4.4, while the full model with seven variables was statistically significant, the model demonstrated that the three independent variables - original career goals, teachers' sense of self-efficacy and empathy - did not predict teacher retention in the final model. Table 4.4 shows the results of each step in the logistic regression. In the

logistic regression analysis, the significance needed to be .05 or below in order to show a significant relationship between retention and the variables. In the final analysis, only two variables ultimately made a unique statistically significant contribution to the model. The strongest predictors of teacher retention included being a teacher of color and not joining TFA immediately after college. Results showed that alumni of color had a significance of 0.01 and joining TFA after one or more years in another career field, had a significance of 0.05. The other two demographic variables did not predict retention. The results of this analysis meant the null hypothesis was accepted, as the three variables did not predict retention.

The following section details how the responses to the demographic questions were prepared for logistic regression analysis. Logistic regression required each categorical variable to have two responses, thus, the responses to the original career goal question were condensed into two categories, 0 for both categories of "no career goal" and "planned to leave teaching", and 1 for "planned to stay in teaching". The teacher efficacy measure was a scaled response, with scores ranging between 1 (not successful) to 9 (highly successful). Lastly, the empathy measure was also a scaled response with scores ranging between 1 (does not describe me well) to 5 (describes me very well).

Additionally, two demographic categorical questions from the survey required condensing. For example, those who joined TFA immediately after college were labeled 0, and those who joined TFA 1 or more years after college were all placed in the 1 category. Similarly, for the race/ethnicity question, alumni who identified themselves as White/Caucasian were put into the 0 category and African-American, Asian American, Latinx, and Multiracial alumni were all placed together and recoded into a new category,

titled "Alumni of Color", and categorized as 1. The low numbers in each of the racial/ethnic categories warranted grouping alumni of color together. The remaining demographic variables did not need modification and included prior teaching experience (yes or no), and completed one or more undergraduate education classes (yes or no). The dependent variable, retention, was coded 0 for those who left the profession, and 1 for those who remained in the profession.

The demographic characteristics provided in Table 3.1, in chapter three, provide details on the demographic categories utilized in the logistic regression model. The sample included 102 White/Caucasian alumni. The alumni of color category included a total of 29 individuals; 13 Latinx alumni, six Black/African-American alumni, five Asian-American alumni and five multiracial alumni. Of the 29 alumni of color, 27 continued to teach (93%) after the TFA program. Out of 102 alumni who identified themselves as white/Caucasian, 69 individuals continued to teach, a percentage of 68%.

Also, when examining the time of entry into the TFA program from Table 3.1, 100 alumni joined TFA immediately after college, while ten alumni joined one year after college, seven alumni joined two years after college, four alumni joined three years after college and ten alumni joined four or more years after college. As mentioned earlier, logistic regression requires a dichotomous variable, so those who did not join TFA immediately after college were grouped into one variable, which meant 31 alumni were grouped together in a category for joining TFA one or more years after college. Of those 31 alumni who did not join TFA immediately after college, 28 in the group (90%) continued to teach after the TFA program concluded. In comparison, of the 100 who

joined TFA immediately after college, 68 alumni (68%) continued to teach after the two-year program concluded.

  This chapter detailed the findings of this quantitative research study. The first research question, analyzed by chi-square analysis, showed a relationship between teacher retention and original career goals. The findings for the second research question, analyzed by an independent samples t-test, showed that no difference existed in teacher efficacy, when comparing the TFA alumni who remained in the classroom with the TFA alumni who departed from the profession. The findings for the third research question, also analyzed by an independent samples t-test, showed that no difference existed in level of empathy, when comparing the TFA alumni who remained in the classroom with the TFA alumni who departed from the profession. The fourth research question was analyzed using logistic regression and the analysis showed that original career goals, teacher efficacy and empathy did not collectively predict teacher retention, however having an original career goal to teach did predict retention. Two demographic characteristics were predictors of retention, being a teacher of color and being an older entrant to the TFA program. The following chapter will discuss the implications of these findings.

CHAPTER FIVE

DISCUSSION AND IMPLICATIONS

The purpose of this study was to explore if three variables – original career goals, teacher efficacy and empathy – had a relationship with teacher retention of Teach for America (TFA) alumni in one region. This final chapter presents a detailed discussion of the results, in context of the research literature on retention of TFA educators and in context of Social Cognitive Career Theory (SCCT). The chapter concludes with a discussion of the implications for practice and recommendations for future research.

Retaining experienced teachers in high-need urban schools is critical for student academic success (Boyd et al., 2008; Simon & Johnson, 2013). As discussed in chapter two, identifying the most important factors which predict retention of urban teachers is a challenge, as a variety of factors at both the individual and school level are involved in the decision to remain a classroom teacher in an urban setting (Allensworth et al., 2009; Borman & Dowling, 2008; Johnson et al., 2005). Teachers in high-need urban schools often face more challenging circumstances than teachers who work in more affluent schools (Johnson et al., 2004: Johnson et al., 2012). Generally, teachers working in high-need urban schools have more students who are behind academically, work with fewer curricular resources, and even work in neighborhoods with more crime (Allensworth et al., 2009; Johnson et al., 2012; Simon & Johnson, 2015). Under these circumstances, many urban teachers experience burnout and either quit the profession entirely or relocate to teach in a school with better working conditions (Allensworth et al., 2009; Johnson et al., 2012; Johnson & Birkland, 2003; Simon & Johnson, 2015). Research indicates that students perform better academically with more experienced teachers, therefore it is

critical to keep experienced teachers in the profession, particularly in urban school settings, which have higher turnover rates than wealthier districts (Boyd et al., 2008; Simon & Johnson, 2015).

The Teach For America (TFA) program has been providing high-need urban and rural school districts a steady supply of in-service teachers over the past twenty-seven years (TFA, 2018). However, a common critique of the program is that their alumni do not remain in the teaching profession after the program concludes (Heilig & Jez, 2014; Veltri, 2010). In fact, the TFA website indicates the teaching experience is essentially a two-year *leadership* program, providing a foundation for alumni to build a career, often outside of K-12 education (TFA, 2018). This study contributes to the research on retention of Teach For America (TFA) alumni who taught in an urban area, specifically through the lens of original career goals, teacher efficacy and empathy.

Discussion of Results

The following section examines the research findings in context of literature related to TFA alumni retention. Findings will be discussed in relation to literature and original career goals, teacher efficacy and empathy. The results of this study support prior research of TFA alumni, but also contradict findings from other TFA studies. This study revealed a majority of respondents, 96 individuals, or 73% of the TFA alumni in the sample, continued in the teaching profession beyond the two-year program, which is a higher retention rate than both the national and regional studies detailed in this study. Retention, for the purposes of this study, is simply defined as continuing as a classroom teacher for minimally one year beyond the two-year TFA program. Appendix E provides a more detailed retention and attrition profile showing the percentage of individuals

remaining in the teaching profession each year. The findings in this study support research on TFA alumni having high retention rates (Donaldson and Johnson, 2010, 2011; Donaldson, 2012; Heineke et al., 2014; Miller & Perara, 2015). However, findings from this existing study directly contradict research indicating that most TFA corps members depart the profession after the two-year program concludes (Gottfried & Strabhaar, 2015; Heilig & Jez, 2014; Ready, 2014). This research does little to resolve the contradictions in findings of these earlier studies, indicating there is not enough research on retention of TFA alumni.

Research Question One - Original Career Goals

The purpose of the first research question was to determine if a significant relationship existed between original career goals and retention of TFA alumni. As shared in chapter four, chi-square analysis showed that a significant relationship existed. The null hypothesis was rejected and the alternate hypothesis accepted, indicating that original career goals were strongly associated with teacher retention. The analysis provided data indicating that overall, out of the 131 respondents, a total of 96 alumni, or 73% of the sample, remained teaching after program completion, which shows a high retention rate for TFA teachers. Analyzing effect size, or the strength of the relationship between variables is important when conducting statistical procedures. As shared in the previous chapter, the effect size was 0.3, indicating a medium effect, or a medium level of strength between the variables (Cohen, 1988). The statistical analysis demonstrated a strong power, .88, indicating there was an 88% chance of determining an effect if one existed (Field, 2013).

For this question, respondents were in one of three categories - no original career goals, career goal to remain in teaching or career goal to leave the teaching profession. Each category resulted in individuals who remained teaching. Not surprisingly, the majority of alumni who originally planned to teach after program completion, 38 of 44 individuals (86%) remained in the profession and followed through with their original career goal, to remain a teacher. However, the other two categories of individuals revealed important and unexpected findings: 1) 12 of 19 individuals (63%) with no original career goal remained in teaching and 2) 46 of 68 alumni (68%) who originally planned to depart from the profession decided to remain as teachers. Those who had the career goal to teach remained in the field at a high rate, and those with no career goals or a different goal outside of K-12 teaching also remained in the field at a lesser, though still significant, rate. In all three cases, the majority remained in teaching. These are significant findings, which demonstrate original career goals outside of K-12 teaching were not fixed, but malleable, as some aspect of the teaching experience modified the original career goal, for those planning to leave the teaching profession.

Prior studies that delved into original career goals of TFA participants showed that TFA alumni with original career plans to leave teaching did, in fact leave teaching (Gottfried & Strabhaar, 2015; Heineke et al., 2014). However, the data from this research study demonstrated the opposite - that 68% of alumni, who originally planned to leave the classroom after the TFA program, ultimately changed their minds and stayed longer than originally planned. This finding contradicts the recommendation of Heineke et al. (2014) for TFA to move away from hiring individuals with fixed career plans outside of teaching. Donaldson & Johnson's studies (2010, 2011) paralleled findings in this study,

showing that TFA alumni with original plans to remain in teaching, continued to teach,

supporting the notion that many TFA corps members view the program as a career path

into teaching. Additionally, this current study revealed a new addition to the research

base on TFA alumni - individuals with no original career goals prior to joining TFA. This

study revealed that the majority in this group, 12 of 19 alumni, with no original career

goals at the onset of the TFA program remained in the teaching profession.

Research Question Two - Teacher Efficacy

The second research question sought to determine if a significant difference

existed in teacher efficacy between the TFA alumni who remained teaching after program

completion and the TFA alumni who left the teaching profession after the two years

ended. Based on the results of the Teachers' Sense of Self-Efficacy measure (Tschannen-

Moran & Hoy, 2001) the independent samples t-test revealed that no significant

difference in teachers' sense of self-efficacy existed between those who left teaching and

those who remained teaching. This result was surprising, as I had assumed the alternate

hypothesis would be supported in this data analysis - that the teachers who remained in

teaching would have a higher teacher efficacy than the teachers who departed from the

profession. Overall, the responses on the TSES scale – which measured three elements of

teaching practice - classroom management, instructional strategies and student

engagement - showed a relatively high level of teacher efficacy, an average of 6 out of 9.

For this question, the effect size was 0.06, indicating a small effect, or small

relationship between the variables (Cohen, 1988). With a small effect, the relationship

between the variables can explain 1% of the variance (Field, 2013). Additionally, the

statistical analysis demonstrated very little power, .10, indicating a 10% chance of

determining an effect if one existed (Field, 2013). For a power analysis to be strong, ideally the result would be .80 or 80% chance of recognizing an effect (Field, 2013).

One explanation to consider is that the levels of teacher efficacy increased during the two-year program. Perhaps corps members began the program with a lower level of teacher efficacy, but by the end of the program, teacher efficacy had increased. However, as this research study did not focus on pre- and post- teacher efficacy scores, this is simply a consideration.

Another explanation to consider is that TFA participants, before starting the program, already held a high level of general self-efficacy, i.e., evidence of high academic achievement, a sense of capability, of determination and ability to work through challenges. One of TFA's core values is to demonstrate resilience (TFA, 2018) and in the interview process, potential corps members most likely had to provide examples of their resilience and share experiences of perseverance in challenging circumstances. Thus, TFA corps members may have drawn on examples of their high level of self-efficacy as a criteria for program admission. If TFA corps members entered the program with a higher level of self-efficacy in general, they might carry that confidence into the profession of teaching, or equally, into any other career path they selected at the end of their two-year commitment.

Some of the research on teacher efficacy points to the connection between a high level of teacher efficacy and teacher retention (Tschannen-Moran & Hoy, 2001). Yet, this research study showed there was no relationship between teacher efficacy and teacher retention, which does not support findings from a study of student teachers and a study of New York City in-service teachers (Knoblauch & Chase, 2014; Ronfeldt, 2012).

Knoblauch and Chase (2014) found that student teachers working in urban school settings had a lower teacher efficacy than student teachers working in rural or suburban schools. Ronfeldt (2012) found that learning to teach in easier-to-staff school settings had a stronger tie to retention than learning to teach in a hard-to-staff school setting. Although they were all working in challenging urban school settings, the TFA alumni in this study held a relatively high level of teacher efficacy, indicating they perhaps entered the program with a high level of self-efficacy that translated into their teaching practice.

TFA corps members are a unique group of in-service educators, different from traditional undergraduate education majors, and even different from students in other alternative licensing programs. Their motivations for temporarily joining the teaching profession may be different from individuals in other teaching programs. In this study, the research demonstrating a relationship between a higher level of teacher efficacy and retention was not supported. Yet findings did reveal a high level of teacher efficacy among all TFA alumni. The connection between teacher efficacy and retention should be explored further, as levels of teacher efficacy may be different depending on the population of teachers studied.

I was not expecting both groups of TFA alumni - the stayers and the leavers - to have the same level of teacher efficacy on the TSES measure (Tschannen-Moran & Hoy, 2001). As discussed earlier, the data revealed that all respondents rated themselves an average of 6 out of 9 on the full teacher efficacy scale, which is between a 5 rating of having "some influence" and a 7 rating, which is having "quite a bit of influence" over successful teaching practices. While the results showed no relationship between level of teacher efficacy and teacher retention, I would imagine if the results of the teacher

efficacy measure were all substantively lower, for example, an average of a 3 or 5 rating, corresponding to "very little influence" to "some influence", the overall retention level for TFA alumni could be lower. Consequently, while the results of this study showed no difference in teacher efficacy level between the stayers and leavers, it also revealed that teacher efficacy levels were high in those individuals who remained teaching, which is an important finding to keep in mind. Overall, the TFA alumni in this region felt fairly confident in their ability to engage their students, instruct their students and manage the classroom, whether they remained in the profession or not.

Research Question Three - Empathy

The third research question sought to determine if a significant difference existed in self-reported empathy level between the TFA alumni who remained in teaching and the TFA alumni who left the teaching profession. The independent samples t-test revealed no significant difference existed between the two groups on the 14-question Interpersonal Reactivity Index measure (Davis, 1980).

For this question, the effect size was 0.13, indicating a small effect, or small relationship between the variables (Cohen, 1988). With a small effect, the relationship between the variables can explain 1% of the variance (Field, 2013). Additionally, the statistical analysis demonstrated very little power, .32, indicating a 32% chance of determining an effect if one existed (Field, 2013). Ideally, results from a G power analysis would indicate a power of .80, or 80% chance of recognizing an effect (Field, 2013).

One possible explanation to consider is that the level of empathy increased during the two-year program. Perhaps TFA corps members began the program with a lower level

of empathy, but by the end of the program - after working alongside their students for two years - their knowledge of student circumstances deepened, and perhaps empathy levels increased. However, as with the self-efficacy variable, because this research study did not focus on pre- and post- empathy scores, this is simply a consideration.

Another consideration for this result is that individuals were drawn to apply to the TFA program, due to their pre-existing high level of empathy. Thus, individuals applied to become a TFA corps member due to their desire to contribute to the social justice mission of TFA and to support the vision of the TFA organization - "the belief in the potential of all children and in their right to an excellent education" (TFA, 2018). Further, three of TFA's organizational core values could be argued as contributing dispositions for empathy; 'pursue equity', 'act with humility' and 'learn continuously' (TFA, 2018). It is possible that the TFA corps members entered the program with a pre-existing high level of empathy or alternatively, that empathic dispositions increased during the two-year program.

Empathy is an important ingredient to being a successful teacher, however this study simply revealed a high empathy level among all TFA alumni in this region, which had no relationship to teacher retention. As discussed in Chapter Two, research suggests empathy is an important emotional and intellectual dispositional trait for teachers, particularly for white educators working in high-poverty school settings (Darling-Hammond, 2000; Johnson & Reiman, 2007; McAllister & Irvine, 2002: Warren, 2013). Research indicates that strong empathic dispositions help teachers work successfully with students from culturally diverse backgrounds, the same students who often attend school in high-poverty school settings (Carter, 2009; Tettegah & Anderson, 2007; McAllister &

Irvine, 2002; Warren, 2013, 2015). What is difficult to discern from this study is if empathy level changed from beginning of the program to end of the program, or if the TFA corps members, both those who remained and those who left teaching, came into the program with a high level of empathy.

The finding for this question was surprising, and I grappled with the implications of this result. I anticipated the alternate hypothesis - that the alumni who remained teaching would have a higher empathy level than the alumni who departed from the profession. Similar to the result on teacher efficacy, I was not expecting both groups to show the same level of empathy. Examining the data further revealed that all respondents rated themselves high on the empathy scale, 4 out of 5 on the IRI instrument (Davis, 1980). While the results showed no relationship between empathy level and teacher retention, I would imagine if the results of the empathy measure were lower for both groups, for example, an average of a 1 or 2, the retention level might also be lower. While the results of this study showed no difference in empathy level between the stayers and leavers, it also revealed that empathy levels were high in those individuals who remained teaching, which is an important finding to keep in mind.

Research Question Four – Original Career Goals, Teacher Efficacy, and Empathy

The purpose of the final research question was to determine if original career goals, teacher efficacy, and empathy were individually and collectively significant predictors for TFA alumni retention. The alternate hypothesis was that all three variables would predict teacher retention to some degree - however, the findings of the sequential logistic regression showed that only one of the three individual variables was a significant predictor, having an original career goal to be a teacher. The model as a whole

with all three variables was not significant, meaning that original career goals had only a minor influence on the model.

Given the minor influence of one variable in the model, I wanted to determine if any demographic variables had a relationship to teacher retention, thus four additional variables were added to the model. Findings indicated that being a teacher of color and joining TFA at an older age were significant predictors of retention. And the logistic regression model as a whole, with all seven variables, was also significant.

Original career goals, teacher efficacy and empathy collectively contributed little to the logistic regression model, showing an influence of only 5.1% – 7.4%. This result is not surprising, given that the results of research questions two and three showed no relationship first between retention and teacher efficacy and second between retention and empathy. The logistic regression results (as seen in Table 4.3) demonstrated this lack of relationship as well. Significance needed to be .05 or less in order to demonstrate the variable was a predictor of retention.

Logistic regression also showed that having an original career goal to become a teacher was significant to retention, at a value of 0.02, which is consistent with the findings of the first research question. However, the weight of the other six factors in the model suppressed the influence of having a career goal to teach so the original career goal variable was not significant to retention with all seven variables in the model. Collectively, all seven variables in the model explained 16.5% to 24.1% of the variability, a significant jump from 5.1 – 7.4%, indicating that heavy weight of the two predicator variables, alumni of color and alumni with prior work experience after college.

I was surprised that the other two demographic variables had no predictive value to retention, taking undergraduate education courses or prior teaching experience.

Results of the logistic regression analysis ultimately demonstrated that only two variables predicted retention: being a teacher of color and not joining TFA immediately after college, which supports Donaldson's research on TFA entrants (2012). The present research study did not interview respondents and therefore it is difficult to know precisely why these two groups of alumni had higher retention rates. Perhaps the teachers of color identified more with the students they were serving, who may have held a similar racial or ethnic background to their teachers. Further, the teachers who joined TFA after pursuing another line of work may have been more committed to teaching not only because they were older than the traditional TFA corps member, but also because they already had some work experience. This additional work and life experience could have provided them with a different context and level of commitment to the teaching profession. As such, simply being older may not have been as important to predict teacher retention as the experiences that transpired in those additional years in between college and the start of the TFA program. The following section will discuss what kind of implications the findings have for the theoretical framework.

Implications for Theory

Social Cognitive Career Theory (SCCT) was a useful framework to examine and reflect upon career decisions of TFA alumni. As discussed in chapter two, this study specifically examined four variables within the SCCT model (Figure 5.1). *Original career goals* was synonymous to "Choice Goals" in the SCCT model. *Teacher efficacy* replaced the "Self-Efficacy Expectations" in the model. *Empathy* was a predisposition in

the "Person Input" portion of the model. Lastly, *teacher retention* was a "Choice Action" in the model.

The findings of this study revealed that of the three core constructs of the SCCT model - self-efficacy expectations, outcome expectations and choice goals - choice goals was the most important variable that had a relationship to teacher retention. While there was not a specific relationship between teacher efficacy and teacher retention, the fact that the teacher efficacy level was high is still important, and could be an important attribute to being a successful urban teacher. The findings also revealed that two Person Inputs, specifically age and race/ethnicity, were the most significant elements of the SCCT framework that influenced teacher retention, the choice action. Similar to teacher efficacy, results also revealed that a high level of empathy existed in alumni who remained teaching, showing a third important Person Input characteristic.

Figure 5.1, *Social Cognitive Career Theory*
Adapted from R. W. Lent, S.D. Brown, and G. Hackett (1994)
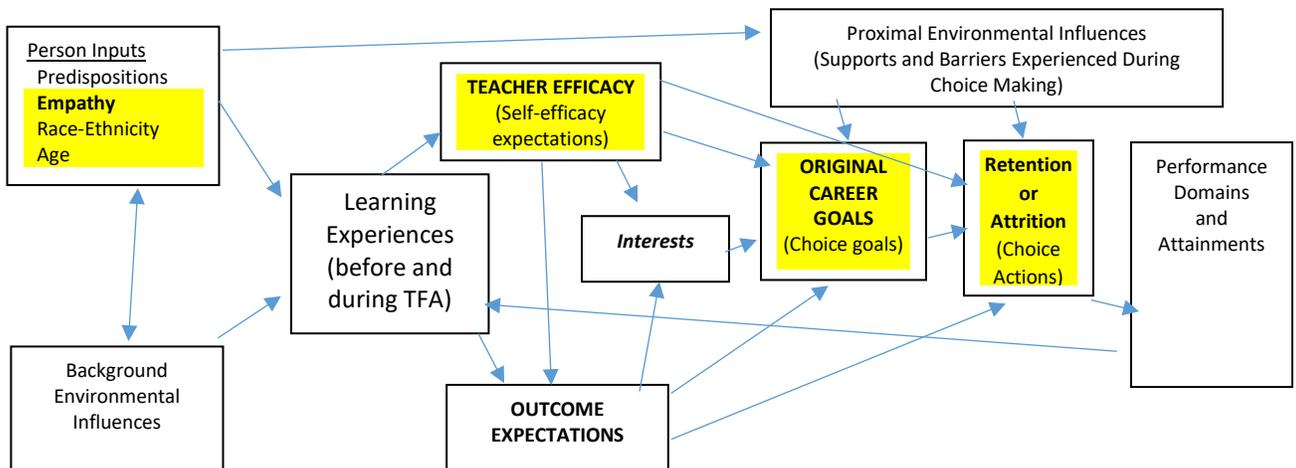
Cumulatively, these findings demonstrate that TFA alumni started the program with characteristics that had a relationship to retention, being a person of color, being

older, in addition to ultimately having a high level of efficacy and a high level of empathy. Original career goals were evident prior to starting the program; however, the TFA experience in some cases modified that original goal. Thus, this study reveals that the predictors of retention for TFA alumni already existed in individuals before they began their program. The following section discusses the four variables within the SCCT model in more detail.

Original Career Goals (Choice Goals)

This study revealed a significant relationship between retention and the three categories of original career goals - no career goals, career goals to remain in teaching, and with career goals outside of K-12 teaching. It is not surprising that the alumni who already had a planned goal to remain in teaching chose to remain. Elements of the SCCT model could have solidified their decision to remain, for example, the personal gains, or rewards (Outcome Expectations) from being a teacher, having high teacher efficacy, extra support received as a teacher (Proximal Environmental Influences) or high level of Performance Domains and Attainment as a teacher.

For the alumni with no career goals and the alumni who planned to leave teaching but ended up remaining in the profession, something transpired during the two-year 'Learning Experiences' that prompted corps members to change their original goal. Social cognitive theory posits that the goals people set for themselves are affected by their self-efficacy and outcome expectations. Perhaps the benefits of remaining a teacher (Outcome Expectations), and high teacher efficacy played a part in the choice action to remain a teacher. In this example as well, other elements of the SCCT model could also have influenced their desire to remain in the profession - such as extra support (Proximal

Environmental Influences) received as a teacher and even high level of performance attainment. Something about the TFA experience itself sparked new interests in teaching and therefore participants created new career goals based on the teaching experience.

Some individuals pursued their original career goal, teaching, while others may have chosen to abandon their original career goal and remain in teaching for the long-term. Alternatively, some alumni decided to teach for one or two additional years and simply put their original career goal off. This study uncovered that all three different original career goals had a relationship to choice action, or teacher retention.

Teacher Efficacy (Self-Efficacy Expectations)

Social Cognitive Career Theory defines self-efficacy as, "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Lent, Brown & Hackett, 1994; see Bandura 1986, p. 391). Self-efficacy, as described in chapter two, is a building block of the SCCT model. In this analysis, findings showed that teacher efficacy did not have a significant relationship with teacher retention. However, a relatively high level of teacher efficacy existed with all respondents in the sample. Thus having a high level of teacher efficacy could possibly be a necessary characteristic for working as a teacher in a high-needs school setting. The SCCT model shows a direct link from self-efficacy to choice goals (Figure 5.1). The TFA experience influenced the growth of teacher efficacy and perhaps swayed 46 individuals who had an original career goal outside of K-12, to change their minds and remain in teaching. For some, the power of the original career goal was more important than teacher efficacy, as 22 alumni of 68 who originally planned to leave teaching, decided to pursue their original career goal outside of K-12.

Empathy (Person Input)

Empathy, the ability to understand someone else's perspective, is a predisposition of the individual, an element of someone's character. Experiences individuals have during their lives influence their levels of empathy (Davis, 1980). While the results of this study showed there was not a significant relationship between teacher retention (Choice Action) and empathy (Person Input), the high level of empathy found across all of the TFA alumni is an important data finding to keep in mind. Perhaps having a high level of empathy is a necessary disposition for being a successful teacher in a high-needs school setting. A high level of empathy was presumably a characteristic corps members had prior to starting the TFA program, similar to the high level of self-efficacy they may also have had prior to the program.

Ultimately, other variables in the SCCT model were more important than a high level of empathy, in terms of influencing teacher retention or attrition decisions. The SCCT model does not show a direct relationship from Person Inputs to Interests, however, the high level of empathy, may have directly influenced someone's interest in working with students from lower socio-economic backgrounds to improve their academic outcomes, especially if they had prior experience working with underserved populations. The SCCT model (Figure 5.1) shows Person Inputs having a relationship to both Learning Experiences and Contextual Influences; however, perhaps a relationship exists directly between Person Inputs and Interests.

Additional Findings: Alumni of Color and Older Entrants into TFA

The results of the logistic regression analysis indicated that two characteristics in the Person Inputs category, race-ethnicity and age, predicted retention. Alumni of color

were more likely to remain in teaching, as were individuals who joined the program after spending at least a year working somewhere else after college. Other elements of the SCCT model most likely influenced decision-making, such as learning experiences, interests, teacher efficacy, outcome expectations and choice goals. In the case of race/ethnicity, the individual is born with that characteristic, so that is potentially a stronger variable than learning experiences, for example. In the case of older entrants into the TFA program, these individuals presumably already tried a career path immediately after college. The feedback loop present in the SCCT interlocking models of interest development, choice action and performance attainment, shifted their interests from whatever career they were currently exploring into teaching. Ultimately, the older entrants developed an interest in teaching, applied to TFA, joined as a corps member and reached some level of performance as a teacher in the program that ultimately resulted in teacher retention.

Retention (Choice Action)

In the SCCT model, choice action refers to individual decisions of TFA alumni to either remain in the teaching profession or depart from it. Results from this study collectively indicated that original career goals, being a person of color and being an older entrant into the TFA program predicted retention. Additionally, the study revealed that all alumni, regardless of whether they stayed in the profession, held a high teacher efficacy and a high empathy level. This research study did not explore the other possible variables within the SCCT model that influence choice action. For example, what supports and barriers existed for alumni, which influenced their choice action? Further, how did their performance as a teacher influence retention decisions? Other components,

in the performance model, including motivation and ability also affect decision-making (Lent et al., 2002).

As referenced earlier, the majority of these retention predictors were present in the individual prior to starting the TFA program – original career goals, race, and age. Given that this study revealed that, the most important predictors to the choice action – retention - were present in the individual before the program began; more weight needs to be placed on the influence of Person Inputs in the SCCT framework.

Implications for Practice

Assuming retention of TFA alumni would be a desirable goal, given the difficulty in retaining teachers in high-need urban schools and the amount of investment in recruitment, training and professional development spent on TFA corps members, the results of this study have three important considerations for enhanced retention of future TFA corps members. The first recommendation is for the TFA program to embrace teacher retention as a program goal. Second and third, TFA should continue to recruit more teachers of color and older individuals with some prior work experience. Since a high teacher efficacy and high empathy level could be important characteristics of an effective urban teacher, suggestions for examining these two variables are explored in the opportunities for further research section.

Make Teacher Retention a Program Goal

This study revealed that 44 individuals, 34% of the respondents in this sample, joined TFA specifically to become teachers for the long term. Teaching was their original career goal and 86% of the alumni with this goal followed through and remained classroom teachers. Additionally, this study showed that 46 individuals with no plans to

remain in the classroom continued teaching after program completion. Given these findings, the regional and national TFA organization should promote the program as an actual avenue into the teaching profession, not just focus solely on leadership development as an outcome of program participation. Teacher retention should be equally important as leadership development or pursuing unrelated careers after program completion.

Given the findings of this study, i.e. that many individuals changed their minds and remained teaching, TFA should view all corps members, even if they originally have an identified career goal outside of K-12 teaching, as potential teachers beyond the two-year program duration. TFA should promote staying in the classroom as a viable and honorable option to pursue after program completion.

Yet teacher retention does not appear to be an overarching goal for the national TFA organization. One exception is a retention initiative for the TFA region in Los Angeles, California. The 2020 Vision has a goal to develop 1000 teachers for Los Angeles high-need public schools by 2020 and ensure 75% of TFA corps members remain teaching for a third year (TFA, 2018). TFA should consider making a 75% retention rate for the third year a goal for all regions, not just Los Angeles public schools.

The TFA website is full of examples of how the classroom teaching experience paves the road for a career outside of classroom teaching. For example, the recruiting page of their website emphasizes leadership and career development outcomes. The website states, "We develop leadership through impact teaching in a low-income community. We develop the skills necessary for systems change through classroom teaching" (TFA, 2018). Further, the website states, "Your future begins now. Have a

profound and immediate impact. Gain perspective and understanding that will fuel your

career. Accelerate your leadership trajectory. Discover the transformative impact of the

corps." (TFA, 2018). While the website has alumni broken down into four categories of

leaders, "teacher leaders", "school leaders", "school systems leaders" and "social

entrepreneurship", there is a great deal of emphasis on roles outside of the classroom and

how the TFA experience will be transformative for one's career (TFA, 2018). Simply

consider that 75% of their leader categories are roles outside of the K-12 classroom.

This emphasis on career paths outside of K-12 teaching is clear. The TFA website

states "TFA alumni work toward systemic change across all sectors. Learn how their

journeys start and evolve" (TFA, 2018). Eight individuals show their different career

paths. None of the eight are still teaching - two are working in K-12, one as a principal

and one as a dean. The other career paths highlighted include working at Stanford

University, Bank Street College and Google, as well as serving as a public defender (after

attending Harvard University Law School), as a speechwriter (after working at Google),

and as an originator of a nonprofit. The messaging to potential applicants and current

corps members is one that demonstrates corps members benefit more from the TFA

experience than the students they are teaching. While couched in terms of concern for the

well-being of children, the actual focus of the program seems more self-serving.

While TFA may have started as a way for children in high-need schools to have a

consistent teacher with a strong academic background for two years, instead of a

revolving door of substitute teachers, the education landscape is not the same as it was

when TFA started in 1991. Consequently, sometimes teacher shortages exist, when TFA

corps members would be welcomed as teachers in high-poverty schools, yet sometimes

teacher shortages do not exist. In fact, research indicates that in some regions, due to

district contracts with TFA, new corps members are hired over educators with teaching

licenses (Brewer et. al. 2016; Veltri, 2010). Over the years, the TFA organization has

faced a great deal of criticism, not only because the organization reportedly takes jobs

away from certified teachers and promotes white middle-class privilege, but also for the

temporary nature of the commitment to teach. However, none of these aspects are a focus

of the study (see Brewer & DeMarrais, 2015 and Brewer et al., 2016 for TFA critiques).

TFA's focus on leadership is evident in a piece on their website which profiles

several African-American alumni in an article titled, "13 Black Leaders Who Are

Shaping the Future of Their Communities" (TFA, 2018). Here again, we see the focus on

career paths outside of teaching - one of the thirteen alumni profiled is a teacher, one

founded her own company and the other eleven work for TFA in a variety of equity and

diversity managerial roles. Making teacher retention a goal for all alumni, including

alumni of color, is key to strengthening the numbers of teachers in high-poverty schools,

but also a key to diversify the teaching force.

Perhaps it is time for TFA to shift and focus on teacher retention as a program

goal, so the focus remains on increasing academic achievement of students. Teachers

with more years of teaching experience have the ability to increase academic

achievement with their students (Boyd et al., 2008; Darling-Hammond et al., 2005;

Simon & Johnson, 2013). Leaving the teaching profession after two years - just as TFA

teachers may be starting to bring an academic benefit to their students - supports the

notion that the TFA experience is more for the benefit of the corps members than for the

students they serve. This study reveals some individuals enter the TFA program for the

expressed purpose of becoming a teacher. If TFA had a goal of teacher retention, they

could better support those corps members who value remaining in the classroom as a

career pursuit. Otherwise, the program continues to look like a stepping-stone for corps

members to learn about the injustices prevalent in education and then utilize the many

connections and resources available to alumni to launch their careers in other non-

education career fields. An honest and thorough examination of the ways TFA, both

nationally and regionally, currently support teacher retention is warranted. Then

developing strategies to enhance teacher retention would flip the stereotype of the

purpose of the TFA program.

Recruit More Corps Members of Color

Results of this regional study revealed teachers of color remained teaching at

higher rates when compared to their white peers. While TFA has several initiatives to

recruit more teachers of color, as well as initiatives to recruit more teachers from diverse

backgrounds in general (TFA, 2018), they should continue to examine and expand

effective recruitment methods for retaining teachers of color to the profession. TFA

boasts that their program provides the highest number of teachers of color to the teaching

force. For example, in 2009, 9% of their corps members identified as African American

and now 20% of their corps members are African American, compared to a 7% rate of

African American teachers across the country (TFA, 2018). TFA indicates that people of

color compose half of the 2017 corps (TFA, 2018). Given their success in recruiting

teachers of color, TFA may want to consider sharing their recruitment practices with

other teacher education programs.

Recruit Older Individuals with Prior Work Experience

This study revealed that older TFA corps members who did not enter the program directly from college remained teaching at higher rates than those alumni who entered TFA directly after college. TFA should continue to recruit these "professionals" of all ages, individuals who have already gained work experience elsewhere after college. If TFA is interested in higher teacher retention after program completion, this TFA region and TFA nationally should consider enhancing their recruitment efforts of older individuals.

This section discussed three implications for practice based on the findings in this study. Implications for practice include making teacher retention after program completion a goal, recruiting more individuals of color and recruiting older individuals who have had prior work experience.

Opportunities for Further Research

The findings revealed in this study point to five possible areas to consider for future research. First, more regional studies of TFA alumni should be conducted in order to compare retention rates, as well as explore the variables of original career goals, teacher efficacy, and empathy. Examining regional similarities and differences among TFA alumni would be useful in creating a broader picture of TFA retention throughout the country. Determining what factors lead to higher retention rates in specific regions is important.

Second, exploring reasons why TFA alumni choose to remain in teaching warrants further research. This particular study does not provide definitive answers regarding all the reasons why 96 of 131 alumni in this region chose to remain in the

teaching profession beyond the two-year program duration. Conducting qualitative research which includes interviews of TFA alumni to explore the most significant reasons influencing their decisions to remain in, or depart from, the profession would be an important addition to the research base. Additionally, qualitative studies allow for participant voice, which is not present in a quantitative methodology and would provide deeper insights into the predictive variables illuminated in this present study. Specifically interviewing alumni of color and alumni who did not join TFA immediately after college would be useful to explore why these two groups had higher retention rates. And interviewing TFA alumni in general would be useful to find out more about retention and attrition decisions.

Third, a qualitative study would allow the opportunity to examine more thoroughly the different components of Social Cognitive Career Theory (SCCT). Questions to examine could include, what external factors existed which influenced decision-making? What piece of the TFA experience - or Learning Experiences in the SCCT model – influenced retention? What kind of influence did school leadership, curriculum or colleagues (contextual influences in SCCT model) have on the decision to remain teaching? What supports existed at the school and perhaps within the local TFA network which influenced retention (additional contextual influences in SCCT)?

Fourth, exploring teacher efficacy and empathy levels - using the same instruments from this study - of traditionally trained teachers or other groups of in-service teachers who work in urban settings would be interesting as a comparison point to the data revealed in this study. For example, determining if TFA alumni have a higher level of teacher efficacy and empathy, when compared to urban educators from a different

training background would be an interesting analysis. Determining the similarities and differences in efficacy and empathy levels of the TFA alumni when compared to traditionally trained educators or other groups of alternatively certified teachers would help in determining if a high efficacy level and a high empathy level are important prerequisites to teach in urban areas.

Lastly, delving further into the career moves of the alumni who remained in the profession would be useful. For instance, creating a retention profile of TFA alumni in this region would help in understanding more about those who remain in the profession and the types of schools they are choosing to work in. Appendix E for example, provides a brief example of such a profile including the length of teaching, where alumni are teaching, and how many alumni pursued additional licensure. All of these indicators would be worth exploring to provide a richer portrait for the individuals who remain in the profession.

One possible reason behind the high retention rate of alumni in this study is that the majority of corps members in this region enrolled in a graduate degree program and earned a state teaching license upon completion of the TFA program. This legitimate state teaching license allowed TFA alumni to continue their teaching career and perhaps influenced those who originally were not going to remain in teaching, to change their mind about their future career goal.

While not central to the findings of the four research questions, Appendix E revealed a high number of movers, teachers who transitioned to work in other schools. Alumni in this study who remained as classroom teachers relocated to work in suburban schools, rural schools, and in different cities, in fifteen different states and two different

countries. Again, this movement of alumni indicates the importance of the teaching

license, almost akin to a passport into the teaching profession. Consequently TFA alumni

are contributing to the teaching profession as a whole - however, they are not necessarily

remaining in the original schools they were placed in or even in the city where they began

their teaching career. This movement is parallel to other teachers who begin their career

in high-poverty urban schools (Allensworth et al., 2009; Johnson et al., 2012; Johnson &

Birkland, 2003; Simon & Johnson, 2015).

  Not all TFA regions provide corps members with an opportunity to earn a state

teaching license (TFA, 2018). Every region is different in regards to training, licensure

and a masters degree option and some do not partner with an institute of higher education

for licensure (TFA, 2018; Veltri, 2008). For example, according to the TFA website,

Alabama, Appalachia, Mississippi and San Antonio do not have a higher education

partner (TFA, 2018). Relay Graduate School of Education, a program not affiliated with a

university, but a program that offers a hybrid certification option, operates in ten different

TFA regions (TFA, 2018). While a review of the TFA website indicates that the majority

of regions have a higher education partner, it is unclear if enrolling in a state licensing

program is mandatory or if it results in an alternative license or a regular state license. I

would like to know what kind of guidance is provided by TFA in terms of pursuing the

state teaching license. While it appears all corps members have an opportunity to earn an

online masters degree if they choose, via a relationship with Johns Hopkins University,

this masters degree does not result in a teaching certificate (Johns Hopkins, School of

Education, 2018).

To walk away from the TFA program after two years of teaching without earning a license effectively means TFA alumni would not be able to resume teaching at a public school. Without a state teaching license, the opportunity to continue in the teaching profession is limited to private school opportunities, or to charter schools that do not require licensure. This almost guarantees that a high percentage of TFA alumni would not remain in the teaching profession. Ideally, TFA should ensure all corps members have the opportunity to pursue teacher certification if they wish while they are working as an in-service teacher. This option would allow those who desired, to continue in the profession. Further research to fully explore the link between TFA teacher retention and state licensure is important to understanding how state licensure may influence retention rates of TFA alumni. This study revealed several opportunities for further research on retention of TFA alumni, specifically more TFA regional studies, more qualitative studies, more studies examining teacher efficacy and empathy, and research examining the influence of earning a legitimate state teaching license.

Conclusion

High-need schools need to retain their teachers, so that students do not suffer academically from the constant re-shuffling of educators (Boyd et al., 2008; Simon & Johnson, 2013). Teacher retention is one of the keys to building a cohesive setting for academic achievement (Boyd et al., 2008; Simon & Johnson, 2013). This particular study focused on in-service teachers in the Teach For America program who were not necessarily committed to a teaching career. Findings from this study provide important considerations for TFA regionally and nationally, and possibly considerations for other teacher education programs. Regardless of original career intent, this study revealed that

73% of TFA alumni in this region decided to remain in the teaching profession after program completion, indicating the teaching profession was a viable career option for many individuals. This retention rate is high, compared to other data on TFA alumni.

Additionally, this TFA region, and perhaps other TFA regions, can increase their retention rates by focusing on increasing the number of corps members of color and the number of professional corps members, i.e. individuals who did not enter the TFA program immediately after college. Lastly, the research analysis also points to several opportunities for further research. Pursuing these steps, as well as exploring the various research possibilities indicated by this research analysis may very well multiply the value the TFA organization brings to K-12 schools. Providing and supporting teachers for the long-term in order to increase academic achievement of students attending high-poverty schools is important.

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APPENDIX A   Excerpts from TFA Alumni Survey

Thank you for your interest in participating in this research study.

The survey should take approximately 15 minutes to complete and has five sections.

> A - Career Decisions after TFA
> B - TFA Teaching Assignment & Reflections on Teaching Ability
> C - Individual Background, Prior Experience and Career Goals
> D - Interpersonal Self-Assessment
> E - Opinions about the TFA Experience

The information you share on the survey is confidential and will only be viewed by the researcher. Thank you in advance, should you decide to participate. Since all responses are anonymous, I will not be able to thank you personally.

Individuals who complete the survey are eligible to be entered into a drawing for one of four $50 Amazon gift cards. If you would like to be placed in the drawing, please follow the directions at the end of the survey.

Thank you again for your time and consideration.

Sincerely,

Tyra N. Hildebrand

MARQUETTE UNIVERSITY RESEARCH INFORMATION

TFA Alumni Career Decisions and Reflections
Tyra N. Hildebrand, Doctoral Candidate
Educational Policy and Leadership Program

You have been invited to participate in a research study. Before you agree to participate it is important that you read and understand the following information. Participation is completely voluntary.

The purpose of this study is to learn about the teaching experiences and career decisions of Teach For America-Milwaukee alumni who completed their program between 2011-2017. The study involves taking an online survey and will take approximately 15 minutes to complete. You will be asked to answer a variety of questions which include information about your individual background, your specific TFA teaching assignment, your reflections on your teaching experience while in the TFA program, and your career decisions after the TFA program ended.

Your name and other identifying information will not collected. Your responses will be anonymous, however, the survey software program will assign a code to each survey response. If you choose, your name will be entered in a drawing for one of four $50 Amazon gift cards. While your name is not being collected on the main survey there is a small chance that the two surveys could be linked.

The risks associated with this project are minimal. There are no direct benefits to you other than contributing to the research base on experiences of TFA corps members. Collection of data and survey responses using the internet involves the same risks that a person would encounter in everyday use of the internet, such as hacking or information unintentionally being seen by others. Your participation is completely voluntary and you may withdraw from the study prior to submitting your responses. The data collected for this study are anonymous, so there is no way to pull your responses out of the data once you have submitted your responses. Data will be kept for possible future research studies about the TFA teaching experience. Your decision to participate or not participate will not impact your relationship with Marquette University.

If you have any questions about this study, please contact Tyra Hildebrand at 414-288-3414 or tyra.hildebrand@marquette.edu. If you have questions or concerns about your rights as a research participant, you can contact Marquette University's Office of Research Compliance at (414) 288-7570.

 Thank you for considering to participate in this research study.

- I have read through the study description and AGREE to participate in this study.
- I have read through the study description and DECLINE to participate in this research study.

1 Please identify the years you were in Teach For America.

☐ 2009-2011

☐ 2010-2012

☐ 2011-2013

☐ 2012-2014

☐ 2013-2015

☐ 2014-2016

☐ 2015-2017

☐ I started the TFA program but I left my teaching position and the TFA Program before the two years ended.

2 List your age when you STARTED the TFA Program.

_____

3 I joined the Teach For America program:

◯ immediately after I graduated from college.

◯ 1 year after graduating from college.

◯ 2 years after graduating from college.

◯ 3 years after graduating from college.

◯ 4 or more years after graduating college.

4 What is your gender/gender identity?

○ Genderqueer

○ Woman

○ Transgender

○ Man

○ Prefer not to respond

5 What is your race/ethnicity?

○ White/Caucasian

○ Black/African-American

○ Latino/Latina/Latinx

○ Asian - American

○ American Indian or Alaskan Native

○ Multiracial

○ Prefer not to respond

6 Identify the graduate program you were enrolled in when you were a TFA corps member in Milwaukee.

○ I was already licensed as a teacher - I did not enroll in graduate coursework leading to licensure.

○ Cardinal Stritch University - Early Childhood Education

○ Cardinal Stritch University - Bilingual Education

○ Cardinal Stritch University - Special Education

○ Marquette University - Secondary Education (Grades 6-12) includes Spanish (K-12)

○ Marquette University - Elementary Education (Grades 1-8)

○ Alverno College - Elementary Education

○ I initially enrolled in a university program, however, I decided to withdraw from the graduate program and I did not earn teacher licensure.

7 Through my Wisconsin graduate program, I earned:

○ Wisconsin teaching licensure only

○ both Wisconsin teaching licensure and a Masters degree

○ a Masters degree only

○ Not Applicable - I was not enrolled or I did not complete the program.

9 I left the teaching profession after completing my two-year program with TFA. Please choose an answer closest to your circumstances.

○ False. I continued to teach in K-12 after my TFA program ended.

○ True. I never returned to K-12 teaching after my TFA program ended.

○ True. However, I am planning to return to the teaching profession in the near future.

○ True. I left the teaching profession after my TFA program ended, but have since returned to working in K-12 education. The career fields I worked in before re-entering K-12 teaching were: _____

10 If you left the K-12 education profession immediately after the TFA program ended, please select the different fields of work you have been involved in since completing the program. Select all that apply.

☐ Education work outside of K-12 (i.e. policy, etc.) How many years?
_____

☐ Business

☐ Technology

☐ Nonprofit

☐ Medical School

☐ Law School

☐ Other Graduate School

☐ Health professions

☐ Social Work

☐ Raise a family

☐ Political work

☐ Travel

☐ Other _____

13 I continued to teach or returned to teaching after my TFA program ended.
   Including this current 2017-18 school year, I have taught for:

   ○ 1 additional year after TFA (total of 3 years)

   ○ 2 additional years after TFA (total of 4 years)

   ○ 3 additional years after TFA (total of 5 years)

   ○ 4 additional years after TFA (total of 6 years)

   ○ 5 additional years after TFA (total of 7 years)

   ○ 6 additional years after TFA (total of 8 years)

15 Currently, I teach at:

   ○ my original TFA placement school

   ○ a K-12 school in Milwaukee (not my TFA placement)

   ○ another urban school (not in Milwaukee) in the state of: _____

   ○ a suburban school in the state of: _____

   ○ a rural school in the state of: _____

   ○ I am no longer teaching.

17 I remained teaching and/or working at my original TFA school placement after I completed the TFA program.

   ○ No. I changed schools after my TFA commitment was over.

   ○ Yes. I remained teaching/working at my original TFA school placement for ONE additional year after TFA ended.

   ○ Yes. I remained teaching/working at my original TFA school placement for TWO additional years after TFA ended.

   ○ Yes. I remained teaching/working at my original TFA school placement for THREE additional years after TFA ended.

○ Yes. I remained teaching/working at my original TFA school placement for FOUR additional years after TFA ended.

○ Yes. I remained teaching/working at my original TFA school placement for FIVE additional years after TFA ended.

○ Yes. I remained teaching/working at my original TFA school placement for SIX additional years after TFA ended.

19 I am no longer working in K-12 Education, however I currently or recently worked in the field of education in a full-time capacity for a total of:

○ 1 year

○ 2 years

○ 3 years

○ 4 years

○ 5 years

○ 6 years

20 My career goal in the next three years is:

○ to remain teaching at my current school or teach at a different school.

○ to move into a K-12 administrative leadership position.

○ to remain working as a teacher leader/administrator in my current K-12 school or another school

○ to transition into an education position outside of K-12 schools.

○ to continue working in the field of education (not K-12)

○ to attend graduate school in the field of: _____

○ to leave the education profession.

○ unclear. I am not sure.

21 I have pursued or completed additional teacher or administrator licensing options beyond the initial state certification earned with the TFA program.

○ No

○ Yes

28 I taught the following grade levels during my two-year TFA experience: (CHECK ALL THAT APPLY)

☐ Pre K

☐ Kindergarten

☐ 1st

☐ 2nd

☐ 3rd

☐ 4th

☐ 5th

☐ 6th

☐ 7th

☐ 8th

☐ 9th

☐ 10th

☐ 11th

☐ 12th

29 I taught the following SUBJECT AREA(S) during my two-year TFA experience: (CHECK ALL THAT APPLY)

☐ Pre K and/or Kind.

☐ Special Ed.

☐ Bilingual Ed.

☐ Math

☐ Science

☐ English/L.A.

☐ Social Studies

☐ Spanish

☐ Physical Education

☐ Advisory

☐ Other _____

33. REFLECTIONS ABOUT MY TEACHING ABILITY WHILE A CORPS MEMBER

Directions: Based upon your teaching experience **while a TFA corps member**, please share your opinions about how successful you felt when engaging in the following teacher activities.

A **"1"** indicates having little control over an indicator, very unsuccessful, while a **"9"** means you had significant influence and were highly successful with the indicator.

No Influence - Unsuccessful		**Very Little** Influence or Success		**Some** Influence or Success		**Quite a Bit** of Influence & Success		Highly Influential & Successful
1	2	3	4	5	6	7	8	9

1. How successful were you in controlling disruptive behavior in the classroom?

2. How successful were you motivating students who showed low interest in school work?

3. How successful were you at getting students to believe they could do well in school work?

4. How successful were you in helping your students value learning?

5. How successful were you at crafting good questions for your students?

6. How successful were you in having your students follow classroom rules?

7. How successful were you at calming a student who was disruptive or noisy?

8. How successful were you at establishing a classroom management system with each group of students?

9. How successful were you in using a variety of assessment strategies?

10. To what extent were you able to provide an alternative explanation or example when students were confused?

11. How successful were you in assisting families in helping their children do well in school?

12. How successful were you in implementing alternative strategies in your classroom?

37 Prior to joining TFA and starting Summer Institute did you have any formal teaching experience with children?

○ No. I had no formal teaching experience before TFA.

○ Yes, I had less than a year of teaching experience with children.

○ Yes, I had more than one year of teaching experience with children.

○ Other. _____

38 Did you have an immediate family member who was a teacher?

○ No.

○ Yes.

41 Prior to joining TFA and starting Summer Institute did you complete (or come close to completing) a teacher certification program as part of your undergraduate studies?

○ No

○ Yes

42 Before you joined TFA, did you enroll in any undergraduate (or graduate) coursework in Education?

○ No. I did not take any undergraduate or graduate courses in Education prior to joining the TFA program.

○ Yes, I completed one course in Education prior to joining the TFA program

○ Yes, I completed 2-3 courses in Education prior to joining the TFA program

○ Yes, I completed 4 or more courses in Education prior to joining the TFA program

44 Please identify the original career goal you planned to pursue after you completed the TFA program. This is your perspective before you started the TFA program. I planned to continue teaching or working in K-12 schools after the TFA program.

○ I did not have a career goal in mind when I started the TFA program.

○ Education work outside of K-12 (i.e. policy, working for TFA, etc.)

○ Attend Medical School

○ Attend Law School

○ Attend Graduate School

○ A job in the field of Business

○ A job in the field of Technology

○ A job in the Healthcare field

○ A position at a Nonprofit Organization

○ Raise a family

○ Political work

○ Travel

○ Social Work

○ Other _____

45 By the end of your TFA program, did your original career goal change from what you anticipated when you started the program?

○ No, I pursued the original career goal I planned for before I started the TFA program.

○ Yes, I decided to teach for a longer amount of time than I had originally planned.

○ Yes, I originally thought I would stay in teaching, but decided to leave the teaching profession after my program ended.

46 INTERPERSONAL SELF-ASSESSMENT

Please answer the following questions regarding your interpersonal feelings. If the statement is not true at all for you, then you would select a "1" rating. If the statement is very true for you, then you would select a "5" rating. A "1" rating DOES NOT describe you very well, while a "5" rating describes you very well.

Does not describe me well		Neutral		Describes me very well
1	2	3	4	5

1. I often have tender, concerned feelings for people less fortunate than me.
2. I sometimes find it difficult to see things from the "other person's" point of view.
3. Sometimes I do not feel very sorry for other people when they are having problems.
4. I try to look at everybody's side of a disagreement before I make a decision.
5. When I see someone being taken advantage of, I feel kind of protective towards them.
6. I sometimes try to understand my friends better by imagining how things look from their perspective.
7. Other people's misfortunes do not usually disturb me a great deal.
8. If I am sure I am right about something, I do not waste much time listening to other people's arguments.
9. When I see someone being treated unfairly, I sometimes do not feel very much pity for them.
10. I am often quite touched by things that I see happen.
11. I believe there are two sides to every question and try to look at them both.
12. I would describe myself as a pretty soft-hearted person.
13. When I am upset at someone, I usually try to "put myself in their shoes" for a while.
14. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

END OF SURVEY

If you would like to be entered into a drawing for one of four $50 Visa cards, please click YES. In order for responses to remain anonymous, you will be directed to another platform to submit your name and email address. If you choose not to be entered into the drawing, please click NO in order for your responses to be recorded. Thank you for taking the survey.

○ NO

○ YES

APPENDIX B   Email Recruitment Scripts

First Email Invitation

Dear TFA Alumni,

My name is Tyra Hildebrand. I am a doctoral candidate at Marquette University in the Educational Policy and Leadership program. Additionally, I have coordinated the Teach For America (TFA) graduate licensing program at Marquette University for the past seven years.

My dissertation topic is focused on examining career decisions of TFA alumni and gaining insight into opinions about the TFA teaching experience.

I am requesting that all TFA-Milwaukee alumni who completed their two-year TFA program between 2011 and 2017 complete an online survey, which will take approximately 15 minutes.

The survey can be found at the following link:

For your time and effort completing the survey, four participants who complete the survey will have an opportunity to be selected for a $50 Visa gift card. Directions are provided at the end of the survey.

If you have any questions, please contact me at tyra.hildebrand@marquette.edu or 414/288-3414.

Thank you in advance for considering to participate in this research study.

Sincerely,

Tyra N. Hildebrand

APPENDIX B Email Recruitment Scripts (continued)

Second email (5 days after launch):

Dear TFA Alumni:

Last week you received a request for participation in an online survey regarding your TFA-Milwaukee experience. Thank you if you have already completed the survey.

Your experience and opinions are valuable to this research study. I hope you will be able to take time to complete the survey found at this link:

Thank you.

Sincerely,

Tyra Hildebrand

Third email (10 days after launch):

Dear TFA Alumni:

Recently, you received a request for participation in an online survey regarding your TFA-Milwaukee experience. Please ignore this email if you have already completed the survey.

If you have not yet taken time to complete the survey, please know that your experience and opinions are valuable to this research study. I hope you will be able to take time to complete the survey found at this link:

Thank you.

Sincerely,

Tyra Hildebrand

APPENDIX C

Factor Loadings and Communalities on the *Teachers' Sense of Self-Efficacy* (TSES) Scale (based on a principal components analysis with oblimin rotation for 12 items)

Reliability, .88

	Component 1	Component 2	Component 3	Communalities
How successful were you at establishing a classroom management system with each group of students? (CM)	.90			.83
How successful were you in having your students follow classroom rules? (CM)	.90			.86
How successful were you in controlling disruptive behavior in the classroom? (CM)	.83			.80
How successful were you at calming a student who was disruptive or noisy? (CM)	.83			.75
How successful were you in using a variety of assessment strategies? (IS)		.85		.73
How successful were you in implementing alternative strategies in your classroom? (IS)		.85	.33	.72
To what extent were you able to provide an alternative explanation or example when students were confused? (IS)		.72		.58
How successful were you in assisting families in helping their children do well in school? (SE)		.52		.38
How successful were you at crafting good questions for your students? (IS)		.48		.41
How successful were you at getting students to believe they could do well in school work? (SE)			.77	.79
How successful were you in helping your students value learning? (SE)			-.75	.74
How successful were you motivating students who showed low interest in school work? (SE)			-.72	.73

Note. Factor loadings less than 0.3 were suppressed.

(CM) – Classroom Management, (IS) – Instructional Strategies, (SE) – Student Engagement

APPENDIX D

Factor Loadings and Communalities on the *Interpersonal Reactivity Index* (IRI) Scale
(based on a principal components analysis with oblimin rotation for 14 items)

Reliability, .77

	Component 1	Component 2	Communalities
I often have tender, concerned feelings for people less fortunate than me. (EC)	.75		.53
Other people's misfortunes do not usually disturb me a great deal. (-EC)	.64		.43
I am often quite touched by things that I see happen. (EC)	.64		.40
I would describe myself as a pretty soft-hearted person.(EC)	.63		.43
When I see someone being taken advantage of I feel kind of protective towards them. (EC)	.57		.34
When I see someone being treated unfairly, I sometimes do not feel very much pity for them.(-EC)	.54		.29
Sometimes I do not feel very sorry for other people when they are having problems. (-EC)	.48		.31
I try to look at everybody's side of a disagreement before I make a decision. (PT)	-.32	.75	.55
I sometimes try to understand my friends better by imagining how things look from their perspective. (PT)		.70	.50
When I am upset at someone, I usually try to "put myself in their shoes" for a while. (PT)		.67	.57
I believe there are two sides to every question and try to look at them both. (PT)		.62	.38
If I am sure I am right about something, I do not waste much time listening to other people's arguments. (-PT)		.59	.34
Before criticizing somebody, I try to imagine how I would feel if I were in their place. (PT)		.59	.46
I sometimes find it difficult to see things from the "other person's" point of view. (-PT)		.34	.19

Note. Factor loadings less than 0.3 were suppressed.

(EC) – Empathic Concern, (PT) – Perspective Taking

APPENDIX E *Retention and Attrition Profile of TFA Alumni*

Category

1. Teaching License of Alumni, n of 129	# of Leavers	# of Stayers
Secondary Education	14	42
Elementary Education	10	27
Special Education	5	12
Bilingual Education	2	10
Early Childhood Education	2	6
Already licensed	1	

2. Original Career Goal before TFA, n of 131	# of Leavers	# of Stayers
No Career Goal	7	12
Remain Teaching or K-12 Admin	2	38
Law School	4	11
Education work outside of K-12	2	6
Attend Graduate School	4	6
Nonprofit	0	6
Health care	1	4
Business	2	2
Medical school	4	2
Political work	1	1
Travel	0	1
Social work	1	1
Journalism	2	2
Other: Agriculture/Farming		1
Other: Dental School		1
Other: Social Entrepreneur		1
Other: Teaching, Law School or Business		1

3. Career Goals in 3 years – Stayers, n of 95	# of Alumni	Percentage
Remain teaching	30	32%
Do not know	16	17%
Keep working as a K-12 administrator	15	16%
Transition into K-12 administrative leadership role	13	14%
Transition into the education field, not K-12	6	6%
Attend graduate school	6	6%
Remain in the education field, not K-12	5	5%
Leave the education profession	4	4%

4. Pursued Additional Educational Licensure –
    42 alumni of 96 who remained teaching (44%)

APPENDIX E *Retention and Attrition Profile of TFA Alumni (continued)*

5.Transitioned Out of Original TFA Placement School, Stayers, n of 95

	# of Alumni	Percentage
immediately after TFA ended	43	45%
1 year after TFA ended	29	31%
2 years after TFA ended	11	12%
3 years after TFA ended	10	11%
4 years after TFA ended	1	1%
5 years after TFA ended	1	1%

6. For the 2017-2018 School Year, Current Employment of Stayers, n of 54

	# of Alumni
Urban school, different state than original placement	18
Urban school in the same city as original placement	13
Suburban school, different state than original placement	8
Rural school, different state as original placement	5
Urban school, different city, same state as original placement	3
Suburban school, same state as original placement	3
Urban school, out of the country	2
Rural school, same state as original placement	2

7. Retention of TFA Alumni over time

Year of Program Completion	After TFA, taught for: 1 year	2 years	3 years	4 years	5 years	6 years	Alumni Total
2011	0	1	0	1	3	2	7 – 7%
2012	5	3	1	1	2	1*	13 – 14%
2013	4	0	0	4	3*		11 – 11%
2014	2	1	5	8*			16 – 17%
2015	2	7	15*				24 – 25%
2016	1	13*					14 – 15%
2017	11*						11 – 11%
Totals:	25	25	21	14	8	3	96

*51 alumni teaching, 2017-18 school year