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Teacher Retention Rates: Variables That Play a Role in Low-Performing Schools with High Minority At-Risk Populations

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Christine Gray

Concordia University - Portland

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Concordia University–Portland

College of Education

Doctorate of Education Program

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Teacher Retention Rates: Variables That Play a Role in Low-
Performing Schools with High Minority At-Risk Populations

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Concordia University–Portland, Oregon

College of Education

Dissertation submitted to the Faculty of the College of Education

in partial fulfillment of the requirements for the degree of

Doctor of Education in

Educational Administration

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2018

Abstract

Educational leaders are concerned about teacher retention rates. More teachers are leaving the profession and fewer colleges are enrolling students into their teacher preparation programs (Sawchuk, 2016). This study focused on potential correlations between the dependent variable of teacher retention and three independent variables: induction and mentoring programs, incentives, and a school's socioeconomic status. The author conducted the study in a Florida school district with low-performing schools populated high-minority at-risk populations. Data collection involved emailing a survey based on Giacometti's (2005) instrument to 1,359 members of the district's teacher's union; 401 educators completed the survey. The author used Qualtrics survey software to collect the data and the Statistical Package for Social Science (version 25) to analyze the data. Cronbach's alpha assessed the internal consistency of the questions for each domain, and point biserial correlation, Kendall's tau-b correlation, and a chi-square tested the hypotheses. No significant correlations were found between any of the independent variables and teacher retention. The results of the study indicate the need to further study the variables that play a role in teacher retention rates.

Keywords: teacher retention, socioeconomic status, mentoring, incentives, low-performing schools, at-risk populations

Dedication

This work is dedicated to my wife Rhonda. It was through her support and continued encouragement that I was able to complete this journey.

Acknowledgements

There are many people who have supported me during this adventure and, as I see this dissertation coming to its completion, I would like to acknowledge these individuals. I would like to thank my faculty chair, Dr. Floralba Arbelo-Marrero for the never-ending support, guidance, and encouragement throughout what has proven to be the most challenging endeavor of my life. I would also like to thank content reader David J. Alba, Ed.D., and content specialist Patricia Akojie, Ph.D., for their time and assistance during the writing process. And I must thank my family and friends for their unwavering support throughout this journey and for their patience during all the events, dinners, and family gatherings that I have missed while taking it.

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Chapter 1: Introduction

The teaching profession has been facing shortages in the United States, especially in areas with low-performing schools and high-minority at-risk populations (Darling-Hammond, 2010). Shortages may have been caused by college students not entering the teaching profession, stressors associated with working in low-performing schools, and the increased demands that have been placed on teachers, which at times may outweigh the incentives offered (Darling-Hammond, 2010). Some of the teachers that have retired have been replaced by novice teachers with little experience in the teaching profession and do not have the skills of their more experienced predecessors (McNabb, 2011). The lack of experience, support, and stress may have contributed to the early attrition of new teachers (McNabb, 2011).

Students suffer from the negative impact that attrition and retention rates have on the teaching profession (Briggs, 2011). The quality of education that students receive may be compromised by inconsistent classroom instruction and lack of continuity from effective instructors, both due to teacher attrition (Pesavento-Conway, 2010). According to Moore-Johnson (2015), at-risk students struggle with motivation, discipline, cultural differences, second-language learning, academic performance, and lack of resources both at home and at school.

Lee and Ryu (2013) argued that when students of a school do not receive ongoing rigorous instruction, especially at a school with an at-risk population, it is the responsibility of the school's leader to identify the problems, establish effective practices, and try to improve teacher retention rates. A school leader who seeks to understand how to recruit and retain teachers must understand the connections between the school community, instructional practices, support provided by induction and mentoring programs, and quality of leadership.

Background of the Problem

Since the 1980s, stakeholders have deliberated on the effectiveness of instructional staff and its connection to the state of education (Gawlik, Kearney, Addonizio, & LaPlante-Sosnowsky, 2012). Issues often associated with job dissatisfaction in the teaching profession have lacked support and increased levels of stress induced by students, colleagues, and administrators (Sass, Seal, & Martin, 2011). Among the strategies developed to help teachers transition into the profession are support from supervisors, colleagues and induction programs (Sass et al., 2011). A solid, well-developed induction program supported by superior mentoring has been noted as one of the more effective ways to acculturate novice teachers into their chosen field (Chan, 2014). Designing and maintaining induction programs that center on mentoring and coaching has afforded veteran and novice teachers the opportunity to work together and provided a scaffolding of support throughout their growth and development as educators (Myers, 2015).

District leaders have faced several challenges, including attracting teachers to their schools and enhancing hiring, transfer, and retention policies so that they could recruit the best teachers possible (Gawlik et al., 2012). Darling-Hammond (2010) established that the teaching profession should be competitive in terms of salaries, working conditions, and incentives for professional development to attract college-educated talent. Financial incentives have been a prevalent strategy for recruiting gifted professionals to teaching positions (Steele, Murnane, & Willett, 2009). These incentives take many forms: conditional scholarships, loan forgiveness, signing bonuses, retention bonuses, and housing incentives are just some of the financial enticements offered (Steele et al., 2009). Hanushek, Kain, and Rivkin (2004) reported that a 10% increase in teacher pay reduced the probability of departure from a school by 1–4%. Springer, Swain, and Rodriguez (2016) reported that retention bonuses mitigated unwanted

turnover and had the potential to strengthen leadership and institutional knowledge among a school's faculty while avoiding financial burdens associated with turnover.

Fulbeck (2014) found that providing teachers with an incentive was associated with a 30% decrease in departure rate for teachers in schools that were not high poverty, compared to 7% for teachers who worked in high-poverty schools. Financial incentives have been popular in the teaching profession, but they have not altered the fact that the teachers teaching students who were poor, low achieving, or belonged to a racial minority have had disproportionately lower academic qualifications than their veteran colleagues (Steele et al., 2009).

Policy makers and educators have struggled to address the low-performance levels of kindergarten-to-12th-grade (K–12) students (Gawlik et al., 2012). According to Gawlik et al. (2012), many underachieving students resided in poverty or within large communities of second-language learners. Ingersoll (2012) reported that new teachers turned over at a higher rate at underachieving and high-needs schools which caused at-risk students to receive their instruction from less qualified teachers. The National Center for Education Statistics (NCES, 2014) found that the teacher turnover rate was 22% higher in schools identified with low socioeconomic statuses. Ingersoll (2012) argued that low-achieving schools with high numbers of racial minorities should be advanced by recruiting, preparing, refining, and retaining exceptional educators. Ingersoll (2012) also argued that teachers whose instructional practices, classroom management, and aptitude for supporting at-risk students should be distributed equitably, throughout all schools.

Conceptual Framework

The two-factor theory of Herzberg, Mausner, and Bloch-Snyderman (1993), itself an update of Herzberg's (1959) theory, played an important role in the conceptual framework for

this study. The theory states that there are certain factors in the workplace that cause job satisfaction and/or job dissatisfaction. The two factors in the theory are referred to as hygiene and motivator (Herzberg et al., 1993). According to Herzberg et al., hygiene is related to an employee relationships with a supervisor, working conditions, salary, and relationships with subordinates; motivators are connected to achievement, recognition, and the work itself. Herzberg (1959) stated that “the factors which motivate people at work are different to and not simply the opposite of the factors which cause job dissatisfaction” (p. 6).

In formulating the conceptual framework for this dissertation, I also drew on my personal experiences from holding various positions in the education field, all of which have been at low-performing schools with high-minority at-risk populations. Having been a teacher, team leader, academic coach, intervention support specialist, and school building administrator, I have had many opportunities to observe the issues directly. As an administrator trying to hire teaching staff, my goal has been to find people committed to educating all students with a strong desire to make a difference and work in low-performing schools with struggling students.

Problem Statement

School administrators are challenged to recruit and retain novice and experienced teachers, and they struggle to staff classrooms with competent educators in the face of teacher shortages (Sass et al., 2011). The education of the next generation is at risk due to the difficulty of retaining teachers, especially in low-performing schools with high-minority at-risk populations. Although the problem of teacher retention has been studied for many years, the problem has not been solved (Darling-Hammond, 2010). Classrooms are filled with students in need of the best education they can receive to prepare them to become productive members of society. One key component to preparing students is to staff classrooms with well-prepared

teachers who are committed to the education of their students (Gawlik et al., 2012). Whether they are novice or seasoned, it is important that the teachers hired desire to stay in the struggling schools with students who need them as much, if not more than, students from affluent schools.

A review of the literature revealed three key factors to investigate that may affect teacher retention in low-performing schools with high-minority at-risk populations: (a) teacher induction and mentoring programs, (b) teacher incentives, and (c) low-socioeconomic-status at-risk populations within the school community. According to McNabb (2011), the evolution from a student teacher to an educator of students is a major undertaking. The first year of teaching is a critical year for the novice teacher as well as the district that has hired the novice teacher. In districts across the United States, less effective or novice educators have been disproportionately concentrated in the poorest schools creating situations where students from low-income communities have not been exposed to continuous, highly effective instruction when compared to their peers in higher income communities (Robertson-Kraft & Duckworth, 2014). To make matters worse, approximately half of new teachers have been exiting the teaching profession in the first five years (Robertson-Kraft & Duckworth, 2014).

This imbalance in the distribution of extremely effective teachers is of foremost concern for school leaders, education policy makers, and practitioners, especially because differences in teacher effectiveness result in substantially different outcomes for students in school and beyond (Springer et al., 2016). All students deserve a competitive education provided by effective educators.

Purpose of the Study

The purpose of this study was to determine whether teacher retention rates in low-performing schools with at-risk populations that include a high number of racial minorities were

related to teacher induction and mentoring programs, retention incentives, or low socioeconomic status. The causes of the decline in teacher retention must be probed so that effective methods can be developed to retain the finest teachers in the education profession and support those who are struggling (Chan, 2014). I expect that the results of this study will assist with reversing the decreasing retention rate of all teachers across the continuum in such schools.

Research Questions and Hypotheses

This study extended previous research on teacher retention rates in low-performing schools with high-minority at-risk populations. The overarching research question for this study was: What factors play a role in teacher retention rates in low-performing schools with high-minority at-risk populations? The following sub questions and hypotheses guided the research.

Research Questions

1. What is the association between teacher induction and mentoring programs and teacher retention rates in low-performing public schools with high minority at-risk populations?
2. What incentives promote teacher retention rates in low-performing schools with high-minority at-risk populations?
3. What is the relationship between the socio-economic status of a high-minority at-risk school community and the retention rates of teachers in low-performing high-minority at-risk schools?

Hypotheses

H₁₀: There is no association between teacher induction and mentoring programs and the retention rates of teachers in low-performing schools with high-minority at-risk populations.

H₁₁: There is an association between teacher induction and mentoring programs and the retention rates of teachers in low-performing schools with high-minority at-risk populations.

H2₀: There is no association between teacher incentives and teacher retention rates of low-performing schools with high-minority at-risk populations.

H2₁: There is an association between teacher incentives and teacher retention rates of low-performing schools with high-minority at-risk populations.

H3₀: There is no association between teachers working in low-socioeconomic-identified schools and the teacher retention rate.

H3₁: There is an association between teachers working in low-socioeconomic-identified schools and the teacher retention rate.

Rationale, Relevance, and Significance of the Study

Teacher retention has been studied in previous research, but it continues to be a problem at schools. The need to continue and further study teacher induction and teacher incentives in low socio-economic contexts is still important. Students at every level of education need consistency of instruction from highly effective teachers. If teachers are leaving their positions, for whatever reasons, students are not receiving the consistent instruction needed to achieve academic success. The information from this research aims to provide relevant data to assist educators, administrators, and policy makers in education with the goal of improving the teacher retention rate in low-performing schools with high-minority at-risk populations.

Definition of Terms

The following terms are used throughout this dissertation and are defined here for convenience.

Mentoring: This term describes a personal developmental relationship in which a more experienced or more knowledgeable person helps to guide a less experienced or less knowledgeable person (Fullan, 2001).

Low-performing schools: These are schools that are in the bottom 10% of performance in their state or that have significant achievement gaps based on student academic performance in reading, language arts, and mathematics on the assessments required by their state (U.S. Department of Education, 2016).

At-risk students: This term refers to students at risk of educational failure or otherwise in need of special assistance and support, including students who live in poverty, attend high-minority schools, are below grade level, have left school before receiving a regular high school diploma, are at risk of not graduating with a diploma on time, are homeless, are in foster care, have been incarcerated, have disabilities, or learn English as a second language (U.S. Department of Education, 2016).

Teacher retention rate: This term is defined as the rate or time a teacher stays in an instructional position at a school (Darling-Hammond, 2010).

Incentive: This term is defined as something that motivates or encourages an individual to do something (Kolbe, T., & Strunk, K. 2012).

Socioeconomic status: This term is defined as a combination of social and economic factors (e.g. income, education, occupation) (U.S. Department of Education, 2016).

High-minority population: This term is defined as a large population that differs from other populations in racial characteristics and is often subjected to differential treatment (U.S. Department of Education, 2016).

Assumptions, Delimitations, and Limitations

Every investigation relies on assumptions and has delimitations and limitations. This section introduces those that applied to this study. The correlational design provided the

opportunity to increase external validity for this study because results might be generalized to other populations.

Assumptions

I had no control over the beliefs, perceptions, or opinions of the participants. Knowing there was no way to identify the participants, it was assumed the respondents would be honest with their responses. Based on the questions in the survey, it was thought the responses would provide a description of the relationship each respondent has with their past and present experiences within the identified school district. Based on the information received from the survey results, an assumption was made that the results would provide relevant data which would be beneficial for studying the teacher retention rates in low-performing schools with high-minority at-risk populations.

Delimitations

The study was delimited by a few boundaries. Analyzing the data through a quantitative analysis may be considered a delimitation instead of utilizing a qualitative or mixed methods approach. Another delimitation were the variables selected for study, teacher incentives and teacher induction, other variables might provide insight to teacher retention. Also, the study included only K–12 public school teachers who were members of the teacher’s union in the targeted school district. Another delimitation was that the school district and thereby, teachers who participated in the study, were all from the state of Florida.

Limitations

I recognized the possibility of limitations within this study. Lack of participation was a potential limitation. A power analysis established that a minimum of 25% of the 1,359 invitees needed to participate to provide enough data (Knapp, 2017). Questions from the chosen instrument may have created a limitation. There is a possibility that responses to questions may have been different depending on the wording of the questions. Also, some participants, especially those new to the district, may not have had adequate experiences to fully comprehend the depth of the survey questions. Length of time and/or experience may have inhibited the ability of new staff members to fully understand how to respond to some questions.

Summary

Other researchers have suggested some reasons for the observed decrease in teacher retention rates. The purpose of this quantitative research study was to investigate the role of several variables in the retention of teachers in low-performing schools with high-minority at-risk populations by surveying teachers within a Florida school district. The overarching research question being addressed in this study was: What factors play a role in teacher retention rates in low-performing schools with high-minority at-risk populations? The two-factor theory of motivation by Herzberg (1959) helped develop the conceptual framework for this research. Through the research question and the conceptual framework in the study, I focused on developing a better understanding of the role of the specific independent variables investigated—induction and mentoring programs, retention incentives, and low socioeconomic status—on the dependent variable—teacher retention rate—in low-performing schools with high-minority at-risk populations.

The data for this research was collected through a slightly modified version of a previously published quantitative survey tool by Giacometti (2005). The quantitative survey used a 4-item Likert-type scale and consisted of 13 demographics and 30 close-ended questions. One-thousand, three-hundred, fifty-nine K–12-certified public-school teachers who were union members in a school district in Florida were invited to participate in the survey. Qualtrics online survey software was used to collect the data and Statistical Package for Social Science (SPSS, version 25) was used to test the hypotheses. Assumptions, delimitations, and limitations were all taken into consideration during the collection of data in this research.

The issues often associated with job dissatisfaction in the teaching profession have been lack of support and increased levels of stress induced by students, colleagues, and administrators (Sass, Seal, & Martin, 2011). Chapter 1 begins the journey into researching the dilemma of teacher retention in low-performing schools with high-minority at-risk populations. Chapter 2, the literature review, will provide a comprehensive and relevant review of literature that pertains to the research problem and identify this dissertation's position within the framework of previous research on the same topic. Chapter 3 will provide an explanation of the design, procedure, and measurements used to analyze the collected data and find a response to the research question or evidence in support of the hypothesis. Chapter 4 presents a detailed description of the methods used to provide evidence and answers to the research question. In conclusion, Chapter 5 will present and evaluate the research results.

Chapter 2: Literature Review

To gain an understanding of what is needed to recruit and retain teachers, it is necessary understand the connections between the school community, instructional practices, support provided by induction and mentoring programs, incentives, and quality of leadership. I investigated these issues, and the connections between them, by studying the existing literature on teacher retention. This chapter contains a review of that literature.

When searching for information pertaining to teacher retention issues in low-performing schools with high-minority at-risk populations, I used the following search terms, which produced the most relevant and useful information: *teacher retention in low-performing schools, teacher incentives and low-performing schools, induction and mentoring programs in low-performing schools, at-risk populations and teacher retention rates, and induction and mentoring programs*. I searched the following databases and archives: The Educational Resources Information Center (ERIC), the ProQuest Education Database, ProQuest Dissertations & Theses, Taylor & Francis Online, Wiley Online Library, Google Scholar, ProQuest Central, JSTOR, the National Center for Education Statistics, and Sage Journals Online.

Topic

The teaching profession has been facing shortages in many areas of the United States, especially in areas with low-performing schools and high-minority at-risk populations (Darling-Hammond, 2010). A school leader seeking to understand how to recruit and retain teachers must understand the connections between the school community, instructional practices, support provided by induction and mentoring programs, and quality of leadership. The topic of teacher retention was investigated in this study.

Organization

While reviewing the literature I determined trends or patterns within the research that could help discover why teacher retention rates have been decreasing. My ultimate hope was to discover areas in need of improvement and how those areas could potentially be improved. The literature review covers the areas of teacher retention, low-socioeconomic and low-performing schools with high-minority at-risk populations, and teacher incentives. I analyzed and cross-referenced these factors with the hope of developing a more in-depth understanding of this increasingly disturbing dilemma.

Context

Two issues that have often been associated with job dissatisfaction in the teaching profession are lack of support and increased levels of stress experienced from students, colleagues, and administrators (Sass et al., 2011). The stressors from teaching have brought about anxiety, causing new teachers to feel misguided and defeated (Callahan, 2016). The high level of stress has caused new teachers to abandon the teaching profession (Carver-Thomas, D. & Darling-Hammond, L. 2017). Among the strategies that have been developed to help teachers transition to the profession is support from supervisors and colleagues through induction programs (Sass et al., 2011). McNabb (2011) argued that an effective mentoring program is vital and showed that a well-developed form of induction has a positive effect on novice teacher retention. According to McNabb, beginning-teacher induction programs should provide an avenue for learning about the school district's philosophy and integrate new teachers into the school community and culture. Chan (2014) stated that a solid, well-developed induction program supported by superior mentoring was the optimal way to professionally acculturate novice teachers into their chosen field. Morello (2014) found the teacher turnover rate to be

higher than ever in both elementary and secondary schools. According to McNabb (2011), “40 to 50 % of novice teachers leave the profession after 5 years” (p. 2). Mentoring programs have empowered many faculties which have sustained their tenure (Chan, 2014). McNabb reported that the costs related to teacher shortages may include deficient academic experiences for students and low student achievement levels. Low-performing schools with high-minority at-risk populations have presented many challenges to school administrators, including the difficulty of attracting and retaining new and experienced teachers and uncertainty about how to enhance hiring, transfer, and retention policies so that administrators can recruit the best teachers possible (Gawlik et al., 2012)

Significance

According to McNabb (2011), the evolution from a student teacher to an educator of students is a major undertaking. The first year of teaching is a critical year for the novice teacher as well as for the district that has hired the novice teacher. In districts across the United States, less effective or novice educators have been disproportionately concentrated in the poorest schools, creating situations where students from low-income communities have not been exposed to continuous highly effective instruction when compared to their peers in higher income communities (Robertson-Kraft & Duckworth, 2014). To make matters worse, approximately half of new teachers have been exiting the teaching profession in the first five years (Robertson-Kraft & Duckworth, 2014). This imbalance in the distribution of extremely effective teachers is of foremost concern for education policy makers and practitioners, especially because differences in teacher effectiveness result in substantially different outcomes for students in school and beyond (Springer et al., 2016).

Problem Statement

The education of the next generation is at risk due to the difficulty of retaining teachers, especially in low-performing schools with high-minority at-risk populations. The variables affecting teacher retention need to be identified because rising turnover rates have been shown to have far-reaching implications for education (Sass et al., 2011). Although the problem of teacher retention has been studied for many years, the problem has not been solved (Darling-Hammond, 2010). Once these variables have been identified, educational leaders must define a plan to reduce or counteract their effects in the hope of teacher retention rates (Sass et al., 2011). The causes of the decline in teacher retention must be probed so that effective methods can be developed to retain the finest teachers in the education profession and support those who are struggling (Chan, 2014).

A review of the literature revealed three key factors to investigate that may affect teacher retention in low-performing schools with high-minority at-risk populations: (a) teacher induction and mentoring programs, (b) teacher incentives, and (c) low-socioeconomic-status at-risk populations within the school community. Often, low-performing schools have hired teachers who have had little experience or have had difficulty in other teaching positions (Loeb, Kalogrides, & Beteille, 2011). When this has happened, students may not have received the best instruction from the most desirable or highly qualified teachers. Hiring new teachers directly out of college is always an option, if they have a good instructional foundation and receive a high level of support. Unfortunately, new teachers have been less likely to remain in the profession, with 50% of new teachers exiting within their first five years of service (Ingersoll, 2012). Because new teachers lack experience, they may be more susceptible to stressors that caused them to leave the profession. Recent research has shown 50% of beginning teachers dropped out

of the teaching profession in the first five years of practice (Chan, 2014). High mobility amongst teachers across the continuum can create revolving doors in classrooms and the students suffer from inconsistency in their instruction and lack of experienced instructional staff. Whether they are novice or seasoned, it is important that teachers hired are willing to stay in struggling schools with students who need them as much, if not more than, students from affluent schools.

Conceptual Framework

The conceptual framework of a study is the “system of concepts, assumptions, expectations, beliefs and theories that support and inform” the research (Maxwell, 2005, p. 33). The two-factor theory by Herzberg (1959) lends itself and supports the beliefs within this research. The two-factors in Herzberg’s (1959) theory are hygiene and motivators. The hygiene factor relates to the relationships, working conditions, and the salaries people receive for their work. The motivator factor has more to do with the recognition people receive for their job performance and the intrinsic rewards one gets from doing the work. The concept of connecting the achievement of teachers to incentives or motivators and the hygiene factor or recognition one receives reflects the assumptions within this research. Herzberg (1959) stated that “the factors which motivate people at work are different to and not simply the opposite of the factors which cause job dissatisfaction” (p. 6). I also drew on my personal experiences through holding a variety of positions in the education field, all of which have taken place in low-performing schools with high-minority at-risk populations when formulating the conceptual framework for this research.

I based the concepts for this research on the issue of why the teacher retention rates in low-performing schools with high-minority at-risk populations in a Florida school district have been on a steady decline. After reviewing the literature on teacher retention rates in low-

performing schools with high-minority at-risk populations, there appeared to be a missing connection or gap involving all the variables investigated in this study.

Review of Research Literature

Researchers have analyzed the issues that they believed were the cause for the decrease in teacher retention, especially in low-performing high-minority at-risk populations and areas with insufficient induction and mentoring programs (Darling-Hammond, 2010). Darling-Hammond (2010) examined the factors affecting teacher recruitment and retention in at-risk populations and researched the strategies used to retain teachers in those communities. Darling-Hammond's findings revealed several areas on which to focus educational policy and practice: investment in competitive salaries, mentoring for new staff, ongoing learning opportunities, desirable working conditions, class size, instructional load, and enough instructional materials. Darling-Hammond also found that investment in the hiring of better prepared teachers could reduce future costs and increase student achievement.

Lee and Ryu (2015) analyzed turnover rates of teachers in a school district in Texas once different conditions had been applied. Their study had one dependent variable, the teacher turnover rate in the academic year 2007–2008. Their independent variables were performance indicators and the Texas Assessment of Knowledge and Skills that examined organizational performance and innovative management; both were measured through four survey questions. Lee and Ryu found that the variables that influenced the innovative management results were organizational and environmental factors: race, gender, experience, education, and salary. Their results suggested that superintendents' innovative management skills had a statistically significant positive association with decreasing teacher turnover. Lee and Ryu reported that the Texas Assessment of Knowledge and Skills had a negative association with teacher retention

rates. Lee and Ryu reported that the turnover rate was contingent on the school rating and the rating of the organization. The authors argued that teachers leave schools when the leadership is not supportive, discipline and school expectations are not adhered to, professional development opportunities are not made available, and the school climate is negative.

Hughes (2012) surveyed 782 teachers to identify the effects of teacher, school, and organizational characteristics (including teacher efficacy) on teacher retention rates. Hughes's findings indicated that 83.5% of the 782 surveyed teachers planned to teach until retirement. Hughes used Wald tests to show that years of experience, socioeconomic status, salary, workload, and provided technology resources all made a statistically significant contribution towards a teacher's desire to maintain their position at a school. Hughes argued that there was a need to increase teacher salaries, reduce workloads, and increase parent and student involvement if the goal was to increase teacher retention rates in low-socioeconomic-status schools.

The purpose of this dissertation was to investigate connections between teacher retention rates and teacher induction and mentoring programs, teacher incentives, and low socioeconomic status in low-performing schools with high-minority at-risk populations. In the following section I address each of these variables in turn.

Teacher Retention Rates

According to Ryu and Lee (2013), educational administrators, policy makers, and researchers have voiced concerns regarding the increasing rate of teacher turnover in America's schools. Ryu and Lee reported that teacher turnover, compared to student matriculation or retirement, was the foremost factor impeding a school's ability to effectively function. Ryu and Lee conducted empirical research and found an undesirable connection between teacher turnover and school functioning, preparation and execution of the required curriculum, and maintenance

of a positive working relationship amongst teachers. Ryu and Lee also proposed that teacher turnover was especially problematic if competent teachers were more likely to leave the profession than incompetent ones, noting that high-turnover schools were those most likely to serve low-income students and students belonging to racial minorities.

As mentioned above, Hughes (2012) found that teachers in the most affluent schools were more likely to carry on teaching until retirement compared to teachers in the neediest schools. Hughes also found a significant relationship between years of teaching experience and the retention rate of teachers working in low-performing schools. Hughes reported that reasons for leaving the profession were lack of support through induction programs and mentoring, ineffective or inadequate incentives, and increased levels of stress due to increased workloads and requirements placed on low-performing schools. Hughes's results suggested ways to increase support in multiple areas identified by beginning teachers, those with a few years in the teaching profession, and those who had dedicated their careers to educating children.

Simon and Moore-Johnson (2015) analyzed six studies pertaining to turnover as a function of school context rather than as a function of student demographics. The six studies reviewed collectively suggested that teachers who left high-poverty schools were not fleeing their students but rather were fleeing the working conditions that made it difficult for them to teach and for their students to learn (Simon & Moore-Johnson, 2015). The authors reported that the factors that played a role in the working conditions were school leadership, collegial relationships, and elements of school culture. Simon and Moore-Johnson found that the demographics of students did not play a role in a teacher's decision when contemplating leaving or staying at their schools.

Teacher Induction and Mentoring Programs

Myers (2015) reported a trend that was developing where novice educators entered the teaching profession and parted shortly thereafter to be replaced by another novice. Myers argued that this ongoing cycle directly impacted student achievement because experience was lost when the attrition of novice teachers remained constant within schools. Myers argued that an induction program, utilized over an extended period, should provide systemic support for beginning teachers that includes orientation, mentoring relationships, support teams, professional development, and a formal evaluation system to help a new teacher understand his or her strengths and weaknesses. Myers suggested that designing and maintaining an induction program centered on mentoring and coaching teachers would afford both veteran and novice teachers the opportunity to work together and could provide a scaffolding of support throughout their growth and development as educators.

A variety of studies have been conducted on the effects that induction programs and mentoring have on novice teachers. A longitudinal study conducted by Helms-Lorenz, van de Grift, and Maulana (2015) showed an enhancement in teaching skills after 3 years in the profession associated with the implementation of an induction program aimed at improving teacher retention rates. According to Helms-Lorenz et al., the enhancement in teaching skills provided teachers with the instructional strategies they needed to establish success in the classroom, created positive experiences, and provided some assistance with teacher retention. Helms-Lorenz et al. established that roughly 29% of beginning teachers who did not participate in an induction and mentoring program left their positions within the first 3 years and almost 16% left the profession. Helms-Lorenz et al. found that only 9% left the profession after the first 3 years when the induction program was implemented.

Another trend that Myers (2015) reported was the placement of novice teachers in low-performing schools with high-minority at-risk populations even though the teachers had no experience or familiarity of the population. Consequently, beginning teachers began to struggle and resorted to survival practices instead of best teaching practices (Myers, 2015). Myers argued that supportive and long-term relationships between an experienced teacher and a novice teacher should take place during the induction phase and continue throughout the first 3 years of placement in a classroom. Myers's research supported the need for a mentor or coach who would assist novice teachers by modeling effective instruction practices, modeling classroom management strategies, providing data assessment and analysis practices, providing constructive feedback through observations, providing resources, and giving the novice teacher the time to reflect and discuss practices with the mentor. By mentoring and providing these resources for a novice teacher, the mentor is the actual catalyst for reflection and change (Myers, 2015).

Callahan (2016) identified ways that mentoring could improve retention of new teachers who would subsequently be able to contribute to the transformation necessary for effectively increasing student achievement. Ingersoll and Strong (2011) investigated how to match the needs of new teachers with the attributes of an effective mentoring program. Pirkle (2011) discussed the positive effects of a strong program to mentor teachers. Shaw and Newton (2014) argued for the transformational effect of mentoring as an essential part in shifting the system of education in the United States.

Low-Performing Schools with High-Minority At-Risk Populations

Robertson-Kraft and Duckworth (2014) stated that “teachers are one of the most valued school resources when it comes to improving student learning” (p. 6). Robertson-Kraft and

Duckworth concluded that good teachers create substantial economic value and that test score impacts are helpful in identifying such teachers.

Ingersoll (2012) found that although novice teachers had come to be more common than experienced teachers among educators, they were also the most likely to leave the profession. Ingersoll (2012) reported that 50% of new teachers exited within their first five years. Between 1992 and 2012, the attrition rate of first-year teachers was 33% on average (Ingersoll, 2012). Underachieving and high-needs schools experienced a high rate of new teacher turnover which caused at-risk students to receive their instruction from less qualified teachers (Ingersoll, 2012). NCES (2014) reported that the teacher turnover rate was 22% higher in schools identified with low socioeconomic statuses, compared to 13% in schools identified with higher socioeconomic statuses. Ingersoll (2012) argued that there was a need to advance low-performing high-minority schools by recruiting, preparing, refining, and retaining exceptional educators. Ingersoll (2012) also advocated the distribution, equitably throughout all schools, of the teachers whose instructional practices, classroom management, and aptitude most efficaciously provided the required support for low-income at-risk students and students belonging to racial minorities.

There has been an exception to the rule that promising teachers leave high-poverty schools to work in wealthier communities with more White members (Simon & Moore-Johnson, 2015). Compared with White teachers, teachers of other races, particularly Black and Latino teachers, have been more likely to stay in teaching and at schools serving students with similar racial and socioeconomic backgrounds (Achinstein, Ogawa, Sexton, & Freitas, 2010; Hanushek et al., 2004; Ingersoll, 2001; Ingersoll & May, 2011; Kirby, Berends, & Naftel, 1999; Marinelli & Coca, 2013; Murnane, Singer, Willett, Kemple, & Olsen, 1991). The patterns have suggested

that teachers' personal characteristics mattered in their decisions about where to teach and when to leave (Simon & Moore-Johnson, 2015).

Researchers have also investigated the factors that influence teacher mobility departures (Boyd, Lankford, Loeb, & Wyckoff, 2005; Carroll, Reichardt, Guarino, & Mejia, 2000; Clotfelter, Ladd, & Vigdor, 2011; Hanushek et al., 2004; Scafidi, Sjoquist, & Stinebrickner, 2007). Again, and again they found that when teachers transferred, on average they moved to schools that served a smaller proportion of low-income and low-racial-minority students (Simon & Moore-Johnson, 2015). Hanushek et al. (2004) found that, on average, when teachers transferred, they looked for schools with academically and economically disadvantaged students. Hanushek et al. also noted that when new teachers were placed in the most difficult teaching situations, they tended to leave after they had gained experience. Hanushek et al. also found that when teacher transfers took place there was a stronger correlation to student race and achievement than to salary differentials. The average salary increase needed to alter this trend among inexperienced female teachers was 25–40% above existing pay rates (Hanushek et al., 2004). Scafidi et al. (2007) conducted a similar study and found that the proportion of students who were Black had a strong relationship to most of the exit reasons, confirming that teachers were more likely to leave schools with high-minority low-socioeconomic-status populations.

According to Kraft et al. (2015), administrators of low-performing schools needed to address the issues within a community and culture to increase the chances of success for students from low-income families and get those families involved within the school setting. The turnover rate among teachers within schools with low-income high-minority at-risk populations had been costly for schools and districts, and would have long-term, negative effects for students living within these communities (Kraft et al., 2015). A growing body of research has revealed

that measures of the work context contribute much more to teachers' satisfaction and career decisions than do their students' characteristics (Kraft et al., 2015). Kraft et al. suggested that schools could support teachers with appropriate, deliberate, and coherent approaches to the uncertainties of teaching in struggling schools. Kraft et al. argued that four types of organizational responses were needed to provide essential support: aligned instructional support, procedures to promote order and discipline, student support services, and practices that involve parents. Schools that promoted these practices were far more likely to attract effective teachers, develop their practice over time, and build expertise across classrooms, thus ensuring that all students routinely benefited from skilled and committed teachers (Kraft et al., 2015).

Retention Incentives

Darling-Hammond (2010) established that the teaching profession needed to be competitive in terms of salaries, working conditions, and incentives for professional development to attract college-educated talent. Common incentives to attract and retain teachers included tuition reimbursement, living expense and travel stipends, and professional growth bonuses (Darling-Hammond, 2010). Darling-Hammond (2010) revealed that teachers made 15–30% less than college-educated individuals who went into other fields. Surveys completed by educators have shown that working environments have played a key role in a person's decision to change locations or leave the profession (Darling-Hammond, 2010). Teachers' plans to stay in the profession and their reasons for leaving were strongly linked with administrative backing, resources provided, and input into the decision-making process (Darling-Hammond, 2010).

NCES (2016) revealed data pertaining to the mobility of teachers and the support teachers received in high-wealth versus low-wealth schools. Among public school teacher movers, 59% moved from one public school to another public school in the same district, 38%

moved from one public school district to another public-school district, and 3% moved from a public school to a private school between the 2011–2012 and 2012–2013 academic years (NCES, 2014). A poll administered by the Public Agenda Foundation found that approximately 80% of teachers would choose to work in a school where administrators supported them, compared to approximately 20% of teachers who would work at a school where there were substantially higher salaries (Rochkind, Ott, Immerwahr, Doble, & Johnson, 2007).

Financial incentives have been a common strategy for recruiting gifted professionals to teaching positions: Examples have included conditional scholarships, loan forgiveness, signing bonuses, retention bonuses, and housing incentives (Steele et al., 2009). Hanushek et al. (2004) reported that a 10% increase in teacher pay reduced the probability of departure from a school by 1–4%. Desirable incentives have been popular in the teaching profession, but they have not changed the fact that poor, minority, and low-achieving students have been disproportionately taught by more inexperienced teachers (Steele et al., 2009). According to Springer et al. (2016), retention bonuses tied to estimates of educator effectiveness served as a tool for stakeholders to improve the quality of the teachers instructing disadvantaged students, as long as the bonuses were given directly to highly effective teachers. Springer et al. argued that retention bonuses could mitigate unwanted turnover and had the potential to strengthen leadership and institutional knowledge among the schools’ faculties while avoiding financial burdens associated with turnover.

Beyond salaries and monetary bonuses, support and teacher preparation incentives have attracted and helped to retain teachers (Darling-Hammond, 2010). Induction programs and mentoring have been huge assets that have attracted novice teachers to a school or district (Darling-Hammond, 2010). Existing research has supported the need to train well-prepared

teachers for high-needs schools. One way to build a steady supply has been the use of residency programs. Residency programs placed midyear applicants who committed to working in low-performing schools with at-risk populations into paid apprenticeships with knowledgeable and successful mentors for a year while they completed required coursework in curriculum and teaching with local partnering universities (Berry, Montgomery, & Snyder, 2008).

Darling-Hammond (2010) reported that it was easier to obtain well-prepared educators from within the existing staff of a functioning school than by offering financial incentives for teachers to go to dysfunctional schools. Although monetary incentives have helped, teachers have been mostly attracted by principals who were good instructional leaders, by like-minded coworkers who were dedicated to similar goals, by having the working conditions and instructional resources they needed readily available, and by having learning supports that enable them to be successful (Darling-Hammond, 2010).

Darling-Hammond (2010) described a magnetic effect that occurred when school systems made it clear that they were committed to finding, keeping, and supporting good teachers as a primary focus of school and district management: Teachers gravitated to places where they knew they would be appreciated. According to Darling-Hammond, teachers were motivated by other respectable teachers who became their contemporaries and together they became magnets for others who were enticed to settings where they could learn from their colleagues and generate success for their students. Good leaders produced desired school settings in which proficient teaching could flourish and grow (Darling-Hammond, 2010).

Review of Methodological Issues

In this section I examine how the studies reviewed employed a qualitative-, quantitative-, or mixed-methods approach to their research problem, and the limitations they encountered.

Studying the Issues Through Qualitative, Quantitative, and Mixed Methods

Understanding the use and differences of qualitative, quantitative, and mixed methods is important for critiquing the existing research regarding teacher retention in low-performing schools with at-risk populations (Babbie, 2010). Qualitative research uses interpretive and theoretical frameworks which emphasize the significance individuals ascribe to a social or human problem (Creswell, 2013). Descriptive data collected through qualitative research is not numerical in form but may consist of answers to open-ended questions, unstructured interviews, and observations (Creswell, 2013). Quantitative methods involve obtaining numerical measurements of the phenomenon under study. Research questions and relevant variables must be precisely defined to obtain unbiased responses (Muijs, 2010). Quantitative research is rooted in numbers and statistics with outcomes embodied in tables, charts, or graphs which demonstrate relationships between variables (Muijs, 2010). Mixed-methods research is a methodology for conducting research that involves collecting, analyzing, and integrating quantitative (e.g., experiments and surveys) and qualitative (e.g., focus groups or interviews) research (Creswell, 2013).

Giacometti (2005), the original author of the survey I used to obtain my results, used a quantitative approach. Giacometti investigated domains that discriminated between teachers who chose to stay or leave the teaching profession: emotional factors; school and community support; instructional support; preparation in teaching curriculum, managing students, and assessing students; collaboration; compensation and benefits; motivation to teach; and culture shock. The questionnaire was administered to 450 randomly selected first-, second-, and third-year teachers (Giacometti, 2005). Giacometti's survey questions were related to domains affecting teacher satisfaction and retention and a demographic section was included to collect

background information. Giacometti used discriminant analysis to investigate the group separation (stayers or leavers) of new teachers based on their level of job satisfaction in the teaching profession. Giacometti used a descriptive discriminant analysis to determine which teacher job satisfaction variables distinguished stayers from leavers.

Giacometti (2005) used her research question, “What combination of factors best separates (discriminates between) leavers and stayers?” (p. 50) to obtain data through descriptive statistics, correlations among demographic variables, inferential statistics, discriminant function analysis, and strength-of-relationship statistics. Giacometti found that 11% of respondents chose to leave the profession. Results of Giacometti’s discriminant analysis indicated that emotional factors were the best predictors of whether a subject would choose to leave or stay in the teaching profession, followed by compensation and benefits and then by culture shock. Giacometti used the analysis to determine whether the individuals in the two groups were correctly classified based on their scores on the eight predictor variables. Giacometti found that 91.4% of cases were correctly classified.

Sass et al. (2011) used the Ohio State Teacher Efficacy Scale to establish relationships between student engagement, social support, teacher stressors, job dissatisfaction, and intent to resign. Using a survival analysis and a large state database, Sass et al. examined teacher data to identify those teachers and school variables associated with attrition. Sass et al. used a sample of 479 certified teachers and tested three competing theoretical models with variables related to teacher stress or support using a structural equation model to predict job dissatisfaction and eventual intention to quit. Their results revealed that student stressors completely mediated the relationship between student-engagement-related teacher efficacy and job dissatisfaction. Sass et al. also showed that social support superiors and student stressors were the best predictors of job

dissatisfaction. Quantitative research methods like those of Sass et al. are used to define current conditions, examine relations, and study cause-and-effect phenomena (Creswell, 2013).

Quantitative methods can be useful to obtain relevant information pertaining to individuals, actions, and the characteristics of those who enter and work within the teaching profession (Creswell, 2013).

Using a qualitative approach, Kraft et al. (2015) analyzed 95 intensive interviews obtained from teachers and administrators who worked in six high-poverty schools in one large school district. They conducted comparative case studies and analyzed the interviews by drafting thematic summaries, coding interview transcripts, creating data-analytic matrices, and writing analytic memos. Kraft et al. learned that students attending the six high-poverty schools brought many elements of uncertainty into their classrooms, which presented ongoing challenges for the teachers. The authors identified the elements of uncertainty as the social consequences of living in poverty, facing racial and ethnic discrimination, and coping with the day-to-day stress of moving through dangerous neighborhoods to and from school. These challenges would cause teachers to fail to educate their students if they were not supported by colleagues and administrators through organizational approaches that established collegial collaboration, positive school culture, order and discipline, socioemotional supports for students, and parental involvement (Kraft et al., 2015). With these organizational supports in place, teachers reported increased opportunities for them to establish success with their students (Kraft et al., 2015).

Using an interpretative-qualitative approach, Efron, Winter, and Bressman (2012) obtained data from participant narratives and naturalistic questionnaires. Efron et al. described and analyzed the first two years of a mentoring program aimed at supporting the retention and growth of new teachers. Efron et al. positioned the subjective experience of participating school

members at the center of their investigation. The authors were guided by the premise that reality is constructed by the subjective interpretation of a situation in which individuals find themselves and that the improvement of that situation can emerge only if those individuals' interpretation is understood. Efron et al. focused on the subjective experiences of the individuals who participated in the mentoring experience; their results described how teachers, mentors, and school administrators perceived the process and impact of the mentoring program once full participation had been achieved.

Efron et al. (2012) asked teachers, mentors, and administrators to complete questionnaires regarding their view of the mentoring program, the relationships formed, and the impact of the program on professional practice. According to Efron et al., the open-ended nature of the naturalistic questionnaires encouraged participants to reflect, interpret, assess, and deepen their understanding of their mentoring experience. The researchers collected data from the three groups of participants involved in the program at the beginning, middle, and end of the year with data collection taking place over a 2-year period. Efron et al. found that mentoring was vital to establishing and maintaining the successful development of educators new to the teaching profession. The researchers advocated further research on teacher retention and the effects of mentoring.

Kaimal and Jordan (2016) investigated incentive-based programs and teacher retention with a mixed-methods analysis that involved a 4-year longitudinal study using a comparative case study and quasi-experimental design. The researchers compiled facts using methods with qualitative features, such as semi-structured interviews and observations of an incentive-based program's activities. The quantitative aspects of Kaimal and Jordan's study were scores from evaluations of classroom instruction, surveys of teacher attitudes, scores from standardized

student-achievement tests as part of state and district assessments, and surveys of teacher and administrator perceptions.

Kaimal and Jordan (2016) established, through mixed-methods analysis, the presence of several challenges to program implementation related specifically to the context of the schools. The challenges included misconceptions about performance pay; difficulties learning, understanding, and sustaining a professional development model; poor fidelity of program implementation; varying abilities among the leadership team; inability to sustain the incentive component; differences in the missions of the participating schools; and high teacher turnover at the schools (Kaimal & Jordan, 2016). Kaimal and Jordan argued that further research was needed on incentive-based programs and their effect on teacher retention rates.

Limitations in the Research

Like all research, existing research pertaining to teacher retention in low-performing schools with high-minority at-risk populations was subject to a variety of limitations (Simon & Moore-Johnson, 2015). Less-than-ideal sample size, study length, and numbers of variables within a study are limitations that can provide a less than desirable outcome (Loeb et al., 2011). Many other characteristics, such as culture, age, gender, and level of education, can also limit the findings of a study (G. Hughes, 2012).

Sass et al. (2011) presented an example of how results obtained through the quantitative method can have limitations. Sass et al. used a sample of 479 teachers to test three competing theoretical models dealing with social support from superiors, workload stressors, and social support from colleagues. Sass et al. used predictor variables related to student engagement, student stressors, job dissatisfaction, and intent to quit, and tested them using a structural equation model to predict job dissatisfaction and eventual intention to quit. The researchers used

the student engagement subscale of the Ohio State Teacher Efficacy Scale to measure teacher efficacy as it related to student engagement. Sass et al. included three dimensions in their findings: (a) instructional strategies, (b) classroom management, and (c) student engagement.

Sass et al. (2011) collected their data online from teachers employed at six schools. The researchers used statistical analysis to estimate the model parameters for both the measurement model and the three theoretical models. Sass et al. demonstrated with their results the importance of a supportive and stress-free environment along with a strong sense of teacher efficacy associated with student engagement.

The method of Sass et al. (2011) provided a good foundation for understanding the information obtained but could have contributed more in-depth understanding if more moderator variables (elementary, intermediate, and secondary levels) were used to determine whether the structural coefficient magnitudes differed. Sass et al. presented two job dissatisfaction variables, one job satisfaction variable, and two leadership variables, which may have limited the depth of the study. It is crucial to consider the model's generalizability to diverse settings because the structural coefficients could differ between cultures or subcultures (Sass et al., 2011). The number of variables limited the span and depth of information which established the need for further investigation of the topic (Sass et al., 2011).

As exemplified by Sass et al. (2011), limitations can occur within longitudinal studies on teacher retention in low-performing schools with at-risk populations due to the movement that takes place within a school or district. Variables and stressors may decrease or increase depending on the situation. Different incentives or programs may be initiated during the span of the study. Education is in a never-ending cycle of change and the changes can cause havoc for a research study (Sass et al., 2011).

Synthesis of Research Findings

Existing research substantiated the need to explore and analyze the reasons why teacher retention rates in low-performing schools with high-minority at-risk populations have been on a continuous decline. Grissom, Viano, and Selin (2015) agreed:

Extensive research based on turnover among public school teachers can be useful for policy makers, practitioners, and researchers interested in the factors that lead some public employees to remain in their positions or organizations while others leave. (p. 41)

In this section I examine recent studies and shed some light on the issues surrounding the decrease in teacher retention rates with a focus on low-performing schools with high-minority at-risk populations, teacher incentive programs, and induction and mentoring programs.

Low-Performing Schools with High-Minority At-Risk Populations

Teachers have been inclined to leave schools serving high numbers of students who have minimal academic success, come from low-income families, and belong to racial minorities (Loeb, Darling-Hammond, & Luczak, 2005). According to Simon and Moore-Johnson (2015), from the 1990s to the 2010s the rate of teacher turnover increased significantly in public schools, particularly low-income schools. Simon and Moore-Johnson reviewed six studies analyzing staff turnover as a function of school context rather than as a function of student demographics.

Grounded in organizational theory and substantiated by an evolving line of research, Simon and Moore-Johnson found that teachers were not leaving because of the student body but rather because of poor working conditions, administration, school community, and elements of school culture. Simon and Moore-Johnson argued that achieving stability in the staffing of qualified teachers is especially vital for low-income students because these students are particularly dependent on their teachers.

Kraft et al. (2015) revealed four types of organizational reactions that affected a teacher's ability to cope with the uncertainty introduced by their environment: coordinated instructional support, systems to encourage order and discipline, student services support, and strategies to engage parents. Coordinated instructional support consisted of working together with colleagues in the same grade level and vertical discussions across grade levels. This would help with consistency of instruction from one grade level to the next to ensure that students had covered the required content and mastered foundational skills (Kraft et al., 2015). When well-designed discipline policies were implemented by all administrators the positive culture in the school would help students transition from stressful home situations to an orderly, stable environment. Teachers could focus on instruction and easily manage situations that arose throughout the school day (Kraft et al., 2015). Students who attended low-performing schools with high-minority at-risk populations tended to have issues in their lives that could not easily be dealt with by a teacher. Providing student services inside and outside of the school could help with those stressors in their lives. The leadership team in a school and entities outside of the school could help establish those services and provide opportunities for getting the entire family involved in the process. This reduced the stress for both teachers and students, eliminating distractors, which enabled focused instruction within the classrooms (Kraft et al., 2015). Teachers recognized the important role parents played in the education of their children. If relationships were built with the families through home visits, parent-teacher conferences, and informal interactions then issues at school could be reduced leading to increased instructional time, less stress, and maybe an increase in student achievement (Kraft et al., 2015).

Induction and Mentoring Programs

Recent studies have placed more emphasis on the components of induction and mentoring programs compared to earlier research, which focused more on working conditions and financial incentives (Helms-Lorenz et al., 2015; Marker, Mitchell, & Lassiter, 2013; McNabb, 2011; Van Zandt, 2016; You, 2012). You (2012) determined that participation in a comprehensive package—a sequence of highly structured activities and frequent gatherings conducted over several years—versus a basic package—single orientation meetings held at the beginning of the school year—had a large and statistically significant positive influence on keeping educators from departing at the end of their first instructional year.

Through use of a case study, Marker et al. (2013) found challenges within a school's mentoring program due to the district's budget cuts. However, they concluded that the success of the mentoring program did not depend solely on the financial support, but also on the continued support and guidance of devoted administrators and mentoring teachers who together formed a package or bundle of support.

Van Zandt (2016) found that novice teachers who received extensive support for their first 2 years were more likely to have students who achieved academic success because of the stability and continuity provided by the teacher. The focused professional development provided an increased mastery of instructional strategies that led to students achieving higher reading gains compared to new teachers who did not receive this increased level of support.

McNabb (2011) conducted a case study with six novice teachers who all completed a 2-year induction program provided by their district. McNabb investigated the effects of the mentoring program on teacher retention. McNabb found that the 2-year induction program provided quality training and support and led to an increase in teacher retention rates within a

school district. According to McNabb, the induction program included communication and collaboration with colleagues and the school community, continued professional development, professional learning community support, peer support, continued planning and classroom management development, and community and team building. The induction program provided the continuous support that the new teachers needed to maintain their ongoing success and helped to increase teacher retention rates (McNabb, 2011).

Teacher Incentives

According to Springer et al. (2016), the theory behind retention incentives is that offering financial incentives will help retain more teachers in hard-to-staff or chronically low-performing schools. Springer et al. performed one of the first studies to evaluate a retention bonus program that targeted highly effective teachers using a rigorous causal research design to assess the effect of a pilot bonus program. The framework of the pilot bonus program compared a group of high-performing teachers in priority schools participating in the retention bonus program to teachers who were not able to receive the bonus because their teacher-evaluation score was below a Level 5, which corresponded to a highly effective teacher. The regression-discontinuity design exploited the sharp cutoff in a teacher's overall evaluation rating that determined eligibility for the retention bonus in participating schools (Springer et al., 2016). The sample of 473 teachers included all teachers who received a teacher-evaluation score at Level 5 working in priority schools in Tennessee during the 2012–2013 academic year (Springer et al., 2016). Of the 473 priority school teachers who earned a Level 5 score for the 2012–2013 academic year, 80% remained within a priority school, and 85% of those received a \$5,000 bonus (Springer et al., 2016). Using rich administrative data, teacher evaluation data, and school level information, Springer et al. found that Level 5 scores had no significant overall effect but did show

statistically significant increases in the retention of teachers for tested subjects and grades.

When addressing tested- and untested-subject teachers, the results revealed that Level 5 tested-subject teachers who received a retention bonus were approximately 20% more likely to remain in their positions in priority schools compared with tested-subject teachers just below the Level 5 cutoff (Springer et al., 2016).

Fulbeck (2014) used Denver Public School teacher-level data from nine transition periods over 10 years to determine if a financial incentive helped to increase teacher retention.

According to Fulbeck, four of the nine transition periods occurred before the implementation of the incentive while five of the transition periods occurred after the incentive was implemented.

At the end of the longitudinal study, comparing those who did and did not receive the incentive, Fulbeck's data revealed, on average, a 30% decrease in the chances of a teacher's departure from schools with a higher socio-economic status compared to a 7% decrease in the chances of a teacher's departure from high-poverty schools.

Steele et al. (2009) evaluated the extent to which receiving financial incentives increased the probability of a novice teacher accepting a position in a school identified as low performing. Then they compared the retention rates between recipients and nonrecipients of a financial incentive program. Steele et al. used an instrumental variable approach to estimate the unbiased effects of the Governor's Teaching Fellowship, a \$20,000 incentive program developed to entice and retain novice teachers in low-performing schools. Along with the financial incentive, participants were given loan forgiveness towards student loans in exchange for 4 years of service in hard-to-staff schools. Steele et al. established a notable recruitment effect and through examining retention patterns found that 75% of both the Governor's Teaching Fellowship

recipients and the nonrecipients who worked in schools identified as low-performing remained in such schools for at least 4 years (Steele et al., 2009).

Critique of Previous Research

The following section provides a critique of the research pertaining to the issues that influence the retention of teachers in low-performing schools with high-minority at-risk populations, with emphasis on teacher incentives and induction and mentoring programs.

Low-Performing Schools With At-Risk Populations

Simon and Moore-Johnson (2015) suggested in their conclusion that poor working conditions common in America's neediest schools explained most, if not all, of the relationships between students' demographic characteristics and teacher attrition. The environment did not factor into the equation of teacher retention rates, but salaries, administration, instructional resources, and geographic location were factors that contributed to the sustainability of staff in low-performing schools. Across the schools that Simon and Moore-Johnson studied, teachers described how school-wide supports facilitated their ability to succeed in meeting the challenges presented by their students. Predictors from all aspects of low-performing schools with high-minority at-risk populations need to be addressed if there is to be a sustained increase in teacher retention rates.

Induction and Mentoring Programs

You (2012) utilized quantitative research methods but could have benefitted from using mixed methods which would have provided a more in-depth analysis of teacher-turnover behaviors and the causes that govern such behaviors. Incorporating qualitative and quantitative research methods may have offered a more comprehensive view of the phenomenon and helped explore the causes with greater clarity.

Helms-Lorenz et al. (2015) found that schools varied widely in the quality of support they offered their novice teachers. By using an experimental condition within the research arrangement, the authors found that all the elements within an induction program could be strengthened. There were many factors that could have influenced the research when using experimental and control group conditions. Helms-Lorenz et al. needed to ensure that all the participants within the longitudinal study maintained the same elements whether they were in the experimental or control group to ensure clearly defined results. The researchers described the importance of mentoring new teachers but lacked the data to confirm whether existing induction and mentoring programs in schools and districts were effective at providing novice teachers with the confidence they needed to establish success in the classroom (Callahan, 2016).

Teacher Incentives

Steele et al. (2009) compared the significant differences of two incentive programs, the Governor's Teaching Fellowship in California (incentive of \$10,000) and the North Carolina Teacher Retention Bonus (incentive of \$1,800) through a longitudinal study spanning five years. The sample consisted of 27,106 licensure candidates, of whom 718 were Governor's Teaching Fellowship recipients (Steele et al., 2009). The data set included information merged from three agencies: the California Student Aid Commission, which administered the Assumption Program of Loans for Education program; the California Commission on Teacher Credentialing, which issued teaching licenses; and the California State University Chancellor's Office, which administered the Governor's Teaching Fellowship (Steele et al., 2009). The two programs were not equal in operation because the North Carolina bonus did not include a recruitment component. North Carolina's bonus did not target teachers based on their academic backgrounds or on other indicators of skill and it demonstrated a stronger effect, reducing turnover rate by

17% for experienced teachers (Steele et al., 2009). The Governor's Teaching Fellowship in California included a recruitment component that focused on academically talented persons enrolled in licensure programs, offered student loan forgiveness, and offered a much larger financial incentive compared to North Carolina. The results could have provided more concrete information if the researchers had used two similar state or district programs.

Fulbeck (2014) analyzed data from the Denver Public Schools and the incentive program they used, the Professional Compensation System for Teachers. The data obtained provided some support for the belief that financial incentives could help retain teachers but did not support the more substantial issues of school leadership, climate, and working conditions, all factors relevant to the retention of teachers.

Much of the research on teacher retention appeared to focus on one factor within a large equation. One factor will not provide answers regarding how to improve teacher retention in low-performing schools with high-minority at-risk populations. Researchers need to think beyond the scope of what currently exists and begin to look at the whole picture, not just a piece of the puzzle. Researchers need to focus on developing a well-balanced, all-encompassing program that will recruit and retain teachers in schools with the highest needs.

Summary

The teaching profession has been facing shortages in many areas of the country, especially in low-performing schools with at-risk and high-minority populations. The lack of experience, support, and stress may have contributed to the early attrition of new teachers (Darling-Hammond, 2010). To gain an understanding of what is needed to recruit and retain teachers, it is necessary to understand the practices in place and identify the factors in need of improvement.

The issues frequently associated with dissatisfaction in the field of education have been lack of support and increased levels of stress from students, colleagues, and administrators (Sass et al., 2011). Teacher induction programs have provided new teachers with an avenue for learning about the district philosophy and assisted with integrating new teachers into the school community and culture (McNabb, 2011). A solid and well-developed induction program supported by superior mentoring has been the optimal way to professionally acculturate novice teachers into their chosen field (McNabb, 2011). Leaders in education have been challenged to acknowledge staggering statistics associated with teacher shortages and novice teacher retention (McNabb, 2011). Designing, implementing, and maintaining an induction program that focuses on mentoring and coaching new teachers could provide novice teachers the opportunity to collaborate with their colleagues and continuously develop and improve their instructional skills (Myers, 2015). Moreover, with the immense negativity that has been directed toward the state of education, it would be helpful if a mentoring program could develop and foster excitement, optimism, and hope for the future of the teaching profession.

Teachers have been likely to leave schools serving high numbers of low-achieving, low-income students who belong to racial minorities for schools that were more economically and educationally advantaged (Moore-Johnson, 2015). Teachers new to the profession have become the most common teachers in public schools today. Unfortunately, they are less likely to remain in the profession, with 50% of new teachers exiting within their first five years of service (Ingersoll, 2012). Low-performing high-needs schools with large populations of students belonging to racial minorities have experienced higher rates of new teacher turnover causing at-risk students to be disproportionately served by less experienced teachers compared to their high-performing and socioeconomically advantaged counterparts (Ingersoll, 2012). NCES (2014)

found that teacher turnover rates were 22% in low-socioeconomic-status schools with high numbers of students belonging to racial minorities compared to 13% in schools with economic stability and higher levels of academic performance. The research clearly supported the need to improve low-performing schools by recruiting, preparing, improving, and retaining excellent teachers and distributing them equitably throughout all schools.

Targeted financial incentives in many forms have been prevalent as ways to attract educated candidates to the teaching profession (Steele et al., 2009). Fulbeck (2014) provided evidence suggesting that increasing teacher compensation has a positive impact on teacher retention rates.

Previous findings indicated positive results when a variety of strategies were used to increase teacher retention rates, but they were not sustained (Darling-Hammond, 2010; Kraft et.al., 2015; Moore-Johnson, 2015). One strategy identified as being necessary to increase teacher retention was the use of extended induction and mentoring programs that provide continuous support, professional development opportunities, peer mentors, and assistance with developing instructional strategies that will help with increasing student achievement. A component of the induction and mentoring program should be provision by the administration of support, training, and an environment conducive to collaboration amongst colleagues (Sass et al., 2011). A positive and supportive administration has been shown to make a difference for staff, students, and parents.

Another approach that has been shown to increase teacher retention rates is identification of incentives that increase a teacher's desire to remain in a position or in the profession (Springer et al., 2016). Incentives have come in a wide variety of forms, including salary increases, student loan forgiveness, housing incentives, travel expenditures, increasing the availability of

instructional materials, and providing the opportunity to seek further education. The location of a school, as well as its culture and climate, leadership, community involvement, and resources provided to teachers, are among the many factors that have been shown to contribute to a decrease in teacher-retention rates (G. Hughes, 2012).

The existing literature supported the need for further research on the issue of teacher retention in low-performing schools with at-risk populations. The literature indicated that there was no quick fix for teacher retention and that further work was necessary to identify the factors involved. My goal with this study was to investigate the importance of three variables that could be factors in teacher retention.

Chapter 3: Methodology

I investigated teacher retention in low-performing schools with high-minority at-risk populations in a Florida school district. High-poverty public schools have been losing approximately 20% of their teachers each year because teachers have been leaving to work in schools with less stressful conditions (Moore-Johnson, 2015). The literature review in Chapter 2 indicated possible interventions to assist with increasing teacher retention rates in schools with at-risk populations. These included induction and mentoring programs (Chan, 2014), incentives (Steele et al., 2009), and ongoing support by school-building leaders (Ryu & Lee, 2013). Sass et al. (2011) noted these variables as worthy of additional exploration and they formed the subject of my study.

In this chapter I present my research questions and hypotheses and describe the methods used to answer the research questions, including the instruments used, the way the sample was chosen, and the procedures used to collect and analyze the data. I also examine the expected findings, possible limitations, and ethical concerns.

Purpose of the Study

School administrators have been challenged when recruiting and retaining new and experienced teachers; this has made it difficult to staff classrooms with competent educators (Sass et al., 2011). In formulating the conceptual framework for this study, I drew on the theory of Herzberg (1959), who stated that “the factors which motivate people at work are different to and not simply the opposite of the factors which cause job dissatisfaction” (p. 6). The factors Herzberg discussed were working conditions, relationships with staff and supervisors, salary, and the work itself. All the topics within Herzberg’s theory relate to this study. My conceptual framework also drew from my personal experiences within the field of education, all of which

took place in low-performing schools with high-minority at-risk populations. My desire to study these issues has been increased by the many opportunities that I have had to observe them first hand. The variables associated with teacher retention in diverse contexts need to be identified because rising turnover rates have been shown to have far-reaching implications for education (Sass et al., 2011). Although the problem of teacher retention has been studied for many years, the problem has not been solved (Darling-Hammond, 2010). Classrooms are filled with students in need of the best education they can receive to prepare them to become productive members of society. One of the main factors influencing this is whether classrooms are staffed with well-prepared teachers who are committed to the education of students (Gawlik et al., 2012).

The purpose of this study was to determine whether a relationship existed between teacher induction and mentoring programs, retention incentives, and low-socioeconomic high-minority populations and teacher retention in low-performing schools with high-minority at-risk populations. The goal was to identify variables capable of influencing the retention rates of teachers in low-performing schools with high-minority at-risk populations so as to facilitate the creation of strategies to improve teacher retention rates.

This study extended existing research on teacher retention rates in low-performing schools with high-minority at-risk populations (Bowles & Arnup, 2016; Goldhaber & Cowan, 2014; G. Hughes, 2012; Simon & Moore-Johnson, 2015).

Research Questions

The overarching research question for this study was: What factors play a role in teacher retention rates in low-performing schools with high-minority at-risk populations? The following are the sub-questions used to guide the study.

1. What is the association between teacher induction and mentoring programs and teacher retention rates in low-performing public schools with high minority at-risk populations?
2. What incentives promote teacher retention rates in low-performing schools with high-minority at-risk populations?
3. What is the relationship between the socio-economic status of a high-minority at-risk school community and the retention rates of teachers in low-performing high-minority at-risk schools?

Hypotheses

Based on the research questions I formulated hypotheses, as follows.

H1₀: There is no association between teacher induction and mentoring programs and the retention rates of teachers in low-performing schools with high-minority at-risk populations.

H1₁: There is an association between teacher induction and mentoring programs and the retention rates of teachers in low-performing schools with high-minority at-risk populations.

H2₀: There is no association between teacher incentives and teacher retention rates of low-performing schools with high-minority at-risk populations.

H2₁: There is an association between teacher incentives and teacher retention rates of low-performing schools with high-minority at-risk populations.

H3₀: There is no association between teachers working in low-socioeconomic-identified schools and the teacher retention rate.

H3₁: There is an association between teachers working in low socio-economic-identified schools and the teacher retention rate.

Research Design

Quantitative research explains relationships among variables, a key element in research (Creswell, 2012). My goal was to remain objective and to obtain as many participants as possible to accrue an abundance of data that would assist with reducing the gaps found in previous research. Using an electronic survey allowed me to reach more potential participants than if I had gone to each of the schools in the district to survey teachers in person. When teachers are in the school building, it is challenging to gather them in one room except for a staff meeting after school. The electronic survey was a simpler and more streamlined method to gather data.

Quantitative methods emphasize objective measurements and the statistical analysis necessary to process numerical data collected from surveys, polls, or questionnaires and generalize it across a group of people (Creswell, 2003). The quantitative method used in this study was a correlational design using descriptive and inferential statistics. Bowles and Arnup (2016) in a quantitative study on resilience and teacher job satisfaction, used an electronic survey to collect responses, which included demographic information as well as questions pertaining to their teaching experiences. Bowles and Arnup sought correlations between resilience and job satisfaction and the relationship of these variables with teacher attrition. Using a correlational design for this research gave me the opportunity to determine whether there was a relationship between different variables without manipulation of the participants (Creswell, 2012). Hughes, Matt, and O'Reilly (2015) also used a nonexperimental correlational design for their research to establish relationships between the supports provided by administrators, perceptions of the support, and teacher retention.

This study is based on the issue of teacher retention in low-performing schools with high-minority at-risk populations because a noted trend in teacher attrition in one Florida school district was discovered. In this study, four variables were analyzed to address the research questions and hypotheses. The four variables were: teacher retention, induction and mentoring programs, teacher incentives, and the low-socioeconomic-status and high-minority population. The goal was to seek relevant true statements that could explain, or at least describe, the observed teacher attrition (Creswell, 2003).

Target Population

The population originally targeted for this research was the entire instructional staff from the selected school district in Florida. The district denied the request for access to their contact data after having previously agreed to the study, therefore I reached out to the teacher's union in the same district. The teacher's union accepted the request and provided access to all the instructional staff who were members of the union. Being limited to a subset of the original target population, it was important to choose a sample that was highly representative of the original population so that I could draw valid inferences about it. This population consisted of 1,359 certified elementary, middle, and high school teachers of a Florida school district who were union members.

Sampling Method

I performed a power analysis in the initial phases of planning to ensure that I used an appropriate sample size and to anticipate the likelihood that the study would measure a significant effect (Concordia University, 2017). The larger the effect size used in the power analysis, the larger the sample size would need to be; the more liberal the criterion required for significance (α), the higher the expectation would be that the study would yield a statistically

significant effect (Concordia University, 2017). The goal of the power analysis was to find an appropriate balance among these factors by considering the goals of the study and the resources available to me (Knapp, 2017). The parameters of a power analysis are an estimate of the effect size (population being surveyed), an average of the variability (standard deviation), the level of significance (standard convention is $\alpha = .05$), and statistical power (the acceptable rate of false negatives, generally set at 80%). I used G*Power (Faul, Erdfelder, Buchner, & Lang, 2009) to perform the power analysis. The result of this power analysis indicated that I needed at least 25% of the 1,359 invited participants to complete and submit the survey, that is 340 respondents.

Instrumentation

After extensive investigation and analysis of previously developed surveys, I obtained permission from Giacometti (2005) to use her published survey, Factors Affecting Job Satisfaction and Teacher Retention for Beginning Teachers (see Appendix C and Appendix D). I slightly modified the survey instrument. Giacometti developed the survey to add to the existing national information on the factors related to teacher job satisfaction and teacher retention. The survey included the constructs of incentives and induction or mentoring programs, both of which I was interested in. Giacometti's work related closely to the subject of this dissertation, which is why I selected her survey instrument. I used the survey in its original format except for statements 2, 3, 21, 24, 25, and 27. These statements were modified as shown in Table 1 to maintain consistency with the positive construction of the entire survey.

The survey used a 4-point Likert-type scale to obtain ordinal data. The points on the scale were: 4 (Strongly agree), 3 (Agree), 2 (Disagree), and 1 (Strongly disagree). While Likert used a 5-point scale, other variations of the response alternatives are appropriate, including a variation without a neutral response (Clason & Dormody, 1994). The 4-point Likert-type scale

was used instead of a 5-point scale to encourage a specific response from respondents by eliminating the undecided option. The original survey instrument developed by Giacometti (2005) also used a 4-point scale, so this choice helped to maintain the survey's validity. The modifications to the survey were to frame all the statements positively rather than negatively so as not to confuse respondents. The original survey statements were not altered to the point of obtaining invalid or inaccurate data compared to the original survey.

Table 1

Original and Modified Wording of Survey Statements

Number	Original	Modified
2	The mentoring program for new teachers was not long enough.	The mentoring program for new teachers was long enough.
3	The social issues that my students face shocked me.	The social issues that my students face did not shock me.
21	Behavior management was addressed in very few of my teacher education classes.	Behavior management was addressed in several of my teacher education classes.
24	I feel burned out by the end of September.	I do not feel burned out by the end of the first month of school.
25	My job is too frustrating for me.	My job is not frustrating for me.
27	The stress on my job reduces my confidence as a teacher.	The stress on my job does not reduce my confidence as a teacher.

The final survey (see Appendix B) consisted of two sections. The first section contained 13 questions pertaining to the participant's demographics: gender, age, years of teaching experience, race and ethnicity, teaching assignment, birthplace (United states or elsewhere), route to teaching (traditional 4- or 5-year teacher-preparation program or alternative certification program), and location of school district (rural, suburban, or urban). The schools within the sampled district were spread out across a wide geographic area that consisted of rural, suburban,

and urban areas. The areas had diverse demographic populations, therefore sampling included teachers working with different populations of students, which I desired.

The second section of the survey had 30 closed-ended statements using the 4-point Likert-type scale and pertaining to satisfaction with salary, incentives, induction programs, mentoring, position stressors, professional development, student support, school and community population, and school climate. The 30 statements were designed to collect data that would identify connections to the variables measured by the survey. Using closed-ended questions eliminated the opportunity for the researcher or respondents to interject beliefs or feelings within the results (Hughes, 2012).

Data Collection

The data source for this research study was a public-school district in Florida. I obtained permission from the teacher's union in the district to send the survey information out to K–12 teachers who were members of the union via their home email addresses. I invited all K–12 teachers in the school district who were members of the union, except the teachers who worked in my school building, to participate in an electronic survey. The teachers who worked under my supervision did not receive the survey to eliminate potential conflicts of interest and bias. I emailed teachers an introduction, purpose, and directions for the survey (see Appendix A). The directions explained that when they clicked on the survey link provided in the email, they were giving me consent to use the data from the survey in my research. I informed all participants of their rights as human subjects involved in a study, informed them that their participation would be anonymous, and reassured them that their right to privacy would be maintained. A link to the survey (Appendix B) was provided in the email message. The survey was generated and administered using Qualtrics survey software (<http://cuportland.qualtrics.com/>). I sent a follow-

up email to all participants after two weeks to increase participation. That email included a reminder to those who had already submitted their survey not to submit it again. Once the data was collected in Qualtrics it was exported to a Microsoft Excel spreadsheet and then imported into SPSS (version 25).

Operationalization of Variables

The dependent variable in this study was the retention rate of teachers in low-performing schools with high-minority at-risk populations. The independent variables were induction and mentoring, incentives, and socioeconomic status. The survey items were rated using a 4-point Likert-type scale ranging from 1 for strongly disagree to 4 for strongly agree. To encourage all participants to respond to each item there was no neutral option.

Prior to analyzing the data, two of the variables were divided into domains because they were too broad. Narrowing the variables assisted with analyzing specific areas in more depth. The induction and mentoring variables were divided into the domains of support and design, and the incentives variable were divided into the domains of finance and support (Table 2). The socioeconomic status of a school's population and the desire for a teacher to leave their present teaching position statements provided the data to address the third hypothesis.

The population studied with the original version of the survey included only teachers in the first three years of service. This was unlike the population that I studied, which included teachers across the career spectrum. The district being analyzed in this study has had a retention issue with teachers across the continuum so collecting data from the entire spectrum may provide information that could assist with improving the retention situation. Because of the difference in the populations, Cronbach's α was used to assess the reliability of the domains used in the first two hypotheses. Using Cronbach's α increased confidence in the reliability of the instrument by

testing the internal consistency of the statements within each domain (Lance, Butts, & Michels, 2006). This helped to maintain the construct validity (Creswell, 2012). Table 2 identifies each domain and variable then provides the conceptual and operational definition of each domain. These methods were like those used by Giacometti (2005), the original author of the survey.

Table 2

Domain and Variable Identification with Conceptual and Operational Definitions

Domain or variable	Conceptual definition	Operational definition	
		Items	Wordings
Incentives			
Financial	Financial incentives are monetary inducements used to motivate an individual to work within a school district.	14 ^a	My salary adequately meets my needs.
		17 ^a	The salary for teachers in my geographical area is comparable to the salaries of other people with the same level of education.
		20 ^a	The district included a lot of “perks,” such as relocation costs and financial incentives in their recruiting process.
		25 ^a	The district provides a lucrative retirement package.
Professional Development and Support	Learning opportunities and support provided to teachers with the goal of enhancing their professional practices.	18 ^a	As part of the professional development plan for new teachers, I am given the opportunity to observe and seek advice from experienced teachers.
		19 ^a	The district stresses professional development as a way of increasing the skill level of teachers.
Induction and Mentoring			
Design	The design of the mentoring and/or induction program is the development of a plan with the intent of the design being productive or successful.	15 ^a	The mentoring program for new teachers was long enough.
		36 ^a	An induction program held before the start of the school year has helped me prepare for the classroom on the first day of school.
		21 ^a	The mentoring program in the district has been a useful program as it gave me the opportunity to discuss problems with an experienced teacher.
Support	Support is assistance provided during a mentoring and/or induction program.	41 ^a	Administration provide the support needed to ensure all teachers can be successful in their positions.
		43 ^a	The mentor assigned to me was very supportive and helpful.
Population socioeconomic status	Individual works within a large minority population with students who need ongoing interventions to achieve academically	7 ^b	Do you work in a school with a high-minority at-risk population? (Large minority population with students who need ongoing interventions to achieve academically.)
Teacher retention rate	The rate at which a teacher stays in a position or is retained within a school system.	8 ^b	Are you considering leaving your present position at the end of the school year due to job dissatisfaction?

^aRespondent selected 1, 2, 3, or 4 for the item.^bRespondent selected yes or no for the item.

Statements 1, 4, 7, and 12 were grouped to represent the financial incentives that the district provided its teachers. Statements 5 and 6 were grouped to represent the professional development and support domain within the incentives variable and focused on collaboration with experienced teachers and increasing the skill level of instructional staff. Table 3 shows the questions and how they were grouped to measure the incentives variable.

Table 3

Survey Statements for the Incentives Variable by Domain

Domain	Statements
Financial	<p>1. My salary adequately meets my needs.</p> <p>4. The salary for teachers in my geographical area is comparable to the salaries of other people with the same level of education.</p> <p>7. The district included a lot of “perks,” such as relocation costs and financial incentives in their recruiting process.</p> <p>12. The district provides a lucrative retirement package.</p>
Professional Development and Support	<p>5. As part of the professional development plan for new teachers, I am given the opportunity to observe and seek advice from experienced teachers.</p> <p>6. The district stresses professional development as a way of increasing the skill level of teachers.</p>

Statements 2, 8, and 23 were clustered to help determine the associations to the induction and mentoring variable in the design domain. Statements 10, 28 and 30 were grouped within the support domain of the induction and mentoring variable. Table 4 shows the questions and how they were grouped to measure the induction and mentoring variable.

Table 4

Survey Statements for the Induction and Mentoring Variable by Domain

Domain	Statements
Design	<p>2. The mentoring program for new teachers was long enough.</p> <p>8. The mentoring program in the district has been a useful program as it gave me the opportunity to discuss problems with an experienced teacher.</p> <p>23. An induction program held before the start of the school year has helped me prepare for the classroom on the first day of school.</p>
Support	<p>10. Administrators ensure that new teachers are not overwhelmed in their new assignments.</p> <p>28. Administration provide the support needed to ensure all teachers can be successful in their positions.</p> <p>30. The mentor assigned to me was very supportive and helpful.</p>

The survey addressed the third hypothesis with two questions in the demographic section that required yes or no responses. The first was, “Do you work in a school with a high-minority at-risk population? (Large minority population with students who need ongoing interventions to achieve academically.),” and the second was, “Are you considering leaving your present position at the end of the school year due to job dissatisfaction?” The first of these questions was intended to identify socioeconomic status and difficulties within an at-risk school population, such as working with struggling populations. The second of these questions was intended to uncover whether a teacher was thinking about leaving their position, which in turn influences teacher retention rates.

Statements that were not identified within a domain were not used to test the hypotheses. If analyzed, they might provide a better understanding of the climate and culture within the schools and district. The climate and culture of a school or district can have a significant impact

on the way high-minority at-risk populations achieve success (Bowles & Arnup, 2016). These statements could assist with identifying supportive environments, confidence levels of teachers, levels of teacher preparedness, and the perceptions teachers have of their working environments. Since the statements were not part of the hypotheses, they were not explored.

Data Analysis

Responses on the 4-point Likert-type scale were coded as ordinal data. Point-biserial correlation was used to test the first hypothesis, Kendall's τ_B correlation to test the second hypothesis, and a χ^2 test for association to test the third hypothesis (Laerd Statistics, 2016a, 2016b, 2017). A larger sample size was used to increase the power which allowed for a smaller error in the study design and a potentially stronger statistical effect (Adams & Lawrence, 2015).

Limitations and Delimitations of the Research Design

The major limitation of this research design was the survey tool. Self-reporting instruments are easy to use and allow flexibility in the items included on the survey, with respondents asked to rate items using a scale, generally from strongly agree to strongly disagree (Kormos & Gifford, 2014). Using explicit terms instead of ambiguous terms to describe frequency of events helped to minimize this limitation.

The large size of the population participating in the survey may have been a delimitation because the larger the sample size, the higher the expectation that the study would yield a statistically significant effect (Knapp, 2017). The study was delimited to K–12 teachers in public schools within an identified school district in Florida. Teachers employed by the district participated in a 3-year induction and mentoring program.

There were potential limitations within this study. Lack of participation would have presented a limitation. Power analysis established that at least 25% of the 1,359 invitees needed to participate to provide enough data to establish significant results. Some participants, especially those new to the district, may not have had enough time in their present positions to provide appropriate responses to the questions. Also, access was not provided for the entire instructional population in the identified school district. Due to not having access to the entire instructional staff population, the demographic data, in its entirety, was not available.

Internal and External Validity

Internal validity, or the degree to which study results are true and can be attributed to the variables measured, is an important consideration in quantitative research (Creswell, 2012). It is relevant in studies that try to establish a causal relationship and is not relevant in most observational or descriptive studies (Creswell, 2012).

If unintentional sampling bias occurred, then participants with certain characteristics would be more (or less) likely to be selected. Such bias would corrupt the external validity of the findings (Knapp, 2017). Selection bias may affect outcomes, but because all instructional staff who were members of the teacher's union were invited to participate, selection bias was not a consideration. My study did not have a pretest and a posttest, so the internal validity was maintained (Knapp, 2017). Participation was voluntary and completely anonymous. The survey tool used in this research was previously published by Dr. Karen Giacometti (2005). Using a previously published survey increased the validity of the analysis tool. Some survey items were slightly altered from the original survey with all being tested for reliability and validity. Altering questions from the survey can be considered a threat and could possibly affect the validity of the survey tool. A controlled or experimental design enables a researcher to control for threats to

internal and external validity (Michael, 2017). Threats to internal validity can compromise the level of confidence when asserting that a relationship exists between the independent and dependent variables (Michael, 2017).

The previously published survey was also analyzed with Cronbach's α to ensure the analysis tool would provide validity for the study when questions were assigned to specific domains. Cronbach's α ranges from 0 to 1.0, with .70 generally agreed as the cutoff above which consistency is acceptable (Bland & Altman, 1997; Lance et al., 2006). Cronbach's α was .71 and .94 for the first hypothesis domains. Cronbach's α was .88 and .80 for the second hypothesis domains. The results established validity and reliability of the survey tool used for this study.

Because 30% of the 1,359 invited members of the population responded, I collected data from a representative sample to facilitate external validity, meaning that what was discovered about the sample could viably be generalized to the population from which the sample was drawn (Knapp, 2017). Threats to external validity could possibly compromise the level of confidence when stating whether the study's results were applicable to other groups (Michael, 2017).

Expected Findings

I hypothesized that there would be a relationship between induction and mentoring programs and teacher retention rates in low-performing public schools with high-minority at-risk populations. Teachers who have received ongoing support, mentoring, professional development, and opportunities to learn from their peers have tended to have good experiences and wanted to continue growing in the teaching profession (Callahan, 2016). New teachers who

took an interest in their school community with the support of their mentoring team developed a sense of ownership and wanted to stay in the profession (Kane & Francis, 2013).

When school districts have offered incentives to work in low-performing schools which have struggled year after year, there have been individuals who have stayed at a school or tried to obtain a position at a school for the money (Springer et al., 2016). Incentives have not always been in the form of cash. Incentives have also been extended over a longer period and have assisted educators with student loans, housing, and increased salary. I therefore also predicted that when an incentive package was developed and implemented, the retention rates would improve in low-performing schools with high-minority at-risk populations (Springer et al., 2016).

Underachieving and high-needs schools have experienced a high rate of new teacher turnover which can cause at-risk students to receive their instruction from less qualified teachers (Ingersoll, 2012). NCES (2014) reported that the teacher turnover rate was 22% higher in schools identified with low socioeconomic statuses, compared to 13% in schools identified with higher socioeconomic statuses. I predicted that the socioeconomic status of an at-risk school would influence the retention rate of schools if members of the instructional staff were not provided with the support and professional development they needed.

Ethics

This quantitative study posed limited risk of researcher bias and no risk to participants. The results of the study added to the body of research pertaining to teacher retention rates in low-performing schools with high-minority at-risk populations. When the survey was distributed by email to the participants, it came with a clear description of the research and an assurance that all participants' identities would be kept anonymous throughout the research process. The email

also informed participants that no deception would take place before, during, or after their participation in the study. By clicking on the survey link at the end of the information letter, participants gave me consent to use the data obtained from the survey, and participants were informed of this fact. At no time did I instill my personal beliefs into the research findings and at no time was any financial gain obtained from the information obtained through the research. All participants were informed that the data obtained from the research would be maintained for three years on a password-protected computer hard drive. After the three years, the data would be deleted from the hard drive.

Summary

In summary, the purpose of this quantitative research study was to examine the variables that play a role in the retention of teachers in low-performing schools with high-minority at-risk populations within a school district in Florida. A correlational design analysis was used to identify the associations between the variables. The data was collected using an online survey sent to 1,359 teachers via email. Qualtrics survey software (<http://cuportland.qualtrics.com>) was used to collect and disseminate the survey data. The responses were then analyzed with SPSS (version 25).

Chapter 4: Data Analysis and Results

The purpose of this quantitative correlational study was to examine relationships between teacher retention rates and teacher induction and mentoring programs, incentives, and low-socioeconomic status of the school population in low-performing schools with high-minority at-risk populations. The study was delimited to a single K–12 public school district in Florida. The reason for this delimitation was that this district had a growing diverse population of students from low-income families in both urban and rural contexts and all teachers employed by this district participated in an induction and mentoring program for their first three years of service. While demographic changes were occurring in this district, the teacher retention rates had continued to track lower than the rates for the state (Florida Department of Education, Education Information and Accountability Services, 2013).

Table 2 and In the public domain.

Table 3 show the average retention rates of each cohort group of first-year teachers for Florida and the analyzed school district, respectively. The district cohort retained 78% of teachers after the first year in 2011–2012, compared to 85% for the state. The percentages for both the state and the district steadily declined with each passing year, for those years for which data are available (Florida Department of Education, Education Information & Accountability Services, 2013). The

identified school district and the state of Florida have experienced a continuous increase in the numbers of minority students. From fall 1981 to fall 2011, the minority population of Florida rose from 3,720 (26.5%) to 26,260 (60.8%), a growth of 34.3% (Florida Department of Education, 2018). Following that same trend, the minority population of the analyzed school district increased by 600.6% from 1983 to 2013 (Florida Department of Education, 2013).

Table 2

First-Year Instructional Staff Retention Rates for the state of Florida, 2002–2003 to 2011–2012

Cohort	% retained after year									
	1	2	3	4	5	6	7	8	9	10
2011–2012	85									
2010–2011	79	73								
2009–2010	85	75	71							
2008–2009	81	74	68	65						
2007–2008	79	71	66	62	59					
2006–2007	81	72	65	64	60	58				
2005–2006	78	72	65	63	61	57	54			
2004–2005	81	71	65	62	59	58	54	52		
2003–2004	83	74	66	63	60	58	57	54	52	
2002–2003	82	74	66	62	60	58	56	55	53	51

Note. From *Retention of First-Year Instructional Staff* (p.2), by Florida Department of Education, Education Information and Accountability Services, 2013, Tallahassee, FL: FLDOE. In the public domain.

Table 3

First-Year Instructional Staff Retention Rates for the School District, 2002–2003 to 2011–2012

Cohort	n	% retained after year									
		1	2	3	4	5	6	7	8	9	10
2011–2012	252	78 ^a									
2010–2011	220	71 ^a	59 ^a								
2009–2010	114	72 ^a	60 ^a	46 ^a							
2008–2009	104	83	72 ^a	64 ^a	66						
2007–2008	196	72 ^a	67 ^a	58 ^a	52 ^a	45 ^a					
2006–2007	255	71 ^a	66 ^a	57 ^a	53 ^a	47 ^a	42 ^a				
2005–2006	183	73 ^a	60 ^a	51 ^a	51 ^a	49 ^a	44 ^a	44 ^a			
2004–2005	9	—	67 ^a	11 ^a	56 ^a	44 ^a	44 ^a	—	—		
2003–2004	21	33 ^a	33 ^a	52 ^a	33 ^a	48 ^a	43 ^a	43 ^a	24 ^a	19 ^a	
2002–2003	6	83	—	50 ^a	50 ^a	50 ^a	33 ^a	33 ^a	33 ^a	—	—

Note. Dashes indicate that none of the original cohort was reported for the district in that year. From *Retention of First-Year Instructional Staff* (p. 3), by Florida Department of Education, Education Information and Accountability Services, 2013, Tallahassee, FL: FLDOE. In the public domain.

^aLower than the state's average.

As Table 4 shows, the trend continued in the identified district from 2013 to 2018, with the district maintaining a higher rate of minority enrollment compared to the state (Florida Department of Education, 2018). These data represent a continuous growth trend in the minority population of the analyzed school district as compared to Florida as a whole (Florida Department of Education, 2018).

Table 4

Minority Enrollment Rate for State and Identified District, 2013–2014 to 2017–2018

Year	District		State	
	<i>n</i>	%	<i>n</i>	%
2017–2018	31,014	66.2	1,755,211	62.0
2016–2017	30,367	65.4	1,727,386	61.3
2015–2016	29,604	64.4	1,689,670	60.5
2014–2015	28,744	63.5	1,648,234	59.8
2013–2014	26,203	59.0	1,438,085	52.8

Note. From *Total Minority Enrollment/Membership by District* (p. 1), by Florida Department of Education, 2018, Tallahassee, FL: FLDOE. In the public domain.

In this chapter I present a detailed description of the sample and the results of my analysis of the data.

Description of the Sample

For this study, I employed a convenience sampling method because of the relevance and readily accessibility of participants (Knapp, 2017). The selected district seemed ideal because of its diverse student population and its population of certified K–12 teachers. The district had a third of its schools being identified as Title I. All the levels of education, elementary, middle, and high school, have schools that are identified as Title I. The average proportion of economically disadvantaged students within the Title I schools was above 80%, with more than

80% of students identified as minority. Demographic information for the district's student population is represented in Table 5.

Table 5

Demographics of School District's Student Population (N = 47,546)

Category	<i>n</i>	%
Gender		
Male	24,426	51.4
Female	23,119	48.6
Economically needy	32,313	68.0
LY	7,582	16.0
Migrant	3,248	6.8
Race/ethnicity		
Hispanic	24,079	50.6
White	16,013	33.7
Black	5,524	11.6
Native American	232	0.5
Asian	710	1.5
Multiracial	977	2.1
Home language		
English	21,991	46.3
Spanish	19,984	42.0
Haitian Creole	3,434	7.2
Other	2,136	4.5

Note. LY = limited English proficient and enrolled in classes specifically designed for such students.

Of the 1,359 targeted respondents to whom the web-based survey was emailed, 401 (30%) responded to the study survey, exceeding the 25% response rate required by the power analysis. Table 6 shows the demographics of the respondents.

Table 6

Demographic Descriptive Statistics of Sample (N = 401) and District Population (N = 3,160)

Category	Sample		District	
	<i>n</i>	%	<i>n</i>	%
Gender				
Female	346	86.3	2,426	76.7
Male	55	13.7	734	23.2
Age				
20–29 years	51	12.7		
30–39 years	74	18.4		
≥ 40 years	276	68.8		
Race or ethnicity				
Hispanic or Latino	48	12.0	451	14.2
White or Caucasian	313	78.1	2,523	79.8
Black or African American	18	4.5	114	3.6
Asian	0	0.0	27	0.9
American Indian or Alaskan Native	3	0.7	7	0.2
Native Hawaiian or Pacific Islander	3	0.7	4	0.1
Two or more	16	4.0	34	1.1
Born				
Inside United States	361	90.0		
Outside United States	40	10.0		
Teacher Education Program				
Traditional (4–5 years)	307	76.6		
Alternative certification	94	23.4		
Level of Education				
Associate degree	2	0.5		
Bachelor's degree	175	43.6		
Master's degree	210	52.4		
Doctoral degree	14	3.5		

Summary of the Results

I used correlational analysis to analyze associations between financial and professional development incentives, design and support of the mentoring program, high-minority and socioeconomic status of a population, and the teacher retention rate.

Validity

I did not manipulate any variables in this correlational study because there was no experimental or treatment condition (Boucaud, 2017). The study design did not permit inferences regarding causality, so most threats to internal validity were not applicable (Boucaud, 2017). Factors that can affect internal validity are multiple treatment interference, pretest treatment interaction, selection treatment interaction, and specificity of variables (Johnson & Christensen, 2007). To address issues of instrument validity, a pre-existing instrument published by Dr. Karen Giacometti (2005) was used to obtain the needed information. Cronbach's α was used to analyze the questions that were placed within specific domains to ensure the validity of the survey tool would be maintained (Bland & Altman, 1997; Lance et al., 2006).

There was still a threat to internal validity because I slightly modified a few of the questions. Modifications were made to frame all the of questions positively, in the hope of attracting participation from the respondents. The original statements were not altered to the point of obtaining invalid or inaccurate data compared to the original survey. Another factor that may could have threatened survey validity was the population of teachers surveyed: The original survey focused on novice educators, but participants in this study were from across the career continuum. Each of the three hypotheses of this study were linked to specific statements in the survey and placed into one of the following domains: (a) induction and mentoring support, (b) induction and mentoring design, (c) financial incentives, (d) supportive incentives, and (e)

socioeconomic status of a school's population or a teacher's desire to leave their present position (see **Error! Reference source not found.**).

Cronbach's α was used to assess the reliability of the domains used in the first two hypotheses because the studied population included teachers across the career spectrum, unlike the population from the original study (Giacometti, 2005), which included only teachers in the first 3 years of service. Cronbach's α ranges from 0 to 1.0, with .70 generally agreed as the cutoff above which consistency is acceptable (Bland & Altman, 1997; Lance et al., 2006). The results of this assessment for each hypothesis are shown below.

H10. There is no association between teacher induction and mentoring programs and the retention rates of teachers in low-performing schools with high-minority at-risk populations. Teacher induction and mentoring was measured by the domains of (a) induction and mentoring design and (b) induction and mentoring support.

Induction and mentoring design domain. The scale items for this domain were:

- The mentoring program for new teachers was long enough.
- An induction program held before the start of the school year has helped me prepare for the classroom on the first day of school.
- The mentoring program in the district has been a useful program as it gave me the opportunity to discuss problems with an experienced teacher.

Cronbach's α was .71.

Induction and mentoring support domain. The scale items for this domain were:

- Administration provides the support needed to ensure all teachers can be successful in their positions.
- The mentor assigned to me was very supportive and helpful.

Cronbach's α was .94.

H2₀. There is no association between teacher incentives and teacher retention rates of low-performing schools with high-minority at-risk populations. Teacher incentives were measured by the domains of (a) financial incentives and (b) professional development incentives.

Financial teacher incentives financial domain. The scale items for this domain were:

- My salary adequately meets my needs
- The salary for teachers in my geographical area is comparable to the salaries of other people with the same level of education
- The district included a lot of perks such as relocation costs and financial incentives in their recruiting process
- The district provides a lucrative retirement package.

Cronbach's α was .88.

Professional development teacher incentives domain. The scale items for this domain were:

- As part of the professional development plan for new teachers, I am given the opportunity to observe and seek advice from experienced teachers.
- The district stresses professional development as a way of increasing the skill level of teachers.

Cronbach's α was .80.

The third hypothesis did not have to be assessed for validity but is provided for identification purposes.

H3₀. There is no association between teachers working in low-socioeconomic-identified schools and the teacher retention rate.

This hypothesis had two nominal variables (with values yes or no). The scale items were:

- Do you work at a school with a high minority at-risk population?
- Are you planning on staying or leaving?

External validity. Many factors can jeopardize external validity, which is the extent to which the results are generalizable (Johnson & Christensen, 2007). A factor that could possibly affect external validity in this study was the population. The sample was drawn from the 1,359 teachers who were members of the teacher's union, not the entire 3,160 teachers who worked within the school district. If all 3,160 teachers had been invited to participate in the survey, there would have been more participants and consequently more data collected that would have represented all the school populations within the identified school district. The increased volume of data may or may not have supported the findings in this study.

Limitations. A limitation of this study was the inability to access the entire population in the school district. A request was submitted to the school district asking for access to all of the instructional staff members of a school district, but the school district denied the request. A request was then submitted to the school district's teacher's union, which approved and provided access to their 1,359 members who worked in the school district. This limitation decreased the amount of obtained data which could have altered the outcome of the results. Another limitation was the inability to access the school district's demographic data in its entirety. Access for some information from the district's website was useful but limited. Having access to information for all areas that could have been beneficial to establish how representative the sample was.

Some participants, especially those new to the district, may not have had enough time in their present positions to appropriately evaluate and respond to the questions. This represents another limitation.

Reliability

Using Cronbach's α also assessed the reliability by testing the internal consistency of the statements within each domain. As shown in the Validity section above, the Cronbach's α values for the measured domains were all over .70, the cutoff above which internal consistency is generally considered to be acceptable (Lance et al., 2006).

Detailed Analysis

Table 7 summarizes the responses corresponding to several variables studied. The results showed that 30.2% of respondents were considering leaving their present position at the end of the school year due to job dissatisfaction.

Research Question 1. What is the association between teacher induction and mentoring programs and teacher retention rates in low-performing public schools with high minority at-risk populations?

The null hypothesis for this research question was H_{10} , that there is no relationship between teacher induction and mentoring programs and the retention rates of teachers in low-performing schools with high-minority at-risk populations.

The first research question and related hypotheses sought associations between induction and mentoring and teacher retention. This I tested the hypothesis across two different domains of induction and mentoring, support and design, to account for the distinct characteristics of induction and mentoring across the entire sample ($N = 401$) with over half of this sample working at schools with high-minority populations ($n = 245$).

A point biserial correlation analysis was performed to measure the relationship between the two variables of induction and mentoring support and teacher retention, because the variables

met the necessary assumptions of normality (Figure 1 and Figure 2) and homogeneity of variance (Table 8) with no observed outliers (Knapp, 2017).

Table 7

Teacher Service Profile Descriptive Statistics for Sample (N = 401) and District (N = 3,160)

Category	Sample		District	
	<i>n</i>	%	<i>n</i>	%
Time in teaching profession				
1-5 years	63	15.7	-	-
6-10 years	63	15.7	-	-
> 10 years	262	65.3	-	-
Time in present position				
1–5 years	215	53.6	-	-
6–10 years	72	18.0	-	-
> 10 years	114	28.4	-	-
Teaching Assignment				
Elementary (kindergarten to Grade 5)	223	55.6	1,320	41.8
Middle (Grades 6–8)	84	20.9		
High (Grades 9–12)	85	21.2	946	30.0
Multiple levels	9	2.2	894	28.3
School grade D or F				
Yes	129	32.2	-	-
No	272	67.8	-	-
High-minority at-risk population				
Yes	245	61.1	-	-
No	156	38.9	-	-
Considering leaving present position				
Yes	121	30.2	-	-
No	280	69.8	-	-
School setting				
Rural	97	24.2	-	-
Suburban	140	34.9	-	-

Category	Sample		District	
	<i>n</i>	%	<i>n</i>	%
Urban	164	40.9		

^aAs of 2017–2018.

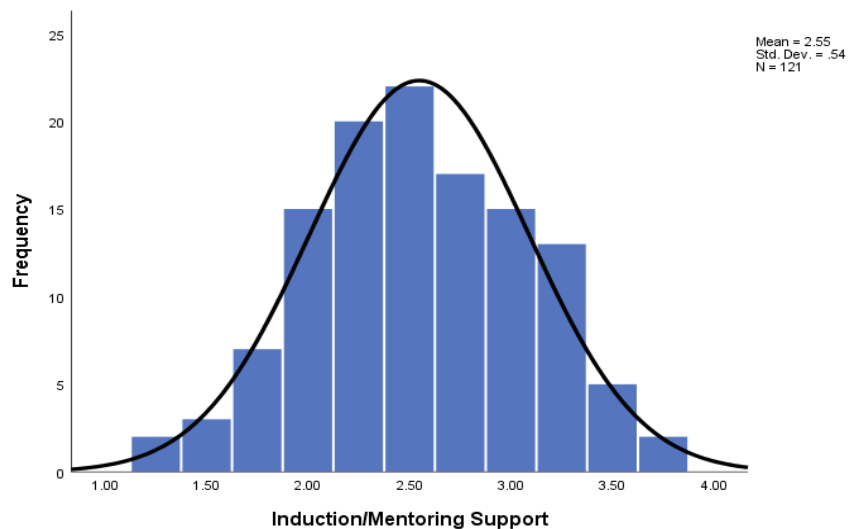


Figure 1. Normal distribution histogram for mentoring support (leavers).

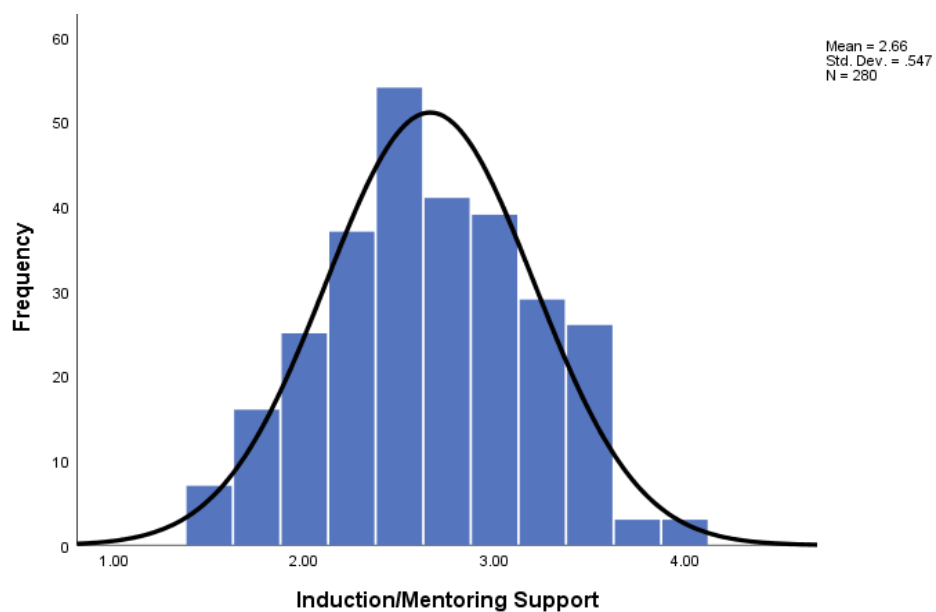


Figure 2. Normal distribution histogram for mentoring support (stayers).

The point biserial correlation was selected instead of Pearson's r because there was one nominal variable and one continuous variable involved, and Pearson's r is appropriate only for two continuous variables (Cohen, 2013; Howell, 2010; Laerd Statistics, 2017).

Table 8

Test of Homogeneity of Variances for Induction and Mentoring Support

Based on	Levene statistic	df_1	df_2	p
Mean	.130	1	399.0	.719
Median	.267	1	399.0	.605
Median with adjusted df	.267	1	398.9	.605
Trimmed mean	.121	1	399.0	.728

The induction and mentoring support of leavers was compared ($n = 121$, $M = 4.720$, 95% CI [4.40, 5.04], $SD = 1.78$) to that of stayers ($n = 280$, $M = 4.99$, 95% CI [4.79, 5.19], $SD = 1.70$). A weak positive correlation was found between teacher retention and induction and mentoring support ($r_{pb} = .072$), but it was not statistically significance ($p = .151$).

Therefore, the null hypothesis was accepted, H_{10} , that there is no relationship between teacher induction and mentoring programs and the retention rates of teachers in low-performing schools with high-minority at-risk populations, was accepted.

The variables of induction and mentoring design and teacher retention also satisfied the assumptions of normality and variance requirements for a point biserial correlation (Figure 3, Figure 4, and Therefore, the null hypothesis was accepted, H_{10} , that there is no relationship between teacher induction and mentoring programs and the retention rates of teachers in low-performing schools with high-minority at-risk populations.

Table 9).

I compared induction and mentoring design of leavers ($n = 121$, $M = 7.66$, 95% CI [7.32, 8.00], $SD = 1.84$) to that of stayers ($n = 280$, $M = 7.78$, 95% CI [7.54, 8.01], $SD = 1.94$). Point biserial correlation indicated a weak positive correlation between teacher retention and induction and mentoring design ($r_{pb} = .027$), but it had no statistical significance ($p = .585$).

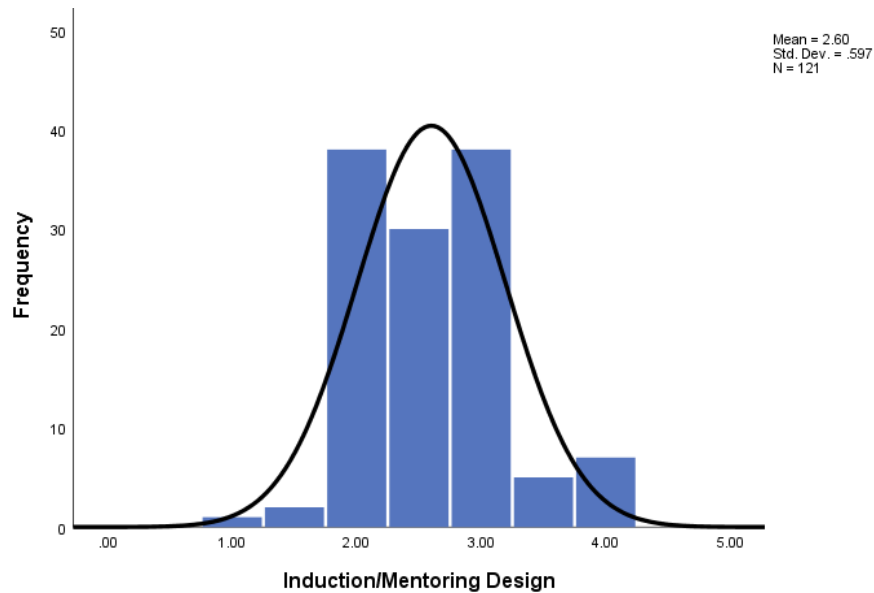


Figure 3. Normal distribution histogram for mentoring design (leavers).

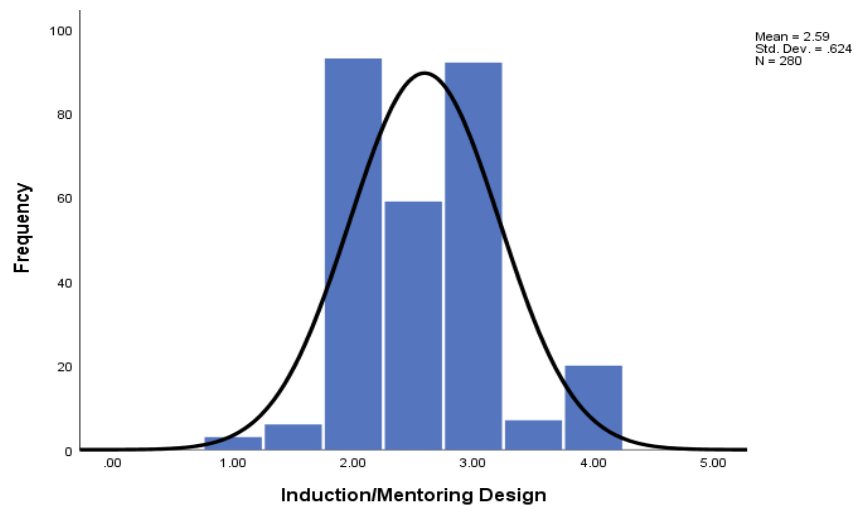


Figure 4. Normal distribution histogram for mentoring design (stayers).

Therefore, the null hypothesis was accepted, H_{10} , that there is no relationship between teacher induction and mentoring programs and the retention rates of teachers in low-performing schools with high-minority at-risk populations.

Table 9

Test of Homogeneity of Variances for Induction and Mentoring Design

Based on	Levene statistic	df_1	df_2	p
Mean	.456	1	399.0	.500
Median	.485	1	399.0	.487
Median with adjusted df	.485	1	398.9	.487
Trimmed mean	.488	1	399.0	.485

Research Question 2. What incentives promote teacher retention rates in low-performing schools with high-minority at-risk populations?

The null hypothesis for this research question was H_{20} , that teacher incentives in low-performing schools with high-minority at-risk populations do not affect teacher retention.

The second research question sought associations between teacher retention and teacher incentives, with incentives separated into the domains of financial incentives and support incentives. The nonparametric Kendall's τ_B correlation was used to test for both these domains (Marascuilo & McSweeney, 1977) because Levene's test indicated that variances were not homogeneous (Chen & Popovitch, 2002). Correlation indicated a weak negative association between teacher retention and financial incentives, but it was not statistically significant ($\tau_B = -.002, p = .959$). Correlation similarly indicated a weak positive association with no statistical significance between teacher retention and support incentives ($\tau_B = .020, p = .663$).

Therefore, the null hypothesis was accepted, H_{20} , that teacher incentives in low-performing schools with high-minority at-risk populations do not affect teacher retention.

Research Question 3. What is the relationship between the socio-economic status of a high-minority at-risk school community and the retention rates of teachers in low-performing high-minority at-risk schools?

The null hypothesis for this research question was H_{30} , that there is no association between teachers working in low-socioeconomic-identified schools and teacher retention. A cross tabulation was performed to assess the relationship between work with a high-minority at-risk population and teacher retention (Figure 5). Of those who work with high-minority at-risk populations ($n = 121$), 67 (55%) were considering leaving their present positions. When assessing the entire population, ($N = 401$) 245 (61%) were considering leaving their present positions.

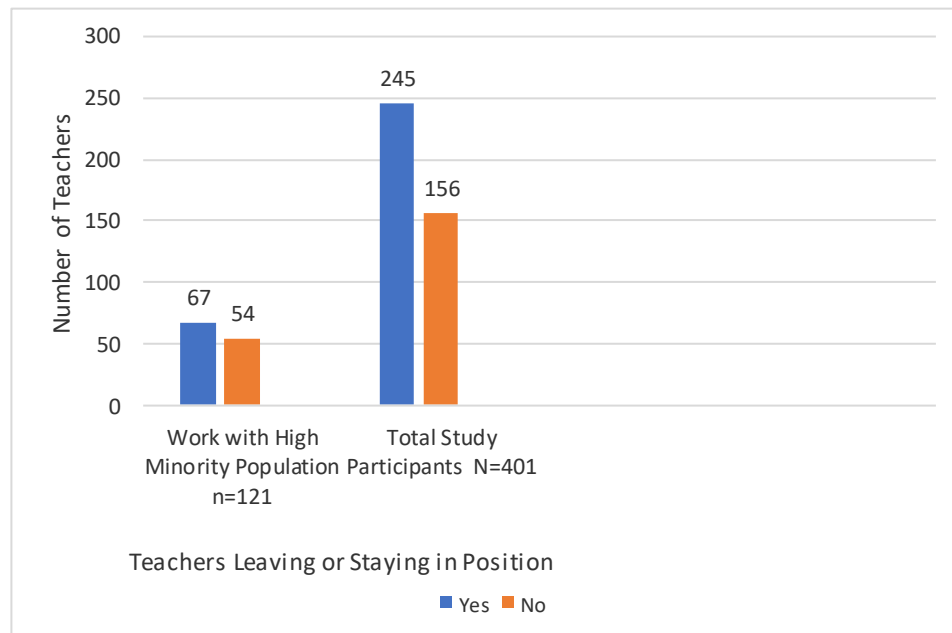


Figure 5. Cross tabulation between socioeconomic status of population and consideration of leaving position.

A χ^2 test for the existence of an association (Laerd Statistics, 2016a) was used between teacher retention and socioeconomic status of school population with a ϕ coefficient to assess magnitude of association (Table 10). The χ^2 test may find a relationship between variables, but it does not indicate the strength of the relationship, so the ϕ correlation was used as a posttest to provide this additional information. The value of ϕ varies from -1 to 1, with values of ϕ close to 0 indicating no association between the variables.

The χ^2 test was used to analyze a contingency table to determine if the observed cell frequencies differed significantly from the expected frequencies (Knapp, 2017). The first step in conducting the χ^2 test was to compute the expected frequency for each cell (Knapp, 2017). The results established that all expected cell frequencies were greater than 5 with a minimum expected count of 47.1. There was no statistically significant association between teacher retention and socioeconomic status of school population ($\chi^2[1] = 2.39, p = .122$).

Table 10

Chi-Square Test for Association (N = 401)

Statistic	Value	df	p (two-tailed)		
			Asymptotic	Exact	p (one-tailed exact)
$\chi^2 (1)$	2.39	1	.122		
Continuity correction	2.06	1	.151		
Likelihood ratio	2.37	1	.124		
Fisher's exact test				.147	.076
Linear-by-linear association	2.38	1	.123		

Therefore, the null hypothesis was accepted, H_{30} , that there is no association between teachers working in low-socioeconomic-identified schools and the teacher retention rate.

Summary

The purpose of this study was to determine whether relationships exist between teacher retention and the variables of induction and mentoring, incentivizing, and low socioeconomic status in low-performing high-minority at-risk populations in a public-school district in Florida. When analyzing the data, I considered the variables of induction and mentoring (with domains of design and support), incentives (with domains of financial and professional development and support), the low socioeconomic status of a school's population and a teacher's desire to leave their present teaching position.

Survey responses were obtained from 401 of the 1,359 K–12 teachers who were invited to participate. A quantitative correlational design was used and analyzed the data using Kendall's τ_B test, point biserial correlation, and the χ^2 test. Although analysis indicated weak correlations between teacher retention and the independent variables, none was statistically significant, leading me to accept the null hypothesis (no association) for each of the three research questions.

Chapter 5: Discussion and Conclusions

The teaching profession has experienced shortages in many areas of the United States over the past decade, especially in low-performing schools with high-minority at-risk populations (Darling-Hammond, 2010). Students suffer from the negative impact that attrition and retention rates have on the teaching profession (Briggs, 2011). Lee and Ryu (2013) argued that when students do not receive ongoing rigorous instruction, especially at a school with a concentrated at-risk population, it is the responsibility of the school's leader to identify the problems, establish effective practices, and try to improve teacher retention rates.

The foundations for this research were based on the issue of teacher attrition in low-performing schools with high-minority at-risk populations in one Florida school district; retention at this district had been steadily declining. This study analyzed incentives, socioeconomic status of the school population, induction and mentoring, and teacher retention. In this chapter, the results of this quantitative study examining the variables that may have an

impact on the retention of low-performing schools with high-minority at-risk populations will be presented. The evaluated results, personal insights, and connections made with the implications of the findings for academic communities will also be discussed in the context of how this research appraises the literature and how it can inform future research.

Summary of the Results

The purpose of this study was to determine whether a relationship exists between teacher induction and mentoring programs, retention incentives, low-socioeconomic high-minority populations, and teacher retention in low-performing schools with high-minority at-risk populations in a school district in Florida. A quantitative correlational research design was utilized for this study. In this correlational design, there were no manipulations of variables, as there is no experimental or treatment condition. The following question guided and provided a clear direction for the research: What factors play a role in teacher retention rates in low-performing schools with high minority at-risk populations in a school district in Florida? There were three hypotheses and research questions addressed in this research:

Research Questions

1. What is the association between teacher induction and mentoring programs and teacher retention rates in low-performing public schools with high minority at-risk populations?

2. What incentives promote teacher retention rates in low-performing schools with high-minority at-risk populations?

3. What is the relationship between the socio-economic status of a high-minority at-risk school community and the retention rates of teachers in low-performing high-minority at-risk schools?

Null Hypotheses

Based on the survey findings presented in Chapter 4, I accepted each of the null hypotheses, which were as follows.

H1₀: There is no association between teacher induction and mentoring programs and the retention rates of teachers in low-performing schools with high-minority at-risk populations.

H2₀: There is no association between teacher incentives and teacher retention rates of low-performing schools with high-minority at-risk populations.

H3₀: There is no association between teachers working in low-socioeconomic-identified schools and the teacher retention rate.

The data for this research was collected from a public-school district in Florida with a high concentration of Title I schools. The teacher's union provided access to the instructional staff within the school district by electronically mailing out an online survey to its 1,359 members. Of the invited 1359 members, 401 respondents completed the survey. The survey was based closely on a previously published survey (Giacometti, 2005) that contained 43 closed-ended questions; 13 pertaining to the participants' demographic information, and 30 questions with 4-point Likert-type scales. Qualtrics survey software and Statistical Package for Social Science (SPSS V25) were the software used to analyze the data. The survey provided objective

results and eliminated the opportunity for the researcher or respondents to interject beliefs or feelings within the results (Hughes, 2012).

Variables

Testing each hypothesis involved analyzing multiple components. As in Giacometti's (2005) research, domains were established to narrow the collection of data to specific areas that represented the variables examined. The analysis of teacher retention reflected the factors in Herzberg's (1959) motivational theory, hygiene and motivation. Herzberg discussed elements that supported administration and the design of induction programs. For example, teacher incentives represent the types of motivators that Herzberg discussed. Giacometti (2005) discussed the factors that played a role in teacher job satisfaction; these included training, school culture, and motivation, all of which connect to Herzberg's theory. Although the domains used in this study mirrored Giacometti's (2005) research, they also mirrored Herzberg's motivational theory. Each of the domains are discussed on the following pages. Cronbach's alpha was used to test for the reliability and consistency of the questions within each of the domains in the first two hypotheses since the sample population included teachers across the career spectrum and not only the first three years of service as was the population of the original study from which the survey was drawn.

Induction and mentoring support and design. Statements from the survey identified strengths and weaknesses around mentoring pertaining to support from administration and mentors. Existing research indicates that teachers leave schools when the leadership is not supportive, discipline and school expectations are not adhered to, professional development opportunities are not made available, and the school climate is negative (Lee and Ryu, 2015). Myers (2015) suggested that designing and maintaining an induction program centered on

mentoring and coaching teachers would afford both veteran and novice teachers the opportunity to work together and could provide a scaffolding of support throughout their growth and development as educators.

Financial and support incentives. Questions focusing on remuneration, such as the comparison of salaries for teachers who work in similar areas, financial incentives for recruiting teachers, and retirement benefits for the identified district were grouped for the domain of financial incentives. Questions were grouped to represent a professional development and support domain within the incentive's variable. The domains or groupings of questions are reflective of the originally published survey tool (Giacometti, 2005). These questions focused on collaboration with experienced teachers and increasing the skill level of instructional staff. Raising and aligning salaries to other professions that require the same education has been shown to keep people in the teaching profession (Giacometti, 2005). G. Hughes (2012) reported that reasons for leaving the profession were lack of support through induction programs and mentoring, ineffective or inadequate incentives, and increased levels of stress due to increased workloads and requirements imposed on low-achieving schools.

Socioeconomic status. Questions related to the socioeconomic status of the school population and a teacher's desire to leave the profession helped to group teachers employed at schools with low-socioeconomic-status populations, which can present difficulties such as working with struggling populations. Hughes (2012) found that years of experience, socioeconomic status, salary, workload, and provided technology resources all made a statistically significant contribution towards a teacher's desire to remain in their position at a school. NCES (2014) reported that the teacher turnover rate was 22% higher in schools

identified with low socioeconomic statuses compared to 13% in schools identified with higher socioeconomic statuses.

Desire to leave present position A question was used that asked about the respondent's desire to leave their present teaching position to provide the value for the dependent variable, teacher retention.

Internal Consistency

Because my population included teachers across the career spectrum and not only the first 3 years of service, as in the original survey (Giacometti, 2005), Cronbach's α was used to assess the internal consistency of the questions within each domain used by the first two hypotheses. The domains are reflective of those established in the original survey tool. These domains were induction and mentoring design ($\alpha = .71$), induction and mentoring support ($\alpha = .94$), financial incentives ($\alpha = .88$), and professional development and support incentives ($\alpha = .80$). All were above the cutoff of .70 that is considered acceptable (Bland & Altman, 1997; Lance et al., 2006).

Analysis

The induction and mentoring support of leavers was compared ($n = 121$, $M = 4.720$, 95% CI [4.40, 5.04], $SD = 1.78$) to that of stayers ($n = 280$, $M = 4.99$, 95% CI [4.79, 5.19], $SD = 1.70$). A weak positive correlation was found between teacher retention and induction and mentoring support ($r_{pb} = .072$), but it was not statistically significance ($p = .151$). Induction and mentoring design of leavers was compared ($n = 121$, $M = 7.66$, 95% CI [7.32, 8.00], $SD = 1.84$) to that of stayers ($n = 280$, $M = 7.78$, 95% CI [7.54, 8.01], $SD = 1.94$). Point biserial correlation indicated a weak positive correlation between teacher retention and induction and mentoring

design ($r_{pb} = .027$), but it had no statistical significance ($p = .585$). Thus, the null hypothesis for both domains tested was accepted for the first research question.

Correlation analysis indicated a weak negative association between teacher retention and financial incentives, but it was not statistically significant ($\tau_B = -.002$, $p = .959$). Correlation analysis similarly indicated a weak positive association with no statistical significance between teacher retention and support incentives ($\tau_B = .020$, $p = .663$). Therefore, the null hypothesis for both domains tested was accepted for the second research question.

The third research question analyzed the association between teacher retention and teacher service at high-minority population schools. Analysis using a contingency table indicated that there was no statistically significant association between teacher retention and socioeconomic status of school population ($\chi^2[1] = 2.39$, $p = .122$). Therefore, the null hypothesis was accepted for the third research question as well.

Discussion of the Results

The results did not indicate significant correlations but did provide information that made connections with past and present research. When there is a lack of statistically significant results in research, the question becomes, “Why was there no correlation among the variables examined?” This is especially true given that previous research has supported a connection between induction and mentoring programs and incentives with the retention of teachers.

The examined data found a weak correlation between teacher retention and induction and mentoring, but the correlations were not statistically significant. This was especially surprising because all teachers in the studied school district participated in an induction program; this program was not solely for novice educators but was used as an onboarding and support program for all educators hired by the district. In this case, teacher attrition may be explained by other

district-wide or school-wide factors, or perhaps in the quality of induction and mentoring program. While researchers have found that induction programs help teachers adjust to the norms, practices, and values of a district, they have not guaranteed success (Van Zandt, 2016).

Attrition may be caused by a lack of ongoing support beyond the induction and mentoring program. Teachers may have come to rely on supportive relationships in their daily work and found it difficult to transition out of the induction and mentoring program. Perhaps the induction and mentoring program needed to be assessed to add another layer of support for transitions from the induction/mentoring program. Induction and mentoring programs that offer little support to teachers after the program ends may also have been a problem that influenced the outcome of this study. When teachers leave an induction program and find themselves in a school context that lacks cohesion and links to peer support or just operates by different standards than the induction program, the work of the induction program may be undone (Carver-Thomas & Darling-Hammond, 2017). Poorly designed induction programs may contribute to teacher attrition (Carver-Thomas & Darling-Hammond, 2017; Cherubini, 2007; DuFour, 2004). This is a consideration in reflecting upon the weak positive association.

Poor teacher retention rates could also be explained by ineffective or inadequate incentives. In this study there were minimal to no correlations between retention and financial and support incentives. These findings may indicate that the district leaders need to review its incentives policies and determine how they compared to best practices in teacher retention. The district may not be incentivizing teachers to remain employed in the district. District leaders should review incentive programs in districts similar in size and teacher work force that have high teacher retention to help understand the types of incentives teachers benefit from. Other reasons for teacher attrition may be increased levels of stress due to expanding workloads and

requirements imposed on low-achieving schools (Hughes, 2012). Pressure to improve performance in low-performing schools may be a significant source of stress for the educators in those schools. They may need extra support that they have not been receiving. Continued research based on turnover among public school teachers in low performing schools could be useful for policy makers, practitioners, and researchers interested in the factors that lead some public employees to remain in their positions or organizations while others leave (Grissom et al., 2015).

Another approach to understanding why there were minimal to no significant relationships among the variables in this study would be to continue the research using qualitative methods with the aim of understanding the phenomenon of teacher attrition. Adding a qualitative component to this research could bring value and insight that quantitative analysis lacked (Creswell, 2013). In the sample for this study, 215 teachers had been in their present positions for 1–5 years. This reflected the number of individuals who were new to the district and may still be participating in the mentoring program. These individuals could provide pertinent information regarding the effectiveness of elements of the mentoring program.

Conducting focus groups with small groups of teachers to understand the impact of the induction and mentoring program and incentives on their decisions to remain or leave the district could help to elucidate the problem of teacher attrition in this district using the teachers' reports of their own experiences. Semi-structured interviews, documentation of conversations, interview protocols, observations, and reflective journaling are other qualitative techniques that could clarify the experiences that affect attrition at this district.

Evaluating each component of the mentoring program may provide insight on the correlations the program has with the school districts teacher retention rate. It is unclear how

widespread the use of induction programs has been in schools across the United States. Specifically, little is known about the activities, supports, and components that induction programs include, and more importantly, whether receiving such support has any positive effect on teachers and students (Ingersoll, 2012). Researchers have recently been placing more emphasis on the components of induction and mentoring programs compared to earlier researchers, who focused more on working conditions and financial incentives (Helms-Lorenz et al., 2015; Marker et al., 2013; McNabb, 2011; Van Zandt, 2016; You, 2012).

Researchers have affirmed that the key to program improvement and student learning is school leader focus on curriculum and instruction, use of assessment data to guide program improvement, and the ongoing professional development of teachers (DuFour, 2004). My study did not examine the individual components of the mentoring program or whether the participants felt as though the mentoring program provided them with effective and sustainable practices that assisted them with maintaining their teaching positions.

Further studying of the participants desire to stay in their teaching position as it relates to the mentoring programs components would also be beneficial. The types and value of the supports in the induction program should be investigated and compared with districts with successful induction programs. Further analysis of the obtained data could provide responses to some of the unanswered questions.

More analytically useful data on incentives could have been collected in this study by developing further questions related to facets of the incentives that were offered and what other incentives might increase the likelihood of teacher retention. Springer et al. (2016) argued that retention bonuses could mitigate unwanted turnover and had the potential to strengthen leadership and institutional knowledge among a school's faculty while avoiding financial

burdens associated with turnover. Beyond salaries and monetary bonuses, support and teacher preparation incentives have attracted and helped to retain teachers (Darling-Hammond, 2010). Opening discussions with the instructional staff who participated in the survey would provide a more information on the incentives provided, or not, by this school district.

The results of this study indicated that there was no correlation between teacher retention and whether teachers worked at schools with high-minority populations in this district. Despite changing demographics at this district, there must be other reasons beyond high-minority populations that have been causing instructional staff to leave their positions. Some of the reasons provided above may contribute to teacher attrition. Assessing the demographic information, members of the instructional staff who were aged over 40 years and had been in the profession for 10 or more years ($n = 276$) may not have wanted to leave their positions because of their age, commitment to their students, or the time already accrued in the district. When teachers become tenured in their positions, they are reluctant to leave the schools in which they are employed (Carver-Thomas & Darling-Hammond, 2017).

Though the results indicated no correlations, the study has produced questions that can be used for future studies, not only in the identified school district, but also for districts that may have similar questions about teacher attrition. In their data, Carver-Thomas and Darling-Hammond (2017) found the reasons teachers leave the profession are dissatisfaction with testing and accountability pressures, lack of administrative support, and dissatisfaction with the teaching career and working conditions. Taking the data obtained for this study then focusing on and combining the variables may provide relevant information for future study. The changes may not come about from implementing one variable, but from implementing multiple variables and focusing in within each of the variables. Using multiple components may establish sustainable

change. This data could assist with future research that uses more targeted methods to collect, analyze, and interpret data from similar populations. Despite their negative nature, these findings contribute to the field of education because they provide a rationale for future studies designed to better understand the variables that influence teacher retention rates in high-minority at-risk schools.

Discussion of the Results in Relation to the Literature

Teachers have had relatively high turnover compared to many other professionals such as lawyers, engineers, architects, professors, pharmacists, and nurses, and this turnover is not cost free (Ingersoll, 2012). The inability to retain highly qualified and high-quality teachers is a national problem which began before the 20th century, especially in high-needs schools (Pesavento-Conway, 2010). The purpose of this study was to increase the level of knowledge regarding to teacher retention, induction and mentoring, incentives, and socioeconomic status in a district with a high-minority at-risk population. My role in this study was as a researcher, administrator, and educator. The researcher's experiences have taken place in multiple settings, all of which have been low-performing schools with high-minority at-risk populations. A goal was established to provide insight into teacher retention and add to the body of knowledge on the subject.

In formulating the conceptual framework for this study, I was guided both by my own experiences and by Herzberg's (1959) two-factor motivational theory. According to Herzberg's theory, there are certain factors in the workplace that cause job satisfaction, while a separate set of factors cause dissatisfaction. Herzberg developed the theory by asking people to describe situations where they felt recognized, appreciated, valued, and supported within their jobs. Herzberg also asked people to describe situations where they did not feel valued, appreciated, or

supported. Herzberg believed that money was not the only motivational driver to superior performance. The motivational factors Herzberg discussed are connected to extrinsic and intrinsic motivation. Giacometti's (2005) domains reflected Herzberg's two factors, hygiene and motivation.

Emotional factors, school and community support, instructional support, and motivation were some of the domains that Giacometti (2005) identified within her research. My own study reflected those same domains. Support received through induction and mentoring programs and incentives are categorized as hygiene and motivators in Herzberg's (1959) theory. Being supported within a position and being valued through incentives correlates directly to Herzberg's theory.

My personal experiences working in low-performing schools with high-minority at-risk populations provided background knowledge which connected with Herzberg's (1959) two-factor theory which, in turn, helped establish the foundation of this study. Working as an administrator, insight to the effectiveness a mentoring program can provide to novice staff members and staff who are new to a district is pertinent information to support them in their role as educators.

Previous research has suggested several reasons that increase teacher retention; that is, why teachers decide to remain in their role as educators at specific school. Carver-Thomas and Darling-Hammond's (2017) survey data revealed that teacher turnover rates vary markedly across the United States. School employment characteristics are also associated with high turnover rates. Teachers are more likely to leave schools in which they are employed that have lower salaries and less-desirable working conditions. Examples of poor working conditions are; school climate, absence of collegiality, lack of support from administration, school leadership,

lack of student discipline and structure, and support provided to teachers in their classrooms. Too often, these conditions exist in schools with more students of color and more student from low-income households. Turnover rates are 70% higher for teachers in schools serving the largest concentrations of students of color and nearly 50% higher for teachers in Title I schools, which serve high concentrations of low-income families. These schools are staffed by teachers with fewer years of experience and, in many cases, significantly less training than teachers at non-Title I schools (Carver-Thomas & Darling-Hammond, 2017).

Ingersoll (2011) found that schools with high-poverty enrollment of 50% or more had higher turnover than schools with high-poverty enrollment below 15%. Ingersoll (2011) identified many factors that led to lower teacher turnover rates and of schools that were more likely to be staffed with teachers who were experienced and highly qualified. Some of the factors identified in Ingersoll's (2011) study were increased administrative support provided to teachers, lower levels of student discipline problems, an increased number of faculty being involved in the decision-making process and teacher autonomy in the classroom (Ingersoll, 2011). Kolbe and Strunk (2012) highlighted patterns in the use of economic incentive policies and pointed to the importance of considering the incentive packages to which teachers may be entitled in developing policies associated with teacher incentives. In my own study, perhaps taking the data and providing another level of analysis using qualitative study techniques, could provide a richer level of information relating to the incentives provided by a school district. This could help the district begin an analysis of current incentives and be used to establish a package of incentives that might improve teacher retention rates.

The data collected in this research study had similarities with previous research, specifically the variables that were analyzed such as, induction and mentoring programs,

pertaining to the design of the induction program, teacher support, and retention rates. Induction and mentoring programs aim to improve the performance and retention of new teachers with the goal of improving student growth and learning. Ingersoll (2012) found a link between early career teachers' participation in induction programs and their retention but also found that the strength of the effect depended on the type and number of supports that beginning teachers received. Research shows that the elements of a mentoring program may make a difference in the retention rate of teachers (Ingersoll, 2012). Analyzing the components of the mentoring program for the district used in this current study might provide an in-depth look at which benefits attract new teachers to the district, as well as what benefits teachers consider in their decision to remain at the district.

Designing and maintaining an induction program that centers on mentoring and coaching teachers affords both veteran and novice teachers the opportunity to work together and could provide a scaffolding of support throughout their growth and development as educators (Myers, 2015). Along with mentoring and incentives, Pesavento-Conway (2010) also found that collaboration with fellow teachers and administrators played a key role in the retention rate of teachers in struggling schools. Supervisor and collegial support are strategies that have been used to allay attrition among educators because these have demonstrated to help teachers transition into the teaching profession (Sass et al., 2010). An effective mentoring program is vital, and the foremost form of induction has a positive effect and impacts teacher retention (McNabb, 2011). Induction programs for teachers new to a district or new to the profession should provide an avenue for learning about the district philosophy and integrating new teachers into the school community and culture (McNabb, 2011). By building trusting relationships and hearing the needs of the school community, new teachers, along with the help of their mentors,

can develop specifically tailored needs that fit the individual (McNabb, 2011). Collaboration between all parties affords the new teacher the opportunity to collaborate and share experiences. The collaboration and professional development within an induction program can give veteran teachers the opportunity to provide strategic support on an individual basis. A well-organized induction program is essential to bring together the elements of support a beginning teacher needs during the first years of teaching (McNabb, 2011). School communities need to work toward creating induction plans that not only value new teachers but recognize their unique differences and the unique cultural settings in which they work (McNabb, 2011).

The school district used as a research site for this study provides a mentoring program for all its teachers during their first three years of employment with the district. Yet, the analysis conducted found no association between the induction and mentoring variable and teacher retention, which might suggest that the design and the effectiveness of the district's mentoring program needs further investigation. Callahan (2016) identified ways that mentoring can improve retention of new teachers who will subsequently be able to contribute to the transformation necessary for effectively increasing student achievement. A mentoring program can provide collaboration and discussion between experienced colleagues, which decreases teacher isolation, and in the long run will help improve student achievement (Callahan, 2016).

Research has suggested that mentoring programs advance the professional growth of new teachers, making them more effective in a shorter amount of time, improving student learning, and reducing the attrition rate of new teachers (Ingersoll & Strong, 2011). Mentoring programs that provide ongoing professional development will increase a new teachers' ability to grow and will provide resources to support their newly acquired skills. New mentoring strategies can be created and need to be continuously developed to maintain their effectiveness (Chan, 2014).

Educational leaders need to disseminate resources in support of future development of induction and mentoring programs. Leaders also need to emphasize mandatory implementation of these programs to aid new staff and to add strength to the teaching force (Chan, 2014). Different types of induction support, activities, or practices rarely exist in isolation; schools or districts usually provide beginning teachers with packages or bundles of incentives (Ingersoll, 2012).

Numerous researchers have described the importance of mentoring new teachers, but what may be lacking is the data to confirm whether established mentoring programs have been effective at giving novice teachers and teachers new to a school district the confidence and support needed to be successful in the classroom (Ingersoll, 2012). I believe that moving forward, assessing the actual induction and mentoring program of the survey population using qualitative methods may provide insight about mentoring and induction that quantitative studies are not able to.

As mentioned above, I did not find that financial and support incentives played a significant role in the teacher retention rate for the sample population from the Florida school district used in this study. Past research has found financial incentives to impact teacher decision making as to whether to remain at a school or move on to another high paid position. Darling-Hammond (2010) established through her research that the teaching profession should be competitive in terms of salaries, working conditions, and establishing appropriate incentives for professional development to attract college-educated talent and highly qualified teachers. Financial incentives and professional development opportunities have been common strategies for recruiting gifted professionals to teaching positions, with the enticements existing in many forms (Steele et al., 2009). The results of Kaimal and Jordan's (2016) 4-year longitudinal study suggested that comprehensive incentive-based models had limited effectiveness with educators

who needed significant salary increases. Participants in their study gladly accepted additional pay as a reward, or bonus, for their hard work as teachers, but the amount was too small to impact their instructional behaviors or retention at a school (Kaimal & Jordan, 2016). If the present study had collected data over a longer period, or used qualitative techniques in addition to quantitative ones, it may have provided a better understanding of the teacher retention issues within the identified school district.

Other research has found that teachers prefer to stay at schools where they felt supported by their administrators over leaving to schools where they would benefit financially. A poll administered by the Public Agenda Foundation found that roughly 80% of teachers would choose to work in a school where administrators supported them as opposed to approximately 20% of teachers who would work at a school where there were substantially higher salaries (Rochkind et al., 2007). Conducting interviews and using a qualitative approach to this study may provide data that supported previous studies. Fulbeck (2014) found that providing teachers with an incentive was associated with lower departure odds for teachers in schools that were not high poverty than for teachers who worked in high-poverty schools. Retention bonuses have been able to mitigate unwanted turnover and have the potential to strengthen leadership and institutional knowledge among a school's faculty while avoiding financial burdens associated with turnover (Springer et al., 2016).

Beyond salaries and monetary bonuses are support and teacher-preparation incentives that can attract and help retain teachers (Darling-Hammond, 2010). No associations were found between these variables in this study, so there is a need to conduct further research utilizing alternative research methods. Taking previous research and analyzing the design of the incentive program within the identified school district could lead to a deeper understanding of the

incentive program's effectiveness and a deeper understanding of the association between the variables analyzed in this study.

Researchers have documented that teachers who work with students who fall into many of the disaggregated subgroups (e.g., English language learners, students from low SES households, Black and Latino students, or special education students) have felt the effects of wide-sweeping policy mandates and a lack of support which in-turn has increased the stress level for teachers and added to the number of teachers leaving their positions (Simon & Moore-Johnson, 2015). In this study, the socioeconomic status of the population a teacher worked with had a positive but statistically insignificant correlation with the teacher retention variable.

Researchers have found again and again that, on average, when teachers transferred, they moved to schools that served a smaller proportion of low-income and low-minority students (Simon & Moore-Johnson, 2015). Often, underachieving schools and students have resided in high-poverty communities or communities with a high proportion of second language learners (Gawlik et al., 2012). Districts have faced several challenges, including attracting teachers to their schools and enhancing hiring, transfer, and retention policies so that they can recruit the best teachers possible (Gawlik et al., 2012). Underachieving and high-needs schools have experienced a high rate of new teacher turnover causing at-risk students to receive their instruction from less qualified teachers (Ingersoll, 2012).

The U.S. Department of Education found that the teacher turnover rate is identified with low socioeconomic statuses (NCES, 2014). The data in this study indicated a weak but statistically insignificant correlation between socioeconomic status and teacher retention. The communities from which the data for the U.S. Department of Education study were gathered may not have reflected the district in which my study was conducted.

With high turnover rates driving teacher shortages and undermining student learning, policymakers should pursue strategies that can improve teacher retention in all schools, but especially in those where turnover rates are most extreme—namely, schools serving students of color and students in poverty. By addressing the key factors that drive teachers from their schools, tailored policy interventions can, over time, stabilize and improve the teacher workforce and better serve all students (Carver-Thomas & Darling-Hammond, 2017).

Although several of the variables were unchangeable (e.g., age, gender, and race), others could be influenced by policy and administrative decisions to increase retention rates (e.g., receiving additional support, mentoring, funding, and training before entering a classroom; see Sass et.al, 2012). Increasing understanding of how each of the variables within my study affects teacher retention in the identified school district, and demographically similar districts, will assist with creating policies and adjusting the decisions made by those who create the policies.

Limitations

My study had some limitations. Using a mixed-methods or qualitative approach instead of only quantitative methods would have provided richer, more robust information. Interviews, discussion groups, and open-ended questions used in a mixed-methods study would provide a better understanding of what matters and makes a difference to teachers. The data provided may have established stronger associations between the variables if a different methodology had been used. The study was also limited to members of the teacher's union rather than the entire population of certified teachers in the school district. Of the 1,359 teachers who were invited to participate, 401 completed the survey. Access to the school district's population of 3,160 certified teachers would have provided more data to analyze the variables as related to the hypotheses. Also, if I had had access to complete demographics for the entire district's

instructional staff, I could have been more certain that my sample was representative of the population I desired to study. Another possible limitation was that participants who were new to the district may not have had enough time or experience in their new positions to provide thoughtful responses to the survey. The wide range of the length of service could also have been a limitation that affected the correlation results. Focusing on a narrower range for length of service within the school district and in the profession may have improved results of the correlations for each of the hypotheses.

Implication of the Results for Practice, Policy, and Theory

The results of this study did not indicate any statistically significant correlations, but the data still contributes to the body of knowledge needed to address the teacher retention rates at low-performing schools with high-minority at-risk populations. Even though this study did not demonstrate correlations, prior research has established that teachers leave the profession because of lack of support through induction and mentoring programs, ineffective or inadequate incentives, and the requirements imposed on low-performing schools (Gawlik et al., 2012; McNabb, K., 2011; Simon & Moore-Johnson, 2015). The value of this study is in its return to the consideration of the quality of induction and mentoring programs and incentives for teachers.

This study provides information that can assist policymakers, school districts, and school leaders with data that supports the need to further study the mentoring programs and incentives provided to teachers. Research suggests the need to address the issue of teacher support, especially for those who work with at-risk populations, as well as the incentives provided to educators in these struggling areas.

I present the results of this quantitative study to the scholarly and educational community. The results, while different than those of past studies, can be used as a way into understanding

the motivational theory of Herzberg (1959) within the context of the quality of these constructs. Further investigation with a wider range of methods would establish a rich body of data that could assist the school district in increasing the retention rate of its instructional staff. I hope the findings of this research will inspire other researchers to investigate the designs of induction and mentoring programs and cause leaders of educational institutions to assess the value of the support programs provided for their teaching populations.

The data may not have indicated correlations between the variables studied, but the need to investigate mentoring programs and provide instructional staff with an assortment of financial and supportive incentives that teachers will value is still present within existing research. The variables that will keep teachers in their teaching positions needs further investigation. Addressing all the issues of an at-risk low-performing school cannot be resolved quickly with one change. Providing one piece of the puzzle does not complete the puzzle. Many variables, pieces of the puzzle, need to be studied to complete the picture.

Research pertaining to the issue of teacher retention has been taking place for more than 20 years (Chan, 2014). The results of this study support and extend Herzberg's (1959) motivational theory. Herzberg argued that support and motivation provided by administrators and colleagues assists with job satisfaction. When a teacher is provided with support, given praise, recognized for his or her contributions, and provided with incentives, that teacher wants to stay in the teaching profession. Research has established a continued belief in the need to provide ongoing mentoring, to establish assorted incentives, and to recognize the issues and needs within low-performing high-minority at-risk populations (Chan, 2014).

The data collected for this study did not establish correlations between the variables, but research suggests the need to further study the practices of induction and mentoring programs;

establish, implement, and improve upon incentive initiatives; and recognize issues within low-performing schools with high-minority at-risk populations. The studied school district can utilize the collected data to improve their teacher retention rate. School districts throughout the country can use the findings to assist with their own teacher retention rate issues.

Recommendations for Further Research

The instrument used to obtain the data in this research was originally published by Giacometti (2005) and, like my study, provided substantial and useful information pertaining to teacher retention. Taking the survey used in this study and adding a mixed methods approach may increase the richness of data obtained could assist with continuing much needed research for future studies. Findings from quantitative studies are conclusive, whereas those from qualitative studies are not and cannot be used to generalize to a wider population of interest. Using a quantitative method for this study did provide data that can be used to further discuss the retention practices within this district, but when extending the research, a qualitative or mixed methods approach could help gain a better understanding of why we obtained data that presented no correlations between the variables. Utilizing individual in-depth interviews or group discussions could provide insights into the setting and help uncover trends for further investigation.

Another direction future study could take is comparing the school district from this study with similar school districts across the country. Looking at school districts with similar demographics could provide a deeper set of findings and could assist school districts across the county set the direction they need to help establish effective practices to improve teacher retention rates. When experienced teachers who expected to work in high-poverty schools indefinitely leave, their leaving should command attention (Santoro, 2011). Policy makers and

educational leaders need to attend to the moral and ethical dimensions of teaching when developing pedagogically related policies and crafting retention efforts (Santoro, 2011).

Conclusion

Teacher turnover is a very real problem with far-reaching implications (Sass et al., 2011). High attrition has been conservatively estimated to cost thousands of dollars for each teacher who leaves the profession (Darling-Hammond, 2010). High teacher turnover has additional implications for seasoned teachers who, in addition to their existing teaching responsibilities, must continuously provide support for the parade of newcomers (Sass et al., 2011).

The purpose of this study was to determine whether a relationship exists between teacher induction and mentoring programs, incentives, low-socioeconomic status populations, and teacher retention in low-performing schools with high-minority at-risk populations in a school district in Florida. Throughout this research, the overarching research question was, “What factors play a role in teacher retention rates in low-performing schools with high minority at-risk populations?” Though there was no relationship between the mentoring, incentives, low SES populations and teacher retention rate variables in this research, the data obtained supports the need to further study the issue of teacher retention rates in the identified school district. This district has retention rate issues. Utilizing a mixed methods or qualitative approach will provide a more in-depth analysis of the variables. Probing the causes behind the decline in teacher retention is essential to the development of effective methods for retaining the finest teachers in the education profession and supporting those who are struggling (Chan, 2014). When effective, or even potentially effective, teachers in low-performing schools with at-risk populations leave a position or the profession, there is a need to identify why they did so and then find solutions to prevent their departure (Chan, 2014).

The issues of recruiting and retention within the teaching profession command attention. The data from this research did not establish relationships between the variables, but the school district in the study does have retention issues. The turnover rate among teachers within low-income high-minority at-risk population schools is costly for schools and districts and has long-term negative effects for students living within these communities (Kraft, et al., 2015). Teaching needs to become an exciting opportunity if the nation is to keep the current and next generation of teachers, who have high expectations and seek ongoing learning opportunities. There is a need for deeper exploration of policy reforms like performance pay, organizational restructuring of the teaching position, and an increase of mentoring and support for all instructional staff. Teachers must feel their work is meaningful, just, and compensated, with opportunities for growth.

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Appendix A: Cover Letter Emailed with the Survey Link

Dear Fellow Educator:

As a teacher, you have experienced the ups and downs, successes and failures, and ultimately have assisted your students with making gains in their academic achievement. You have been instrumental in helping students gain insight into the subject matter in which you have meticulously taught them. Given the facts that there is a teacher shortage across the country and that school divisions lose new teachers at a rapid rate, there is a pressing need for individuals and organizations to learn and understand the factors that are related to teacher retention. Your input is important so that solutions can be considered in developing teacher support practices that positively impact teacher retention.

You are one of approximately 1,400 teachers who are members of the teacher's union and who work within a designated school district. Participating in this research is completely voluntary and not required by the school district. I am asking you to complete a brief, research-based survey and seeking to determine which factors impact the retention rate. For the results of the study to truly represent the thinking of the identified teachers, it is important that each questionnaire be completed and submitted. Your efforts to return the survey will be most appreciated.

You may be assured of complete confidentiality. Your name will never have any connection to the survey or the data obtained.

I would be happy to answer any questions you may have about this study. I can be contacted by e-mail (redacted) or by phone (redacted).

Thank you very much, in advance, for your assistance and cooperation.

Sincerely

Christine Gray

Graduate Student

Click on this link to complete the survey.

Clicking on this link means you give the researcher consent to use your survey data.

Appendix B: Teacher Retention Survey

Instructions: Please read each sentence carefully and select your response.

Demographic Data

Gender:

- Female
- Male

Age range:

- 20 – 29 years old
- 30 – 39 years old
- 40 years old and above

Beginning with the 2017-2018 school year, how long have you worked in the teaching profession?

- First Year
- 1 – 3 Years
- 3 - 5 Years
- 5 – 10 Years
- Beyond 10 Years

Beginning with the 2017-2018 school year, how long have you worked in your present teaching position?

- First Year
- 1 – 3 Years
- 3 - 5 Years
- 5 – 10 Years

- Beyond 10 Years

My teaching assignment:

- Elementary
- Middle
- High School
- Multiple Levels

Do you work in a school that presently has or in the past has received a D and/or F through the states evaluation system?

- Yes
- No

Do you work in a school with a high-minority at-risk population? (Large minority population with students who need ongoing interventions to achieve academically.)

- Yes
- No

Are you considering leaving your present position at the end of the school year due to job dissatisfaction?

- Yes
- No

Race/Ethnicity:

- Hispanic or Latino (Persons of Mexican, Puerto Rican, Cuban, or South American, or other Spanish Culture or origin, regardless of race)
- White (Persons having origins in the original people of Europe, North Africa, or the Middle East.)

- Black or African American (Persons having origins in the black racial groups of Africa.)
- Native Hawaiian or other Pacific Islander (Persons having origins in the peoples of Hawaii, Guam, Samoa, or other Pacific Islands.)
- Asians (Persons having origins in the original peoples of the Far East, SE Asia, or the India Subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, Philippine Islands, Thailand, & Vietnam.)
- American Indian or Alaskan Native (Persons having origins in the original peoples of North or South America, and who maintain cultural identification through tribal affiliation or community attachment.)
- Two or More Races (Persons who identify with more than one of the above races.)

Born in:

- United States
- Outside of the United States. What country_____?

The school I work in is:

- in a rural setting. (country)
- in a suburban setting. (outer suburbs of a city)
- in an urban setting. (city with a population of at least 50,000)

I became a teacher through a:

- traditional 4 or 5-year teacher preparation program. (College Program/Degree)
- Alternative certification program. (A process where a person is awarded a teaching license without completing a traditional teacher certification program.)

What is your highest level of education?

- Associates
- Bachelors
- Masters
- Doctorate

Instructions: Please read each sentence carefully and select your response.

Four-Point Likert Scale:

4 = SA (Strongly Agree), 3 = A (Agree), 2 = D (Disagree), and 1 = SD (Strongly Disagree)

1. My salary adequately meets my needs. SA A D SD
2. The mentoring program for new teachers was long enough. SA A D SD
3. The social issues that my students face did not shock me. SA A D SD
4. The salary for teachers in my geographical area is comparable to the salaries of other people with the same level of education. SA A D SD
5. As part of the professional development plan for new teachers, I am given the opportunity to observe and seek advice from experienced teachers. SA A D SD
6. The district stresses professional development as a way of increasing the skill level of teachers. SA A D SD
7. The district included a lot of “perks,” such as relocation costs and financial incentives in their recruiting process. SA A D SD
8. The mentoring program in the district has been a useful program as it gave me the opportunity to discuss problems with an experienced teacher. SA A D SD
9. The district pays an extra stipend for hard-to-fill positions. SA A D SD

10. Administrators ensure that new teachers are not overwhelmed in their new assignments.
SA A D SD
11. The entire staff takes part in creating the objectives for the school's yearly plan.
SA A D SD
12. The district provides a lucrative retirement package. SA A D SD
13. The community has many resources available to deal with social problems of young people. SA A D SD
14. The administrators deal with difficult students very effectively. SA A D SD
15. My job has very few stressful days. SA A D SD
16. More than one semester of student teaching is needed to be an effective beginning teacher. SA A D SD
17. My school has a high minority population of students. SA A D SD
18. The joy of teaching young people from high-minority at-risk populations keeps me motivated year after year. SA A D SD
19. I feel confident that I have the skills necessary to perform my duties. SA A D SD
20. Teachers in my school work as a team to ensure student achievement. SA A D SD
21. Behavior management was addressed in several of my teacher education classes.
SA A D SD
22. I have a strong commitment to the field of education. SA A D SD
23. An induction program held before the start of the school year has helped me prepare for the classroom on the first day of school. SA A D SD
24. I do not feel burned out by the end of the first month of school. SA A D SD
25. My job is not frustrating for me. SA A D SD

- 26. My school has a positive environment in which to teach. SA A D SD
- 27. The stress on my job does not affect my confidence as a teacher. SA A D SD
- 28. Administration provides the support needed to ensure all teachers can be successful in their positions. SA A D SD
- 29. I feel challenged in my job as a teacher. SA A D S D
- 30. The mentor assigned to me was very supportive and helpful. SA A D SD

Appendix C: Permission from Original Publisher of Survey

Sat, Apr 22, 2017 at 12:38 PM

Dear Dr. Giacometti:

I am a doctoral student at Concordia University's School of Education and working on my dissertation on teacher retention in low-performing schools with high-minority at-risk populations.

I am requesting permission to utilize the survey instrument from your dissertation for my research.

Thank you for your time and I look forward to your reply.

Christine Gray

Karen Giacometti 

Sat 4/22, 7:00 PM

Yes,

You may use my instrument as long as you properly cite it in the bibliography.

I also would like to see a copy of the final dissertation.

Thank you!!

Have fun!!

Appendix D: Original Published Survey

Factors Affecting Job Satisfaction and Teacher Retention for Beginning Teachers

Instructions: Please read each sentence carefully and circle your response.

SA = Strongly Agree, A = Agree,
D = Disagree, SD = Strongly Disagree

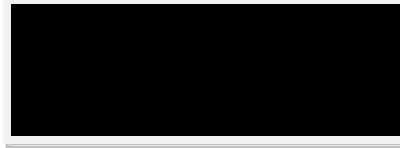
PLEASE DO NOT OMIT ANY ITEM.

1. My salary adequately meets my needs. SA A D SD
2. The induction program for new teachers was not long enough. SA A D SD
3. The social issues that my students face were a shock to me. SA A D SD
4. The salary for teachers in my geographical area is comparable to the salaries of other people with the same level of education. SA A D SD
5. As part of the professional development plan for new teachers, I am given the opportunity to observe and seek advice from experienced teachers. SA A D SD
6. Many businesses in my community have created partnerships with the schools. SA A D SD
7. My district provides a lucrative retirement package. SA A D SD
8. My district stresses professional development as a way of increasing the skill level of teachers. SA A D SD
9. I am satisfied with the way that my district spends money. SA A D SD
10. My district included a lot of "perks," such as relocation costs and coupons from local merchants, in their recruiting process. SA A D SD
11. The mentoring program in my district has been a useful program as it gave me the opportunity to discuss problems with an experienced teacher. SA A D SD

Appendices

Appendix A

Questionnaire



12. The community has many resources available to deal with social problems of young people. SA A D SD
13. My district pays an extra stipend for hard-to-fill positions. SA A D SD
14. Administrators ensure that new teachers are not overwhelmed in their new assignments. SA A D SD
15. The parents or guardians of my students rarely return my calls. SA A D SD
16. My coursework specifically dealt with assessing students' abilities. SA A D SD
17. The entire staff takes part in creating the objectives for the school's yearly plan. SA A D SD
18. There is much growth potential in the education field. SA A D SD
19. My courses in college prepared me to teach the curriculum for the courses that I have been assigned. SA A D SD
20. My administrators deal with difficult students very effectively. SA A D SD
21. My job has very few stressful days. SA A D SD
22. More than one semester of student teaching is needed to be an effective beginning teacher. SA A D SD
23. I have anxiety attacks when I think of going to work. SA A D SD

24. The joy of teaching young people keeps me motivated year after year. SA A D SD
25. I feel confident that I have the skills necessary to perform my duties. SA A D SD
26. Teachers in my school work as a team to ensure student achievement. SA A D SD
27. I feel that I am making a difference in the lives of children. SA A D SD
28. Classroom discipline was addressed in very few of my teacher education classes. SA A D SD
29. I have a strong commitment to the field of education. SA A D SD
30. An induction program held before the start of the school year has helped me prepare for the classroom on the first day of school. SA A D SD
31. I feel burned out by the end of September. SA A D SD
32. My job is too frustrating for me. SA A D SD
33. My school has a positive environment in which to teach. SA A D SD
34. The stress on my job reduces my confidence as a teacher. SA A D SD
35. I feel challenged in my job as a teacher. SA A D SD

Demographic Data

36. ☐ I plan to stay in the profession.
☐ I plan to leave the profession.
37. If you plan to leave, state the reason why you are leaving.

38. ☐ Age at last birthday.
39. Race:
☐ American Indian or Alaskan Native
☐ Asian or Pacific Islander
☐ Hispanic
☐ Black, not of Hispanic origin
☐ White, not of Hispanic origin
39. Gender:
☐ Male
☐ Female
40. Years in Education:
☐ First Year
☐ Second Year
☐ Third Year
41. My teaching assignment is:
☐ Elementary School
☐ Middle School
☐ High School
42. My Marital Status is:
☐ Single ☐ Married
43. My current salary is:
☐ Below \$30,000
☐ Between \$30,000-\$35,000
☐ Over \$35,000

44. My final GPA in my teacher preparation program was:
☐ Below a 2.0
☐ Between 2.0-2.5
☐ Between 2.51-3.0
☐ Between 3.01-3.5
☐ Over a 3.5

45. I became a teacher through a:
☐ traditional (4 or 5 year teacher preparation program).
☐ alternative certification program.

47. My school district is considered to be:
☐ in a rural setting.
☐ in a suburban setting.
☐ in an urban setting.

48. The state where I am employed:

49. If you are leaving the profession, state one factor that would have changed your decision:



Dear Colleague:

The retention of new teachers is a challenge facing school districts across the country. This is a study of the factors that affect the satisfaction of beginning teachers.

Your responses are vital to this study. The information gained will help schools and local school districts to understand how to more effectively deal with new teachers in an effort to increase their retention rate.

All information provided will be confidential. The number, which appears on the survey and envelope, will be used to monitor the returns. A self-addressed, stamped envelope is enclosed for your convenience.

Thank you, in advance, for your help in gaining information about the teaching profession.

Sincerely,



Appendix E: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously-researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity.

As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

What does “fraudulent” mean?

“Fraudulent” work is any material submitted for evaluation that is falsely or improperly presented as one’s own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate’s final work without full and complete documentation.

What is “unauthorized” assistance?

“Unauthorized assistance” refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

- Use of unauthorized notes or another’s work during an online test
- Use of unauthorized notes or personal assistance in an online exam setting
- Inappropriate collaboration in preparation and/or completion of a project
- Unauthorized solicitation of professional resources for the completion of the work.

Statement of Original Work (Continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.
2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association*.

Christine Gray

Digital Signature

Christine Gray

Name (Typed)

October 21, 2018

Date