New Teacher and Mentor Contact: An Examination of Type, Frequency, and Duration

Tiffany R. Lowery

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FREQUENCY, AND DURATION

by

Tiffany R. Lowery

Dissertation

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OF TYPE, FREQUENCY, AND DURATION

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Dissertation

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People often tell me that they do not know how I was able to complete the monstrous task of a doctoral degree. My response always points back to my support system. As with all other endeavors in my life, this journey began with a whisper from God to move forward and His promise to sustain me along the way.

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ABSTRACT

This study focused on three aspects of a new teacher mentor program in a Midwestern elementary school district. The researcher sought to determine whether the type, frequency, and duration of contact between new teachers and their mentors affected the overall usefulness of the mentor program. Within the study, the following types of contact were included on the survey tool: face-to-face contact, email, observation, or other. Frequency was measured by the number of days per month that the new teacher met with the mentor. Duration was measured by the amount of time, in minutes, spent in face-to-face conversation with the mentor. The school district agreed to allow the researcher to survey new teachers, defined as teachers recently hired to the district, currently participating in the mentor program or who had completed the program within the last year. Due to a low number of participants, the results suggested that the types, frequency, and duration of contact were statistically insignificant in relation to the usefulness of the new teacher mentoring program.
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CHAPTER I

INTRODUCTION

When looking back and pondering educational experiences, teachers are often brought to remembrance. Their personal connection, helpfulness, encouragement, and introduction to new concepts and ideas make a lasting impression, positively or negatively. Schools need good teachers in order to function properly. Teachers are one of the most important stakeholders in the educational system.

With the increasing demands for high test scores on standardized tests, and changing learning standards, school districts are placing a great deal of pressure on classroom teachers. Teachers are no longer able to simply teach, yet their teaching must be effective so that the teaching results in high percentages of students meeting or exceeding on state tests, which allows schools to make adequate yearly progress (AYP). In their study of pre-service and novice teacher stress, Rieg, Paquette, and Chen (2007) found that meeting the requirements and student achievement expectations for standardized testing ranked as one of the top two stresses for novice teachers. Jepson and Forrest (2006) reported that the high stress levels associated with teaching are resulting in a “detrimental effect on recruitment and retention” (p. 184).

According to McCann (2012), many new teachers forfeit the effective teaching practices and strategies that they learned during their teacher education programs, and begin to conform to the teaching model of their schools in preparation for mandated testing. McCann also stated that new teachers could begin to revert to the teaching
models they experienced as students themselves. According to Ingersoll and Smith (2004a), three out of 10 new teachers move to other schools or do not remain in the profession at all at the end of their first year of teaching. School districts, especially in areas of high-needs or with a large population of ethnic minority students, are experiencing disproportionately high attrition rates. Each year, schools are looking for new teachers because of their high turnover rate (Ingersoll, 2001).

In an attempt to combat the constant flow of teachers, school districts began creating teacher induction programs, many of which included a mentoring component. These induction programs were designed to help new teachers manage students, adjust to the school environment, and cope with various teaching practicalities (Ingersoll & Smith, 2004a). Although the number of school districts implementing teacher induction and/or mentor programs has increased, a multitude of variance exists within each program. In their study on the effectiveness of induction and mentoring, Ingersoll and Smith, found that duration and intensity were among the most crucial areas of variance. Perhaps focusing on the duration and quality of new teacher-mentor contacts within the programs will allow increased clarity related to the overall effectiveness of the program.

Statement of the Problem

Teacher induction is often interchangeable with teacher mentoring. Teacher mentoring programs are designed to support new teachers who have recently completed their teacher education coursework and have accepted a teaching position. Focusing on variations in the types, frequency and duration of contact, the researcher can now analyze the effectiveness of the mentor program of a suburban elementary school district of a major midwestern city. The purpose of this study was to determine whether the types,
frequency, and duration of contact between new teachers and their mentors impacted the usefulness of the mentor program. New teacher perceptions of the program’s benefits were measured in order to determine the most useful components of the mentor program of a suburban elementary school district of a major midwestern city.

Background

Business is concerned with the retention and turnover of employees. Yet since the 1980s, the teaching profession has had distinctively high rates of attrition (Grissmer & Kirby, 1987). During that time, it was feared that a massive teacher shortage would occur due to the high amounts of teachers retiring and decreasing enrollment of students in teacher education programs. Grissmer and Kirby (1997) attributed high teacher turnover, to an increasingly graying teacher workforce. Educational policy makers were concerned that the number of retiring teachers was greater than the number of incoming teachers. Ingersoll (2001) believed that although the rate of teacher retirements is high, teacher turnover is not due to a high number of retirees. Instead turnover may be due to a constant flow of new teachers. New teachers are leaving the field of education for reasons other than retirement, including job dissatisfaction and career changes.

The National Commission on Teaching and America’s Future (NCTAF) indicated that teachers were not adequately prepared prior to service and school districts were providing insufficient professional support for teachers (Darling-Hammond, 1997). As executive director of NCTAF, Darling-Hammond suggested that school districts create mentor programs for beginning teachers. Recently, one way that school districts and policy makers are attempting to address issues among new teachers is to create teacher induction, or mentoring programs.
Traditionally, these programs are designed to provide new teachers with support and resources to be successful in education. For example, in accordance with Public Act 335 (1993), the Michigan State Board of Education mandated that all school districts create a teacher mentor program for new teachers during their first three years. School districts in Oakland County, Michigan are meeting the state’s requirements by including several key components in their mentor programs, such as mentors, developmental plans for new teachers, and formal evaluations (Mills, Moore, & Keane, 2001).

Similarly, Hallam, Chou, Hite, and Hite (2012) studied the components of new teacher mentoring programs in two school districts within the same state. Both school districts that served elementary students and teachers were included in the study. New teachers from Dane and Asher School Districts were surveyed and interviewed during their first three years of teaching. Data from the surveys and interviews were analyzed and Hallam et al. extrapolated several commonalities. In both districts, teachers were part of professional learning communities in which they collaborated with their grade level colleagues on a regular basis. In addition, new teachers were provided with in-school mentors with whom the teachers were mandated to meet with regularly. Mentors provided the new teachers with guidance and support with curriculum, instructional strategies, and monthly planning meetings.

Hallam et al. (2012) acknowledged two notable differences between the two models. Asher School District paid their mentors substantially higher than those in Dane School District, $1,500 compared to $150 annually. Also, Dane School District utilized a mentoring coach during the new teachers’ first year, rather than an in-school mentor. The mentor coach did not have teaching responsibilities within the school district, but was
able to provide support to groups of 10-12 new teachers throughout the district. Additionally, the mentor coach visited and observed new teachers’ classrooms regularly and provided monthly professional development on various topics.

Chicago Public Schools (CPS) also provided new teachers with a mandatory two-year mentoring program. The Mentoring and Induction Program for New Teachers, or MINT, was updated in April 2002 after seven years of implementation (Doak, 2003). The new program, Guidance Orientation and Leadership Development Empowering New Teachers, or GOLDEN, was developed to support beginning teachers in CPS (Doak). A primary component of GOLDEN includes all first- and second-year teachers being paired with a mentor, who introduces them to CPS policies. Additionally, new teachers participate in professional development workshops and have an individual growth plan to monitor their progress. New teachers in the GOLDEN program are required to complete four peer observations in which they observe their mentors and mentors observe the new teachers. Mentors and mentees also hold pre- and post-observation meetings to discuss pedagogy (Doak).

Ingersoll and Smith (2004a) studied the impact of teacher induction and retention. The authors used a sample of 3,235 beginning teachers from the Schools and Staffing Survey (SASS), “largest and most comprehensive data source available” (Ingersoll & Smith, 2004a, p. 687) to determine the widespread use of teacher induction nationally. As a result of their study, Ingersoll and Smith found a dramatic increase in the number of teacher induction, or teacher mentor programs from 1990 – 2000. The number of programs increased by 35% in the public and private sectors from 1990-1991 to 1999-2000. The results make it clear that although the components within in program played a
role in teacher turnover, induction programs are on the rise among elementary and secondary schools for new teachers.

Across the nation, teacher mentoring programs are not consistent in their construction. Specifically, the duration and intensity of the programs are areas where districts can vary (Ingersoll & Smith, 2004b). Currently, no national standards exist for teacher mentor programs. Depending on the school district, the mentor program could consist of an orientation at the beginning of the school year or a structured monthly program spanning several years. Additionally, mentor programs can vary in the participants; including recent undergraduates or teachers with experience that are simply new to the school district. With all of the combinations of mentor program components available, Ingersoll and Smith determined that the following have the greatest impact on teacher turnover: common planning time with colleagues, participation with an organized network of teachers, and communication with school administrators.

Keeping in mind the components of greatest influence in teacher mentor programs, this study is designed to take the research a step further. Smith and Ingersoll (2004a) did not determine whether specific variables related to the interaction between mentors and mentees played a role in teacher turnover rates. In fact, the authors suggested a study on the duration, frequency, and types of contacts between mentors and mentees for further research. This study will begin to investigate types, frequency, and duration of contacts between mentors and mentees to determine if a relationship exists between them and the overall usefulness of a mentor program in an elementary school district.
Research Questions

The primary research questions of this study are:

1. What is the relationship between the types of contact new teachers have with mentors and the perceived usefulness of the current mentor program?
2. What is the relationship between the frequency of contacts that new teachers have with their mentors and the perceived usefulness of the current mentor program?
3. What is the relationship between the duration of each face-to-face contact that new teachers have with their mentors and the perceived usefulness of the current mentor program?

Description of Terms

*Mentor teacher.* A mentor teacher is defined as an experienced teacher who is paired with a beginning teacher. (Ingersoll & Kralik, 2004).

*Mentoring.* Mentoring is defined as the personal guidance provided to beginning teachers by experienced teachers in schools. (Ingersoll & Smith, 2004b).

*New/beginning teacher.* For the purposes of this study, a new/beginning teacher is defined as any teacher new to the school district, including those with previous teaching experience, who have participated in the district’s mentor program for at least one year or have completed the program within the past year. (Ingersoll & Smith, 2004b).

*Teacher attrition.* Teacher attrition is defined as the rate of individuals who leave the field of education entirely (Ingersoll, 2001).

*Teacher induction.* Transforms a student of teaching to a teacher of students; additional training for teachers who have completed basic training. (Ingersoll & Smith, 2004b).
Teaching turnover. Teacher turnover is defined as major changes to a teacher’s assignment from one school year to the next. (Boe, Cook, & Sunderland, 2008).

Significance of the Study

Over the past two decades, there have been countless studies related to teacher induction and mentoring programs. Yet, these studies have largely focused on the components within the programs. Richter et al. (2013) asserted that simply determining whether teacher mentor programs exist is no longer sufficient, rather studies need to focus on the “quality and quantity of interactions between mentor and beginning teachers” (p. 168). When making decisions related to implementing teacher induction programs, it would be important for policymakers and school district administrators to know the effects of the specifics within the programs.

Ingersoll and Smith’s (2004a) study suggested that researchers explore how the quantity and timing of contact between new teachers and their mentors impact the effectiveness of their overall experience. In an attempt to address this need, the researcher of this study focused on the quantity, duration, and types of contact between new teachers and mentors of a midwestern elementary school district. By focusing on these specific areas, the researcher measured the perceptions of the new teachers in relation to the overall effectiveness of their current mentor program. Results of this study would be useful to the school district administrators when evaluating the effectiveness of the current program. Additionally, results of the study could be used to assist with modifying the current mentor program as needed.
Process to Accomplish

The purpose of this quantitative study was to explore how the frequency, duration, and types of contacts between new teachers and their mentors affected the new teachers’ overall perceptions of the usefulness of the mentor program. The study was conducted in a Midwestern suburban school district.

In this district, teachers involved in the mentor program consisted of recent college graduates and/or teachers with experience, but are new to the district. The population for this study was comprised of teachers who have participated or were currently participating in the school district’s mentor program. Specifically, participants needed to have completed at least one year of the mentor program or had completed the program within the past year. The mentoring program administrator provided a list of teachers meeting the requirements for participation. Potential participants were contacted via email or face-to-face during a mentor program meeting. A convenience sample of these teachers was drawn, and the prospective participants were invited to voluntarily participate in the study. All participants were briefed on the general components of the study by the researcher and were given a consent form to sign. Also, participation in the study in no way influenced the matriculation of current mentor program participants through the program.

For the study, the researcher modified a survey instrument created by Richter et al. (2013) of the University of Germany Berlin with the authors’ permission. The original survey was composed of seven questions rated with a Likert scale ranging from (1) strongly disagree to (6) strongly agree. Additionally, an eighth item related to frequency of contact between mentors and mentees was rated with a Likert scale ranging from (1)
less than once a month to (6) every day. The survey was tested for reliability resulting in a reliability coefficient of 0.80 and an internal consistency coefficient of 0.84. The validity of the survey was tested using cross-validation in which half of the data were used in exploratory factor analysis and the other half used confirmatory data analysis. The results of the cross-validation revealed high factor loadings and low cross-loadings.

In the modified survey, the researcher maintained the original survey items, yet removed the Likert scale for Item 8 allowing participants to indicate the exact number of minutes spent communicating with their mentors monthly. Also, the researcher added three questions, Items 9-11, related to the type of contact new teachers had with their mentors. A pilot was conducted for Items 8-11 of the study in order to establish validity and reliability during Spring 2014. Participants in the study were asked to complete the final survey in the 2014-2015 school year.

Research Question 1: What is the relationship between the types of contact new teachers have with mentors and the perceived usefulness of the current mentor program? In addressing Question 1, the researcher sought to determine if there was a difference between new teachers’ perceived usefulness of the mentor program and the types of contact that they had with their mentor. Data were collected using survey Item 9 which asked participants to rate the average type of contact that they had with their mentors. Participants responded by selecting face-to-face conversation, email, observation, or other. Responses to this item served as the independent variable, while responses from Items 1-7, indicating perceived usefulness of the program, served as the dependent variables. These data were analyzed using a simple analysis of variance, or ANOVA.
Research Question 2: What is the relationship between the frequency of contacts that new teachers have with their mentors and the perceived usefulness of the current mentor program? In addressing Question 2, the researcher sought to determine if new teachers’ perceived usefulness of the mentor program was influenced by the frequency of contact that they had with their mentor. Data were collected using survey Item 8, which asked participants to rate how often they communicated with their mentors. Participants indicated the average amount of times per month, indicated by number of days, spent communicating with their mentor. Responses to Item 8 as well as those from Items 1-7, indicating perceived usefulness of the program, served as the X and Y variables. These data were analyzed using the Pearson Product Moment Correlation Coefficient to determine if there were any statistically significant relationships.

Research Question 3: What is the relationship between the duration of each face-to-face contact that new teachers have with their mentors and the perceived usefulness of the current mentor program? In the final research question the researcher determined whether the duration, or amount of time engaged in a particular type of contact, influenced the new teachers’ perceived usefulness of the mentor program. This question was addressed with survey Items 10 and 11, which referred to the average amount of time, in minutes, that new teachers spent in face-to-face conversation with their mentors during each occurrence. Responses to Items 10 and 11, as well as those from Items 1-7, indicating perceived usefulness of the program, served as the X and Y variables. These data were analyzed using the Pearson Product Correlation Coefficient to determine if any statistically significant correlations existed between the variables.
In addition to each survey item listed, the survey included general demographic information, such as gender, age, ethnicity, professional teaching experience, as well as number of years completed in the mentor program. The researcher analyzed demographic and experience data with teacher perception data using mixed factorial ANOVAs to determine if any statistically significant relationships existed. To maintain confidentiality, each survey was coded using a one- or two-digit random number assignment beginning with 01.

Summary

A great deal of research was conducted for this study related to new teacher mentoring. The types and components of teacher mentoring programs vary across the United States. To date, few studies focus specifically on the potential relationships between the types, frequency, and duration of contacts between new teachers and mentors. Chapter two consists of an extensive review of the current literature related to new teacher mentor programs and their effectiveness in providing adequate teacher support.
CHAPTER II
REVIEW OF THE LITERATURE

Introduction

Mentoring has been defined in many different ways. According to Merriam-Webster Dictionary (2014), a mentor is “someone who teaches or gives help and advice to a less experienced and often younger person” or “to teach or give advice or guidance to” (Mentor section, para. 1). In education, Hobson and Malderez (2013) defined mentoring as a relationship between an inexperienced and experienced teacher that is intended to provide support in developing the new teacher and acclimating them to the professional culture. Intentionally incorporating the mentoring of new teachers within induction programs is becoming widespread. Ingersoll and Smith (2004a) stated that over the past two decades, mentoring has been the primary form of teacher induction. However, the components and characteristics of mentor programs contain a great deal of variance (Ingersoll & Smith). This chapter will provide an extensive exploration of the relevant literature related to the factors that contribute to the need of new teacher mentor programs as well as provide a context for the importance of this study.

Teacher Attrition and Turnover

Prior to the 1950s, women and men were not required to attain college degrees in order to teach. In 1950, the majority of adults over the age of 25 did not have college degrees. Schlechty and Vance (1983) reported that in 1950 only 7.1% of adult males and
5% of adult females in the United States had obtained college degrees. By 1959, these numbers had increased to 10.1% adult males and 5.9% adult females. From 1960 – 1970, there was an increase of nearly 39% for males and females obtaining college degrees. Although the rate of growth in college degrees in 1960 was high, nearly 39%, it could not keep up with the rapid growth in the field of education, nearly 52% (Schlechty & Vance). Additionally, requirements for teaching transformed from 1950 – 1970, mandating that teachers possess college degrees (Schlechty & Vance). The field of education was experiencing a high volume of students in elementary and secondary classrooms due to the postwar baby boom (Schlechty & Vance). The influx of students caused a high demand for teachers. Because the need for teachers was so high coupled with the low amounts of college-educated teachers, many school districts were forced to hire an unbalanced number of inexperienced teachers (Schlechty & Vance).

According to Grissmer and Kirby (1987), teacher supply and demand interact with one another. One way to account for teacher supply is through the amount of students enrolled in teacher preparatory college programs. Astin, Kenneth, and William (as cited in Grissmer & Kirby) stated that as of 1986, nearly 7.3% of college freshman stated that they intended to pursue teaching as a profession, which is decreased from the 21.7% that had intentions of a teaching career in 1966. Within the education field, many were beginning to fear that the United States would enter a teacher shortage that could not meet the increasing teacher demand.

To address the availability of college-educated teachers, schools began to focus their attention on retaining the teachers were employed. The logic was that the more teachers that could be retained, the less new teachers that would need to be acquired, thus
allowing schools to manage the teacher demand. Unfortunately, before 1970 reliable research related to teacher retention is scarce (Schlechty & Vance, 1983) which meant that policymakers had no data to examine when making decisions. However, by the 1980s research related to teacher retention and attrition, or leaving employment, had uncovered some startling and uncomfortable data. Grissmer and Kirby (1987) found that education had a problem with teacher attrition. The data showed that the highest levels of teacher attrition were taking place among new teachers and retirement age teachers. At the time, total attrition was at 7% nationally, yet it was expected for the rates to increase in the coming years (Grissmer & Kirby).

In more recent research, a more detailed picture of teacher attrition has been uncovered. Boe et al. (2008) asserted that attrition is only one-third of the larger spectrum of teacher turnover. Also included in teacher turnover are teacher migration, or movement from one school district to another, and area transfer, which is a change in teaching assignment. According to the Teacher Follow-Up survey that tracked teacher turnover nationally during 1999-2000 and 2000-2001 school years, 7.4% of all public school teachers left education due to attrition, whereas 7.7% left as a result of migration, for a total of 15.1% (Boe et al.). However, when adjusted for school transfers within school districts, the total attrition and migration rate for 2000-2001 was 11.5% for public schools (Boe et al.), an increase from 7% in the late 1980s as stated by Grissmer and Kirby (1987). The increase in teacher attrition rates revealed that the problem of retaining teachers is on the rise.

Over the past 50 years, attrition rates have been reported inconsistently. Grissmer and Kirby (1987) asserted that some districts have stated that 50% of new teachers
departed education within their first five years of teaching while others maintain that nearly one-third of new teachers left education, including those who moved from one district to another (Darling-Hammond, 2003). Ingersoll and Smith (2004a) reported that in 1999-2000, only 15% of new teachers left education due to migration and 14% for attrition. New teachers in private schools were less likely to leave as a result of migration, yet were more than twice as likely to leave due to attrition as public school new teachers (Ingersoll & Smith). Rates for new teachers within charter schools were similar to those of private school teachers (Ingersoll & Smith). No longer is the problem related to being able to acquire highly educated and competent teachers, rather it is to keep them wanting to remain in the classroom that is the challenge. During the 1960s, teaching was thought to become one of the most prestigious professions with the new college degree requirements and rapid growth rate (Grissmer & Kirby). However, Schlechty and Vance (1983) would argue that the teaching profession is simply not organized to foster long term commitments among educators. Between predetermined salary schedules and little opportunities for advancement, Schlechty and Vance argued that academically high achieving college graduates with high career aspirations would not choose to enter the field of education.

Numerous theories related to why new teachers experience such high attrition rates have been developed. Prior to the 1990s, researchers such as Grissmer and Kirby (1987) believed that voluntary new teacher attrition was related to life cycle or career advancement opportunities that provided the individual with some sort of benefit or perceived personal gain. For example, a new teacher may leave to start or raise a family, unlike a teacher near retirement who, typically, has moved past this life cycle. Or, a new
teacher may choose to leave due to career related benefits such as higher salary or work conditions. Boe et al. (2008) determined that of the 173,000 people who left teaching in the 1990s, nearly 58,000 (34%) took non-teaching positions in education, 13,000 (8%) became employed in non-education positions, 41,000 (24%) turned to homemaking and/or child care, and 18,000 (10%) retired. Many of the other individuals were unable to obtain employment outside of education (Boe et al.).

In their study to further determine reasons for teacher turnover, specifically attrition, Ingersoll and Smith (2004a) found that rates varied based on school size and poverty concentration, although surprisingly school location was not a factor of attrition. “Teachers in high poverty public schools were less likely to move between schools, yet were more likely to leave teaching compared to medium-poverty schools (16% to 9%)” (Ingersoll & Smith, p. 693). Additionally, teaching position affected attrition rates. First year teachers within middle schools were twice as likely as elementary teachers to leave after the first year, whereas high school teachers were 50% more likely (Ingersoll & Smith). When comparing regular education and special education teachers, first-year special education teachers were 2.5 times higher than regular education teachers to leave based on attrition (Ingersoll & Smith).

Although it may seem logical that the rate of teacher retirement would greatly influence teacher attrition rates, retirement is not considered a major factor. In a study related to teacher shortage and turnover, Ingersoll (2001) determined that although there was an increase in teacher retirement, the amount was minor when compared to other factors such as job dissatisfaction and career advancement. Additionally, a study from National Commission on Teaching and America’s Future (NCTAF) found retirement to
be an insignificant cause of teacher attrition (Hunt & Carroll, 2003). Instead, more common factors attributing to attrition are related to work conditions including salary and classroom support (Hunt & Carroll).

Among the work conditions related to teaching, salary is at the forefront (Darling-Hammond, 2003; Perrachione, Rosser, & Peterson, 2008). In their study related to teacher retention, Certo and Fox (2002) found that one-third of their sample, or 23 participants, stated that poor salary was the reason why their colleagues had left the profession. Teachers reach nearly the top, or maximum level, of the salary schedule by the age of 35, with 10-15 years of experience, while other professions are just entering the peak of their careers (Schlechty & Vance, 1983). Stevenson, Scott, and Holcomb (1999) conducted a study focused on administrators’ perceptions of teacher retention in urban school districts and found that 71% of their participants reported low salary as being the primary reason why teachers left the profession. Results from Stevenson’s et al. study shows that both teachers and administrators perceive salary as a major factor of attrition.

In order to attract competent and academically high achieving college graduates, school districts must be able to provide incentives and benefits that are enticing. However, according to Darling-Hammond (2003), teacher salaries are 20% below other professions with comparable qualifications and training requirements. Despite these studies, other researchers have asserted that salary is not a major contributor to teacher attrition. Ingersoll (2001) found that during data analysis, when other factors were held constant, or controlled, salary was statistically insignificant when predicting teacher attrition. Norton (1999) maintained that factors such as school climate, student behavior,
and parental support were more closely related to teacher retention than salary and benefits. Similarly, to determine the importance of salary on teacher mobility, Kain, Rivkin, and Hanushek (2004) conducted a comprehensive study utilizing a database of all public schools in Texas. Kain et al. found that salary was more likely to determine the probability of teachers moving to other districts rather than leaving the public school system entirely.

In a study of teacher retention and attrition, Ingersoll (2001) used data from the Schools and Staffing Survey (SASS) to determine that 42% of teacher attrition was due to job dissatisfaction, coupled with career advancement. Job dissatisfaction can be comprised of a variety of components, most commonly including low salary, lack of administrative support, and other student related problems (Ingersoll). Bogler and Nir (2012) conducted a study in Israel with 2,565 teacher participants to determine the relationship between perceived organizational support and job satisfaction. Bogler and Nir found that teachers had a greater sense of job support when they were able to practice various intrinsic variables like social relationships and respect among peers as well as extrinsic variables including work-related challenges or level of professional development.

Teacher Stress and Standardized Tests

Stress is present in the lives of employees from nearly every profession. In education, stress can be attributed to several factors. Rieg et al. (2007) found that the primary causes of stress in first-year teachers included parents, standardized tests, observations by administrators, and classroom management. However, many pre-service teachers, or those still completing teacher education courses, were also concerned about
the politics of No Child Left Behind (NCLB) and preparing students for the administration of high-stakes tests (Rieg et al.). The NCLB policy was created to make teachers and schools accountable for student learning. As a result, policymakers designed a test in which “every student in the state would take identical tests and be given the same instructions thus validating the test results. The goal of NCLB is to reach 100% reading and math proficiency by 2014” (Bhattacharyya, Junot, & Clark, 2013, p. 634).

Bhattacharyya et al. (2013) asserted that the ability to perform proficiently on standardized tests “have become an all-consuming force in the schools” (p. 634). School ranking within the district and funding depend on a school’s scores. “Persistent low scores may attract severe penalties for the school. Pressure builds up in the school board and percolates down to the teachers” (Bhattacharyya et al., p. 634). NCLB requires testing in reading, math and science. In an attempt to provide maximum instruction in those areas, other subjects become neglected. “Because of the risk of lower test scores, teachers rarely deviate from testing curriculum even if they have to eliminate other important subject matter content” (Bhattacharyya et al., p. 634). According to Bhattacharyya et al., preparing the students for the test reduces instructional time and “narrows the curricular topics and methods of instruction. This in turn limits the instructional materials that a teacher can use especially if they are not similar to standardized testing formats” (p. 635). Teachers are also required to focus on borderline students. “This group consists of students who are on the border of passing/failing the test. These students have an enormous impact on the school or district score: whether they fail or pass the tests” (Minarechová, 2012, p. 90).
Additionally, during their study of stressors among novice teachers, Rieg et al. (2007) found that “standardized testing was an issue that crossed several categories…

Preservice teachers were aware of pressure that some children put on themselves to succeed on the standardized tests” (pp. 214-215). Among children, stress can manifest in unhealthy ways. “Possible symptoms of stress are jumpiness, nervousness and poor concentration, which can affect the student’s performance in school. The symptoms of stress also include a lack of appetite and the student being frequently ill” (Minarechová, 2012, p. 91). Minarechová stated that an enormous amount of stress is inflicted on students due to public comparisons between students in the classroom or school. Some schools post test result comparisons of individual students whose test scores fell allowing students to see the evaluations of all their classmates, “which may be very unpleasant for pupils who have not achieved the required score” (Minarechová, p. 91). In an attempt to “artificially raise or rather influence their position in the performance tables,” (Mirachova, p. 89) some schools expel students with low scores around test time.

“Students from low-income and minority groups suffer the most from high-stakes testing through failure to pass to the next grade level and remediation programs” (Bhattacharyya, 2013, pp. 636-637).

In a study determining support received by novice teachers, out of 1,318 third-year teachers in North Carolina, “more than 93% of respondents reported support from other teachers and assistance in dealing with stress” (Algozzine, Gretes, Queen, & Cowan-Hathcock, 2007, p. 140). Rieg et al. (2007) asserted that “teacher preparation programs should prepare students to recognize stress factors and to employ effective
coping mechanisms” (p. 211). “Having the ability to deal with stressors is vital in teacher retention” (Reig et al., p. 212).

New Teacher Mentoring Programs

With the high rates of attrition among inexperienced teachers, mentoring of new teachers is becoming commonplace in education (Ingersoll & Smith, 2004b). The purpose of new teacher mentoring programs is not to train teachers, but to serve as a “bridge from student of teaching to teacher of students” (Ingersoll & Smith, p. 29). Teachers participating in new teacher mentoring programs have already completed basic training through a traditional or alternative certification program. With less professional teaching experience as their veteran colleagues, novice teachers will face challenges as they begin their career. Hobson, Harris, Buckner-Manley, and Smith (2012) asserted that there are four common obstacles that hinder the success of novice and pre-service teachers: poor mentors or cooperating teachers, lack of mentoring, poor time management, and lack of classroom or practice teaching experience.

The challenges facing new teachers serve as the rationale for many school districts opting to implement mentor programs. However, the components of the programs are left to interpretation, resulting in a multitude of styles and formats. Particulars such as participants, duration, purpose, and mentors within the new teacher programs can vary from district to district. According to Ingersoll and Smith (2004a), a mentor program could consist of one orientation or a series of intricate activities throughout several years. The individuals chosen to participate in the mentor programs could be limited to recent college graduates or incorporate teachers with experience, but who are new to the school district. Also, the purpose of each mentor program could range
from fostering growth and development of teachers to simply assessing teachers who are not best suited to meet the district’s expectations (Ingersoll & Smith).

According to their study, Ingersoll and Smith (2004a) determined that successful and effective new teacher induction programs are comprised of multiple sources of support. Particularly, providing new teachers with a mentor in their field and collaborative planning time with colleagues (Ingersoll & Smith). Ideally, the authors suggested that induction programs also offer a reduced teaching schedule or additional classroom assistance for each new teacher; however, very few teachers in their study received such supports (Ingersoll & Smith). Fry (2009) conducted a study of the characteristics that attribute to the success of novice elementary teachers. In the study, Fry reported that of the four case study participants, two of the participants had mentors in first year only, one had no mentor, and another had an induction program, but it was uniform in approach for all new teachers, meaning there was no differentiation in requirements depending on years of experience. Mentoring programs that do not intentionally meet the unique needs of novice teachers will not be effective. Successful programs must be able to nurture and support new teachers and their mentors (Kilburg & Hancock, 2006).

Although new teacher mentor programs have a great deal of variance, there are several key aspects of the programs that can result in potential negative outcomes if not implemented properly. According to Kilburg and Hancock (2006), the following factors are critical for mentoring programs: mentor matching/selection, time, emotional support, communication/coaching, change/conflict. Each of these areas of a mentor program must receive detailed and full implementation in order for the program to be successful and
effective. For example, ample time is necessary for novice teachers to meet with mentors, collaborate with colleagues, observe veteran teachers, and discuss instructional strategies and coping mechanisms with mentors. “When that time is reduced because of building proximity, part-time versus full-time teaching status, busy schedules, or lack of release time, . . . the mentoring experience may be seen as nothing more than a token gesture. (Kilburg & Hancock, p. 1323). As with any other form of professional development, teacher mentoring programs are not meant to be trivial, but to enhance the performance of each new teacher.

One vital component of mentoring programs is the mentor. Many school districts select and pair mentors with mentees simply based on availability, while other programs incorporate more extensive compatibility criteria to ensure that mentees are paired with mentors that will best suit them. In either case, communication between the mentor and mentee is paramount. Kilburg and Hancock (2006) asserted that it is the responsibility of the mentor to adjust their communication methods to meet the needs of the new teacher. “When communication is minimized and is not a priority for one or both mentoring team members, we can expect to see a relationship that is not functioning at its full potential” (Kilburg & Hancock, p.1324). Differentiated mentoring not only meets the personal, professional, and emotional needs of new teachers, but it demonstrates that the mentor cares for and values the teacher (Kilburg & Hancock).

Algozzine et al. (2007) studied new teachers’ perspectives of their induction programs throughout North Carolina. The study included 1,318 third-year teachers who had all completed a form of new teacher induction. With upwards of 69% of participants rating their programs as effective, participants’ programs shared several commonalities
(Algozzine et al.). More than 80% of study participants indicated that their induction programs included formal observations by administrators and mentors, assigned mentors, professional development, structured orientations, teaching within their licensure area, and developing an individual growth plan (Algozzine et al.). All of these components are integral in shaping an effective new teacher mentor program. “Effective induction programs include mentoring by experienced teachers, release time for observing other teachers, varied mentors, seminars, and multiple opportunities for sharing experiences” (Algozzine et al., p. 141).

Studies in which new teacher mentoring programs were considered ineffective tended to be faulty in relation to mentors and time commitments. In a study of 149 mentoring teams across a two year period the top three recurring problems included lack of time, mentors and mentees not in same building/school, and mentors not in the same subject area as mentees (Kilburg & Hancock, 2006). Providing support for beginning teachers is essential “to retain qualified beginning teachers and the need for beginning teachers to become effective practitioners as soon as possible” (Andrews & Quinn, 2005, p. 110). Andrews and Quinn studied 135 first year teachers’ perceptions of support given in their induction program and found that teachers who were assigned a mentor received more support when compared to those without a mentor. However, the majority of the support given to new teachers was related to school policies and procedures and less support was given in curriculum, instruction, and acquisition of resources (Andrews & Quinn). Teachers with low support and an assigned mentor reported “probable causes…were mentor mismatch, unsupportive school climates, and multiple preparations
for secondary teachers” (Andrews & Quinn, p. 112). The importance of a quality mentor-mentee relationship cannot be overlooked.

New Teacher Mentoring Programs in Illinois

In their study on new teacher induction in the Midwest, Bartlett, Johnson, Lopez, Sugarman, and Wilson (2005) found that Illinois, Wisconsin, and Ohio are among the Midwestern states that have begun to link their three-tiered teacher licensing system with new teacher induction programs. As of 2005, all three states had eliminated permanent teacher credentials, and replaced it with three stages or levels of credential. A novice teacher would begin with a non-renewable initial credential and progress to a renewable standard, or professional, credential. Illinois also gives a third option of master level credentials (Bartlett et al.). In order for a teacher to progress from one credential to the next, professional development requirements must be met. One of the professional development options for new teachers is participation in a state-approved, district-sponsored teacher induction program that includes a mentoring component (Bartlett et al.).

Revised in 2004, the Illinois General Assembly specifies criteria for state approval of a district’s new teacher induction programs (Public Act 093-679). Proposals for induction programs must include a description of the mentor’s role and criteria for selection, a formally trained mentor assigned to each new teacher, and various professional development opportunities to provide support with Illinois Teacher Standards, content area knowledge, and any other school improvement topics. Additionally, the programs must include a formative assessment based on the Illinois Teacher Standards, providing feedback to the new teacher. School district induction
programs are also required to designate responsibility of the coordination of the program to an individual(s) within the district.

Among the three states included in the study, Illinois was the only state that did not mandate nor provide funding for new teacher induction programs (Bartlett et al., 2005). Features of induction programs, such as reduced work load, common planning time, and release time, were analyzed for incidences and desirability among the Midwestern states. Illinois had the lowest rates of both incidences and desirability compared to Wisconsin and Ohio (Bartlett et al.). The authors suggested that the low rate was due to the lack of induction mandates and funding. In fact, Illinois officials reported that there is currently no systematic way in which data is collected or analyzed to determine the rate of attrition within districts or schools, and how that rate relates to the effectiveness of induction programs (Bartlett et al.).

Due to the lack of funding, school districts throughout Illinois are not required to develop and implement new teacher induction programs. Bartlett et al. (2005) stated that districts are creating programs that meet their school communities’ needs rather than adhering to a mandated set of criteria. As a result, there is great variance in the types and components of new teacher mentoring and induction programs (Bartlett et al.). For example, in an interview Eric Witherspoon, superintendent of Evanston Township High School District 202, reported that his district has a two year training and induction program for new teachers (Patton, 2011). During the first year of the program called ETHS 101, new teachers are required to participate in 2-3 hour monthly teacher-led professional development sessions with topics ranging from equity and high expectations to professionalism (Patton). Additionally, each new teacher is paired with a mentor,
typically within the same content area. The second year of the program, ETHS 202, the same cohort of new teachers focus on becoming a skilled teacher using the work of Saphier and Gower (1997) as their focus text.

Of the 900 school districts within the State of Illinois, the greatest concentration, comprised of 600 schools, is located in Chicago Public School (CPS) (Bartlett et al., 2005). Currently, CPS has a teacher workforce of 27,000 including over 4,000 novice teachers with less than two years of experience and hires 1,800 – 2,400 new teachers annually (Bartlett et al.). However, since the late 1990s, there has been an increasing trend in the percentage of new teachers that are leaving their positions in Chicago Public Schools (CPS). During the 1993-1994 school year, 28% of newly hired teachers left CPS within five years (Williams, 2003). However, Williams reported that by 1998-1999 the amount had increased to 39%. In the 1996-1997 school year, 18% of new teachers left CPS after two years, however by 2001-2002 nearly 31% of the 2,475 newly hired teachers had departed after only a couple of years (Williams).

Programs to retain newly hired teachers are varied throughout Chicago. In the late 1990s, CPS created the Mentoring and Induction for New Teachers (MINT) program which was an attempt to merge the district’s 30 hours of professional development requirement with a new teacher mentoring program (Duffrin, 1999). Although CPS launched MINT, building principals were allowed to determine if they wanted to include a mentoring component to their current induction program. If they chose to include mentoring, principals were responsible for assigning mentors to new teachers (Duffrin). Each new teacher was paired with a mentor who could work with up to three different
teachers (Duffrin). Mentors earned a stipend of $1,500 and may or may not teach the same subject and/or grade level as their mentees (Duffrin).

In April 2002, CPS Human Capital Initiative and Teacher Academy for Professional Development revised MINT and created a new program, Guidance Orientation and Leadership Development Empowering New Teachers (GOLDEN) (Bartlett et al., 2005). GOLDEN, a state-approved two-year induction and mentoring program, is mandatory for all new teachers in CPS (Bartlett et al.). Since the State of Illinois is not funding induction programs, GOLDEN is funded primarily through district funds and secondary grants (Bartlett et al.). The program’s purpose is to provide support of new teachers (Doak, 2003) and emphasizes reflective practices, goal setting, and data analysis (Bartlett et al.). New teachers in GOLDEN are required to attend a three-hour orientation, complete a minimum of 15 hours of unpaid professional development, and work with their assigned mentor (Bartlett et al.). When working with their mentors, new teachers must complete four peer observations including pre- and post- observation meetings to discuss teaching practices (Doak, 2003).

Adding to the variance of teacher induction and mentoring programs throughout Chicago, the University of Chicago’s Urban Teacher Education Program (UChicago UTEP) is designed to develop quality teachers for CPS while also serving as a test model of urban teacher preparation. Started in 2003, UChicago UTEP prepares recent college graduates or career changers for teaching elementary education or secondary math and biology (Hammerness & Matsko, 2012). As part of their five-year commitment, participants complete two years of coursework and three years of mentoring and support once they enter the workforce (Hammerness & Matsko). During their final three years,
the participants are paired with an induction coach who conducts formative assessments, observations, and other context-specific support to aid new teachers in their transition into CPS.

Another mentoring program in Chicago, Center for Urban Education (CUE), is externally contracted with CPS. The program is funded entirely by grants and works specifically with schools on probation due to low standardized test scores (Sconzert, 2001). CUE also provides professional development for teachers and training for Peace Corps participants pursuing teaching careers in CPS (Sconzert). Modeled after a teacher residency program in Boston, the Academy of Urban School Leadership (AUSL) in Chicago provides alternative teacher certification programs which include mentoring. Currently, 95% of students who completed the AUSL program are still teaching in CPS after three years (Honawar, 2008).

Mentoring Program Challenges

School districts that are creating and implementing new teacher mentoring programs are headed in a positive direction. However, many programs are facing a variety of challenges related to their effectiveness. In Chicago’s GOLDEN program, teachers have voiced concerns regarding new teacher workloads and lack of communication. New teachers are not compensated for their required professional development sessions, yet teachers outside of the program are paid for attending professional development (Bartlett et al., 2005). Additionally, with all of the time commitment that GOLDEN requires, new teachers are not given reduced workloads during their first two years. Although GOLDEN is mandatory for the 4,000 or more new teachers, only 65-70% of new teachers participate, while the remaining 30-35% of new
teachers are left uninformed about the program’s requirements and/or professional development opportunities (Bartlett et al.). Moreover, how, when, and where professional development sessions are offered are inconsistent throughout CPS.

Since mentoring programs are not mandated or funded by the State of Illinois, school districts are left to fund programs themselves. Moir (2009) stated that “unfunded mandates that require that districts assign mentors to new teachers without regard to program quality won’t improve teacher practice or student learning” (p. 18). With Illinois setting requirements for state approved mentoring programs, yet making no attempts to monitor their effectiveness, there is no measure by which to determine if the programs are working. In CPS, district budget cuts have resulted in cutting the once full-day new teacher orientation meeting to a half-day, which many teachers say is too brief for the abundance of information that must be delivered (Bartlett et al., 2005). Bartlett et al. suggested that if funding was increased, there could be a reduction in these limitations and more expanded training for the GOLDEN mentors.

In a broader context, leadership in new teacher mentoring programs begins from the top down. Moir (2009) stated that principals are instructional leaders and thus a critical component of new teacher induction programs. However, in the MINT program, many new teachers expressed that at the discretion of their principals they often had conflicting schedules with their mentors and were unable to meet for observations (Duffin, 1999). Practices such as these are unproductive. “Administrators should work at improving the quality of existing mentoring programs” (Andrews & Quinn, 2005, p.113). Principals who are committed to the success of new teachers make it a priority to get into the classrooms and are skilled at observing and delivering effective feedback (Moir).
When principals and mentors form a partnership, their environments are conducive to supporting new teachers and student achievement (Moir).

Another challenge for mentoring programs is the lack of release time given to both new teachers and their mentors. According to Bartlett et al. (2005), Illinois officials stated that the most valuable aspect of a mentoring programs include access and education on teaching technologies, topical workshops, and reduced workloads during the first years. However, most new teachers do not experience all of these activities. Instead, many new teachers receive basic technology access, various workshops, and general support sessions (Bartlett et al.). New teachers in Illinois are “least likely to receive reduced teaching duties and release time to observe other teachers” (Bartlett et al., 2005, p. 16). In an ideal program, mentors would be fully released from their full time teaching commitments in order to focus solely on providing excellent mentoring and coaching to the new teacher (Moir, 2009).

Perhaps the most common challenge among mentoring programs is the selection and training of the mentors. McCann and Johannessen (2009) suggested that a single individual was incapable of meeting all of the requirements of a mentor, rather new teachers should develop a network of mentors including anyone from college friends to department administrators who could provide various types of support. However, in typical mentoring programs, new teacher mentors are comprised of educators that can provide the teacher with support. When considering a mentor, McCann and Johannessen asserted that criteria for serving as a mentor should include being tenured, working in the same school as the mentee, and having a positive reputation in the school community.
Additionally, mentors must be “helpful, collaborative, discreet, ethical, student-centered, and empathic” (McCann & Johannessen, p. 120).

Sosik, Lee, and Bouquillon (2005) studied the effectiveness of formal and informal mentoring relationships between mentors and new teachers. In their study, Sosik et al. defined formal mentoring as occurring at the sanction of a school district or organization through a standardized process. An informal mentoring relationship is developed more naturally, whereby a mentor volunteers to engage in a learning experience with the new teacher (Sosik et al.). The interactions between a mentor and new teacher in formal mentoring are contracted, typically last for six months with the majority of the goals, locations and frequencies being predetermined according to the mentor contract. Contrastingly, informal mentoring relationships include evolving goals that change in alignment with career changes and meetings are conducted when desired by the mentor and mentee. Results from the study suggested that new teachers engaged in informal mentoring had higher levels of role modeling and organizational commitment than those with formal mentors (Sosik et al.).

Once mentors are selected, effective training is paramount. However, due to the variety of mentoring programs and components, training of mentors is not standardized or consistent. Moir (2009) said that school districts must engage mentors with high-quality professional development, paired with time and tools to advance a new teacher’s performance and create a supportive environment where mentees can share and collaborate in their work. Additionally, many mentors are not formally evaluated or monitored for effectiveness. Principals and other administrators must develop assessments to measure the performance of mentors, just as they do with new teachers.
“When accountability is built into an induction program, participants can document growth toward defined objectives” (Moir, pp. 18-19). Providing support for mentors and mentees is the responsibility of program leaders. Gathering data, publicizing positive works, and assessing effectiveness are ways in which leaders can pay more close attention to mentors and mentees (Moir).

Conclusion

New teachers need to be involved in a quality mentoring program that goes beyond making teachers familiar with district policies and procedures. Instead, new teachers benefit most from engaging relationships with competent, qualified, and caring mentors who are committed to developing well-rounded and well-adjusted new teachers. Coupled with induction components such as observations, constructive feedback, emotional support, and instructional/curriculum development, new teachers can make a healthy transition from student teaching to professional teaching. Given the wide variance in new teacher mentoring programs throughout the country, it is imperative that researchers begin to focus more closely on specific elements of the mentor-mentee relationship that may be the most valuable for achieving effective programs.

Summary

The literature is full of research related to contributing factors of teacher attrition and retention; however, many researchers are beginning to narrow their studies to more specific aspects of new teacher mentoring programs. By sharpening the focus on particular areas, researchers can begin to pinpoint areas of effectiveness. Focused on the duration, frequency, and types of contacts that new teachers had with their mentors, this study will contribute to the body of research that explores components of mentoring
programs and their effectiveness. The next chapter, Chapter III, will provide a detailed account of the methodology used in the study. Chapter III will include research design, population, data collection, analytical methods, and limitations.
CHAPTER III

METHODOLOGY

Introduction

Now that the research, which provided the foundation for the study, has been presented, the purpose of Chapter 3 was to extensively detail the research process and procedures. The researcher has detailed the overall research design of the study, including the population, data collection, and analysis. Each of the three research questions were addressed and examined for their individual methodologies. The researcher then concluded the chapter with limitations that were present in the research study.

Research Design

Leedy and Ormrod (2013) defined a quantitative study as one in which the researcher looks at amounts of one or more variables. In a quantitative study the researcher “tries to measure variables in some numerical way, perhaps by using commonly accepted measures of the physical world or carefully designed measures of psychological characteristics or behaviors” (Leedy & Ormrod, p. 95). This study followed a quantitative research design, and explored the possible relationships between the perceived usefulness of a mentor program and the types, frequency, and duration of contacts that new teachers had with their mentors. The researcher created the Mentor Program Survey using eight survey items from Richter et al. (2013) which included a six point Likert scale to rate the usefulness of the mentor program. Reliability and validity for the usefulness items were established and resulted in Cronbach’s alpha = .89.
Additionally, the researcher added four demographic questions and four questions related to the types, duration, and frequency of contacts that new teachers had with their mentors. The researcher was unable to test the additional demographic questions and those related to types, duration, and frequency for reliability due to the small sample size. However, the overall Mentor Program Survey was measured for validity using content validity. Content validity was established by having a group of tenured teachers, who were not eligible to be participants in the study, review the survey and determine if the items were appropriate for measuring types, duration, and frequency of contact between new teachers and mentors (Salkind, 2014).

Research Question 1: What is the relationship between the types of contact new teachers have with mentors and the perceived usefulness of the current mentor program? In addressing Question 1, the researcher sought to determine if the types of contact that new teachers had with their mentors influenced usefulness of the mentor program. Question 1 sought to identify differences between usefulness scores for each participant and the type of contacts. In this study, the dependent variable is the overall usefulness rating score while the independent variable is the type of contact with four groups: face-to-face conversation, email, observation, and other. The independent variables were not assigned using random assignment, rather these groups had already occurred between the new teachers and their mentors. Unlike an experiment, in which participants are assigned to groups using random assignment, Salkind (2012) defined quasi-experiment as one in which “preassignment to groups has already taken place” (p. 245). Therefore, the most suitable design for research question 1 is a quasi-experiment.
Research Question 2: What is the relationship between the frequency of contacts that new teachers have with their mentors and the perceived usefulness of the current mentor program? In addressing Question 2, the researcher sought to determine if new teachers’ perceived usefulness of the mentor program was influenced by the frequency of contact that they had with their mentor. The goal of research question 2 was to determine if a relationship existed between frequency of contact and the overall usefulness rating score. Correlational research would be the most suitable method for question 2 because it is one that “describes the linear relationship between two or more variables without any hint of attributing the effect of one variable on another” (Salkind, 2012, p. 203). Correlational research consists of X and Y variables rather than independent and dependent variables. For research question 2, the overall usefulness rating score served as the X variable and the frequency of contact, indicated by number of days per month, served as the Y variable.

Research Question 3: What is the relationship between the duration of each face-to-face contact that new teachers have with their mentors and the perceived usefulness of the current mentor program? In research question 3 the researcher determined whether the duration, or amount of time engaged in a particular type of contact, influenced the new teachers’ perceived usefulness of the mentor program. Similar to research question 2, the goal of question 3 was to determine whether a relationship existed between variables. As a result, the most suitable research method was correlational. The overall usefulness rating score served as the X variable and the duration of contact, indicated by number of minutes spent in face-to-face conversation with a mentor, served as the Y variable.
Population

New teachers, defined as those teachers newly hired in the midwestern school district regardless of previous teaching experience, were the participants for the study. Participation in the three-year mentor program is a mandated process for all new teachers in the school district. Of the 45 new teachers in the school district, the study limited the participants to those who had completed at least one year of the mentor program or had graduated from the program within the last year. There were a total of 20 new teachers who met the study requirements and 10 of those individuals participated in the study resulting in a response rate of 50%.

Participants in the study consisted of nine females, 90%, and one male, 10%. The ethnicities of the participants included six African-American, two Caucasian, one Hispanic/Latino, and one participant who identifies as both African-American and Caucasian. The ages of the participants ranged from 25 – 33 years old, with three participants choosing not to include their age. The mean age was 28 years old.

Data Collection

All data for the study was collected using the Mentor Program Survey. Items 1-7 of the survey were taken from a study done by Richter et al. (2013) of the University of Germany Berlin. Survey items 1-7 were tested for reliability resulting in a reliability coefficient of 0.80 and an internal consistency coefficient of 0.84. The validity of the survey was tested using cross-validation in which half of the data were used in exploratory factor analysis and the other half used confirmatory data analysis (Richter et al.). The researcher included additions to the seven items including demographic
information and teaching experience as well as four questions related to frequency, duration, and types of contact.

All participants in the study were a part of a school district mandated mentor program that met on a monthly basis for professional development. The researcher was granted permission by the director of the mentor program to administer the Mentor Program Survey during a meeting in October 2014. Participants were given a brief overview of the study and invited to complete the survey. Initially, a total of nine participants completed the survey. In an attempt to collect additional participants who may have been absent from the October meeting, the researcher obtained an email list of all participants who met the criteria for the study. The researcher sent a mass email with an overview of the study and invitation to attend another survey after school on a non-mentor meeting day. Those individuals who had already completed the survey were asked to reply to the researcher with the subject heading titled completed. Emails with the subject heading completed were not included in follow-up correspondence. During the second survey session, a single participant attended, making a total of ten participants for the study.

The study consisted of three research questions, with each question requiring a different research design method. Research question 1 was a quasi-experimental design with the participants’ usefulness rating score as the dependent variable and the types of contact as the independent variable. Data for Question 1 was collected using the sum of the Likert scale ratings for items 1-7 along with item 9. Research question 2 was a correlational design with the usefulness rating score as the X variable and the frequency of contact as the Y variable. Data was collected using the sum of the Likert scale ratings
for items 1-7 along with items 8 and 11. Research question 3 was a correlational design with the usefulness rating score as the X variable and the duration of contact as the Y variable. Data was collected using the sum of the Likert scale ratings for items 1-7 paired with item 10.

Analytical Methods

During the data analysis portion of the study, there were several completed surveys in which participants selected multiple responses when only a single response was requested. Specifically, in the demographic and teaching experience sections of the survey, multiple participants circled two or more categories for ethnicity and/or grade levels taught. When coding the data for these responses, the researcher added another label for ethnicity called Caucasian/African-American and multiple grade levels for the teaching experience section.

In addressing Question 1, the researcher sought to determine if the types of contact that they had with their mentor influenced new teachers’ perceived usefulness of the mentor program. Data were collected using survey Item 9 which asked participants to rate the average type of contact that they had with their mentors. Participants responded by selecting face-to-face conversation, email, observation, or other. For research question 1, the independent variable, types of contact, has four levels: face-to-face conversation, email, observation, other. These data were analyzed using a simple analysis of variance, or ANOVA. An ANOVA is used when “one factor or treatment is being explored and this factor has more than two levels” (Salkind, 2014, p. 234). The data for the ANOVA were calculated using SPSS Statistics software. To address multiple responses to Item 9, in which participants were asked to indicate a type of contact that occurred the most
often, multiple labels were created to indicate the varying combinations of contact types that were indicated. Also, another variable, labeled *multiple types of contacts*, was added in which the researcher could identify the number of types of contact that a participant chose for Item 9. For example, if a participant selected face-to-face conversation, email, and observation a three was indicated in the *multiple types of contacts* variable.

In addressing Question 2, the researcher sought to determine if new teachers’ perceived usefulness of the mentor program was influenced by the frequency of contact that they had with their mentor. Data were collected using survey Item 8, which asked participants to rate how often they communicated with their mentors. Participants indicated the average amount of times per month, indicated by number of days, spent communicating with their mentor. Responses to Item 8 as well as those from Items 1-7, indicating perceived usefulness of the program, served as the X and Y variables. Because Research Question 2 was intended to identify a relationship between frequency and usefulness, a correlation design was necessary (Salkind, 2012). The X and Y variables were analyzed using the Pearson Correlation Coefficient to determine if there were any statistically significant relationships between survey Item 8 and teacher’s perceptions. The Spearman Correlation Coefficient was not used because it focused on ordinal or ranking data which was not present for Research Question 2.

In research question 3 the researcher determined whether the duration, or amount of time engaged in a particular type of contact, influenced the new teachers’ perceived usefulness of the mentor program. Question 3 was addressed with survey item 10, which referred to the average amount of time, in minutes, that new teachers spent in face-to-face conversation with their mentors during each occurrence. In addition, the research
question was addressed with Item 11, which determined the number of face-to-face conversations that occurred per month between the mentor and new teacher. Responses to Items 10 and 11, as well as those from Items 1-7, indicating perceived usefulness of the program, served as the X and Y variables. Similarly to research question 2, research question 3 focused on finding a relationship between the time spent in conversation and the seven Likert scale responses for program usefulness. The most appropriate statistic to analyze the data was the Pearson Correlation Coefficient, rather than the Spearman Correlation Coefficient, which is used for ordinal or ranking data.

In response to Items 10 and 11, several participants indicated a number range rather than a single number for their response. For example, Item 10 asked participants to indicate the average number of minutes spent in face-to-face conversations with a mentor. In order to calculate the data for a participant who responded with a range of minutes, such as 45-60 minutes, the lowest number was entered into the data set. Similarly for Item 11, in which participants were asked to indicate the average number of face-to-face conversations they had with their mentor each month, the lowest number was entered for participants who gave a range of numbers.

Limitations

This study had three primary limitations that included sample size, school district, and type of school district. By limiting the operational definition of applicable participants to only those who have completed at least one year of the mentor program or have graduated from the program within the past year, the researcher was restricted to a very select group of possible participants. Within the midwestern school district, there were approximately 20 people who fit these criteria and only 10 of those individuals
completed the survey. Conducting a study with this small of a sample \((n=10)\) prohibited the researcher from being able to generalize the findings to a greater audience. Also, the results of the study will not be representative of a larger population of new teachers.

Additionally, the study was conducted in a midwestern elementary school district. The location was chosen based on availability and access to participants. By only choosing to use a single school district, the researcher was not able to collect a more varied sample of participants. Also, the school district is elementary, including only kindergarten through eighth grade students. The grade level limited the researcher by not allowing for new teachers of secondary education students to be included. In the future, the researcher would consider utilizing multiple school districts within the Midwest and possibly include new teachers working in high schools.

Summary

The researcher examined the relationship between the usefulness of a mentor program and the types, frequency, and duration of contacts that new teachers had with their mentors. The quantitative study was conducted in a midwestern school district that served students in kindergarten through eighth grade. The ten participants in the study were newly hired teachers who were required to complete the three-year mentor program regardless of teaching experience. The three research questions utilized both quasi-experimental and correlational research methods in order to best analyze the data. Although this chapter was focused on the methodology of the entire study, Chapter 4 further expounded the specific analysis and results of the study in full breadth.
CHAPTER IV
FINDINGS AND CONCLUSIONS

Introduction

With the methodology of the study fully detailed, the purpose of the final chapter was to report the findings of the study. The study was comprised of the following three research questions.: Research Question 1 - What is the relationship between the types of contact new teachers have with mentors and the perceived usefulness of the current mentor program?; Research Question 2 - What is the relationship between the frequency of contacts that new teachers have with their mentors and the perceived usefulness of the current mentor program?; and Research Question 3 - What is the relationship between the duration of each face-to-face contact that new teachers have with their mentors and the perceived usefulness of the current mentor program? Each of the research questions were analyzed and any possible conclusions were drawn to provide a supporting response to the questions. Chapter IV detailed the statistical findings that were analyzed using SPSS software. The chapter concluded with implications and recommendations for further research.

Findings

Focused on variations in the types, frequency and duration of contact, the researcher analyzed the effectiveness of the mentor program of a suburban elementary school district of a major Midwestern city. The purpose of this quasi-experimental and correlational study was to determine whether the types, frequency, and duration of
contact between new teachers and their mentors impacted the usefulness of the mentor program. The quasi-experimental design of the study was located within Research Question 1, in which the research sought to find differences between the types of contact new teachers had with their mentors and the usefulness of the mentor program. The correlational design of the study was imbedded within Research Questions 2 and 3 because they sought to determine if relationships existed between the variables. The variables, such as years of teaching experience, could not be randomly assigned and there were no control or experimental groups. Each research question in the study was analyzed using inferential statistics such as factor analysis or Pearson Product Moment Correlation Coefficient. The control variables for all research questions were that participants were new teachers, defined as recently hired to the district regardless of experience, and had completed their first year of the mandatory mentor program.

Research Question 1 - What is the relationship between the types of contact new teachers have with mentors and the perceived usefulness of the current mentor program?

In addressing Question 1, the researcher sought to determine if new teachers’ perceived usefulness of the mentor program was influenced by the types of contact they had with their mentor. The combination of participants in the study not randomly assigned and the examination of differences between the independent and dependent variables indicated that the Question 1 was a between-subjects quasi-experimental design. Data were collected using survey Item 9 which asked participants to rate the average type of contact that they had with their mentors. The type of contact served as the independent variable comprised of four levels, or groups. Participants responded by selecting one of the four levels: face-to-face conversation, email, observation, or other.
For each participant, the sum of Items 1-7 served as the overall usefulness rating, or dependent variable. Because the nature of Research Question 1 was to determine the differences between each level of the independent variable and dependent variable the most appropriate analysis was a between-subjects analysis of variance (ANOVA).

The usefulness rating of the mentor program varied by the types of contact between mentors and mentees, $F(5, 5) = .240, p > .05$. There was no significant difference between face-to-face conversation ($M = 36.5, SD = 6.45$), email ($M = 36.5, SD = .71$), or face-to-face/other ($M = 2.83, SD = 2.00$). Several participants selected multiple types of contact rather than a single type. As a result, additional labels were created in the data set to indicate the combinations of contact types. The standard deviation (SD) was not calculated for three categories of contact types, each represented a combination of contacts that the participant indicated: face-to-face/email ($n=1$), face-to-face/observation ($n=1$), face-to-face/email/observation ($n = 1$), due to a low number of participants who chose the item.

Research Question 2: What is the relationship between the frequency of contacts that new teachers have with their mentors and the perceived usefulness of the current mentor program?

The research question being addressed was whether there was a relationship between the perceived usefulness of the mentor program and the frequency of contact between new teachers and their mentors. Participants in the study were not randomly assigned to conditions. This particular research question did not involve a determination of differences, rather the intention was to decipher whether a relationship existed between two variables. Since the ratings of mentor program usefulness and days per month spent
communicating with a mentor were continuous variables, the most appropriate methodology was the correlational method. All participants in the study were new teachers, defined as any teacher newly hired to the school district, so teacher status was a directly controlled variable. Because this was a correlational study, there were no independent or dependent variables. Instead, a relationship was explored between ratings of mentor program usefulness (X) and number of days per month spent communicating with the mentor (Y).

The statistic chosen to analyze the data collected was the Pearson Correlation Coefficient. This inferential statistic was chosen instead of a Spearman Correlation Coefficient because differences between only two continuous variables, rather than ranking variables, were explored. The results from the Pearson Correlation Coefficient were calculated and indicated that there was no significant relationship between ratings of mentor program usefulness and number of days spent contacting mentor per month, $r(9) = .45, p > .05$. Figure 1 represents the moderate positive correlation with a scatterplot. When visually represented with a histogram in Figure 2, the data for the Y variable, number of days per month spent communicating with mentor, resulted in a negative skew. This skew was most likely due to an outlier.
Figure 1. Scatterplot with positive slope depicting usefulness rating and days spent with mentor per month.

Figure 2. Histogram with negative skew due to possible outlier for Research Question 2.
Research Question 3 - What is the relationship between the duration of each face-to-face contact that new teachers have with their mentors and the perceived usefulness of the current mentor program?

In Research Question 3 the researcher determined whether the duration, or amount of time engaged in a particular type of contact, influenced the new teachers’ perceived usefulness of the mentor program. This question was addressed with survey Item 10, which referred to the average amount of time, in minutes, that new teachers spent in face-to-face conversation with their mentors during each occurrence. In addition, the research question was addressed with Item 11, which determined the number of face-to-face conversations that occurred per month between the mentor and new teacher. Since the research question sought to explore the relationship between variables rather than differences, a correlational design was necessary. Also, the researcher did not randomly assign participants to conditions. Responses to Items 10 and 11, as well as those from Items 1-7, which indicated perceived usefulness of the program, served as the X and Y variables.

The statistic chosen to analyze the data collected was the Pearson Correlation Coefficient. Similarly to Research Question 2, this inferential statistic was most appropriate because differences between only two continuous variables, rather than ranking variables, were explored. The results from the Pearson Correlation Coefficient were calculated and indicated that there was no significant relationship between ratings of mentor program usefulness and average number of minutes per face-to-face contact, $r(9) = - .56, p > .05$. There was also no significant relationship between ratings of mentor
program usefulness and the average number of face-to-face conversations per month, $r(9) = .39, p > .05$.

Conclusions

The study, to determine whether the usefulness of a new teacher mentor program was affected by the types of contacts, frequency, and duration of contacts, proved statistically insignificant overall. Research Question 1 was intended to determine if differences were present between the types of contacts and the overall usefulness scores of each participant. The results of the ANOVA used to analyze the data determined that there was no statistically significant difference between the overall usefulness of the new teacher mentor program and the types of contacts new teachers had with their mentors. This result was most likely due to the small sample size, $n=11$. When analyzing the data, SPSS was unable to calculate the post hoc, a comparison of each variable mean to each other, as a result of three of the independent variable groups having less than two participants. The inability to run the post hoc calculation was also consistent with the small sample size.

The analysis for Research Question 2 was intended to describe any correlations between the frequency of contact, indicated by days per month, between new teachers and mentors. The results of the Pearson Product Correlation were statistically insignificant for the number of days per month spent in contact with the mentor correlated to the overall usefulness score. However, although statistically insignificant, a positive slope on the scatterplot in Figure 1 showed that higher usefulness scores resulted in higher numbers of days spent in face-to-face communication with the mentor. A larger sample size would be necessary to more accurately determine the statistical significance.
The analysis for Research Question 3 was focused on determining if a correlation existed between the overall usefulness of the new teacher mentor program and the frequency of contact with a mentor, as measured by number of face-to-face conversations and average number of minutes per conversation each month. The Pearson Product Correlation analysis resulted in a statistically insignificant correlation between each pair of variables. Although statistically insignificant, the correlation between the usefulness rating and minutes of conversation resulted in a negative correlation, while the usefulness rating and number of conversations resulted in a positive correlation. Exploring the possible differences in the correlational directions could serve as an avenue for further research with a larger sample size of participants.

Implications and Recommendations

Throughout the course of the study, there were two primary areas of concern: data collection process and unexpected survey responses. Data for the study were collected during a mandatory new teacher mentor program meeting, at which time the researcher introduced the study and invited participants to complete the study. However, on the initial data collection day not all of the anticipated new teachers were present, leaving the researcher with minimal completed surveys. Since the mentoring meetings were mandatory, the researcher did not anticipate new teacher absences. Also, due to the anonymous nature of the surveys, identifying which new teachers were not present at the initial data collection day required contacting the director of the mentoring program to correlate the formal attendance record for the meeting with the informed consent forms which contained participant signatures. Additionally, the researcher obtained an email list of all eligible participants and sent an email requesting that participants who completed
the survey respond with the word *completed* in the body of the message. All participants who did not respond with the word *completed* were contacted in a separate email to invite them to participate in a second data collection day. Unfortunately, there was only a single participant who actually came to the second data collection day.

In the future, this study could be repeated with a much larger sample size. For this study, the convenience sample of eleven participants included all who were available, however it may be possible to draw statistically significant conclusions or generalizations with a broader group of participants. A suggestion would be to include multiple elementary school districts in the study to increase the number of participants. Although, by adding different school districts it is possible that there would be varied criteria for new teachers to participate in the mentor program. The differences in criteria, if any, would need to be taken into consideration. Another suggestion would be to transform the study into a longitudinal design, following a new teacher from their first year through their third year and determining if any differences occurred in their overall usefulness ratings from year to year. Quantitative data could also be collected through interviews or short answer questions to allow new teachers to explain their thoughts and perspectives more thoroughly.

The close examination of how the usefulness of a new teacher mentoring program is related to the types, frequency, and duration of contacts between new teachers and their mentors was met with some complications due to sample size, yet produced additional questions and varying study designs that could be explored. With new teachers entering classrooms each year, school districts will continually need to ensure that their mentor programs are designed to meet the diverse needs of teachers. Although this study only
focused on one aspect of the factors that affect new teachers, a repeated study with additional participants could provide worthwhile results to school districts and the overall body of knowledge. The potential results could assist school districts with making modifications to their current program or creating new mentoring programs entirely.
REFERENCES


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Public Act, 335 M.C.L.A § 1526 (1993).


Appendix A

Mentor Program Survey
Mentor Program Survey

The purpose of this survey is to gather teachers’ perceptions related to components of the new teacher mentor program. This survey is part of a study independent of the school district. All information obtained in survey will be confidential and used for research purposes. Results from the study may be used to provide suggestions for improvement and/or modifications to the current mentor program. Participation in this survey is completely voluntary and participants may withdraw at any time.

DEMOGRAPHIC INFORMATION

Circle your choice.

Gender:  M  F
Ethnicity:  Caucasian/White  African American/Black  Hispanic/Latino
          Asian/Pacific Islander  Other _____________________________

Age:  ___________

TEACHING EXPERIENCE

Circle your choice.

Years of professional teaching experience:  _______________

How many years of the Mentor Program have you completed?  _______________

Grade levels taught:  (Circle all that apply)

K – 2  3 – 5  6 – 8  9 – 12  College  N/A
MENTOR PROGRAM

For each item, please circle a number 1 – 6 for your response.

Strongly disagree (1)  Strongly agree (6)

My mentor …

1. helps me to improve independently.  
   5  6

2. supports me in trying out different 
   teaching methods.  
   5  6

3. gives me the opportunity to draw my 
   own conclusions.  
   5  6

4. has ideas that prompt self-reflection.  
   5  6

5. tells me what I need to improve.  
   5  6

6. has specific ideas about how I should teach the 
   lesson content.  
   5  6

7. tells me what I have to do differently in lessons.  
   5  6

Circle your responses for the following items.

8. On average, how many total days do you spend communicating with your mentor each month? ________________

9. Over the course of the mentor program, what type of contact did you have with your mentor most often?

   Face-to-face conversation   Email   Observation   Other: _______________________

10. On average, how many minutes long are your face-to-face conversations with your mentor? ________________

11. On average, how many face-to-face conversations do you have with your mentor each month?

   _______________________

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