ABSTRACT

Title of Dissertation: EXPLORING THE EFFECTS OF THE RELATIONSHIP BETWEEN SCHOOL CHARACTERISTICS, TEACHER CHARACTERISTICS, ADMINISTRATIVE SUPPORT, AND SCHOOL CLIMATE ON VOLUNTARY INTRA-DISTRICT TEACHER MIGRATION

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This quantitative research study utilized a binary logistic regression in a block design to investigate exogenous and endogenous factors influencing a teacher's decision to make an intra-district move. The research focused on the following exogenous factors: classroom characteristics (size of class, percent minority, percent of students with an individualized education plan, and percent of students that are English language learners) and teacher characteristics (experience and gender). The following endogenous factors were examined: direct administrative influence (administrative support, rules enforced, school vision, teacher recognition, and job security) and indirect administrative influence (school climate, student misbehavior, parental support, materials, staff collaboration). The research was conducted by using information available from the National Center for Educational Statistics, the SASS from 2011-2012 and TFS from 2012-2013. The 2012-2013 Teacher Follow-up Survey identified 60 teachers who made a voluntary intra-district move. Results illustrate there is a statistically significant relationship between percentage of English Language Learners and overall job satisfaction and teachers choosing to make an intra-district move.

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by

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Dedication

I dedicate this paper to the people I consider to be my world, my family. To my wonderful husband, Adam, may this determination represent our commitment to each other and the love and support we have for one another. To my beautiful and amazing children, Ava and Aden, may you consider this effort as your mother's belief that you can achieve anything you set your mind and heart to, the sky's the limit. You have the ability to do anything you want and change the world, as you and your love have changed mine forever. I love you with my heart and soul and thank you for believing in me. To my Mom, Minaxi, thank you for always supporting my aspirations and for your unconditional love and support.

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Chapter 1

Introduction

"Understanding why teachers leave is the first step in getting them to stay." (NYSED, 2010, p. 1)

There has been a great deal of focus on teacher retention; some would say that it has become a national crisis (National Commission on Teaching and America's Future, 2004). More importantly, while teacher retention as a whole is important, keeping good teachers in our schools is vital. There are many costs associated with teacher retention (i.e., financial, student achievement, recruiting, hiring, training new teachers, etc.). According to Hughes (2012), the financial costs net around $2.2 billion annually.

According to Ingersoll and Smith (2003, p. 2), teacher turnover is evenly distributed between "two components: attrition (those who leave teaching altogether); and migration (those who move to teaching jobs in other schools)." It is important to keep in mind that leavers depart for many reasons: family or personal decisions (e.g., retirement), other work opportunities, dissatisfaction with the profession, etc. Movers also do so for many reasons: working conditions, poor administrative support, and lack of faculty influence (Ingersoll & Smith, 2003). One way to help administrators retain good teachers in their schools is to dig deeper into the factors that influence a teacher's decision to make a move.

Since the early 1980s there has been a series of reports indicating the possibility of a severe teacher shortage in elementary and secondary schools (Ingersoll, 2001a). Darling-Hammond (2003) stated that the problem of teacher retention issues is not the supply of teachers, since more qualified teachers are produced than hired, but rather being able to keep the good ones. Ingersoll (2001b) claimed that teacher retention issues

are the result of teachers moving from one school to another or exiting the profession, thus creating a situation called a "revolving door" (p. 501). Ingersoll (1995a) found that about half of the overall teacher turnover is attributed to teachers migrating from one school to another. According to the 2007-2008 School and Staffing Survey (SASS) and Teacher Follow-up Survey (TFS) from National Center for Educational Statistics (NCES), teacher migration still remains significant. It is in the best interest of school administrators and district personnel to better understand the factors that influence a teacher's decision to migrate, since administrators want to keep good teachers in their schools.

According to Watlington, Shockley, Guglielmino, and Felsher (2010), "When high quality teachers leave the classroom, the effect on both student performance and school and district fiscal operations is significant and deleterious" (p. 22). Schools and districts not only invest money into training and developing teachers, they are invested in cultivating excellent teachers for their district. The research shows that the costs of teacher turnover are financial, emotional, and psychological and they affect teachers, staff, and students, often leading to achievement setbacks for the latter (Watlington, et al., 2010). Therefore, it is important for districts and school administrators to keep good teachers in their buildings. While teacher turnover can have a harmful effect on students, some researchers have noted that teachers who are burnt out and stay are just as detrimental to students, if not more (Haberman, 2004). Some teachers may choose to stay in their school physically, therefore considered statistically a teacher stayer, but they may not contribute much leadership or teaching to the school (Haberman, 2004).

Nevertheless, if teachers choose to stay, it is up to school administrators to ensure they feel supported and have positive working conditions.

Workforce conditions (i.e., school demographics, salary, demands brought by accountability, etc.) also influence a teacher's decision to remain in their current position or leave (Johnson, 2006). Teaching has become more demanding; common core state standards and the ongoing national and state mandated assessments have put a great deal of pressure on teachers (Harris & Rutledge, 2010). The increasingly diverse student populations and instructional challenges also contribute to the decrease in the retention of teachers (Elfers, 2006).

Nationally, the issue of teacher mobility has education advocates questioning the quality of teaching and learning going on in the classrooms (Darling-Hammond, 2001). While teachers often make the decision for a change without consulting the principal, school administrators can influence a teacher's decision to migrate to another school. Intra-district transfers may be prohibited in some school systems during the first three years. Retention of teachers with fewer than five years of teaching experience is an area of concern. Approximately one-quarter of all beginning teachers, those with less than five years of teaching experience, choose to leave teaching (Benner, 2000). According to Haberman (2004, p.2), "The average length of a teaching career in the United States is now down to eleven years." Haberman also reported that a teacher in an urban setting has a shorter teaching career with about half the new teachers leaving within the first five years. There are a number of factors that determine the number of teachers in the classrooms and their quality.

NCES reports that teacher turnover in the late 1980s and early-to-mid 1990s was between 12.4% and 13.5% (Luekens et al., 2004). According to the results from the 2004-2005 SASS, 8.1% of the teachers moved from one public school to another, whereas 7.2% moved in the 1994-1995 survey. The 2007-2008 Teacher Follow-up Survey (TFS) and SASS showed that "of the 3,380,300 public school teachers who were teaching during the 2007-08 school year, 84.5% remained at the same school ("stayers"), 7.6% moved to a different school ("movers"), and 8.0% left ("leavers") the profession during the following year" (Keigher, 2010, p .3). Thus, in that year, "15.6% of American public school teachers left their schools" (Keigher, 2010, p.3), which is a 8% increase from the 2000-2001 school year. The turnover data for public school "novice teachers, with 1–3 years of experience, is slightly higher; 77.3% stayed in their base-year school, 13.7% moved to another school, and 9.1% left teaching in 2008–09" (Keigher, 2010, p. 3). Many districts do not allow novice teachers to make intra-district moves prior to receiving tenure. For public school teachers with four or more years of experience who moved, turnover was significantly higher; "55.3% moved from one public school to another public school in the same district and 42.3% moved from one public school district to another public school district between 2007–08 and 2008–09" (Keigher, 2010, p. 4). For the purposes of this study, an examination into the impact of intra-district movers was the focus, because school administrators do not want to lose good teachers to other schools in their district and there is limited research in this area.

According to Ingersoll (2001), districts create recruitment programs, but that may not solve the problems they face with staffing. Ingersoll (2001) further believed that the districts need to focus on the core foundational structures that result in low teacher

retention and make efforts to change those numbers. Buckley, Schneider, and Shang (2004, p. 2) asserted:

> A major component of the No Child Left Behind Act (NCLBA) mandates that all teachers in core subjects be "highly qualified" by 2005-6. Leaving aside the debate over the definition of "highly qualified," few would challenge the assertion that the nation needs to attract the best possible teachers to the profession. However, as school administrators and education researchers have long known, hiring bright new teachers is only part of the problem – the attrition of both new and experienced teachers is as great a challenge for schools and school systems.

While we have minimal influence on those choosing to exit the profession, we should seek to better understand factors influencing a teacher's decision to transfer schools because in the end, school administrators invest many resources into the teachers they hire and do not want to lose them to another school. Teachers in high-poverty schools often have a higher turnover rate (Bandiera de Mello & Broughman, 1996). One study indicated that teachers in some high-poverty schools see teacher turnover rates reaching almost 50% in their first year of teaching (Whitener, Gruber, Lynch, Tingos & Fondelier, 1997).

There are several explanations for teacher turnover. Some factors affecting attrition include: salary, working conditions, teacher preparation, and mentoring support. For the purposes of this study, salary was not a factor since the teacher movers are intra-district. Some suggestions for school leaders include: improving working conditions, hiring better prepared teachers, and providing mentors for novice teachers and challenges for veteran teachers (Jackson, 2007).

Bluedorn (1982) and Murnane, Singer, and Willet (1987) state that supply and demand of teachers are at the root of the retention problem; Darling-Hammond (2003) disagrees and states that more qualified teachers are produced than hired. According to Darling-Hammond, the problem is keeping the good ones.

Teachers who have moved say that working conditions, in addition to recognition and support from administrators, are significantly better in their current position (NCES, 2007). Fewer than 30% of teachers cited inadequate administrative support, and about 18% cited student discipline problems as reason for leaving the school (Whitener et al., 1997). Throughout the years, difficult working conditions in general have been associated with teacher turnover (Chapman, 1986; Ishler, 1990; National Education Association [NEA], 1966).

Statement of the Problem

With an increased emphasis on highly qualified teachers in every classroom, it is crucial for us to be able to retain good teachers. There are just as many teachers moving to another school as leaving the profession. From the 207-2008 SASS, of the 13.7% that moved to another school, 43.4% of those made an intra-district move. The data for experienced teachers demonstrate a higher percentage of teacher movers. "Among public school teacher movers with four or more years of teaching experience, 55.3% moved from one public school to another public school in the same district" Keigher, 2010, p. 4). Moreover, the costs of teacher turnover go beyond the obvious financial cost; there is an emotional, physiological, and student achievement cost associated with teacher turnover (Watlington et al., 2010). With an increase in teacher migration and the high costs associated with it, determining the factors that influence teacher migration is crucial.

Purpose of the Study

The purpose of this study was to use quantitative methods to determine the factors influencing a teacher's decision to make an intra-district move. Administrators would benefit from learning more about what factors contributed to a teacher's decision to move to another school. There is something schools can do about the administrative support they provide to teachers. Examples are providing staff support, better safety and school order, and more professional development. This study also evaluated the observable characteristics of the teachers (in the SASS) to see how movers compare to stayers. Schools need to know how to improve to better retain teachers. Schools need to know the factors that determine a teacher's decision to move.

This study used a national data set available from the U.S. Department of Education. The National Center for Educational Statistics collects data from schools across the country. The 2011-2012 Schools and Staffing Survey (SASS) and the 2012-2013 Teacher Follow-up Survey (TFS) were the data sources for this study.

Research Questions

Three key research questions guided this study.

1. Is there a correlation between the exogenous variables of classroom and teacher characteristics and teachers moving to a different school?
2. Is there a correlation between the endogenous variables under direct administration influence and teachers moving to a different school?
3. Is there a correlation between school climate and teachers moving to a different school?

The first question is based on something that is inherent in the school, their classroom and teacher characteristics. Classroom characteristics include class size, the racial breakdown of the students, and percent of students in the school with special needs (English Language Learners and students with an Individualized Educational Plan) whereas teacher characteristics include experience and gender. The second question tackles factors (administrative support, enforcing rules, vision, teacher recognition and providing job security) over which school leadership may have direct influence. The amount of perceived administrative support is a self-report by teachers on SASS and TFS. The third question deals with school climate. School leaders have indirect influence over the climate of the school. For the purposes of this study, school climate was the influence teachers feel they had over school policies and practices in the school where they work, student misbehavior, parental support, necessary materials, staff collaboration, and overall teacher satisfaction. While many of these factors affect all forms of teacher turnover, this study is only examining the voluntary intra-district movers.

Significance of the Study

The study contributes to the research on questions of factors that influence intra-district teacher migration. Retaining teachers is important to schools and principals. There is a cost (i.e., monetary, time, professional development, etc.) associated with hiring and training new teachers to education and/or each individual school. The study will examine classroom characteristics, teacher characteristics, administrative support and school climate to determine the factors that influence a teacher's decision to make the intra-district move.

Definition of Terms

The following are definitions of terms used in this study. The terms used parallel the work of Ingersoll (2001) and are consistent with those used by the National Center for Educational Statistics.

Classroom Characteristics - classroom characteristics in the analysis, including class size, race, and percentage of students with an individualized educational plan and percentage of English language learners.

Direct Influence – the analysis includes administrative support, administration enforces school rules, vision, teacher recognition, and job security.

Endogenous Variables – variables over which schools have direct and indirect influence.

Exogenous Variables – variables over which schools do not have direct influence or control (student and teacher characteristics).

Indirect Influence – the analysis includes school climate, student misbehavior, parental support, necessary materials, staff collaboration, and overall job satisfaction.

Intra-district – within the same district in a state

Leavers – teachers that leave the teaching profession.

Movers – teachers that voluntarily choose to move schools within the same district.

Stayers – teachers that remain at their same teaching location as the previous year.

School Climate – the working conditions teachers are teaching in.

Teacher Characteristics – teacher characteristics in the analysis include experience and gender.

Organization of the Dissertation

This dissertation is organized in five chapters. In Chapter 1, the significance, purpose, and statement of the problem are introduced, as well as the definitions of terms. Chapter 2 presents literature related to teacher turnover as relevant to this study. Chapter 3 describes the research design and methodology. Chapter 4 presents the results of the data analysis and Chapter 5 includes the conclusions and recommendations for further study.

Chapter 2

Literature Review

Teacher Turnover Background

"Keeping good teachers should be one of the most important agenda items for any school leaders. Substantial research evidence suggests that well-prepared, capable teachers have the largest impact on student learning" (Darling-Hammond, 2000b, p. 1). Nationally, the problem of teacher retention has become increasingly difficult to address. The No Child Left Behind Acts requirement that schools staff all classrooms with "highly qualified teachers" creates challenges, especially for schools in inner city and poor rural areas (Darling-Hammond, May, 2003). Since the early 1990s, "The annual number of exits from teaching has surpassed the number of entrants by increasing amounts" (Darling-Hammond, 2003, p.1). Although some level of teacher turnover is unavoidable, the migration of large numbers of teachers over time reduces the overall capacity of a school to serve its students.

According to the research, there are three major influences that contribute to teacher retention: school-based factors, individual factors (Shen, 1997), and the teacher labor market (Watlington, 2010). According to national studies, the absence of colleague and administrative support as well as school demographics contribute to teacher mobility (Carlson, 2004; Ingersoll, 2003; Loeb, Darling-Hammond, & Lucak, 2005; NCES, 2003; Smith & Ingersoll, 2004). Additional factors include: salary, working conditions, teacher preparation, and mentoring support (Darling-Hammond, 2003). According to the 2001-2002 NCES survey, "Of the 8,400 public and private school teachers, the main reasons

for high teacher turnover and attrition rates are inadequate administrative support (38%) and workplace conditions (32%)" (Luekens, Lyter, & Fox, 2004, p.4).

As workforce conditions (i.e., school demographics, mentoring program, support from administration, demands brought by NCLB, etc.) change, the impact on classroom teachers, especially in relation to teacher retention, has been a growing concern of school administrators. Teaching has become more demanding; the ongoing national and state-mandated assessments alone have put a great deal of pressure on teachers. The increasingly diverse student populations and instructional challenges also contribute to the problem of the retention of teachers.

According to Ingersoll and Smith (2003), "The total teacher turnover is fairly evenly split between two components: *attrition* (those who leave teaching altogether); and *migration* (those who move to teaching jobs in other schools)" (p. 32). They add, the problem impacts beginning teachers more than others.

"Teacher turnover can negatively affect the cohesiveness and effectiveness of school communities by disrupting educational programs and professional relationships intended to improve student learning" (Elfers, Plecki, & Knapp, 2006, p. 98). Teachers leave for a variety of reasons, both personal and professional. Examples of personal reasons why teachers may leave include the desire for career change, family, lack of satisfaction with the organization, health, etc. According to the research, lack of administrative support and teacher autonomy, student misbehavior and lack of student motivation, low salary, dissatisfaction with teaching assignments, and inadequate allocation of time all contribute to teachers leaving (Ingersoll, 2003; Luekens et al., 2004; NCES, 2003). It is important to understand why teachers choose to transfer to another

school within their district. There has also been a correlation between the students' race, ethnicity and poverty and teacher attrition and mobility (Hanushek, Kain, & Rivkin, 2001; Ingersoll, 2001b; Lankford, Loeb, & Wyckoff, 2002; NCES, 2005; Shen, 1997). The research states that high-poverty schools generally see a higher rate of teacher turnover, but research suggests that high-poverty schools with positive working conditions may not have high turnover rates (Loeb & Darling-Hammond, 2005).

Researchers found that the school-based factors with the greatest impact on teacher mobility, and thus the focus of this literature review, include administrative support (measured by working conditions and teacher involvement), and school demographics (measured by percent minority and student achievement) (NCES, 2003). Teachers choose to work in a particular school for a variety of reasons, with working conditions being an important factor. When researchers use the term working conditions, this can mean a wide range of factors. There are some working conditions that are quantifiable such as class size and access to materials and resources. There are others that are harder to measure such as the quality of the school leadership, autonomy over the curriculum, and parent support (Johnson, Berg, & Donaldson, 2005). Regardless of the type of working condition, they all play a role in a teacher's overall satisfaction.

Murnane and Steele (2007) depict the importance of working conditions through sharing the stories of two hypothetical adjacent school districts, Oceanside and Rivercity. Both districts have identical numbers of students, salary, and a desire for excellent teachers. The Oceanside district has updated and new schools, school leaders that have been recognized nationally for their practice, and a supportive community. Rivercity's district is completely the opposite; its schools need major renovations and upgrades, and

it has underperforming school leaders and lacks community support. If a teacher had to choose between working at one of the two districts, they found more teachers chose Oceanside, leaving Rivercity with less effective teachers. If those two schools were within the same district where the salaries are the same, fewer effective teachers would be attracted to Rivercity school than Oceanside school, thus creating a shortage of effective teachers for a school that needs them the most, Rivercity.

Many of our urban school districts that serve students in poverty have difficulty recruiting and retaining good teachers (Hanushek, Kain, & Rivkin, 2004). While some urban school districts recognize this issue and offer high salaries to attract good teachers, the large school districts with a wide range of populations offer the same salary to all teachers within their district. The increase in salary may attract more teachers, but there must be adequate working conditions paired with administrative support to retain the good teachers.

The bulk of current research focuses on teacher turnover and teacher retention (the leavers), but the research on movers is lacking. In order for school and district leaders to keep good teachers, it is imperative to learn about the factors that influence intra-district mobility. What school-based factors influence a teacher's decision to move? Do schools with a higher percentage of minority students and higher poverty rate result in an increased percentage of teacher transfers? When principals are perceived to be unsupportive, by either not having optimal working conditions or not involving teachers in the decision-making process, the result is a higher percentage of teacher transfers (Brown & Wynn, 2009). Understanding the impact of these factors will also help districts learn what teachers value when choosing to work at a particular school.

Exogenous Variables

The research clearly outlines several factors that influence a teacher's decision to stay, move, or leave. Lochmiller, Sugimoto, and Muller (2016) state "The rates of teacher retention, mobility, and attrition vary across state, school, and teacher characteristics" (p. 2). The exogenous variables that are consistent in the research include classroom and teacher characteristics. It is important to break down the variables that have the greatest influence on a teacher's decision to remain or move.

Classroom characteristics. Educational researchers have commonly found that schools serving a higher percentage of minority students living in poverty are often the most difficult to staff (Ingersoll, 2001; Lankford, Loeb, & Wyckoff, 2002). These hard-to-staff schools have higher proportions of unqualified teachers, inexperienced teachers, and higher teacher turnover. In comparison, schools found in wealthy communities tend to have more qualified teachers, lower rates of teacher attrition, and are more likely to have their choice of qualified candidates from which to choose when teacher positions open up in their schools. Lankford (1999) found evidence that some teachers will work a couple of years in the harder-to-staff schools before transferring to schools serving students of higher socioeconomic status when these positions became available or when they receive tenure and are eligible to switch schools. This suggests that the supply curve of available teachers may be different for schools serving largely minority and poor students as compared to that faced by wealthier schools.

Hanushek (2004) studied the factors that caused public school teachers in Texas to move or leave. He examined three components: job characteristics, classroom characteristics, and student achievement scores. The job characteristics included salary

and working conditions; the classroom characteristics examined included percentage of low income, and the percentage who were Black or Hispanic. Results show that between 1993 and 1996 about 82% stayed, 7% left, 6.5% moved and 5% switched districts. The results suggest that student achievement has more of an impact on teacher retention than salary. Hanushek (2004) also found that when schools had a large population of Black or Hispanic students underperforming, teachers tended to leave at a higher percentage when compared to the Texas public schools as a whole. Hanushek concluded that improving working conditions helped retain teachers. The working conditions needing improvement for highly diverse populations included: more structure to address disciplinary issues, strong leadership, and a general focus on safety and security. Alternately, there is speculation that improving those working conditions and retaining the teachers may have a direct benefit in improving student achievement.

The research on schools with high poverty and teacher retention is consistent; if the working conditions are poor in those schools, teachers tend to leave. It is important to understand the teachers' perspective on remaining in high-poverty schools because they are often under scrutiny for lack of student achievement. Elfers (2006) compared survey results of teachers in high-poverty schools (greater than 50% of students in free and reduced price lunches) in relation to the teachers working in low-poverty schools (20% or less for free and reduced). A total of 210 teachers participated in the survey. The results showed that the biggest discrepancies in high-poverty versus low-poverty schools include amount of support for learning in the students' homes and disciplinary issues. These findings definitely help explain the negative correlation between school demographics, as

measured by poverty, and teacher retention. They have significant implications for school and district leaders (Elfers, 2006).

Researchers agree that the demands on teachers increase as time goes on. The number of students for whom teachers are responsible has also increased. According to Barrett and Toma (2013), the districts allocate resources to individual schools based on student enrollment and school principals determine the number of students in each class. They also found that "more effective teachers do receive punishment in the form of larger class sizes" (Barret & Toma, 2013, p.42). When teachers have larger class sizes, they believe they are not as effective and at times it can lead to burn out, resulting in attrition issues. Billingsley (2004) stated, "School districts may raise class size limits to cope with the lack of qualified teachers" (p. 39). School leadership may have some influence on the class sizes allocated to each content and grade level within a school and attempts should be made to keep the student load manageable.

Teachers are faced with diverse needs when it comes to the students they are teaching. Many teachers have students with diverse needs (individualized education plans and/or English language learners) in addition to the diverse learning styles of each student. According to Ingersoll (2001), special education, math, and science teachers have the highest turnover while special education teachers are more likely to exit the profession. With more students being mainstreamed into general education classes, special education and general education teachers have to collaborate, sometimes creating confusion and conflicts with roles and responsibilities. Billingsley (2004) reports that special education teachers who are in more general education classrooms have a higher risk of burnout than those in self-contained classrooms. She also states that school

leadership needs to be aware of the supports teachers may need as there is shift toward inclusion (Billingsley, 2004).

Teacher characteristics. Movement from one organization to another in one's career is common. Teachers change jobs for several reasons, including participation in school decision making, supportive instructional leadership from the principal, and opportunities to work cooperatively with other teachers. Ingersoll (2003) estimated a consistent national rate of teacher turnover of about 15% of the workforce per year, almost evenly split between leavers and movers. This rate is not consistent in all local contexts, with some locales experiencing higher or lower turnover rates. Additionally, there are especially high rates of teacher turnover both early in teachers' careers and later when they are approaching retirement age. According to the 2008-2009 TFS, among public school teachers with "one to three years of experience, 77.3% stayed in their base-year school, 13.7% moved to another school, and 9.1% left teaching" (Keigher & Cross, 2010, p.3). The national data for "teacher movers with four or more years of teaching experience had 55.3% move from one public school to another in the same district and 42.3% move from one public district to another public district" (Keigher & Cross, 2010, p.4). Many districts will not allow teachers in their first few years, also known as probationary teachers, to move, thus the lower percentage of novice movers.

A characteristic that is correlated to teacher retention is age (Hughes, 2012). According to Hughes (2012), teachers, both younger and older, are leaving the profession for various reasons. The younger teachers tend to leave either due to dissatisfaction with the profession or for family reasons while older teachers leave for retirement (Hughes, 2012). Lochmiller, Sugimoto, and Muller (2016) found that teachers with the least

number of years of experience, teachers in urban schools, and teachers in schools with a high poverty rate were retained the least. Teaching still remains as a majority-women occupation, but men are more likely to remain in teaching (Hughes, 2012).

According to Shen (1997), teachers with less experience were more likely to move or leave, whereas more experienced teachers stayed. While Hanushek (2004) concluded salary did not have an impact on retention, Shen concluded that salary had a positive correlation with teacher retention. Many teachers stay in education for the intrinsic benefits of teaching children and seeing them do well. Teachers put in more hours than they are compensated for and empowering them to have a voice and influence in school and district policies has been shown to improve retention (Shen, 1997). According to Hanushek (2004), the location of the school in relation to where a teacher was residing was not correlated with retention and attrition. He also found that schools with a higher percentage of students receiving free and reduced lunch and a higher percentage of minority students were faced with more teacher movers and leavers.

Johnson and Birkeland (2003) conducted a longitudinal study of novice teachers in Massachusetts. They found that the teachers' first-year experiences were monumental in determining if they chose to stay in their school and continue teaching. They argued that the novice teachers' experiences and success are dependent on the school where they are working and the working conditions at the individual school. If schools had support (time with colleagues, appropriate teaching assignments, structures to support student learning, resources, and opportunities for growth) for their teachers, the novice teacher rated that as a positive working environment and chose to remain in that school. Additionally, Smith and Ingersoll (2004) found that if novice teachers had the

opportunity to participate in some sort of a mentoring and/or induction program, it contributed to teacher retention.

The No Child Left Behind law highlighted the importance of needing good and qualified teachers in each school. The teacher shortages in the high-needs areas (i.e., mathematics, science, and special education) have become a major concern (Cochran-Smith, 2004; National Commission on Mathematics and Science Teaching for the 21st Century, 2001). According to Ingersoll and May (2012), the rates of mathematics and science teacher turnover have increased over the past two decades. They also found that there is variability between schools on teacher turnover when it comes to mathematics and science teachers. The schools that are classified as high poverty, high minority, and urban schools have the highest turnover rates. It is unclear if the high turnover rates are due to a teacher's teaching assignment or the school demographics.

Researchers have found that teachers who move to another school are more willing to critique their former school leader than those who remain in a school (Luekens et al., 2004). According to Elfers (2006), teachers identified leadership and support differently depending on the type of school they were in, high- versus low-poverty. The teachers that chose to remain in their high-poverty school stated that they had strong leadership and leadership support. This conclusion is imperative for school leaders because it implies that they have great influence on the working conditions and teacher retention. Thus, the teachers in high-poverty schools are more likely to stay if there is strong leadership support even though teaching in a high-poverty school presents a different set of challenges (Elfers, 2006).

Endogenous Variables

Teachers come into the profession for many reasons and are also exiting the profession for several reasons. While district and school leaders do not have influence over some of the reasons teachers chose to leave or move (classroom and teacher characteristics), they do have influence over other reasons (administrative support and school climate). There are two types of support, direct and indirect. School leaders can directly influence the amount of administrative support provided and indirectly influence the school climate inherent to their school.

Direct support. Administrators may not realize the important role they play in teacher retention; "Administrators' actions have enormous impacts on teacher retention" (Hughes, 2012, p.247). The research on the importance and role of educational leadership in the retention decisions of teachers confirms the necessity for strong administrative support to retain teachers (Copeland, 2007; Hamilton, 2007; Stratman, 2007). Hamilton found that administrators must show strong administrative support to the teachers that allows them to address many different situations in many ways. Hamilton stated, "The principal's leadership trait is a determining factor of teacher attrition" (p. 84).

Stratman (2007) and Day, Davis, and Fitchett (2007) found that school administrators and other educational leaders must utilize a variety of diverse methods for teacher recruitment and retention. The results of international studies conducted in Australia and England support the findings that educational leadership has an influence on teacher recruitment and retention (Bamby, 2006; Beatty, 2007; Robinson & Timperley, 2007). Beatty (2007) emphasized the importance of principals establishing a

school climate where meaningful collaboration is valued. Additionally, Robinson and Timperley (2007) emphasized the importance of educational leaders participating in and fostering appropriate teacher professional development. They presented five leadership dimensions to help establish an effective and collaborative school climate. The five dimensions include: providing direction, strategic alignment, developing an improvement community for student success, constructive talk of problems, and smart tool development and selection.

A study conducted by Day et al. (2007) resulted in the seven core values they believe educational leaders must possess to be effective today. The seven values include: respecting diversity and individuality, empowerment of others, teamwork by creation of a shared vision, persistence, being willing to take risks, making sound decisions, and planning strategically. According to the study, these values are the core of educational leadership. Teachers, especially novice teachers, want a school leader with a clear vision, but also one that includes teachers in decision making (Morrison, 2012). The term support means something different to each teacher. Morrison (2012) found that when new teachers received support in the form of clear communication, enforcing rules, teacher recognition, and overall support and understanding, novice teachers were more likely to remain in the profession.

Ingersoll (2001) focused on the characteristics, conditions, and effectiveness of school organizations that affect teacher turnover, cited from the *Schools and Staffing Survey* and *Teacher Follow-up Survey* collected by the National Center for Education Statistics. Ingersoll concluded that policy decisions about salaries, administrative support, and school atmosphere do affect workers' behavior as well as the specific

characteristics of an organization, thus impacting the decisions of the majority of teachers who either remained at or left an organization, particularly in the early years of employment.

It is important to understand the role of administrative support in teacher retention. Zwicky (2008) conducted a study to understand how leadership, professional community, and trust impact teacher mobility. The study investigated three questions:

> (1) What is the relationship between adult relationships and high mobility rates among mid-career teachers? (2) How do the elements of school culture (conflict and conflict management; trust among teachers and between teachers and administrators; and opportunities for teachers to exercise leadership) affect the development of professional culture? (3) What impact do administrator-teacher relationships have on the professional culture of a school? (p.1)

According to Zwicky (2008), when there is trust and strong school leadership there is a positive culture and climate in the school. This, in turn, reduces teacher mobility.

When one thinks of leadership in schools, it's usually the principal who comes to mind. In recent years, the importance of building the role of teacher leadership has been addressed (Zwicky, 2008). Outstanding leadership exists when principals create an administrative team for the school consisting of the principal, representative teachers, and other staff such as counselors. This has been shown to improve collaboration among teachers and their relationship with students, as well as to affect their stress level. Novice teachers especially need the support of an administrative team (Zwicky, 2008).

If teachers feel supported, they will be committed to their work. Teachers also need recognition for their work. Firestone and Pennell (1993) developed a framework for

assessing how different incentive policies affect teacher commitment. Researchers believe if teachers are committed and feel as if their input in school decisions is valued, they are more likely to stay at that school. Firestone and Pennell (1993) examined seven key workplace conditions that contribute to teacher commitment: job design characteristics, autonomy, participation, feedback, collaboration, learning opportunities, and resources. The framework they used suggested four areas to pursue: increase teacher participation, look for more effective ways to increase collaboration and learning opportunities, increase feedback between administrators and teachers, and change teachers' work to make it more stimulating, challenging, and interactive by varying professional development opportunities.

A deeper look into novice teachers' response to impact of working conditions and their overall attitudes and values was conducted by Johnson, Birkeland, Kardos, Kauffman, Liu, and Peske (2001) at the Project on the Next Generation of Teachers. Their findings for what teachers value and desire for working conditions is consistent with those of other researchers. Johnson et al. (2001) found that teachers make their decision to stay or leave based on the support received at their school. The research on why teachers leave the profession or migrate has shown that looking at improving working conditions and leadership support are most effective in retaining good teachers. When teachers perceive principals to be unsupportive, by either not having a school-based mentoring program or not involving teachers in the decision-making process, there is a higher percentage of teacher movers.

Indirect support. Research studies indicate that administrative leadership and support are the most influential factors in establishing the culture and climate of their

school. The culture and climate part of the working conditions, as reported by teachers, can either help retain good teachers or help them choose to move to another school (Ingersoll, 2001; Johnson, et al., 2001). "Workforce conditions that encourage the capabilities and emphasize the worth of individuals contribute to retention" (Council for Exceptional Children [CEC], 2001, p. 40). Teachers have reported that the working conditions most influential on their decision to stay or move include: their involvement in the decision making process, support with discipline issues, and appropriate teaching assignments with input from teachers, compensation and recognition for going above and beyond the call of duty, and time to collaborate with their colleagues. The schools that are able to have a positive climate and good working conditions are able to retain more teachers than schools that have less than desirable working conditions (Darling-Hammond, 2003).

The phrase "working conditions" is an umbrella term to describe the school climate, student misbehavior, student poverty, class size, percentage of students with special needs, parental support, adequate resources, staff collaboration, and overall job satisfaction. Teachers choose to migrate for a variety of reasons and it is important to better understand if there are specific working conditions that affect their decision to move.

The research is clear that working conditions influence a teacher's decision to stay or leave. Darling-Hammond (1997) examined the results of the 1995 SASS and TFS. The survey results indicated that retention was lower in high-poverty versus low-poverty schools. The teachers that left the high-poverty schools were almost double those leaving the low-poverty schools because of dissatisfaction with teaching. The key areas of

dissatisfaction include: student motivation, student discipline, and leadership support. According to Hughes (2012), student discipline is the second reason (salary being first) for teacher attrition.

The research has been consistent with stating that working conditions vary by school and the administrators have a great deal of influence over them. "In 1994, not only were the best paid teachers in low-poverty schools earning over 35% more than the best paid teachers in high-poverty schools" (National Center for Education Statistics [NCES], 1997a, Figure 6.2), the teachers also had different working conditions which included: smaller class sizes, autonomy, and input into school-based decisions. According to Morrison (2012), when principals foster collegiality and collaboration among staff, novice teachers are more likely to stay. In examining the results from the 1994 SASS data, Weiss (1999) found that the novice teacher's perceptions of the working conditions, which include administrative support, access to materials, collaboration with colleagues, and input into decision making, were the most significant predictors of the teachers' commitment and willingness to stay in teaching. This is consistent with Shen's (1997) analysis of the SASS follow-up surveys. Shen (1997) confirmed that teacher leavers and movers felt that they had little to no input into decision making and the administrators did not understand their needs and issues.

The research examining the teacher's decision to leave the profession helps illuminate the influence of working conditions on teacher attrition. However, the research also indicates that there is variability in the working conditions in each school. While differences in school culture and climate as well as working conditions across

schools have been recognized, their implications for teacher attrition need to be examined (Loeb, 2005).

Conceptual Framework

Researchers have been examining teacher retention and attrition for decades, but it is only recently that researchers have taken an interest in understanding the factors that lead to a teacher staying in or leaving the profession. Ingersoll (2001a) identified the three major categories of teacher retention and attrition: stayers (those remaining in their present school), movers (those switching from one school to another within a district), and leavers (those who leave the teaching profession). This dissertation focuses on movers, and helps the researcher examine more deeply the school culture that influences a teacher's decision to move or not.

The issue of teacher mobility is complex. There are many factors that impact a teacher's decision to move intra-district. Factors such as salary, locale, school demographics, age, etc. cannot be controlled by individual schools. Administrative teams at individual schools can improve the quality of instruction and school leadership, share a positive vision, mentor teachers, and secure more recent materials for teachers to use, such as books, white boards, and computers.

Figure 1 illustrates the hypothesized factors that contribute to a teacher's decision to make intra-district moves. The figure provides the conceptual framework that was used in this study.

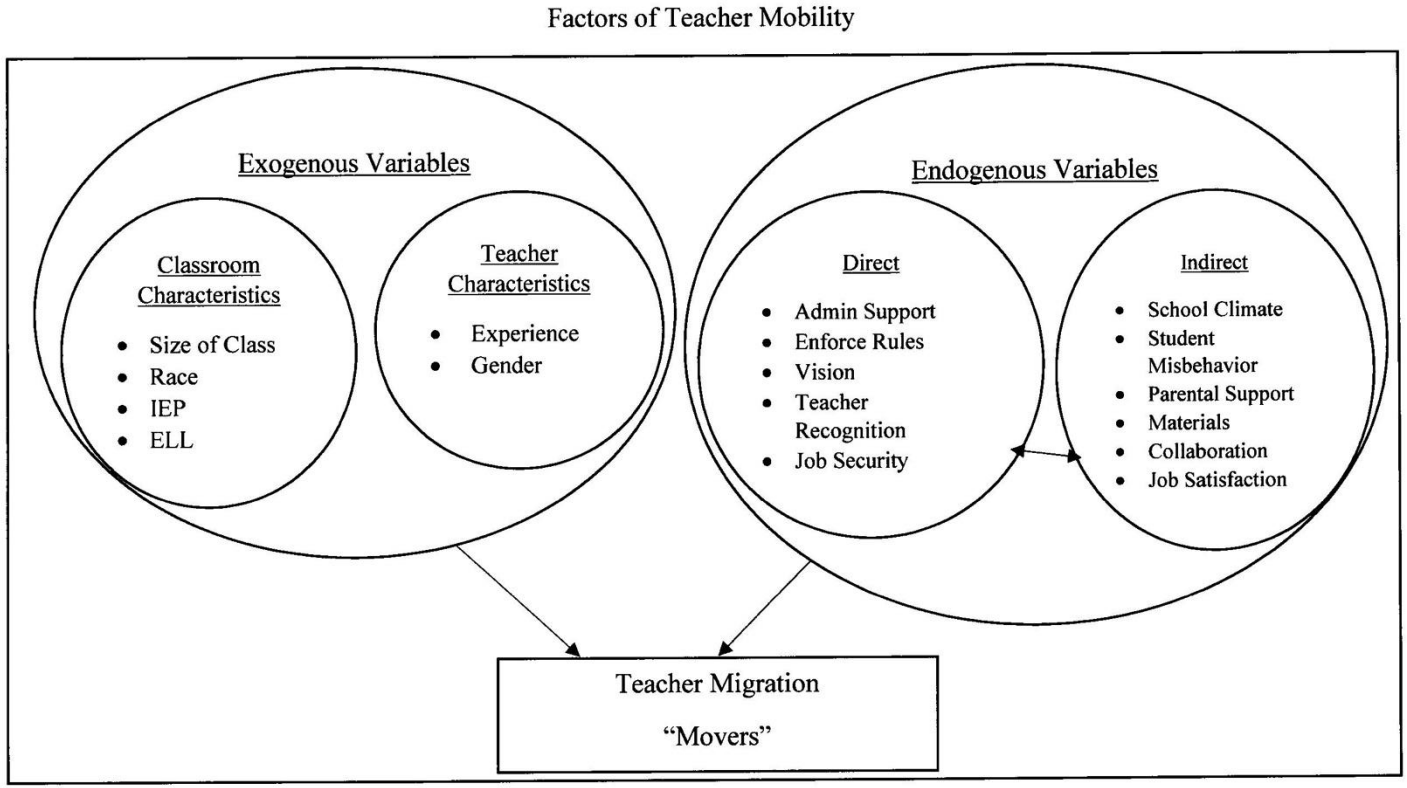

Figure 1. Conceptual Framework for Factors of Teacher Mobility (Davis and Zaks, 2015).

This framework includes the teacher's perceptions of administrative support, which can improve the quality of academic instruction for the students and the culture of the school. Furthermore, it examines factors of student demographics such as race, as measured by the percentage of students categorized as minority and special needs as measured by percentage of student with an Individualized Education Plan and English-Language Learners. This framework raises the question whether classroom characteristics, teacher characteristics, and administrative support, and/or the school climate influence the teacher's decision to make an intra-district move. It also demonstrates that direct and indirect administrative support are related.

Three key research questions guide this study.

1. Is there a correlation between the exogenous variables of classroom and teacher characteristics and teachers moving to a different school?
2. Is there a correlation between the endogenous variables under direct administration influence and teachers moving to a different school?
3. Is there a correlation between school climate and teachers moving to a different school?

The first question is based on something that is inherent in the school, their classroom and teacher characteristics. Classroom characteristics include class size, the racial breakdown of the students, and percent of students in the school with a diverse needs (English language learners and students with an individualized educational plan), whereas teacher characteristics include experience and gender. The second question tackles factors (administrative support, enforcing rules, vision, teacher recognition and providing job security) over which school leadership may have direct influence. The

amount of perceived administrative support is a self-report by teachers on SASS and TFS. The third question deals with school climate. School leaders have indirect influence over the climate of the school. For the purposes of this study, school climate will be the influence teachers feel they had over school policies and practices in the school where they work, student misbehavior, parental support, necessary materials, staff collaboration, and overall teacher satisfaction. This study is only examining the voluntary intra-district teacher movers.

Chapter 3

Methodology

According to NCES (2009), the number of public school new teacher hires is on the rise. In 2006, approximately 284,000 teachers were hired and they are projecting a 26% increase to 357,000 new teacher hires for 2018. Many school districts in the United States continue to be challenged with finding highly qualified teachers to staff their classrooms because of immigration flourishing, increased focus on reducing class sizes, and many teachers approaching retirement age (i.e., 37% of teachers are over the age of 50) (Johnson & Birkeland, 2003a). According to the National Commission on Teaching and America's Future (2004), "Two million new teachers, over 700,000 in urban areas alone, must be hired over the next decade to accommodate these demographic and policy changes" (p.4). Ingersoll (2004) conducted research to determine if the teacher staffing issues are isolated to a particular content area or widespread. He found that the issues remain the biggest concern in certain subject areas such as math, science, and special education, as well as the schools with high percentages of students living in poverty. The research on teachers exiting the profession in their early years is alarming. Approximately one-third of novice teachers leave the profession within their first three years and one-half leave after five years (Darling-Hammond & Sykes, 2003). Ingersoll and Smith (2004) found that during the 1999–2000 school year, "29% of first-time teachers who entered the field either moved to a new school at the end of the year (15% migration rate) or left the teaching profession altogether (14% attrition rate)" (p. 30). Teacher migration, both intra- and inter-district, exacerbates the issue of teachers leaving their school to go to another school, creating a "revolving door occupation with relatively

high flows in, through, and out of schools" (Ingersoll, 2002a, p. 3). With many factors impacting a teacher's decision to migrate, it is important for us to explore why teachers migrate and who they are.

Rationale for Study

The purpose of this dissertation is to determine if there is a relationship between classroom characteristics, teacher characteristics, support from school leadership, and school climate that influence a teacher's decision to make an intra-district move. This study is about teachers in general and all classroom teachers are included. It is important to understand teacher migration and factors contributing to it. With teacher turnover rates being as high as they are, keeping good teachers is imperative. Schools invest a great deal of resources into teachers and school leaders need to better understand why teachers choose to leave to go to another school in the same district. If there is a negative correlation between working conditions, administrative support and teacher movers, then school leadership will know where they can provide support to teachers to better retain them. While administrators cannot influence their school demographics, they can determine the amount of support provided to teachers. Schools need to know what they can improve to better retain teachers. Intra-district teacher mobility is on the rise, especially in larger districts (Morrison, 2012). This study helps understand factors that influence a teacher to make an intra-district move.

This research topic was chosen for two reasons. The first was to see what relationships exist for the factors that influence teacher migration in relation to classroom and teacher characteristics, administrative support and school climate. The second reason

was to fill the gap in the literature as there is little research on what specific factors impact intra-district movers.

The researcher used data from the 2011-2012 Schools and Staffing Survey (SASS), which includes measures of several components of teacher retention, and the 2012-2013 Teacher Follow-up Survey (TFS) to examine the factors that influence a teacher's decision to make an intra-district move. The TFS includes more information on reasons teachers chose to move, stay, or leave their schools.

Research Questions

This study addresses the following three research questions.

1. Is there a correlation between the exogenous variables of classroom and teacher characteristics and teachers moving to a different school?
2. Is there a correlation between the endogenous variables under direct administration influence and teachers moving to a different school?
3. Is there a correlation between school climate and teachers moving to a different school?

Hypothesis

The hypothesis for this study is that exogenous and endogenous factors impact a teacher's decision to move or stay. A more diverse student population will encourage teacher movers and teachers with more experience to be more likely to remain in their current school. The researcher also believes that there is a negative correlation between factors under direct and indirect administration influence and teacher mobility. This hypothesis is supported, as Hughes (2012) and Morrison (2012) have found that schools high in poverty and diversity have more difficulty retaining qualified teachers. They

have also stated that younger teachers are more likely to move or quit due to lack of administrative support, overall dissatisfaction with the profession, and/or family reasons. Morrison (2012) states that when principals are able to foster more collegiality among staff, novice teachers feel supported and in turn are likely to remain in their current school.

Overview of Research Methods and Procedures

After the approval of the dissertation proposal by the research committee and the University's Human Subjects Review Board, the researcher began to examine the variables within the dataset. The research was conducted by using information available from the National Center for Educational Statistics, the SASS from 2011-2012 and TFS from 2012-2013. The researcher obtained authorization from the National Center for Educational Statistics to be able to use the restricted dataset. The 2012-2013 Teacher Follow-up Survey identified 60 teachers (not weighted count) who made a voluntary intra-district move and 1901 teachers (not weighted count) that stayed in their school. Their responses were examined to determine the influences of teacher migration. The researcher conducted the study in two phases: (1) sample and variable selection; and (2) an analysis of all data.

Sample Selection

The researcher used data from the U.S. Department of Education's 2011-2012 Schools and Staffing Survey (SASS) and the 2012-2013 Teacher Follow-up Survey (TFS) to answer the research questions. SASS data, collected for the first time in 1987-88, constitutes the largest and most comprehensive set of survey data on teachers, and the characteristics of the schools in which they work in the United States. It is the best

choice for examining teacher migration because the survey responses offer specific information on working conditions. SASS also provides data on teacher background, teacher behaviors, and teacher beliefs. The Teacher Follow-up Survey (TFS) is administered to teachers in the year following the administration of the SASS and is designed to ask teachers specific questions on several factors that may impact a teacher's decision to stay, move, or leave.

Data Sets

According to the National Center for Educational Statistics, the 2011–12 version of School and Staffing Survey was administered to public and private schools as well as Bureau of Indian Affairs and consists of five different questionnaires. For the purposes of this study, the researcher used the public school data sets: school questionnaires and teacher questionnaires. Within the school survey, information about teacher certification, experience, and classroom information can be obtained. The teacher surveys contain rating information about a teacher's working conditions, their teaching assignment, workload, and perception of school leadership. This study focused on traditional public schools.

The 2012-13 Teacher Follow-up Survey was administered to teachers who participated in the 2011-12 SASS. According to the National Center for Educational Statistics, a major purpose of the Teacher Follow-up Survey (TFS) is to determine how many teachers stayed, moved, or left teaching. The TFS is primarily administered online, but also has a paper component. The 2012-13 TFS consists of four questionnaires: teachers in their first year who left, teachers in their first year that are currently teaching, non-first year teachers who left, and non-first year teachers currently teaching. Items

found in the current teacher questionnaire consist of teaching status and assignments as well as information on decisions to change schools. The former teacher questionnaire contains information including the teacher's employment status as well as information on decisions to leave teaching.

According to NCES (2010), the TFS sampling frame consists of all eligible teachers who responded to the Schools and Staffing Survey (SASS) Teacher Survey in the previous year. The primary sample design objective for the TFS was to support comparative analyses of stayers, movers, and leavers for teachers classified by type of school (public and private), grade level taught (elementary and secondary), minority status, and years in teaching (new and experienced). In order to achieve the design objective, the sample of SASS respondents was grouped into 216 strata based on TFS status (stayer, mover, leaver, unknown status), sector (traditional public, public charter, private), grade level taught (elementary, middle, and high school), minority status, and years in teaching (1 year, 2-3 years, 4 or more years).

Sample and Variables

The researcher obtained authorization to be able to access and use the restricted SASS and TFS databases. After receiving the data, the researcher linked SASS and TFS using teacher control numbers as a key field. All identifying information was eliminated from the data files to ensure confidentiality. To select the sample of movers, the researcher screened off part-time teachers, non-classroom teachers, involuntary transfers, and private/non-traditional teachers. The final sample of movers consisted of 60 full-time classroom teachers in public schools that made a voluntary intra-district move. Many districts are very small consisting of 1-2 high schools, 2-3 middle schools and 3-5

elementary schools. In states with small districts, when teachers make a move, it could be considered an intra-state move, but not intra-district, thus the small sample size. A mover dummy variable was created and used as the outcome variable for teacher movers (0 = stayers and 1 = mover). According to NCES (2009), weighting procedures are used in the database to account for the school's selection probability, to reduce biases from nonresponse, and to improve the precision of sample estimates. The researcher has to correct for the sample weights by creating and applying a normalized sample weight throughout the analysis. The last step in creating the database was to look at the variables of interest and ensure responses were consistent. Many of the responses are in the form of a Likert scale and variables had to be examined to ensure a score of 1 meant strongly disagree and a score of 4 strongly agree. In some cases, the variables had to be reverse-coded for consistency and some records were removed in order to eliminate missing responses or invalid responses.

Data Variables

The researcher examined the following data from SASS and TFS:

Instrumentation/Measures

- Dependent Variable – turnover, specifically "movers"

Teacher Turnover – dichotomous variable where 1 = not teaching in same school as last year, but in the same district (mover) and 0 = currently teaching in same school (stayer)

- Classroom Demographics
  - Size – class size
  - Race – percentage of students in the teacher's class who were considered ethnic minority
- Teacher Demographics
  - Experience
  - IEP/ELL – percentage of students in class

- Leadership Support
    - Administrative support – on a scale of 1 = strongly disagree to 4 = strongly agree
- School Climate
    - School climate - on a scale of 1 = strongly disagree to 4 = strongly agree

Statistical Analysis

For the purposes of this study, the researcher examined data from the movers, those reported to be in the same district, but at a different teaching location. Teachers that had left the teaching profession were removed from the data set. The researcher utilized a logistic regression model to determine the influences for teacher migration because the outcome variable, if the teacher moved or not, is binary. In addition, the researcher used a principal component analysis in which multiple survey questions were combined into composite variables for administrative support and school climate in order to determine which ones had a greater influence on teacher migration. The study used quantitative analysis consisting of simple descriptive analysis and binomial logistic regression in a block design model testing independent variables on a dichotomous outcome (0 = stayers, 1 = movers). The model used is as follows:

$$Y_i = \alpha + \beta_1 C_i + \beta_2 D_i + \beta_3 I_i + \epsilon_i \text{ such that:}$$

Y_i = *Movers (dichotomous), where P(Y = 0) is the probability that teacher i does not move and P(Y = 1) is the probability that teacher i makes an intra-district move.*

C_i = Calssroom and teacher characteristics influencing teacher move

D_i = Direct leadership variables influencing teacher move

I_i = Indirect leadership variables influencing a teacher move

ϵ_i = Error term assumed to be independent and logistically distributed across teacher movers

Variables in the model.

Classroom and Teacher Characteristic Variables. The following classroom and teacher characteristic variables from the School and Staffing Survey were included in the model:

Class size – This is the total number of students enrolled in the teacher's class.

Student race – This is the percentage of students classified as an ethnic minority (African American/Hispanic) the teacher had in class.

Teacher experience – This is the total number of years the teacher has worked as a teacher.

Percentage of IEP taught – This is the percentage of students with an individualized education plan of the total number of students taught.

Percentage of ELL taught – This is the percentage of limited-English proficiency or English-language learners of the total number of students taught.

Direct Leadership Variables. The following direct leadership variables, all using a Likert scale, were included in the model:

Administrative support – This variable is the extent to which the school administration's behavior toward the staff is supportive and encouraging.

Enforce rules – This variable is the extent to which the school administration enforces school rules for student conduct and backs up teacher when needed.

Vision – This variable is the extent to which the principal knows what kind of school he or she wants and has communicated it to the staff.

Teacher recognition – This variable is the extent to which the staff members feel they are recognized for a job well done.

Job security – This variable is the extent to which the teacher worries about his/her job because of the performance of students or based on school, state, and/or local tests.

Indirect Leadership Variables. The following indirect leadership variables, all using a Likert scale, were included in the model:

Student misbehavior – This variable is the extent to which the level of student misbehavior in this school (noise, horseplay, or fighting in the halls, cafeteria, or student lounge) interferes with teaching responsibility.

Parental support - This variable is the extent to which the teacher receives a great deal of support from parents for the work done.

Materials - This variable is the extent to which the necessary materials such as textbooks, supplies, and copy machines are available as needed by staff.

Collaboration - This variable is the extent to which there is a great deal of cooperative effort among the staff members.

Overall satisfaction - This variable is the extent to which the teacher reports as generally satisfied with being a teacher at this school.

Summary of Methodology

This quantitative study was employed to assess the influences of teacher migration. Teacher migration is very complex and can't be measured directly; it has many facets. However, different aspects of migration - school demographics, school leadership support, and school climate - can be measured. A principal component analysis model and logistic regression will help delineate the aspects of migration that

have the strongest correlation. That statistical model allows for multiple variables to be considered to determine if there is a relationship or strong influence on migration. The findings for the study may assist other school systems as they attempt to retain high-quality teachers in their schools. The findings from these analyses are presented in Chapter 4.

Chapter 4

Presentation and Analysis of Data

This study intended to investigate the exogenous and endogenous variables that influence teachers to make an intra-district move. The purpose of this study was achieved by examining the classroom and teacher characteristics, factors of administrative support and school climate to determine the reasons a teacher may choose to move schools. This chapter provides (a) descriptive analysis of the teacher movers and stayers and (b) a logistic regression analysis of classroom and teacher characteristics, components of administrative support, and school climate and its correlation to teacher movers. The Statistical Package for the Social Sciences (SPSS) was utilized to perform analysis of factors that influence teachers to change schools. The researcher conducted a principal component analysis for administrative support and school climate variables, but the factors did not load well in the design. The researcher then decided to run each variable individually in the logistic regression. A block design was used to determine the correlation of each variable. The variables were entered into three blocks, one for each research question. The variables entered for each block were the ones identified in the conceptual framework.

Validity and Reliability

The researcher relied on the National Center for Education Statistics to test the validity and reliability of the School and Staffing Survey as well as the Teacher Follow-up Survey. NCES sends a letter to each school within participating districts about participation for the sampling year. The teachers are then sent a packet in the mail with survey materials. According to NCES, the teachers were contacted a year later to

complete the Teacher Follow-up Survey. The information from the Teacher Listing Form (TLF) was used. "Field follow–up was conducted for schools that had not returned the TLF and individual survey respondents (e.g., principal, librarian, and teachers) were called from the telephone centers to attempt to complete the questionnaire with them over the phone. Field follow–up was conducted for schools and teachers that had not returned their questionnaires" (NCES, 2001)

Descriptive Statistics

A descriptive analysis was completed in an effort to assess norms and possible outliers. The descriptive statistics in this study assessed variables inclusive of classroom and teacher characteristics and variables of direct and indirect administrative leadership for the teachers that completed the Teacher Follow-up Survey in 2012-2013. The descriptive statistics include the range, mean, and standard deviation for variable for the teacher movers in comparison with the teacher stayers.

Table 1 illustrates the range, mean, and standard deviation for demographic information for the teachers that remained in their previous school as well as those that made an intra-district move. The dataset included 1,901 teacher stayers and 60 teacher movers that completed the survey and of the 60 movers, 19 completed answered the question about class size. The movers, on average, had a larger class size, a higher percentage of minority students, and an increased percentage of students with special needs (IEP and ELL). The teacher movers also, on average, had fewer years of teaching experience. Many respondents chose not to answer the gender question; therefore, that variable was not included in further analyses.

Table 1

Descriptive Statistics for Demographic Information from Teacher Follow-up File 2012-2013

	Stayers					Movers				
Variable	N	Min.	Max.	Mean	SD	N	Min.	Max.	Mean	SD
Class size	691	3	99[+]	22.38	10.61	19	2	98[+]	24.43	10.68
% student minority	1901	0	100	45.25	33.99	60	0	100	55.41	36.9
Teacher experience	1901	1	47	13.82	9.15	60	1	39	12.34	10.05
% IEP taught	1901	0	100*	11.99	16.52	60	0	100	14.79	23.32
% ELL taught	1901	0	100*	5.93	13.75	60	0	100*	41.76	153.02

* Due to sample weights, some percentages were larger than 100%. Those values were capped at 100%.
[+] Due to normalized weighing, the class size maximum is larger.

Table 2 illustrates the mean and standard deviation for the survey data for the teachers that remained in their previous school as well as those that made an intra-district move. Each response had a range of 1 to 4. The movers also reported, on average, decreased overall administrative support, lack of enforcement of school rules, lack of a school vision, and teachers not being recognized for their work. Additionally, the movers reported, on average, issues with student misbehavior, lack of parental support, not having adequate materials, lack of cooperative effort among staff, and a decrease in overall satisfaction with their profession.

Table 2

Descriptive Statistics for Survey Data From Teacher Follow-up File 2012-2013

	Stayers			Movers		
Variable	N	Mean	SD	N	Mean	SD
Admin support	1901	3.3	0.83	60	2.93	1.11
Enforce school rules	1901	3.33	0.84	60	3.13	0.94
Vision	1901	3.4	0.79	60	3.2	0.94
Teacher recognition	1901	3.07	0.87	60	2.69	1.02
Job security	1901	2.72	1.01	60	2.7	1.05
Student misbehavior	1901	2.8	1.03	60	2.58	1.11
Parental support	1901	2.66	0.89	60	2.28	1.06
Materials	1901	3.16	0.86	60	2.89	0.99
Cooperative effort	1901	3.26	0.73	60	3.03	0.81
Overall satisfaction	1901	3.49	0.67	60	2.95	0.89

Research Questions

The research questions and regression models are presented here with discussion of the findings for each question.

Research Question 1

Is there a correlation between the exogenous variables of classroom and teacher characteristics and teachers moving to a different school?

To answer this research question, the researcher relied on the data from the School and Staffing Survey 2011-2012. As illustrated in Table 3, the analysis assessed the classroom and teacher variables in relation to teacher movers. It was determined that a significant relationship ($B = 0.010, p<0.05$) was found to exist between the percentage of English-language learner students in the class and a teacher choosing to move schools.

Table 3

Summary of Logistic Regression Analysis for Exogenous Variables Influencing Teachers to Move

Variable	*B*	*SE B*	*p-values*	e^B
Class size	-.004	.009	.657	.996
Percentage of student minority	.005	.004	.190	1.005
Teacher experience	-.023	.016	.153	.977
Percentage of IEP taught	-.009	.01	.349	.991
Percentage of ELL taught	.010*	.003	.003	1.010
Constant	-3.423	.337	.000	.033
χ^2	5.093			
Df	8			
Goodness of fit				
Nagelkerke R^2	.055			
% correctly predicted	97.1			

Notes: *Significant at .05

There is a statistically significant relationship between percentage of ELL taught, but there is no statistically significant relationship between percentage of minority students and teacher experience in relation to teacher movers.

Research Question 2

Is there a correlation between the endogenous variables under direct administration influence and the teacher moving to a different school?

To answer this research question, the researcher relied on the data from the Teacher Follow-up Survey 2012-2013. As illustrated in Table 4, the analysis assessed variables under direct administrative influence in relation to teacher movers. None of the estimated coefficients were statistically significantly different from zero.

Table 4

Summary of Logistic Regression Analysis for Endogenous Variables Under Direct Influence Predicting Teachers to Move

Variable	*B*	*SE B*	*p-values*	e^B
Administrative support	-.235	.202	.244	.790
Enforce school rules	.0175	.214	.412	1.192
Vision	-.075	.209	.720	.928
Teacher recognition	-.277	.196	.158	.758
Job security based on test scores	-.020	.136	.883	.980
Constant	-2.088	.733	.004	.124
χ^2	10.532			
Df	8			
Goodness of fit				
Nagelkerke R^2	.072			
% correctly predicted	97.1			

Research Question 3

Is there a correlation between school climate and teachers moving to a different school?

To answer this research question, the researcher relied on the data from the Teacher Follow-up Survey 2012-2013. As illustrated in Table 5, the analysis assessed variables under indirect administrative influence in relation to teacher movers. It was determined that a significant relationship ($B = -0.808, p<0.05$) was found to exist between the overall job satisfaction and teacher movers.

Table 5

Summary of Logistic Regression Analysis for Endogenous Variables Under Indirect Influence Predicting Teachers to Move

Variable	*B*	*SE B*	*p-values*	e^B
Student misbehavior	.100	.149	.501	1.105
Parental support	-.235	.169	.163	.790
Materials and resources	.042	.169	.806	1.042
Cooperative effort	-.100	.213	.638	.905
Overall satisfaction	-.808*	.203	.000	.446
Constant	-.540	.965	.576	.583
χ^2	7.370			
Df	8			
Goodness of fit				
Nagelkerke R^2	.114			
% correctly predicted	97.1			

Notes: *Significant at .05

Summary

This chapter presented the findings associated with this study. The researcher used a quantitative method, binary logistic regression in a block design, to address the research questions. The data analysis showed a correlation between classroom and teacher characteristics and a variable under indirect administrative influence in relation to teacher's decision to move. While there was a correlation with the variables under direct administrative support and teacher movers, the relationship is not statistically significant.

Chapter 5

Discussion and Conclusions

In the previous chapter, the presentation and analysis of data have been reported. This chapter consists of a summary of the study, discussion of the findings, implications for practice, and recommendations for further research and final thoughts. The purpose of the final sections is to expand upon the concepts that were examined in the research study in an effort to provide a deeper understanding of the possible influences, including leadership practice, that impact a teacher's decision to move. Additionally, presentation of suggestions for further research into teacher mover behaviors is discussed. Finally, a synthesizing statement is offered to sum up the study and document what has been discovered in this research.

Summary of the Study

Understanding why teachers choose to make an intra-district move is a complex task and certain behaviors of the principal may have an effect on their decision. School leaders should be proficient human resource managers who have skills to recruit, train, and retain their workforce. Thus, we need to understand the practices and procedures of school leaders so that we can better retain the high-quality teachers we recruit and hire. The researcher chose to study exogenous and endogenous factors that influence a teacher's decision to make an intra-district transfer because there are many costs associated with losing good teachers and school leaders want to retain the high-quality teachers they have recruited. School leadership must address fixed (exogenous) factors and malleable factors at the same time (indirect and direct administrative support). While the exogenous variables are out of the control of school leadership, they are important to

examine and understand. The endogenous factors are the ones principals need to closely examine because they are within the control of school leadership and often have a great impact on whether a teacher chooses to stay or seek other employment.

The research questions were answered quantitatively from the datasets the researcher analyzed. The research utilized a descriptive statistics and a binary logistic regression in block design to analyze the data and answer the research questions. The researcher concluded that the percentage of English-language learners in a class and the teacher's overall satisfaction of the profession are significantly correlated with teacher migration.

Discussion of the Findings

Previous researchers (Hughes, 2012; Ingersoll & Smith, 2003; Morrison, 2012) studied teacher retention and mobility extensively. The goal of this study was to examine the classroom and teacher characteristics as well as direct and indirect principal leadership factors that contribute to teacher mobility within a school district. This section discusses the implications of the findings for each of the three research questions.

Research Question One

Is there a correlation between the exogenous variables of classroom and teacher characteristics and teachers moving to a different school?

There is a positive and statistically significant relationship between the percentage of students in the teacher's class that are English-language learners (ELL) and a teacher moving to another school. This finding speaks to the challenges a teacher may face when there are a large number of students with special needs in a classroom. There was not a significant relationship between the percentage of students with an individualized

education plan (IEP) and teacher mobility. Students with an IEP may be mainstreamed into the general education setting or in self-contained classes with other students that have similar needs; in either case, the students have additional staff to assist them. They also have a plan to support them and resources allocated to those supports. Often, students with an IEP have a case manager responsible for monitoring their learning. English-language learners are mainstreamed into the general education setting, regardless of their level and time in the United States of America. These students are dealing with many adjustments (i.e., academically, culturally, socially, etc.) and often they do not receive additional supports and resources. Federal guidelines state that for a class to remain as a general education class, there must be more general education students that those with an IEP; the same does not apply for students who are ELL. Thus, the student to teacher ratio for special education classes is much lower than the student to teacher ratio for ELL, creating more demands on teachers who have a higher percentage of ELL students in their class. Since classroom characteristics were examined, ELL could be a proxy for students receiving free and reduced meals (FARMS) and/or poverty. Many immigrant families have children receiving free and reduced meals. Research has demonstrated that schools with a high percentage of FARMS have a higher percentage of turnover (Hughes, 2012).

The findings on teacher characteristics did not indicate a statistically significant relationship between teacher experience and teacher movers. The lack of significance could be attributed to the small sample size. This finding is inconsistent with the previous studies conducted on teacher retention (Hughes, 2012; Morrison, 2012). Ingersoll and Smith (2003) stated that teachers within the first five years are more likely

to leave than experienced teachers. Novice teachers should have the support in their school (i.e., administrative, collegial, etc.) to be successful. The focus should be on retaining the teachers instead of trying to recruit new ones.

Research Question Two

Is there a correlation between the endogenous variables under direct administration influence and teachers moving to a different school?

The results from research question two did not indicate a significant relationship between the variables under direct administrative leadership and teacher mobility. This finding is inconsistent with previous research (Hughes, 2012; Morrison, 2012). This statistically insignificant relationship could be attributed to the fairly small sample of intra-district movers.

Research Question Three

Is there a correlation between the endogenous variables under indirect administration influence and teachers moving to a different school?

The findings resulting from research question three indicate a positive and significant relationship between the overall job satisfaction reported by the teacher and him/her moving to another school. This finding speaks to the profession as a whole. The demands of a teacher have increased through the years. Schools and teachers are responsible for the academic and socio-emotional wellbeing of children. This finding is consistent with those of previous research. According to Bogler and Nir (2015), the single variable that predicts teachers' commitment and overall job satisfaction was "teacher's perceptions of the fit between one's job demands and abilities" (p. 541). The second variable that proved to be influential was principals' interaction with the teachers

(Bogler & Nir, 2015). According to Hughes (2012), novice teachers want more direct support than experienced teachers. Teachers as a whole want and need a positive school climate that is supported and appreciated by the administration.

Implications for Practice

Teacher retention has been a focus and studied for many years. NCES began collecting data on teachers in the 1980s to help understand a wide range of topics: "teacher demand, teacher and principal characteristics, general conditions in schools, principals' and teachers' perceptions of school climate and problems in their schools, teacher compensation, district hiring and retention practices, to basic characteristics of the student population" (NCES, 2001). Many researchers have stated that the problem is not recruitment, but rather retention. School and district leaders want the most highly qualified teachers in their district and school. School leaders spend a great deal of time ensuring their classrooms are staffed with high-quality teachers and want to be able to retain them, thus it is vital to understand why a teacher wants to move to another school within the same district.

The results of this study suggest that all school leaders should actively try to keep classes with English-language learners small and manageable, to provide resources, and to staff adequately. The study also suggests that factors under indirect administrative leadership are more influential for teachers as they decided to stay or move. The lack of significance with the factors under direct administrative leadership suggests that these variables need to be further explored, possibly with a larger sample.

Recommendations for Further Research

Suggestion 1. *Study if elementary or secondary teachers are more likely to move and if subject taught makes a difference in the upper grades.* Due to the sample size of the movers, the results may not be significant, but studying if the level of the school matters will help further understand the teacher characteristics as it relates to teacher movers.

Suggestion 2. *Study if the teacher movers are more satisfied in their current location as compared to their previous location.* The movers for the most part decided a change was necessary, thus studying how content and satisfied they are at their new school in comparison to their previous location may help further understand why the move was necessary. Oftentimes we think the grass is greener on the other side until we are on the other side.

Suggestion 3. *Study intra-district movers on a district level.* This study focused on movers at a national level. There are many districts within the Mid-Atlantic Region that want to learn why teachers are making voluntary intra-district moves. Some districts conduct surveys while others will ask the teacher at the interview to explain why he/she is seeking a move. A deeper and better understanding at why teachers want to move from one school to another can only help school administrators.

Final Thoughts

This study examined the classroom and teacher characteristics and direct and indirect administrative influences as it relates to teachers' decision to move or stay. The purpose was to better understand why teachers chose to voluntarily make an intra-district move. The statistical analysis and findings allowed the researcher to draw conclusions

and make suggestions based on the data, including how school and district leaders can better retain their teachers. The study concluded that a high percentage of English-Language Learners and overall satisfaction with the profession are indicators of the likelihood a teacher will move to another intra-district school. School leaders should provide supports and resources to help teachers with a high percentage of ELL students. District and school leaders can do more to find out why a teacher wants to make a voluntary intra-district move, after all, the teachers are accessible and still working in the district. The role of administrators is complex and this particular skill set can only provide great benefits to our students.

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