2021

Collective Teacher Efficacy and Teachers' Intent to Teach and Site Performance

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Abstract

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by

David Ruiz Ramirez III

MA, Alliant International, 2011

MS, California State University East Bay, 2013

BS, Dominican University of California, 2009

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Education

Walden University

August 2021

Abstract

Teacher attrition has been a widely researched topic in the United States. However, little research has been conducted in large urban districts divided by high- and low-performing schools in regards to collective teacher efficacy and teachers' intent to continue teaching. Considering this research gap, this quantitative study was conducted to examine collective teacher efficacy in relation to middle-school and high-school teachers' intent to continue teaching and their perceptions of school performance. Within the conceptual framework of collective teacher efficacy, the research questions addressed the extent the independent variable, collective teacher efficacy, predicted the dependent variable, teachers' intent to continue teaching for the next 5 years, with a moderating effect of teachers' perceptions of school site performance. Survey data were collected from N = 105 teachers from a population of 364 beginning teachers at the middle- and high-school level in a Northern California school district. The Collective Teacher Beliefs Scale and single questions on the intent to teach for 5 years and the perceived school performance served as data collection instruments. A regression analysis confirmed that collective teacher efficacy significantly predicted teachers' intent to continue teaching for the next 5 years ($\beta = .62$, $p <. 01$), with the model explaining approximately one third of the variance in the dependent variable ($R^2 = .36$, $F(2, 47) = 15.03$, $p < .01$). A one-way ANCOVA showed no significant moderating effect of teachers' perceptions of site performance. These results suggest that interventions aimed to enhance collective teacher efficacy may improve teacher retention, which in turn could lead to an increase in education quality for positive social change.

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Dedication

I dedicate this study to my grandparents, Arthur and Mary Lopez, and David Sr. and Virginia Ramirez.

Acknowledgements

I want to acknowledge my family and those who have supported me through this long journey. Thank you to my mom, dad, and sister who are my biggest fans and supporters. Thank you to Mario for dealing with my late night typing sessions and using electricity for an extensive amount of time. Thank you to all my friends and colleagues, thank you for all the love, support, and advice during this journey. A special thanks to my comrade, Jane Kaufman.

To my first committee chairperson, Dr. Andrew Thomas, thank you. To Dr. D.L. Bearden, thank you. My present committee, Dr. Cheryl Keen, Dr. John Flohr, and Dr. Nicolae Nistor, provided all the guidance, encouragement, and support during the last stages of my dissertation.

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Chapter 1: Introduction to the Study

Introduction

Teacher retention in California has been discussed widely. The California Teachers Association (2016) reported a yearly retention rate of 80%; however, if a teacher is placed in an urban school district, the retention rate decreases to 50%. Due to the high turnover rate, California spent over 200 million dollars addressing the teacher shortage (Darling-Hammond et al., 2018). Nonetheless, teachers who have fewer than 3 years of teaching experience and teach in a Title I school have a 28% attrition rate each year, and teachers with fewer than 3 years who do not teach at a Title I school have a 22% attrition rate (Carver-Thomas & Darling-Hammond, 2019, p. 9). Teacher attrition levels in the U.S. workforce have been estimated to be 16% annually, with 8% of teachers leaving the teaching profession and 8% transferring to different schools (Darling-Hammond et al., 2018). Teacher attrition is a financial burden on school systems but also has a negative impact on individual schools and especially those in low performing urban schools (Mosoge et al., 2018; Scheopner, 2010; Simon & Johnson, 2015; Vagi et al., 2019). Research is lacking that examines the reasons why teachers leave a district with a divide in school site performance (Darling-Hammond et al., 2016).

The purpose of this quantitative study was to determine the predictive relationships of collective teacher efficacy, middle-school and high-school teachers' intent to teach for 5 years, and teachers' perceptions of school site performance. The current research on teacher retention has predominantly been focused on factors contributing to teacher attrition. Researchers have not examined teachers' perceptions of

school site performance, their intent to teach for 5 years, and school site performance in a single school district divided by two different types of schools regarding their students' levels of academic achievement. Most researchers have examined a variety of other factors leading to teacher attrition, such as lack of principal support, working conditions, teaching assignments, student factors, compensation, social connectedness, safety, and personal reasons (Akiba & Liang, 2016; Carpenter, 2016; Kruse & Johnson, 2017; McLaurin et al., 2009; Nir & Kranot, 2006; Simon & Johnson, 2015; Thomas et al., 2020). Unique to this study is the variable of collective teacher efficacy in relationship to teachers' intent to teach for 5 years and teachers' perceptions of school site performance.

In this chapter, I summarize the background literature, define the study's research problem, and explain the purpose of the study. I state the study's research question with hypotheses and summarize the theoretical framework and a rationale for conducting a quantitative study and data analysis plan. Lastly, I explain and describe definitions, assumptions, delimitations, and limitations.

Background

Teacher retention continues to burden school districts that support low-income students and low-performing schools. School districts have spent, in the past, an average of 200,000 dollars on recruitment to fill vacancies in a district (U.S. Department of Education, National Center for Education Statistics, 2014). To understand teacher attrition, researchers have examined reasons for leaving the teaching profession (Akiba & Liang, 2016; Carpenter, 2016; Kruse & Johnson, 2017; McLaurin et al., 2009; Nir & Kranot, 2006; Simon & Johnson, 20150). Low-performing schools often have high

teacher attrition due to a variety of reasons: difficulty dealing with student behavior, unsafe school climate, lack of principal support, low pay, and personal reasons (Holmes et al., 2019; Rezsonya et al., 2019). However, there is a lack of information on collective teacher efficacy and the relationship with teachers' intent to teach for 5 years and teachers' perceptions of school site performance (Albantan, 2017; Fackler & Malmberg, 2016). While studies exist on ways to improve teacher retention, little has been addressed on known collective teacher efficacy in relationship to teachers' intent to teach for 5 years (Albantan, 2017).

Problem Statement

The research problem addressed by this study is the number of teachers who leave low-performing schools compared to high-performing schools (Darling-Hammond et al., 2016; De Neve et al., 2015). Districts must both hire new teachers and make efforts to retain current teachers (Darling-Hammond et al., 2016). In low-performing schools, the teacher retention rate is 50% (California Teachers Association, 2016). Twenty-one percent of teachers at high poverty schools leave their school annually, which in the past has cost school districts approximately 2.2 billion dollars a year (Haynes, 2014; Ingersoll, 2004; Johnson et al., 2005; Sorensen & Ladd, 2020).

Kan (2014) found that higher-performing schoolteachers can focus more on classroom instruction. Lower-performing schools tend to have newer teachers because of more frequent turnover. In many low-performing schools across the country, principals have to attend to student behavior due to the number of beginning teachers who struggle with classroom management (Grissom, 2011; Kan, 2014). Another challenge to low-

performing schools may be lower collective teacher efficacy and diminished student academic performance (Goddard et al., 2002). This study aims to extend the research of Mosoge et al. (2018) by assessing collective teacher efficacy in relationship to teachers' intent to teach for 5 years and teachers' perceptions of school site performance. In the study, I focused on a large urban school district in Northern California, which provided an opportunity to better understand collective teacher efficacy in relationship to teachers' intent to teach for 5 years and teachers' perceptions of school site performance. According to the district teacher retention dashboard, approximately 80% of teachers return to the district with approximately 75% returning to their same site, while approximately half are at the same site for 3 years.

Researchers attribute teacher attrition in urban schools to several factors, including lack of principal support, lack of teacher input in decision making, low salary, and issues with school culture surrounding student discipline (Harris et al., 2019; Kelchtermans, 2017; Simon & Johnson, 2015). In addition, teachers in low-performing schools have a higher rate of attrition due to a variety of reason such as student behavior, lack of support, and high requirements in place for low performing schools, and a higher percentage of students who live below the poverty line (Harrell et al., 2019; Hughes et al., 2015). Still, these working conditions in urban or low-performing schools do not drive away every teacher. Researchers have identified practices and conditions that increase teacher retention, including reducing teacher or clerical tasks, providing regular feedback on teaching, high-quality professional development, and collaboration time with colleagues (Bauml, 2016; Charner-Laird et al., 2016; Simon & Johnson, 2015).

Researchers have studied how principals and school officials have developed a strong sense of collective teacher efficacy (Adams & Miskell, 2016; Demirtaş et al., 2017; Kundu et al., 2018) and ways to improve collective teacher efficacy (Fancera, 2016; Prelli, 2016). However, there is a lack of research addressing collective teacher efficacy in relationship to teachers' intent to teach for 5 years and teachers' perceptions of school site performance.

Purpose of the Study

The purpose of this quantitative study was to determine the predictive relationships of collective teacher efficacy, middle-school and high-school teachers' intent to teach for 5 years, and teachers' perceptions of school site performance. The two types of schools differ in performance on state assessments and will be categorized as high performing and low performing as identified by participants. Participants were beginning teachers who have taught between 0 and 5 years at the middle- and high-school level based on the district's salary scale.

For this study, the moderating variable of teachers' perceptions of school site performance in either a high- or low-performing school was identified by participants. The independent variable was collective teacher efficacy as measured by the Collective Teacher Beliefs Scale (Tschannen-Moran & Barr, 2004). The dependent variable was teachers' intent to teach for 5 years.

Research Questions and Hypotheses

RQ1: To what extent does collective teacher efficacy predict teacher intent to teach for 5 years?

$H_0$1: Collective teacher efficacy has no significant relationship in predicting teachers' intent to teach for 5 years.

H_a1: Collective teacher efficacy has a significant relationship in predicting teachers' intent to teach for 5 years.

RQ2: To what extent does teachers' perceptions of school site performance moderate the relationship between collective teacher efficacy and teacher intent to teach for 5 years?

$H_0$2: Teachers' perceptions of school site performance has no significant moderating effect on the relationship between collective teacher efficacy and teacher intent to teach for 5 years.

H_a2: Teachers' perceptions of school site performance has a significant moderating effect on the relationship between collective teacher efficacy and teacher intent to teach for 5 years.

Theoretical Foundation for the Study

The theoretical foundation I used in this study is Goddard et al.'s (2002) model of collective teacher efficacy and a more recent adaptation of Goddard et al.'s model found in Tschannen-Moran and Barr's (2004) model of collective teacher efficacy, both derived from Bandura's (1977) social cognitive theory and the concept of self-efficacy. According to Bandura's (1977) social cognitive theory, self-efficacy is derived from an individual's self-perception of how they feel, act, and think. Through the individual's self-perception, the cognitive and motivational process of self-efficacy begins to emerge and determine the task outcome (Bandura, 1977). An individual with high self-efficacy

will be able to achieve success while using a positive mindset to complete a task (Bandura, 1977). However, if an individual has low self-efficacy, the self-perception of completing a task will have low self-confidence in their ability (Bandura, 1977).

Nature of the Study

In this quasi-experimental study, I explored collective teacher efficacy in relationship with middle-school and high-school teachers' intent to teach for 5 years and teachers' perceptions of school site performance. Teachers in this study were not randomly assigned to their school site as teachers were hired prior to the start of this study. The two types of schools differ in performance on state assessments and were categorized as high performing and low performing based on teachers' perceptions. Participants were beginning teachers who had taught between 0 and 5 years at the middle- and high-school level, with years of teaching based on the district's salary scale as the district does not collect individual teaching years. One hundred and five teachers from the district were surveyed via email; email addresses were provided by the school district's research and development department. The data were collected through Survey Monkey and were analyzed with IBM Statistical Package for the Social Science (SPSS) Version 27. The data collection for the study provided participants a 2-week period to submit their surveys.

The independent variable was collective teacher efficacy measured by the Collective Teacher Beliefs Scale (Tschannen-Moran & Barr, 2004). The dependent variable was teachers' intent to teach for 5 years measured on a researcher-developed single question scaled 1–9. The moderating variable of teachers' perceptions of school

site performance in either a high- or low-performing school was measured on the same scale rating of 1–9. I used linear regression analysis to answer RQ1 to predict collective teacher efficacy on teachers' intent to teach for 5 years For RQ2, I used a separate linear regression for both levels of teachers' perceptions of school site performance to illustrate the different relationships and analysis of covariance (ANCOVA) to determine the statistical significance of the moderating effect.

Definitions

For this research, the following key terms were defined as follows:

Collective teacher efficacy: The perception of whether teachers as a whole can make a positive impact on student achievement (Goddard & Goddard, 2001).

School site performance: Either a high-performing or low-performing school. Teachers' perceptions of their school site was based on a 1–9 rating provided in the survey.

Teacher retention: The rate at which teachers remain in the profession (Gray & Taie, 2015).

Assumptions

I assumed participants would be curious about their sense of collective teacher efficacy and would want to help a fellow teacher with their research such that I would reach an adequate sample size. In addition, I assumed participants would complete both surveys truthfully. Also, I assumed the participants taught only at one school site to meet independence of observation.

Scope and Delimitations

This study took place in one school district in California that has been characterized as having high- and low-performing schools. Middle- and high-school teachers were invited to this study who were employed within the research district, teaching between 0 and 5 years (based on the district's salary scale), and placed in one of the district's middle or high schools. I did not collect data from elementary schools in this district; elementary schools in the district often perform at similar levels on state exams. In addition, the middle- and high-school teachers see more students compared to their elementary-school colleagues.

Limitations

The quality of the data may have been limited by time constraints for teachers to complete the survey and lower than desired response rates due to teachers not checking their email accounts. The teachers may not have given adequate time for reflection and their perceptions may have varied if the data were collected at different times of the year. As this study was quasi-experimental, due to teachers not being assigned by the research to their teaching positions, it is difficult to generalize the consistent instructional and student discipline strategies of each participant. Lastly, this study was done during the COVID-19 pandemic, which impacted schools moving out of the classroom and into distance learning. The survey asked teachers to answer the survey questions based on prepandemic experiences, but results may be limited by the challenge of remembering perceptions from several months earlier or having the pandemic influence those perceptions.

Significance

Researchers have shown that urban schools require more support for beginning teachers, especially teachers placed in low-performing schools (Barth et al., 2016; Whipp & Geronime, 2017). However, there is a lack of research on collective teacher efficacy and teachers' intentions to teach for 5 years and teachers' perceptions of school site performance. This study may help understand collective teacher efficacy in relationship to teachers' intent to teach for 5 years and teachers' perceptions of school site performance. Districts that have differently performing schools may gain insight into how to streamline supports for beginning teachers to increase their schools' collective efficacy and teachers' intentions to teach for 5 years. Having more teachers with high levels of collective teacher efficacy may have a positive influence on teachers' intent to teach for 5 years. This study may provide positive social change for education by providing information on collective teacher efficacy in relationship to teachers' intent to teach for 5 years and teachers' perceptions of school site performance.

Summary

Teachers' diminished rate of return to their current teaching position in low-performing schools continues to be a problem in the U.S. education system; more research is needed on collective teacher efficacy and school site performance. To address this issue, in this study, I addressed collective teacher efficacy in relationship with teachers' intent to teach for 5 years and teachers' perceptions of school site performance. In this chapter, the need for this study was developed by analysis of the gap in the literature and the potential significance for social change. The study was comprised of

one survey that included a collective teacher efficacy scale and a personally developed single question on intent to teach for 5 years, scored 1–9. In the next chapter, I will provide the literature search strategy, theoretical foundation, and empirical literature review.

Chapter 2: Literature Review

Introduction

Supporting and retaining highly qualified teachers is one of the toughest challenges in the U.S. education system (Helfeldt et al., 2009; Kelchtermans, 2017; Sutcher et al., 2019). According to the U.S. Department of Education, National Center for Education Statistics (2014), urban school districts make up more than 50% of the total number of school districts in the nation. Unfortunately, urban school districts experience 50% more teacher attrition compared to other districts in affluent communities (Dunn & Downey, 2018). While researchers have identified a variety of factors affecting teacher retention (Borman & Dowling, 2017; Geiger & Pivovarova, 2018; Glazer, 2018), little research exists on the relationship between collective teacher efficacy and teachers' intent to teach for 5 years. The purpose of this quantitative study was to determine the predictive relationships of collective teacher efficacy, middle-school and high-school teachers' intent to teach for 5 years, and teachers' perceptions of school site performance. In this chapter, I list the library databases and search engines as well as the key search terms I used. I explain the theory used as the framework and how relates to this study, and I discuss literature related to the methodological design. Lastly, I review the literature, providing what is currently known about collective teacher efficacy related to the key concepts and methodology of this study and other contributing studies related to teacher retention and attrition.

Literature Search Strategy

I accessed the research used in this literature review from ERIC, Education Source, SAGE, Academic Search Premier, and ProQuest databases; Google Scholar was used when additional resources were needed. Literature used in this study was largely published within the last 5 years; however, I also referenced earlier studies due to the number of studies on teacher retention in the early 1990s. The following key terms were used to search each database: *teacher retention, teacher attrition, urban school district, administrative support, collective teacher efficacy, teacher self-efficacy, beginning teacher, attrition, working conditions, bureaucratic impediments, safety, crime, low-income schools, hard-to-staff, red tape, accountability, leavers, stayers, teacher job satisfaction, school climate, school culture, discipline, teacher retention, and bureaucracy, paperwork, high-performing school, low-performing school,* and *self-efficacy.*

Theoretical Framework

The theoretical foundation I used in this study is a more recent adaptation of Goddard et al.'s (2002) model of collective teacher efficacy, found in Tschannen-Moran and Barr's (2004) model of collective teacher efficacy, both derived from Bandura's (1977) social cognitive theory and the concept of self-efficacy. Through the individual's self-perception, the cognitive and motivational process of self-efficacy begins to emerge and determine the task outcome (Bandura, 1977). An individual with high self-efficacy will be able to visualize success while using a positive mindset to complete a task

(Bandura, 1977). However, if an individual has low self-efficacy, the self-perception of completing a task will include negative feelings and instant failure (Bandura, 1977).

Tschannen-Moran and Barr (2004) defined collective efficacy as teachers' collective perception they can make an educational different in their students' lives inside and outside the classroom. Collective teacher efficacy has two elements: analysis of teaching and assessment of teaching competence. The first element, analysis of teaching, focuses on the school's ability to overcome the challenges and barriers to achieve student success (Goddard et al., 2002). These challenges include student motivation and abilities, availability of instructional materials, access to community resources, and use of the school's physical space. The second element, assessment of teaching competence, focuses on the school's interpretation of the task and assumptions of the teaching skills, teaching methods, trainings, and expertise. If a school site has high levels of collective teacher efficacy, the school site will accept challenging goals with strong organizational efforts that lead to better performance. On the contrary, if school sites have low collective teacher efficacy, there will be low levels of effort, higher levels of giving up, and poor performance levels.

Tschannen-Moran and Barr (2004) found schools that demonstrate high levels of collective teacher efficacy are setting high goals for their students, delivering high-quality instruction, and believing all their students can achieve at higher academic levels. In high collective teacher efficacy schools, teachers do not see students' socioeconomic status, lack of ability, and family background as reasons for low student achievement (Tschannen-Moran & Barr, 2004). Instead, high collective efficacy schools create

conditions for teacher collaborations that involve joint problem solving and teacher ownership in school decisions, are committed to community partnerships, and provide frequent communication to home from school. Lastly, the theory claims schools with high levels of collective teacher efficacy demonstrate persistence and resiliency when working with students who are performing below standards. Teachers in such schools will create intervention courses that strategically support struggling students and maximize instruction time by addressing disruptive classroom behaviors.

In addition, Tschannen-Moran and Barr (2004) found schools with high levels of collective efficacy had principals who support their teachers. Schools with high levels of collective efficacy had principals who find creative ways to improve instruction, listen to their teachers, and promote innovated ways of teaching. When the principal promotes shared leadership, teachers are invested in decision making, that in turn promotes collective efficacy. The supportive behavior of the principal not only promotes collective efficacy but also teacher self-efficacy. Research has shown that when teachers receive a low level of support from their principals, their self-efficacy suffers (Ninkovic & Knezevic Floric, 2018; Sehgal et al., 2017; Zakeri et al., 2016). When self-efficacy suffers, teachers begin to question their career choices and consider leaving the classroom. This is a cascading problem of low support that contributes to low self-efficacy and, ultimately, teacher attrition. This, in turn, influences teacher performance with classroom instruction while improving student outcomes (Baricaua Gutierez, 2016; Boies & Fiset, 2019; Talsma et al., 2018). When teachers are provided with support,

research indicates that high self-efficacy increases and promotes a more positive attitude and a higher level of confidence and performance (Firestone & Wilson, 1984).

Goddard et al.'s (2002) construct of collective teacher efficacy was developed from Bandura's (1977) social cognitive theory and concept of self-efficacy. Collective teacher efficacy is the perception that teachers as a whole can make a positive impact on student achievement (Goddard & Goddard, 2001). Goddard et al.'s model of collective teacher efficacy has two elements. The first element, goal competency, focuses on the school's ability to overcome challenges and barriers to achieve student success (Goddard et al., 2000). The second element, task analysis, focuses on the school's interpretation of the task and assumptions of teaching skills, teaching methods, trainings, and expertise (Goddard et al., 2002). Goddard et al. used goal competency and tasks analysis due to

> perceptions of group capability to successfully educate students result when teachers consider the level of difficulty of the teaching task (in relation) to their perceptions of group competence. Although we may discuss analysis of the teaching task and perceptions of group competence separately, perceptions of collective efficacy are formed only after teachers weigh these elements in relation to one another. (p. 485)

The survey being used in this study, the Collective Teacher Beliefs Scale, was developed by Tschannen-Moran and Barr (2004) and is an adaption of Goddard et al.'s (2002) Collective Teacher Efficacy Survey. While Goddard et al.'s focus on schools' abilities to overcome challenges and barriers and tasks, Tschannen-Moran and Barr's Collective Teacher Beliefs Scale focuses on instructional strategies and student

discipline. The reason for using Tschannen-Moran and Barr's scale is due in part to expanding the research on collective teacher efficacy as it relates to instructional strategies and student discipline in high- and low-performing schools.

Literature Review Related to Methodology

In this section, I review quantitative studies I used in determining the appropriate methodology for this research. The following studies used linear regression to study the variables of collective teacher efficacy, teacher retention, and job satisfaction. These studies from the reviewed literature helped determine which statistical method was appropriate for my study.

Cansoy and Parlar (2018) examined the relationship between school principals' instructional leadership behaviors, collective teacher efficacy, and teacher self-efficacy. The researchers surveyed 427 teachers in elementary, middle, and high schools who had an average of 4.67 years in the classroom. Three different scales were used: (a) Efficacy School Leadership Scale, (b) Teacher Self-Efficacy Scale, and (c) the Collective Teacher Beliefs Scale, which is the scale I used in my study. A linear regression analysis was performed to determine the "predictive power of teacher self-efficacy beliefs and effective school leadership behaviors over the teachers' collective efficacy perception" (Cansoy & Parlar, 2018, p. 558). From the linear regression, it was determined effective school leadership and teacher self-efficacy were "significant and positive predictors of collective teacher efficacy" (Cansoy & Parlar, 2018, p. 560).

Tentama and Pranungsari (2016) examined the roles of teachers' work motivation, job satisfaction, and commitment in 29 teachers employed in one school over

a 1-year period of work. Three scales were used in this study to measure organizational commitment, work motivation, and job satisfaction. Multiple regression was used to determine the correlation between the two independent variables, work motivation and job satisfaction, and the one dependent variable, organizational commitment. Tentama and Pranungsari found a positive correlation between teachers' work motivation and their organizational commitment. When teachers had low work motivation, their organizational commitment was low.

Shibiti (2019) used a multiple regression analysis to determine whether the independent variable (retention factors) predicted the dependent variable (job embeddedness). Participants in this study consistent of a convenience sample of 278 teachers who worked in a district's public schools. The Retention Factors Measuring Scale was used to determine employees' satisfaction with compensation, job characteristics, training and development opportunities, supervisor support, career opportunities, and work–life policies. Seven regression modules were performed with one model for job embeddedness and six for the subcomponents of job embeddedness. From the seven regressions, five were statistically significant, and two were not statistically significant. Shibiti's study concluded that if a teacher was satisfied with compensation, training, and development, they were more likely to be embedded in their job. In addition, teachers who were satisfied with opportunities in their career development demonstrated high levels of organizational sacrifices.

Literature Review Related to Key Variables and Concepts

In this section, I analyze research studies on variables related to the factors leading to teacher retention and high levels of collective teacher efficacy as well as the influence of high- and low-performing schools on collective teacher efficacy.

Collective Teacher Efficacy in Low-Performing Schools

Mosoge et al. (2018) conducted research on collective teacher efficacy in low-performing schools. The researcher aimed to establish the importance of improving collective teacher efficacy that would, in turn, improve student academic performance. The survey instrument used was the Collective Teacher Scale developed by Goddard et al. (2002), which has two elements: general competency and task analysis. Participants in the study included 10 low-performing schools with 217 teacher participants located in township, rural, and urban schools. The schools selected were randomly selected low-performing schools as determined by the province of Kenneth Kaunda Education Department of Education. Participants of the survey were comprised of approximately 70% township, 22% rural, and 8% urban schools. The results indicated teachers had medium to high levels of collective efficacy in group competency but low collective efficacy in task analysis.

Self-Efficacy and Teacher Retention

Teachers leaving the classroom can be attributed to many factors, such as student population, lack of resources, low compensation, and low support. Numerous studies have been conducted regarding a teacher's lack of self-efficacy as a factor of attrition (Chesnut & Burley, 2015; Tzivinikou, 2015; Wang et al., 2015). Teacher attrition is low

when a teacher's self-efficacy is high (Mehdinezhad & Mansouri, 2016; Skaalvik & Skaalvik, 2016). A teacher's high self-efficacy was found to be related to the level of support given by the school principals or mentor teachers (Charner-Laird et al., 2016). Principals play an important role in teachers' self-efficacy not just at the classroom level but also with professional development (Grant, 2017; Littrell et al., 1994). Studies have shown a variety of methods can be used by school principals to increase teachers' self-efficacy: strong communication about school-wide situations, modeling expectations, empowering staff, being considerate, providing rewards as a means of motivation, and showing discipline (Louis & Murphy, 2017; Mehdinezhad & Mansouri, 2016). In their review study, Zee and Koomen (2016) found teachers with high self-efficacy experienced high levels of personal accomplishment and high levels of satisfaction and were committed to their jobs. On the reverse, teachers who experience low levels of self-efficacy point the blame of their lack of success on other individuals; the teacher holds a low level of expectations for themselves and their students (Conley & Muncey, 1999; Sepe & Roza, 2010; Strunk et al., 2018).

Factors That Support Teacher Retention

In this section, I review research studies related to the influence of several factors on teacher retention: compensation, school safety, principals, connectedness, and students.

Compensation and Teacher Retention

Teacher compensation is one factor that can attract and retain teachers (Burke et al., 2015; Müller et al., 2009). However, others conclude compensation is a fraction of

the overall dilemma of retaining teachers (Hanushek et al., 1999; Müller et al., 2009; Räsänen et al., 2020). Teachers who are not competitively paid are likely to leave the classroom due to the demanding daily tasks (Loeb et al., 2005). Mertler (2016) found that teachers who were paid 20% more were more likely to stay for the first 14 years than their peers (4.38% for men and 5.27% for women). Other researchers have found teachers who are paid less than their peers in neighboring school districts are more likely to leave the classroom (Murnane & Olsen, 1990; Tehseen & Hadi, 2015).

Teachers who left the profession recommended more money due to the demanding day-to-day tasks (Buckley et al., 2004). Some researchers have concluded that due to the amount of work needed to be completed by teachers, districts need to have competitive compensation to keep their teachers (Hanushek et al., 1999; Ingersoll, 2004). Hanushek et al. (1999) found in many school districts, teachers who stay in the profession longer receive a salary increase each year and receive additional compensation based on education units. However, gender differences have been found when comparing male to female compensation rates (Hanushek et al., 1999; Hill & Jones, 2020). In addition, Hanushek et al. found male teachers were more likely to use compensation as a major factor for accepting job positions while females tended to use compensation as a small decision factor. Teachers who received pay raises every year stated other factors such as the advantages of teaching, influence on school policy, and connection with school principals as a reason to staying in teaching (Hanushek et al., 1999). However, Battle and Looney (20014) found teachers who were satisfied with the compensation stated the steady income was a factor in remaining in the classroom.

Safety and Teacher Retention

Safety plays a vital role in creating a positive working environment (Gregory et al., 2012; Valaei & Rezaei, 2016). Supportive schools are those that have a variety of student support and behavior modifications that create a positive school climate (Galand et al., 2007; Gray et al., 2017). This, in turn, allows a school to have fewer acts of violence towards students to students and students to adults (Johnson, 2006; McIntosh et al., 2016). These support systems help increase school-wide safety while decreasing the rate of teacher victimization (Gregory et al., 2012). However, schools that serve low-income communities and higher minority students experience a higher rate of safety issues than those in affluent communities (McMahon et al., 2014).

Teachers reported a variety of acts of violence by students that include verbal and physical abuse, and reports of stolen items. In McMahon et al.'s (2014) study on teacher violence, 75% of teachers reported being harassed by students, 44% reported physical attacks. In addition, teachers reported being victims by parents (37%), colleagues (21%), others (9%), and strangers (8%). Female teachers were more likely to report their acts of violence against them while male teachers were less likely to report incidents especially any forms of intimidation. Teachers in secondary schools reported more acts of violence compared to teachers in other grade levels. The study presented gender differences with male teachers reporting more incidents of obscene marks and gestures, verbal threats, and having a weapon pulled on them (McMahon et al., 2014).

To improve the safety of a school site, it is essential principals and school districts take measures to create a safe school environment. In a study by Aldridge and Fraser

(2016), teachers reported high job satisfaction when principals have a detailed plan to address school safety. School principals and the school community must create a positive school climate that focuses on building a sense of community and belonging, promoting nonviolent acts to deal with conflict and school-wide behavior modifications that are practiced by every adult official (Alonso et al., 2009; Sass et al., 2011). To further improve a school's safety and security, there should be an adequate amount of school security officers, security cameras surveying the campus, and implementing school emergency procedures (Maring & Koblinsky, 2013). These practices will not only improve the safety at a school site but potentially support teacher retention.

Principal Support and Teacher Retention

In this section I review two central aspects of principal support for teachers: direct support of teachers and support for student achievement that can influence teacher retention.

Principal Support and Intent to Return. Research on collective teacher efficacy and intent to return is limited, however Qadach et al. (2020) conducted a study on instructional leadership and teachers' intent to return. The study included 1700 elementary teachers from 130 Arab and Jewish schools using a multilevel structural equation modeling indicated a negative correlation between collective teacher efficacy and intent to leave. However, the study results did indicate a principal's instructional leadership decreases a teachers' intent to leave when the focus of the principals was on collective teacher efficacy and a shared vision of the school. In addition, collective teacher efficacy and a shared vision were mediators between a principal's instructional

leadership and a teachers' intent to leave. For principals to decrease the chance of teachers leaving, Qadach et al. suggested principals demonstrate instructional behaviors that allow for teacher to participate in the school vision and focus on ways to increase collective teacher efficacy.

Principal Support of Teachers. Studies have shown when principals implement a variety of practices to increase retention, promote positive school culture and climate, it improves student achievement and provides a safe learning environment for stakeholders (Grissom, 2011; Stein et al., 2016). Principal support has been the focus of several studies on teacher retention (Buttram & Farley-Ripple, 2016; Dahlkamp et al., 2017; Davies, 2013). The following principals support factors have been studied to help improve teacher retention: observation and feedback, professional development, and involving stakeholders in school-based decisions.

Principal support can be provided to teachers and students in a variety of ways that include but are not limited to the mentorship of new teachers, providing ongoing observations and feedback to teachers (Buchanan, 2012; Lavadenz & Hollins, 2015; Schmiegel, 2015; Vikaraman et al., 2017), providing professional development to improve instruction, and providing support for overall school culture (Battersby & Verdi, 2015; Blase & Blase, 2004; Brown, 2016; Firestone & Wilson, 1984). Principals have been found to provide positive and useful feedback to teachers that are based on observations and student data (Brill & McCartney, 2008; Buckley et al., 2004; Kyriacou, 2001). Professional development is a time for teachers to prepare and plan lessons with adequate support from principals (Bauml, 2016; Desimone & Garet, 2015; Foltos, 2015;

Gallagher, 2012; Lambeth, 2012). It is suggested professional development not only focus on curriculum and instruction but also provide teachers with techniques to deal with students and family communication (Boggan et al., 2016; Melnick & Meister, 2008).

Principals who support and enforce high standards and expectations for all their students and staff help contribute to a supportive school culture (Gregory et al., 2012; Hughes et al., 2015). School rules and policies should be enforced by principals and carried out by all adults at the school site to create a supportive environment (Fuller et al., 2016; Futernick, 2007; Gregory et al., 2012; Hirsch, & Emerick, 2007). When students are disruptive and noncompliant, principals should have a procedure to ensure the learning environment is not disruptive to other learners (Gregory et al., 2012).

Principals who provide stakeholders with an opportunity to contribute to school-wide policies and practices build ownership and connection to the school site (Dwyer, 2013; Hakanen et al., 2006; Lynch, 2012). Conversations about the school policy and practices will develop a bond of trust, collegiality, and a sense of ownership and autonomy for the school site (Blase & Blase, 2004; Müller et al., 2009; Shen, 1997). Torres (2016) found principals who support and enforce high standards and expectations for all their stakeholders promotes a caring learning environment for the school community. Studies have shown when principals and adults enforce school rules and policies, this promotes a positive school culture (Fuller et al., 2016; Futernick, 2007; Gregory et al., 2012; Hirsch & Emerick, 2007). When students are disruptive and noncompliant, principals should have a procedure to ensure the learning environment is not disruptive to other learners (Gregory et al., 2012).

Studies have shown teachers who left the classroom stated several reasons for leaving, including the lack of support given by principals such as providing support for state-required curriculum and not encouraging collaboration between colleagues (Boyd et al., 2011). In addition, 40% of teachers started with poor principal support (Boyd et al., 2011). Former teachers indicated a lack of support with state-mandated curriculum, using formative assessment data to drive instruction, lack of collaboration with colleagues, and identifying the school's mission to drive school operations (Boyd et al., 2011; Futernick, 2007). Schools in the underserved community reported lower ratings for principals due to frequent issues with school culture and climate (Grissom, 2011). Principals lacked the teacher support regarding dealing with violent related stress (Maring & Koblinsky, 2013)

To support beginning teachers with the demands of teaching, studies have shown schools that implement a mentor program have lowers teacher turnover (Johnson, 2006; Popp & Goldman, 2016), increase teacher retention (Lynch, 2012; McLaurin et al., 2009), and supports collegial collaboration (Collins, 1999; Ingersoll & Smith, 2003; Johnson, 2006). A variety of studies suggests mentoring allows for novice teachers to talk about the demands, struggles, and success of teaching in a non-judgmental and evaluative environment (Brown & Wynn, 2009; Buchanan, 2012; Collins, 1999; Hallam et al., 2015; Tarter, 2016). Mentoring provides novice teachers with the support and resources in a safe professional learning community (Brown & Wynn, 2009; Gray & Taie, 2015; Lambeth, 2012).

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Principals' Indirect Support of Teachers Through Supporting Student Achievement. Principal support indirectly promotes student achievement by providing strategies for teachers to use in their classrooms (Brown, 2016; Burkhauser, 2017; Dutta & Sahney, 2016; Schiefele & Schaffner, 2015). Studies found when principals focus professional developments on behavior management, teachers can use what they learned into action in their classroom (Brown et al., 2017; Park & Ham, 2016). The principal's role in promoting student achievement begins with supporting classroom teachers to be equipped to deal with the most challenging students and findings ways to engage every student with learning (Adams et al., 2017; Castro Silva et al., 2017; Goddard et al., 2015). By providing teachers with the strategies to build a conducive learning environment, teachers are more likely to promote student learning and build an inclusive classroom environment (Baricaua Gutierez, 2016; Doney, 2013; Gray et al., 2017; Karadag, 2019).

This can be done by providing professional developments focused on the psychological needs of students and ways to support learning (Adams & Olsen, 2017; Cooper Stein et al., 2016; Dana et al., 2016; DeMonte, 2013).

Social Connectedness and Teacher Retention

Teacher isolation can occur when collaboration is not part of the school culture (Melnick & Meister, 2008; Ostovar-Nameghi, & Sheikhahmadi, 2016). In two studies, teachers who were seeking other professions stated a lack of connection between colleagues as a reason for departing (Brill & McCartney, 2008; McLeskey et al., 2016). For beginning teachers, the demands of teaching often lead novice teachers to be isolated from their colleagues (Martin et al., 2016; Ning, et al., 2016; Sass et al., 2011). Dillard (2016) suggests principals can reduce isolation at their school site by providing teachers with collaborative sessions to speak about students and the curriculum. Mentor teachers will be able to provide resources and share knowledge to novice teachers about their teaching experience (Buckley et al., 2004; Gray et al., 2016; Sass et al., 2011; Zhang & Zeller, 2016). These collaborative sessions can lead to a discussion about the school's external community and support teachers with becoming familiar with their community (Collins, 1999; Minark et al., 2003; Owen, 2016; Pelika, 2000; Yoo, 2016). School sites that encourage staff to communicate about a shared vision and goals lead to a strong positive teaching experience for teachers (Johnson, 2006; Lambeth, 2012; Wang et al., 2008). In addition, school sites that promote a strong communication system contribute to a positive school culture (Kyriacou, 2001; Müller et al., 2009).

Student Factors

While there are numerous reasons for teachings to remain or leave teaching, another factor that must be considered is the actual students (Boyd et al., 2011; Ingersoll, 2004; Zee & Koomen, 2016). A critical aspect of teachers staying in the classroom is the ability to control and manage students (Buchanan, 2012; Sass et al., 2011). Teachers in areas with a high percentage of Latino and black students and a high number of students on free or reduced lunch student populations, report lower job satisfaction than teachers who work in non-White and high-income communities (Brill & McCartney, 2008; Grissom, 2011; Johnson et al., 2005; Lynch, 2012; Shen, 1997). In addition, teachers working in a low-income community with higher Black and Latino populations are more inclined to leave the teaching (Grissom, 2011). The behavior of the students highly contributes to a teacher's lack of motivation and burnout that ultimately contribute to the decision to leave teaching (Farber, 2000; Ford et al., 2019). Poor classroom management can often lead to teachers feeling distrust in their classroom system, sense of failure and may develop negative feelings towards students and the school site (Buchanan, 2012; Dickie et al., 2015). Brouwers and Tomic (1999) found when there is a lack of response and or dealing with student issues in the classroom will result in loss of instructional minutes for students.

Principals play a key role in supporting school-wide and classroom management system by providing resources and support in dealing with problematic students (Buchanan, 2012; Sowell, 2018). Professional developments on how to deal with problematic students and to develop strong behavior management contribute to a

teachers' confidence in dealing with issues in their classroom (Anrig, 2015; Berkovich & Eyal, 2018; Buchanan, 2012). Teachers who reported receiving support for problematic students were less likely to report being victimized by students and contributed to a positive student to teacher relationship in a study by Gregory et al. (2012). The support and feedback in dealing with problematic students can contribute to a teacher's willingness to connect with their students on a deeper social and emotional level (Gregory et al., 2012). The development and connection on social and emotional levels support teachers in meeting students at their needs to diffuse possible conflicts or anger and in turn create a positive classroom culture (Gregory et al., 2012).

Teacher Attrition

The literature I reviewed pointed to several personal reasons why teachers leave. In addition, the socio-economic characteristics of schools have been found to be influential.

Personal Reasons for Leaving Teaching

Although there are reasons in the classroom and at the school site that contribute to teacher attrition, there are some personal reasons why teachers leave the classroom. Teachers who leave the classroom state the long hours (Minark et al., 2003), large class sizes (Brill & McCartney, 2008), lack of principal support (Kim, 2019; Rothmann & Fouché, 2018; Trace, 2016) and demands of the profession contributed to high levels of stress and anxiety (Battle & Looney, 2014; Maring & Koblinsky, 2013). Another reason for teacher attrition was found to be due to teachers starting a family or relocating the family to a different community (Buckley et al., 2004). Since teaching involves a lot of

demands, a teacher starting a family may not have enough time to prepare and execute lessons with daily demands of raising a family (Buckley et al., 2004). When a teacher begins a family, the stress of the child along with the demands of being in the classroom contributes to higher stress levels and possible health problems (Burke et al., 2015). In addition to starting a family and relocating to different communities, teachers often leave the classroom to pursue high degrees or better job professions (Boyd et al., 2011; Brill & McCartney, 2008; Ingersoll & Smith, 2003).

Low-Income Schools

Low-income schools in the country differ in a variety of areas that include student population, physical conditions of the building, and the number of veteran teachers present at the school site. Schools that are low income and terms *urban schools* are those located in largely populated cities. Urban school districts have many minority students living at poverty levels. In addition, many of the urban school districts serve many immigrant students who speak little to no English. From the students who make up the urban school population, 56% of the students qualify for free or reduced lunch and 40% are attending schools that receive Title I Funds (Kena et al., 2015).

To better support teachers in low socioeconomic levels, a variety of studies recommend school sites focus on a variety of areas that will positively influence teacher attrition. As low socioeconomic communities experience a great deal of crime, violence, and bureaucratic impediments, support systems to be in place to r0educe teacher stress and the feeling of burning out (Papay et al., 2017). Farber (2000) mentioned factors that are often experienced in low socioeconomic schools that play to teacher stress and

burnout: an excessive amount of paperwork, above-average class size and lack of classroom space, students who are disrespectful and unmotivated, classrooms that are physically run down and do not possess adequate staff and equipment to support instruction. In addition, research suggests teachers be allowed to have autonomy and a high level of principal support with management and instruction (Cosner et al., 2015; Kan, 2014; Lynch, 2012). Principals play a key role in ensuring the physical and internal working conditions of the school are adequate and teachers are provided with competitive salaries compared to other neighboring districts (Geiger & Pivovarova, 2018; Lynch, 2012; Milanowski et al., 2009).

Summary

In Chapter 2, I reviewed research that pointed to different reasons for teacher retention and attrition. The literature also defined and discussed teacher location and the two dependent variables (teachers' collective teacher efficacy and intent to teach for 5 years). In addition, the literature provided a connection between teacher location on teacher self-efficacy and intent to return to teaching (Cosner et al., 2015; Kan, 2014; Lynch, 2012). The literature also provided a variety of factors contributing to teacher retention and intent to return.

The reason for teachers leaving the classroom is quite complex and involves many factors that include student, community, compensation, working conditions, levels of support, and personal reasons. School principals play an integral role in the teacher's decision to level the classroom. As principals are the leaders of the school site, teachers must feel supported when creating instructional material and supporting student

situations. As teaching can be an isolated profession, teachers need to feel they not only have the support from their colleagues. The mentorship and collaboration with their colleagues allow teachers to feel supported and share ideas to improve their instruction and classroom management. The gap in the research provided above does not discuss how collective teacher efficacy predicts teacher intent to teach for 5 years or the role perceived school site performance has on teacher intent to teach for 5 years. This research will create an additional platform to increase collective teacher efficacy and retention of beginning teachers in a similar school district.

In the next chapter, I will describe how I researched the relationship of teachers' perceptions of school site performance on collective teacher efficacy and teachers' intent to teach for 5 years. In addition, in Chapter 3, I will discuss the research design, the target population for this study, and the instrumentation to be used to collect responses. Lastly, I will discuss the analysis plan along with limitations and threats to validity.

Chapter 3: Research Method

The purpose of this quantitative study was to determine the predictive relationships of collective teacher efficacy, middle-school and high-school teachers' intent to teach for 5 years, and teachers' perceptions of school site performance. The current research on teacher retention has predominantly been focused on factors contributing to teacher attrition, and researchers have not examined teachers' perceptions of site performance and intent to teach for 5 years in a single school district divided by two different types of schools regarding their students' levels of academic achievement. Chapter 3 includes a detailed explanation of the study's research design elements and the rationale for selecting the research design. I discuss the sampling strategies, the population used in this study, and the types of instruments used. Also, this chapter includes a description of previous quantitative research used and the rationale for analysis. At the end of this chapter, I list potential threats to validity and the strategies and measures put in place to minimize the risk of this taking place during the study.

Research Design and Rationale

In this quasi-experimental study, the independent variable was collective teacher efficacy and the dependent variable was teachers' intent to teach for 5 years. The moderating variable was teachers' perceptions of school site performance in either a high- or low-performing school. This study did not involve a treatment or random assignments of the teachers and was a quasi-experimental study. I addressed RQ1 using the scores on the Collective Teacher Beliefs Scale and a single question regarding intent to teach for 5 years. I addressed RQ2 using a single question asking teachers their

perceptions of their school site performance. This design choice is consistent with previous research, builds on previous findings of Mosoge et al. (2018), and was focused on a specific school district.

Methodology

Population

The target population for this survey was beginning teachers teaching in a large urban school district in California at the middle- and high-school level. Specifically, the population was comprised of teachers who had been in the classroom for 0 and 5 years based on the district's salary scale and were teaching Grades 6–12 in all subject areas. In 2019–2020, the district had more than 25 middle and high schools with at least 30 teaching staff members to each school and approximately 3,000 teachers in the district; approximately 364 teachers were in the target population of having served between 0 and 5 years, with approximately 600 teachers in the first or second year, including elementary grades with 216 teachers who have taught from 0 and 5 years in middle-school or high-school. In the district, the average teachers' experience is 8 years. The student population for the targeted teachers at the middle- and high-school level is approximately 8,250. The student population in this district is almost half Latinx, 22%; over 10% for each of Black, Asian, and White; and less than 5% of Filipino, multiethnic, Native American, and Pacific Islander combined.

Sampling and Sampling Procedures

The type of sampling used in this study was convenience sampling to find a target population. As the study focused on beginning teachers in high and middle-schools in the

two communities of a district, target sampling was chosen for the sampling method because the research was focused on teachers who have taught between 0 and 5 years. Schools located in the north are typically the district's highest preforming schools while schools located in the east are low-performing schools. This district was selected due to the difference of performance levels of schools in different sections of the district.

I contacted the district's data team to help me identify participants using their years of teaching based on their salary scale. Teachers' perceptions of their school site helped determine the performance level of the school. I requested this information when I asked for permission to survey teachers in the district. I sent email invitations to 364 potential participants in hopes to collect survey data from 100 participants. G*Power 3.1 (Faul et al., 2007) computations for bivariate linear regression indicated at slope/correlation = 0.25, power = .80, and $p = .05$, the resulting recommended sample size was $N = 95$.

Procedures for Recruitment, Participation, and Data Collection

To recruit teachers for this study, I checked and confirmed that teachers met the criteria to participate in the study. Participating teachers must have been beginning teachers with 0 and 5 years of experience and must have taught in of the district's selected high and middle-schools in the district. I contacted the district's central office asking for permission to obtain email addresses of teachers who met the selection criteria for the study. Teachers who met those criteria received an email from me to their district email that communicated expectations, such as permission to use the data, confidentiality, time constraints, and availability for any follow-up questions they may have. An

opportunity to agree to informed consent was provided to participants on Survey Monkey before they took the survey. To ensure I received enough participants, I emailed eligible teachers with reminders to participate in the survey after 7 days.

Instrumentation and Operationalization of Constructs

For this study, there was one dependent variable: intent to continue teaching for the next 5 years. The independent variable was collective teacher efficacy. The moderating variable was teachers' perceptions of school site performance. The collective teacher efficacy independent variable was measured using the Collective Teacher Beliefs Scale developed by Tschannen-Moran and Barr (2004). Permission to use the Collective Teacher Beliefs Scale was obtained by the scale's designer (see Appendix). The dependent variable, teacher intent to teach for 5 years, was measured using a personally developed single question using the same scale of 1 to 9 as the Collective Teacher Beliefs Scale. The survey also included an informed consent page where they accepted their participation in the study before answering the survey questions.

The Collective Teacher Efficacy Scale has 12 total questions measured on a scale of 1 to 9. For my study, I used an overall averages score. An example of a question for instructional strategies is, "How much can teachers in your school do to produce meaningful student learning?" For student discipline, an example is, "To what extent can teachers in your school make expectations clear about appropriate student behavior?" According to the scoring guide, an overall collective teacher efficacy score can be calculated by taking the mean of all 12 items of the scale. To get an overall score for the subscores of instructional strategies and student discipline, a calculation of the means for

each item related to each factor would need to be computed. The data from the survey provided the average score for the 12-item scale, the six-item subscale for instructional strategies and student discipline. This determined the level of collective teacher efficacy for the type of school (high performing or low performing).

The operationalization aspect of this study is focused on collective teacher efficacy predicting teachers' intent and how teachers' perceptions of school site performance moderates the relationship between collective teacher efficacy and teacher intent to teach for 5 years. Site performance was determined based on teachers' perceptions of the school being high performing or low performing. The collective teacher efficacy independent variable was measured using the Collective Teacher Beliefs Scale developed by Tschannen-Moran and Barr (2004) due to concerns of the previous collective teacher efficacy measure developed by Goddard et al. (2002). According to Tschannen-Moran and Barr (2004), the Goddard et al. survey "artificially drives down the collective efficacy scores of schools in more challenging environments by its explicit measurement of task difficulty" (p. 109). The Collective Teacher Beliefs Scale developed by Tschannen-Moran and Barr is an adaption of Tschannen-Moran and Woolfolk Hoy's (2001) Teacher Sense of Efficacy Scale. To establish reliability and validity, Tschannen-Moran and Barr administered the survey in 66 middle-schools in the Commonwealth of Virginia. The school location demographics included 25% rural, 50% suburban, and 25% urban communities. The Cronbach's alpha reliability for the 12-item scale was .97. For the six-item scale for instructional strategies, a Cronbach's alpha reliability of .96 and student discipline of .94 (Tschannen-Moran & Barr, 2004).

Data Analysis Plan

I analyzed the collected data using a linear regression model to determine the extent to which collective teacher efficacy predicts teachers' intent to teach for 5 years and to what extent teachers' perceptions of site performance moderate the relationship between collective teacher efficacy and intent to teach for 5 years. The data provided were stored on the Survey Monkey site and then transferred to SPSS for data analysis. All data provided were stored with password-protected access and will be kept confidential from the public. To analyze the data, SPSS Version 27, software to assist with statistical analysis, was used to conduct a linear regression analysis. A linear regression model was the most appropriate research design to determine if the independent variable, collective teacher efficacy, predicts the outcome of the dependent variable, intent to teach for 5 years. Conducting separate linear regression analyses for each teacher perception of site performance, high and low performing, will determine different relationships while ANCOVA will determine the statistical significance of the moderating effect.

For RQ1 on the extent of collective teacher efficacy predicting teacher intent to teach for 5 years, a linear regression analysis was used to report the correlation coefficient β, error probability *p,* variance explained by the regression model R^2. For RQ2 on the extent to which teachers' perceptions of site performance moderate the relationships between collective teacher efficacy and teacher intent to teach for 5 years, a separate linear regression analysis was used for each teacher performance level to illustrate the different relationships. In addition, ANCOVA was used to determine the statistical significance of the moderating effect reporting *df*, *F*, *p* for the effect of the site

performance, and the increase in DV variance ΔR^2 introduced by the moderator. To address any outliers in the data, I went back to the data to ensure data entry was accurate and no errors were present in the instrumental process.

Threats to Validity

External Validity

To avoid possible threats to external validity, such as incorrect reporting, the selection process was streamlined to ensure all teachers participating fit the criteria. Because the survey focused on the 2020–2021 school year, teachers were asked to reflect on their experiences during this time frame and pre-COVID 19 pandemic. Teachers in this study taught at the middle- and high-school level, had teaching experience between 0 and 5 years, and were employed in the testing district. To assist with verification, I worked with the district to cross-reference teacher placement criteria. In addition, school placement was monitored to ensure participants were employed during the 2020–2021 academic school year. In addition, it was assumed teachers who participated in this study taught at one school site in the high- or low-performing schools. Lastly, for the linear regression to properly be used, the sample size must be an adequate amount to have accurate data.

Internal Validity

To avoid any threat to internal validity with treatment and interactions with participants, the instrumentation was the same for all participating teachers. Teachers were given the same amount of time to complete the survey and the questions were the same for all participating teachers. This ensured teachers were providing accurate

response to the scale. To minimize any issues with the selection process of participants, data information obtained from the district's research and data team was used to identify year's teachers taught in the district based on the salary scale. This ensured teachers used in the study area were in the target population. The survey was emailed to teachers' email accounts providing them easy access to complete the survey during their free time.

Ethical Procedures

I as the researcher followed all Walden University's ethical guidelines by the Institutional Review Board (IRB) and did not collect data until receiving permission (Approval Number 11-30-20-0312686). Conducting research that promotes ethical conduct is important to any study involving human participants (Creswell, 2014). In this study, teachers were surveyed using an online survey platform and was anonymous. Participation in this study were voluntary, I provided informed consent to all participants in the invitation, and no one was compensated for participating in this study. The online survey provided to participants was conducted using Survey Monkey. Participants provided their consent, assurance of the anonymity of responses shared, and protection from any harm. Participants were allowed to terminate their participation at their free will. An application was submitted to IRB to begin the process of data collection and ensure all ethical procedures are being followed. I contacted IRB to ensure I was collecting data ethically and making sure the method of obtaining information is following their standards. I ensured the information about the participants would remain anonymous and would not be given to any other individuals in the district. During the survey, participants were permitted to not finish the survey or decline to participate.

Participants were not compensated for their participation however I informed the participants that I donated $1 to a local nonprofit that supports getting technology to students for each participant.

Summary

In this chapter, I described the research method and the measuring tools to be used in this study. In addition, information on how the data was collected and analyzed, the threats to validity, and detailing the ethical procedures. This quantitative study used one survey to determine the relationship of teacher perceived school site performance on collective teacher efficacy and intent to teach for 5 years. This study may provide information about differences in collective teacher efficacy and its relation to teachers' intent to teach for 5 years. In Chapter 4, I will present the data and the data analysis for each research question.

Chapter 4: Results

The purpose of this quantitative study was to determine the predictive relationships of collective teacher efficacy, middle-school and high-school teachers' intent to teach for 5 years, and teachers' perceptions of school site performance. The research questions were:

RQ1: To what extent does collective teacher efficacy predict teachers' intent to teach for 5 years?

$H_0$1: Collective teacher efficacy has no significant relationship in predicting teachers' intent to teach for 5 years.

H_a1: Collective teacher efficacy has a significant relationship in predicting teachers' intent to teach 5 years.

RQ2: To what extent does teachers' perception of school site performance moderate the relationship between collective teacher efficacy and teacher intent to teach for 5 years?

$H_0$2: Teachers' perception of school site performance has no significant moderating effect on the relationship between collective teacher efficacy and teacher intent to teach for 5 years.

H_a2: Teachers' perception of school site performance has a significant moderating effect on the relationship between collective teacher efficacy and teacher intent to teach 5 years.

In Chapter 4, I address setting, demographics, data collection, and results for this study. In the last part of Chapter 4, I summarize the findings regarding collective teacher

efficacy in relationship to teachers' intent to teach for 5 years and teachers' perceptions of school site performance, including statistical assumptions and statistical analysis of the results.

Data Collection

The research location of this study was a large urban school district in Northern California. The study only focused on the district's managed middle and high schools and excluded the elementary and charter schools. The participating district required approval from Walden University's IRB before the district's data department reviewed the study. To meet the needs of the district, I changed a previous question on retention to state teachers' intent to teach for 5 years, added a question on teachers' perceptions of their school site performance level, and sent the same invitation letter as the reminder. For the data collection process, I followed the procedures mentioned in Chapter 3 with adjustments requested by the district. The participating district required changes in the procedures prior to me sending the survey to participating teachers. The district required changes to the intent to return to current teaching position question, which was replaced with "Do you think you will be teaching for 5 years?" The demographic question of where the participant's site is located was also removed and replaced with the following question: "What is your perception of your school site performance?" Once the changes were made to the questions and approved by Walden University IRB, the data collection process began January 24, 2021.

Because the participating district does not collect the number of years a teacher has been in the district, I was given participants' emails based on the district's salary

scale, which was used to determine what teachers would be considered 0–5 years and able to participate in the study. During the time of data collection, the teachers were working virtually due to the COVID-19 pandemic. Participants were given 2 weeks to complete the survey. I sent out the survey to 364 teachers and 105 teachers participated in the study. From the 105 participants, 55 teachers were from low-performing schools and 50 teachers were from high-performing schools.

Results

Research Question 1

RQ1 asked to what extent collective teacher efficacy predicts teacher intent to teach for 5 years. The independent variable was collective teacher efficacy. To test this, a linear regression was used to predict collective teacher efficacy on teachers' intent to teach for 5 years. Several assumptions must be considered to use a linear regression analysis according to the Laerd Statistics (2019) data analysis tool. For both research questions, the same process was used to determine if a linear regression analysis was appropriate for this study. For the first assumption, the current study did meet the first assumption as there was one dependent variable, teacher intent to teach for 5 years, as measured at the continuous level with a scale from 1–9. The current study also met the second assumption, as there was only one independent variable, collective teacher efficacy, also measured at the continuous level using the same scale 1–9 as the dependent variable.

Other assumptions for linear regression were examined. Normality of the data was checked as met with visual of P-P plot and histogram. Linearity was checked by

correlation $r = .63$ and visual of scatterplot and was determined to be met. Homoscedasticity was determined met by visual of scatterplot and because Levene's test of equality of error variance was not significant ($F = 3.41$, $p = .07$). Independence observations were met as each participant was counted as one independent observation, and for residual errors Durbin-Watson statistic was used. Based on the Durbin-Watson statistic of 1.73, which approached 2.0, the assumptions were met. No outliers were omitted from the data used after inspection of the scatterplot.

I ran linear regression to determine the extent to which collective teacher efficacy predicts teacher intent to continue teaching for the next 5 years. To assess linearity, a scatterplot of teacher intent to teach for 5 years against collective teacher efficacy was plotted. Visual inspection of these two plots suggested a linear relationship between the two variables. Collective teacher efficacy was found to significantly predict teachers' intent to continue teaching for the next 5 years ($\beta = .62$, $p <. 01$) while school performance did not ($\beta = -.02$, $p < .89$). The regression model explained 36% of the variance in the dependent variable ($R^2 = .36$, $F(2, 47) = 15.03$, $p < .01$).

Research Question 2

RQ2 asked to what extent do teachers' perceptions of school site performance moderate the relationship between collective teacher efficacy and intent to teach for 5 years. To illustrate the relationships, separate linear regressions were run with collective teacher efficacy as the independent variable and the dependent variable was intent to teach for 5 years. The moderating variable was school performance group, with a separate analysis for perceived low and high performance. For RQ2, separate linear

regressions for low- and high-performing schools to determine the extent to which high- and low-performing schools moderate the intent to teach for 5 years.

Linear Regression, Low Performing Schools

I ran a linear regression to determine the extent to which collective teacher efficacy predicts teacher intent to teach for 5 years with a moderating variable of teachers' perceptions for low performing schools. I found that, for low-performing schools, collective teacher efficacy predicts teachers' intent to continue teaching for the next 5 years ($\beta = .62$, $p < .01$). The regression results indicate that the predictors explain 39% of the variance ($R^2 = .37$, $F(1, 48) = 30.67$, $p < .01$).

Linear Regression, High-Performing Schools

I ran a linear regression to determine the extent to which collective teacher efficacy predicts teacher intent to teach for 5 years with a moderating variable of teachers' perceptions for high-performing schools. I found that, for high-performing schools, collective teacher efficacy predicts teachers' intention to continue teaching for the next 5 years ($\beta = .52$, $p < .01$). The regression results indicate that the predictors explain 27% of the variance ($R^2 = .25$, $F\ (1, 52) = 18.99$, $p < .01$).

ANCOVA

Both high- and low-performing schools individually were variables in predicting intent to teach for 5 years. An ANCOVA was run to compare the effects of teachers' perceptions of both low- and high-performing schools simultaneously on teacher intent to teach for 5 years after controlling for collective teacher efficacy. The ANCOVA was performed using school performance as the independent variable, collective teacher

efficacy as covariate, and teachers' intent to continue teaching for the next 5 years as dependent variable. Levene's test of equality of error variance was not significant (F = 3.41, p = .07). After adjustment for collective teacher efficacy, there was no statistically significant difference between high- and low-performing schools ($F(1, 102) = 1.54$, p = .22, $\eta^2 = .015$). Therefore, the null hypothesis was accepted: Teachers' perceptions of school site performance did not have a significant moderating effect on the relationship between collective teacher efficacy and teachers' intent to teach for 5 years.

Summary

In Chapter 4, I provided information of the data collection methods and included a report of the findings of the current study. The alternate hypothesis for RQ1 was accepted based on the data showing a significant effect in the relationship of collective teacher efficacy predicting teachers' intent to teach for 5 years. For RQ2, the null hypothesis was upheld as the data showed there was no significant relationship on teachers' perceptions of school performance moderating the relationship between collective teacher efficacy and teacher intent to teach for 5 years.

In Chapter 5, I review the purpose and nature of the study. I include interpretation of the findings and a discussion of the study's limitations. In addition, I discuss recommendations for further research based on previous research on this topic discussed in Chapter 2 and the current findings. Lastly, I will provide potential implications for positive social change based on the current study's findings.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative study was to determine the predictive relationships of collective teacher efficacy, middle-school and high-school teachers' intent to teach for 5 years, and teachers' perceptions of school site performance. To address RQ1, a linear regression was used to predict collective teacher efficacy on teachers' intent to teach for 5 years. To address RQ2, a one-way ANCOVA was used to predict the influence of the independent variable, teachers' perceptions of school site performance, on the dependent variable, teachers' intent to teach for 5 years, while controlling for collective teacher efficacy. Collective teacher efficacy predicted teachers' intent to teach for 5 years, and teachers' perceptions of site performance (low and high performing) did not moderate the relationship between collective teacher efficacy and teachers' intent to teach for 5 years. In this chapter, I will discuss the interpretations of the findings, limitations of the current study, recommendations for future research, potential implications for positive social change, and conclusions.

Interpretation of Findings

In this section, I discuss how the key findings confirm and extend knowledge about the relationship among collective teacher efficacy, intent to teach for 5 years, and teachers' perceptions of school site performance, drawing on literature I reviewed in Chapter 2, beginning with interpretation in light of empirical literature and then in relationship to the theoretical framework.

Interpretation of Findings in Relationship to the Empirical Literature

The findings of this study confirmed and extended findings in the literature on collective teacher efficacy, teachers' perceptions of school site performance, and teachers' intent to teach for 5 years. In this study, teachers who had high collective teacher efficacy were more likely to indicate an intention to teach for 5 years. This confirmed the findings from Tschannen-Moran and Barr's (2004) research on collective teacher efficacy and student achievement. Tschannen-Moran and Barr, whose survey sample was collected from participating schools in rural, urban, and suburban communities, also found a significant relationship between teachers' perceptions of collective teacher efficacy and student achievement. My current study extends the work of Tschannen-Moran and Barr by exploring collective teacher efficacy in a high needs school district with a focus on teachers' perceptions of school site performance and intent to teach for 5 years. From my findings, the variable teachers' perceptions of school site performance does not have a significant statistical moderating effect on the relationship between collective teacher efficacy and teachers' intent to teach for 5 years. However, a regression analysis showed both high- and low-performing perceptions individually moderate collective teacher efficacy and teachers' intent to teach for 5 years.

Tschannen-Moran and Barr (2004) used measures of student achievement to compare to collective teacher efficacy; my study used teacher perception of high or low school site performance in a single high needs district in place of student achievement. The current study also adds to the literature as it was conducted during the COVID-19 pandemic and conducted in a high-needs district. Previous research on collective teacher

efficacy, teachers' perceptions of school site performance, and teachers' intent to teach for 5 years was done during full-time in-person learning; this study was conducted during full-time distance learning. Even though the study was conducted during a global pandemic, the results of the study confirmed the previous study by Tschannen-Moran and Barr.

The current study's findings can be compared to the findings of Mosoge et al. (2018), who conducted their study with different types of low-performing schools: township, rural, and urban schools. Mosoge et al. found that collective teacher efficacy in the three types of low-performing schools was medium to high for teachers' group competencies, but lower in teacher task analysis. My study extended the work of Mosoge et al. by including high- and low-performing middle and high schools. However, my study measure of collective teacher efficacy did not include subsets, having used only one scale in Tschannen-Moran and Barr's (2004) survey.

The present study focused on collective teacher efficacy, not individual teacher efficacy. Studies have shown that higher teacher efficacy is related to higher retention (Chesnut & Burley, 2015; Mehdinezhad & Mansouri, 2016; Skaalvik & Skaalvik, 2016; Tzivinikou, 2015; Wang et al., 2015). Teachers who experience low levels of self-efficacy blame their lack of success on other individuals, holding low level of expectations for themselves and their students (Conley & Muncey, 1999; Sepe & Roza, 2010; Strunk et al., 2018). Papay et al. (2017) used longitudinal data sets from 16 schools in urban districts that primarily serve a large population of disadvantaged students; the study's main variable was whether a teacher remains in a teaching assignment in the

same school after a given period of time. Papay et al. found 13% of teachers left the district each year with 45% leaving in 5 years. In my study, 36% of teachers indicated they would most likely not teach for 5 years. In the current study, I did not compare collective teacher efficacy to individual teacher efficacy, so it is not possible to determine if collective teacher efficacy has more predictive power regarding teacher retention.

Interpretation of Findings in Relationship to the Theoretical Framework

The construct and scale of collective teacher efficacy (Tschannen-Moran & Barr, 2004) was based on Bandura's social cognitive theory. Goddard and Goddard (2001) defined *collective teacher efficacy* as the perception of whether teachers as a whole can make a positive impact on student achievement. For this study, participants took Tschannen-Moran and Barr's Collective Teacher Beliefs Scale (2004) that measures the "collective perception of a school's capacity for student discipline, as well as instructional practice" (p. 191) as well as an overall measure of collective teacher efficacy. For my study, I did not use the categories of instructional practices and student discipline. In the current study, I focused on the overall collective teacher efficacy and did not look at the subscales of instructional strategies and student discipline, so I cannot address the findings in relationship to the larger theory. This study supports a basic tenet of collective teacher efficacy: when there are high levels of collective teacher efficacy, students' standardized test scores are higher in percentile ranking (Tschannen-Moran & Barr, 2004). However, not having access to data on standardized tests, the current study used a measure of high or low student performance. From my study, 37 out of 50 (74%) teachers who indicated their perception of their school site to be low performing had a

low collective teacher efficacy average. However, 50 out of 55 (91%) teachers who indicated their perception of their school site to be high performing had high collective teacher efficacy average scores. Regarding the findings in relationship to the two research questions, I addressed those findings in light of the work of Tschannen-Moran and Barr (2004) in the previous section, which focused more on their empirical findings. From the linear regression, collective teacher efficacy did predict teachers' intent to teach for 5 years. In addition, a one-way ANCOVA found school site performance (low or high performing) did not moderate the relationship between collective teacher efficacy and teachers' intent to teach for 5 years. However, a regression analysis shows both high- and low-performing perceptions moderate collective teacher efficacy and teachers' intent to teach for 5 years.

Limitations of the Study

The main limitation of this study was it taking place during a COVID-19 global pandemic. Due to the pandemic, schools in the participating district were conducted remotely, and had been for 7 months, during data collection. The pandemic did not allow new teachers to experience in-person instruction or teachers new to the district to experience in-person instruction in that district. Teachers' recent teaching experiences, which may have been their focus in completing the survey, may have been limited to interactions with students and colleagues via online platforms. This limitation was addressed by asking teachers to reflect on their experience of teaching to the best of their ability despite not being in person. Therefore, findings from this study may not be generalizable to teachers' reflections before the pandemic and the onset of virtual

instruction, to teaching experiences with more than a year of virtual experience, or future in-person teaching.

A second limitation results from how participants were recruited and selected for this study. The participating district provided email addresses of participants based on their salary scale rather than reported number of years teaching, as the number of years teaching was not available. Email addresses were selected based on the salary range of a teacher with 0–5 years of teaching experience as reflected in the district's standardized salary scale. Individuals who entered the district with a high number of education credits but whose salaries indicated they may have been considered in the 0–5-year range were not invited to participate in the survey due to their placement on the salary scale. Findings for this study may not be generalizable to other populations of teachers with more precise measures of years of teaching.

A third limitation was how participants determined their school's performance level. Due to changes to the participating district's state reporting system, performance is no longer reported as one score but is determined by multiple categories, so identifying a school as high performing or low performing was not easily accessible in the database. To address this limitation, participants were asked to provide a self-perception of their school's site performance using a 1–9 scale. This allowed me to segregate the data based on high- or low-performing schools.

Recommendations

In the following section, I will discuss my recommendations for future research based on the strengths and limitations of the current study. As this study took place

during the COVID-19 pandemic, I recommend repeating the study with the same research questions when schools resume to full-time in-person instruction. Because online learning presents different challenges for teachers and students, using the same design of the study could yield different results among a population experiencing full-time in-person learning. In addition, while beginning teaching presents many challenges, the first 5 years of teaching during a global pandemic presents a different set of challenges, including lower levels of student engagement, increased needs for monitoring student progress, lack of student and colleague connection and engagement, lack of feeling successful as a teacher, and struggles with the use of technology (Kraft & Simon, 2020).

My study only focused on the overall collective teacher efficacy and did not further break the data into two categories: instructional strategies and student discipline. Examining the different subscales of the Collective Teacher Efficacy scale (Tschannen-Moran & Barr, 2004) based on school site performance could further provide information on possible areas of improvement in instructional strategies and student discipline. The participating district can use this study to begin discussions on how to support low-performing schools with increasing teachers' collective efficacy to increase teacher retention past the 5-year mark. The participating district can further investigate what supports are in place at the high-performing schools and replicate these supports to low-performing schools.

Implications for Positive Social Change

The findings from this current study provide new information regarding collective teacher efficacy, teachers' intent to teach for 5 years, and teachers' perceptions of school site performance. The results of the study may have implications for positive social change by improving teachers' intent to teach for 5 years or longer by helping develop a stronger understanding of how to best support them during their beginning years of teaching. Because teachers in the 0–5 years range have a high percentage of leaving (Carver-Thomas & Darling-Hammond, 2019), making improvements to support their experience as a teacher could improve their intentions to stay longer in the profession. As collective teacher efficacy focuses on teachers' perceptions and judgment as a group to positively influence student outcomes (Donohoo, 2017), districts can provide professional development that is focused on improving student achievement through lesson inquiries, student work analysis, and collaboration with other teachers in the district.

Conclusion

Teacher retention has been a widely studied topic in the field of education. This study, although conducted during a global pandemic, confirms previous research regarding teacher attrition in the first 5 years of teaching. To improve retention numbers of beginning teachers, more research is needed to determine solutions for high attrition rates among beginning teachers, particularly those teaching in urban school districts. This study extends the research on teacher retention by connecting collective teacher efficacy to intent to teach for 5 years and teachers' perceptions of school site performance. The

findings of this study indicate that teachers' perceptions of school site performance did not have a significant moderating effect on the relationship between collective teacher efficacy and teachers' intent to teach for 5 years. However, a regression analysis showed both high- and low-performing perceptions moderated collective teacher efficacy and teachers' intent to teach for 5 years.

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Appendix: Approval to Use Collective Teacher Beliefs Scale

William & Mary
School of Education

MEGAN TSCHANNEN-MORAN, PHD
PROFESSOR OF EDUCATIONAL LEADERSHIP

May 12, 2020

David,

You have my permission to use the Collective Teacher Beliefs Scale in your research. The best citation to use is:

> Tschannen-Moran, M., & Barr, M. (2004). Fostering Student Learning: The Relationship of Collective Teacher Efficacy and Student Achievement. *Leadership and Policy in Schools,* 3(3), 189-209.

You can find a copy of this measure and scoring directions on my web site at http://wmpeople.wm.edu/site/page/mxtsch . I will also attach directions you can follow to access my password protected web site, where you can find the supporting references for these measures as well as other articles I have written on this and related topics.

All the best,

Megan Tschannen-Moran
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