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WHERE DOES MENTORING MATTER MOST? TEACHERS' PERCEPTIONS OF BEING MENTORED DURING THEIR FIRST YEAR OF TEACHING AND THE CORRELATION OF THOSE PERCEPTIONS WITH JOB SATISFACTION AMONG ECONOMICALLY DIVERSE SCHOOLS

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by
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ABSTRACT

WHERE DOES MENTORING MATTER MOST?

TEACHERS' PERCEPTIONS OF BEING MENTORED DURING THEIR FIRST YEAR OF TEACHING AND THE CORRELATION OF THOSE PERCEPTIONS WITH JOB SATISFACTION AMONG ECONOMICALLY DIVERSE SCHOOLS

Zachary Boyt

In this quantitative study, the researcher explored the relationships between new teacher mentoring and job satisfaction. Although many studies have been conducted on the link between new teacher mentoring and job satisfaction, there exists little research on whether or not there are specific mentoring activities that correlate more strongly with job satisfaction. In addition to filling that gap in the research, this study examined the extent to which job satisfaction is correlated with both mentoring activities and the mentoring relationship. Over 600 teachers across nine districts plus a regional center on Long Island were surveyed. The schools surveyed had varying percentages of economically disadvantaged students.

Using both Seligman's (1972) theory of *learned helplessness* and Ingersoll and Strong's (2011) *theory of teacher development* as frameworks, this study developed an understanding of the frequency of specific activities in which mentors and mentees engage and if said activities correlate with job satisfaction. The results in this study indicated few significant differences in mentor-mentee activities across varying degrees of economically disadvantaged schools. Moreover, the study found that the following three activities had the strongest correlation with job satisfaction among early-career teachers: understanding the school's evaluation process, time management, and

understanding of curriculum. Finally, it was determined that, in general, the strength of the mentor-mentee relationship is more strongly correlated with job satisfaction than any of the specific activities in which mentors and mentees engage. The results could help inform both mentors and trainers of mentors, and the recommendations that were made are intended to build confidence and optimism in new teachers, thus potentially leading to higher teacher retention, and, ultimately, improved student outcomes.

DEDICATION

To my dad, Joseph Boyt, who helped to instill an inquisitive mind in me, and to my brother, Alex Boyt, who constantly reminds me, “There’s more ahead of you than you could know of now.” You continue to live in me.

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CHAPTER 1
Introduction

The percentage of teachers leaving the profession year after year is shocking and staggering. Over the past thirty years, anywhere between nine and 11% of teachers leave the profession within a year of their start date (Ingersoll, 2018). Additionally, almost half (44.1%) of all teachers leave within five years (Ingersoll, 2018). To combat this, New York State has implemented and mandated a new teacher mentoring program with the aim of keeping quality teachers in the profession.

New York State requires that teachers are to receive one year of mentoring to earn their professional certification, and this requirement was implemented in 2004 after piloting programs throughout various districts across the state during the late 1980s and early 1990s to help new teachers learn a new set of skills while adapting to a new profession (NYSED, 2012). Unfortunately, there is often a lack of communication between the new teacher and the mentor (Benson-Jaja, 2010). Furthermore, schools will often select a mentor for a new teacher out of convenience, rather than basing it on the specific needs of the teacher (Smith, 2009). Moreover, while there are a variety of different activities that count toward mentoring hours, such as co-teaching, co-planning, and observations, mentoring activities are also chosen out of convenience, not based on the needs of the new teacher (Smith, 2009). The process is even more difficult in high-need schools, where attrition rates are higher than their lower-need counterparts, due to poor working conditions, lack of resources, and the stress of working with students and families who pose a wide range of needs (Darling-Hammond, 2003).

In summary, although mentoring would seem like a feasible solution to a pressing and enduring educational problem, there are still gaps and inconsistencies in many mentoring programs; although almost 80% of first-year teachers report having a mentor (BTLS, 2008), the teacher attrition rate has remained relatively consistent (Ingersoll, 2018) with 19% of teachers stating that they leave the profession due to stress, pressure, and burnout (Phi Delta Kappan, 2019).

Purpose of the Study

Rowley (1999) wrote that there is a need to identify and prepare quality mentors. He writes that a good mentor is committed to the role, accepting of the new teacher, skilled at providing correct and appropriate supports, adept at various interpersonal contexts, maintains a love of lifelong learning, and consistently exudes confidence and optimism. Still, a mentor should also be aware of the specific mentoring activities that are most strongly associated with positive responses from the new teachers they serve (Rowley, 1999).

The purpose of this study was to examine the specific mentoring activities that new teachers perceive as effective. At the same time, the study analyzed the differences in mentoring practices perceived by new teachers as effective across districts of varying percentages of economically disadvantaged students, defined by the New York State Department of Education as any student who participates in, or in a family that participates in, at least one economic assistance program, such as Social Security Insurance, Food Stamps, free and reduced-price lunch at school, or the Home Energy Assistance Program (NYSED, 2019). Finally, this study determined the degree to which teacher satisfaction is correlated with both mentor activities and mentor-mentee

relationship. In other words, the study determined whether or not the strength of the mentor-mentee relationship is more highly correlated with job satisfaction than the specific activities in which the mentor and mentee engage.

Using a survey adapted from Gordon's (2000) *Helping Beginning Teachers Succeed*, Berk's (2005) *Mentorship Effectiveness Scale,* and Hinshaw and Atwood's (1982) *Anticipated Turnover Scale*, the researcher ran both correlational analyses and multiple one-way ANOVA tests to complete this quantitative examination.

Theoretical Framework

In this study, two frameworks were used in tandem as a means to support the research. The first and older theory is Martin Seligman's theory of *learned helplessness* (1972). The second, more contemporary theory is the *theory of new teacher development* (Ingersoll & Strong, 2011). These two theories will be discussed in greater detail in chapter two.

Learned Helplessness. In his theory of learned helplessness, Seligman (1972) posits that helplessness is actually a learned behavior; when animals fail at something over and over and over again, and it feels like the circumstances are beyond their control, they give up more easily. He first performed experiments on dogs and found that when dogs kept getting shocked, they eventually stopped trying to get out of a cage, even when the shocker was turned off. In essence, they learned to be helpless. His book *Learned Helplessness and Depression on Animals and Men (1976),* as well as many other works of his, explains this in great detail.

Conversely, Seligman further explains that the one way to alleviate learned helpless is through *learned optimism*. By encouraging people to focus on the positive,

they are less likely to immediately default to the belief that they are unable to do something. His book *Learned Optimism (1991)* explains how individuals' focus on either the pessimistic or the optimistic can absorb their emotions in all aspects of life for better or for worse. In his book *Flourish (2013),* Seligman delves into five major facets of positive psychology that play a crucial role in happiness. The first facet is positive emotion, which includes pleasant states involving enjoying one's self in the moment. The second facet is engagement, which is being completely absorbed in a task. The third facet is meaning, which gives the beholder a sense of belonging. The fourth facet is accomplishment, which is feelings of success and achievement. The final facet, positive relationship building, involves a vibrant social life in both personal and professional settings.

Seligman's theory connects to new teacher mentoring in a variety of ways. First, it connects to the phenomenon of almost half of teachers leaving the profession within five years. It is plausible to think that there is some connection between such a high attrition rate and the theory of learned helplessness. Second, it would seem as though a successful mentor-mentee relationship would be predicated upon fostering learned optimism. Chhauger, Rose, and Joseph (2017) found that higher levels of optimism predict higher levels of physical, cognitive, and emotional engagement. Thus, if a mentor-mentee relationship between a veteran teacher and a first-year teacher fosters optimism, then that teacher may more likely be committed to continued work.

Theory of New Teacher Development. Ingersoll and Strong (2011) created a model that illustrates how preparation of teachers leads to student success. This model views teachers as human capital. By retaining the human capital, ultimately, the growth

and academic learning of students would be improved (Ingersoll & Strong, 2011). The model contends that schools must develop preservice preparation programs for teachers, commonly known as new teacher induction. Often within this this induction program is mentoring (McBride, 2012). Successful induction leads to improved classroom teaching practices, which, in turn, leads to higher teacher retention, and, ultimately, to the to the goal of improved student learning and growth in schools.

The theory of new teacher development connects to the researcher's study because it suggests that without a proper mentoring program, teachers will not grow, teachers will not stay, and, as a result, students will not learn. By looking at the ways in which mentors conduct activities most strongly tied to job satisfaction, insight could be gained on which strategies mentors could use to increase job satisfaction and, ultimately, lead to greater student success.

The two theories connect because helplessness could be the disruptor between successful induction and improved practices. First-year teachers may feel properly trained during their preservice training and have a false sense of confidence when beginning in the profession. However, when first-year teachers are forced to endure all of the unexpected elements of first-year teaching, they may give up and leave the profession forever without the proper professional, social, and emotional support. As a result, this could deny underserved students potentially successful teachers.

Significance of the Study

Although much research exists in the field of new-teacher mentoring, there exists very little on whether or not any differences in mentoring practices exist when comparing high-need districts to their more affluent counterparts. The research is particularly

important in the professional growth of teachers, students, and school and district leaders. It ultimately addresses Professional Standard for Educational Leadership #6 (2015), which states, “Effective educational leaders develop the professional capacity and practice of school personnel to promote each student’s academic success and well-being.”

The research extends knowledge in the area by not only looking at whether or not mentoring differences exist across schools of varying percentages of economically disadvantaged students (as there may not be a single panacea to help all new teachers succeed, regardless of the school in which they teach), but it also determines whether or not the quality of the mentor-mentee relationship has a stronger connection with job satisfaction than the activities in which mentors and mentees engage. The results could be used to give teachers, their mentors, and school leaders a better sense of what mentors and mentees should be doing together during their year of mandated collaboration.

Connection with St. John’s Mission

St. John’s University, a Vincentian University, models itself after the tenets of St. Vincent de Paul, a champion of equity and service to the underprivileged. As such, much of the academic work completed at the university focuses on social justice. This dissertation is no exception.

As stated previously, nearly half of all teachers leave the profession within five years of their hiring date (Ingersoll, 2018). This is not only a social issue, but also a civil rights issue. Students in lower income communities are more likely to be students of color; America’s racial and ethnic minorities comprise a disproportionately large population Americans living in poverty (US Department of Education, 2000). In addition to being subjected to challenging financial circumstances, economically disadvantaged

students must also deal with significant educational challenges, in part because they are stuck in an endless revolving door of teachers with little to no experience (Falk, 2012). It is the aim of this study that its results expose mentors to engaging practices with mentees in order to keep them in the classrooms, particularly in high-need schools. This may help solve some of the problems of educational inequity, thus furthering the mission of the university.

Research Questions

The purpose of this study was to determine the specific activities in which new teacher mentors and their mentees engage and if these specific activities have any effect on mentees' perceptions of their job. As such, three questions were answered:

1. To what degree do mentoring activities differ in schools with higher percentages of economically disadvantaged students?
2. To what extent is there a correlation between specific mentoring practices and early-career teachers' job satisfaction?
3. To what extent is teacher satisfaction correlated with mentor activities and mentor relationship? Does this correlation vary by percentage of economically disadvantaged students?

Null Hypotheses

H_0 #1: There are no significant differences in mentoring activities in districts with higher numbers of economically disadvantaged students.

H_0 #2: There is no correlation between specific mentoring practices and early-career teachers' job satisfaction.

H_0 #3: Neither specific mentoring activities nor the quality of the relationship between the mentor and the mentee will be more strongly correlated with job satisfaction.

Alternative Hypotheses

H_1 #1: There are significant differences in mentoring activities in districts with higher numbers of economically disadvantaged students.

H_1 #2: There is a correlation between specific mentoring practices and early-career teachers' job satisfaction.

H_1 #3: Specific mentoring activities and/or the quality of the relationship between the mentor and the mentee will be more strongly correlated with job satisfaction.

Research Design and Data Analysis

This study was quantitative. The research design utilized was a survey design. The reason this was appropriate, according to Vogt et. al. (2012), is because, "you can expect respondents to give you reliable information; you know how you will use the answers; and you can expect an adequate response rate" (p.16).

To answer the first research question regarding the degree to which mentoring activities differ in schools with higher percentages of economically disadvantaged students, 36 one-way ANOVA tests were conducted to determine significant differences among each independent group. In this case, the dependent variable was time spent engaged in each of the 18 mentoring activities mentioned in the survey, and the independent variable was categories of economically disadvantaged students: 0-20% economically disadvantaged (very low economically disadvantaged), 20-40% economically disadvantaged (low economically disadvantaged), 40-60% economically

disadvantaged (moderate economically disadvantaged), 60-80% economically disadvantaged (high economically disadvantaged), and 80-100% economically disadvantaged (very high economically disadvantaged). The first 18 ANOVAs run involved all teachers surveyed, while the second 18 ANOVAs run involved early-career teachers.

To answer the second research question regarding extent to which there is a correlation between specific mentoring practices and early-career teachers' job satisfaction, a bivariate correlational analysis was run to determine if any specific mentoring activities were significantly correlated with job satisfaction, and, if so, which specific activities had the strongest correlation. In the definition of terms later in this chapter, job satisfaction is defined by participants' composite scores on the *Anticipated Turnover Scale,* scores which range from 8 (lowest possible job satisfaction) to 38 (highest possible job satisfaction.)

To answer the third research question regarding the extent to which teacher satisfaction is correlated with mentor activities and the mentor-mentee relationship, once again, a bivariate correlational analysis was run to determine if the mentor-mentee relationship has a stronger correlation with job satisfaction than the specific activities in which mentors and mentees engage. Additionally, a bivariate correlational analysis was run separately to determine whether or not mentoring activities' and/or the mentor-mentee relationship's correlation with job satisfaction remains consistent across schools with varying percentages of economically disadvantaged students.

To ensure validity and reliability of the study, participants' answers to surveys were both anonymous and confidential. Additionally, it was assumed that participants

who work in any type of school would be equally likely to answer the questions on the survey, regardless of the percentage of economically disadvantaged students. It was further assumed that people with all strengths of opinions would answer the questions, not just those who are highly passionate either way about their experiences. Finally, it was assumed that all teachers in this survey have a valid recollection of their mentoring experiences, even if it was completed years ago.

Sample/Participants

The sample in this survey consisted of 651 teachers, including 111 early-career teachers across nine school districts and one regional support center in Long Island. The reason for this was twofold. First, as stated in the introduction, nearly half of teachers in urban areas leave the profession within their first five years (Ingersoll, 2018). Second, given the *recency effect* (Jones & Goetthals, 1972), it was more likely that teachers would have a more vivid recollection of their mentoring experiences within their first five years of teaching. However, all teachers from each school were invited to take the survey, as looking at data from more veteran teachers indicated the extent to which they still value the mentoring they received many years after the fact.

Instruments

There were three surveys adapted into a single survey in this study. The first survey was adapted from Gordon's (2000) *How to Help Beginning Teachers Succeed* and was further adapted to one part of the *Survey for Mentor Program Participants* utilized in Watson's (2012) *Analysis of New York State Mentoring Programs*. The first purpose of this instrument was to determine if a new teacher was mentored. If so, the survey's

second purpose was to identify which beginning teacher needs were best met by their program's components. The specific areas of need represent all seven areas supported by the California Beginning Teacher Project (2006) as beginning teachers' seven major needs: systematic needs, parental needs, resource needs, emotional needs, managerial needs, instructional needs, and disciplinary needs.

The second survey was an adaptation of the *Mentorship Effectiveness Scale*. Originally authored by Berk, Berg, Mortimer, Walton-Moss, and Yeo in 2005, it was also utilized in Morina's (2012) *Mentoring and Retention in First-Year Teachers: A Mixed Methods Study.* The Mentorship Effectiveness Scale contains a Likert scale consisting of 12 items, using a six-point continuum (Berk, et al., 2005). This was used to measure the strength of the relationship between the mentor and mentee, from the perspective of the mentee.

The third survey was an adaptation of the *Anticipated Turnover Scale* (ATS), originally authored by Hinshaw and Atwood in 1982, and also utilized in Morina's (2012) *Mentoring and Retention in First-Year Teachers: A Mixed Methods Study*. The *Anticipated Turnover Scale* also consists of eight items rated on a six- point Likert scale. The *Anticipated Turnover Scale* was chosen to measure the influence on teacher retention because it was originally developed to measure retention in nursing, which, like teaching, has one of the highest turnover rates among all professions (Hinshaw & Atwood, 1982).

The survey was piloted by the researcher during the summer of 2019. During the pilot, the researcher found in a correlational analysis that the top three mentor-mentee activities most associated with teacher job satisfaction, according to these results, were mentee observing mentor teach (r = .37), mentee observing other teachers teach (r = .32),

and mentor and mentee attending professional development together (r = .23). However, the sample size was limited (n = 36), so the researcher decided to distribute the survey on a larger scale for this research project to increase statistical power and to decrease the likelihood of a Type II error. Additionally, the researcher received permission from all three groups of authors to adapt and to use their survey, as well as permission to distribute the survey electronically.

To further ensure validity and reliability of the study, participants' answers to surveys were both anonymous and confidential. Additionally, it was assumed that those who answered the questions in the survey were the actual teachers to whom the survey was sent, as opposed to a friend or a relative who had access to the email. It was further assumed that people with all strengths of opinions answered the questions, not just those who are highly passionate either way about their experiences. Finally, it was assumed that all teachers in this survey had a valid recollection of their perceptions of mentoring experiences, even if it was completed years ago.

Procedures/Interventions

After approval from the dissertation committee, the researcher sought approval to conduct research from three entities: the original authors of the survey instruments, St. John's Independent Review Board, and each individual school district's superintendent. While waiting for approval, the researcher used BEDS data from NYSED (2019) to create a document stating the percentage of students in a school who are considered economically disadvantaged. For example, if School A had 15 students listed as economically disadvantaged and 85 students listed as not economically disadvantaged then, on the form the researcher creates, the percent of economically disadvantaged

students in School A would be 15%. The researcher would then use this data to inform the search for an appropriate number of schools in each category. After receiving approval from each district's superintendent, the researcher requested that the superintendent forward the survey to all teachers in the district. Although it may seem that this was done for the sake of efficiency, the true motivation behind this decision was so that the survey would be sent by a known entity, as opposed to a stranger asking participants to click on an unknown link.

Schools were divided into five categories: 0-20% economically disadvantaged, 20-40% economically disadvantaged, 40-60% economically disadvantaged, 60-80% economically disadvantaged, and 80-100% economically disadvantaged. There was a near equal number of schools in each category. If a teacher was unsure of the percentage of students in their school who are economically disadvantaged, the list of schools with estimated percentages of economically disadvantaged students was included as an attachment. Every single public school in Nassau and Suffolk County was included on the attachment, so participants wouldn't know exactly which other schools were surveyed. Teachers were given three weeks to complete the survey, and reminder emails were sent out each week. The survey was sent via Survey Monkey. Once all data were collected, they were then transferred to SPSS, cleaned, and analyzed.

Definitions of Terms

- **mentor***:* For the purposes of this study, a mentor is any current or former teacher who provided formal mentoring to a first-year teacher, who is now currently teaching in a K-12 public school district in Long Island, over the course of that year.

- **mentee:** A current K-12 teacher in a public school on Long Island who received formal mentoring from a school or district appointed mentor.
- **first-year teacher:** Any teacher in his or her first year of full-time teaching in a public school, as opposed to student teaching or part-time teaching.
- **job satisfaction***:* the extent to which a teacher enjoys his or her job and wants to continue to work in that role, as measured by teachers' composite score on the section of the survey adapted from the *Anticipated Turnover Scale* (Hinshaw & Atwood, 1982).
- **mentor relationship***:* the extent to which a current or former new-teacher mentee perceives the strength of the relationship with their assigned new-teacher mentor, as measured by individual elements in the *Mentorship Effectiveness Scale* (Berg, 2009).
- **economically disadvantaged student:** A student who participates in, or in a family that participates in at least one economic assistance program, such as Social Security Insurance, Food Stamps, free and reduced-price lunch at school, the Home Energy Assistance Program, etc. (NYSED, 2019).
- **very low economically disadvantaged school:** any school with 0-19.999% of their students qualifying as economically disadvantaged.
- **low economically disadvantaged school:** any school with 20-39.999% of their students qualifying as economically disadvantaged.
- **moderate economically disadvantaged school***:* any school with 40-59.999% of their students qualifying as economically disadvantaged.

- **high economically disadvantaged school:** any school with 60-79.999% of their students qualifying as economically disadvantaged.
- **very high economically disadvantaged school***:* any school with 80-99.999% of their students qualifying as economically disadvantaged.
- **early-career teacher:** a teacher who has been teaching full time for fewer than five years.
- **composite relationship score:** the extent to which a mentee perceives the effectiveness of the relationship of the mentor, as measured by the sum of elements in the *Mentorship Effectiveness Scale* (Berg, 2009).

CHAPTER 2
Review of Related Research

This chapter will explain how much attention has been paid to mentoring in education over the years. It will delve into the legal aspects of mentoring in New York State, while also discussing the efficacy of mentoring. It will also dive into the challenges of mentoring new teachers. All of this will be set against two theoretical lenses: Seligman's theories of learned helplessness and learned optimism, as well as Ingersoll and Strong's theory of teacher induction.

Theoretical Frameworks

As mentioned earlier, two theoretical frameworks guided this research: the theories of "learned helplessness/learned optimism" and the "theory of new teacher development."

Learned Helplessness. In his theory of learned helplessness, Seligman (1972) posits that helplessness is actually a learned behavior; when animals fail at something over and over and over again, and it feels like the circumstances are beyond their control, they give up more easily. Having an interest in clinical depression, Seligman first performed experiments on dogs. He separated the dogs into three groups. The first group featured dogs in harnesses that didn't get shocked. The second group of dogs were placed in harnesses and shocked, but they were given a lever to push that would end the shock. The third group was set up similarly to group two, but the lever they could press did not stop the shock; thus they were not able to escape the shock. Afterward, each of the dogs was placed in a cage in which it could be shocked, but the shock could be avoided by moving to the other side of the cage. Seligman found that the dogs in the first two groups

were able to escape the shock in the cage, but the dogs in group three failed to even try to move to the other side of the cage, even when he turned off the shocker. In essence, they learned to be helpless.

Seligman has written volumes on this theory, including *Learned Helplessness and Depression on Animals and Men (1976) and Helplessness (1975),* which discussed how there exists a perception that behavior fails to influence future events. *Learned Helplessness: A Theory for the Age of Personal Control (1993),* discusses the negative effects that occur when people feel that everything in their lives is beyond their personal control; *Helplessness: On Depression, Development, and Death (1992)* discusses how anxiety, depression, and giving up often grow out of a sense of helplessness generated by external stimuli perceived to be beyond the victims' control.

There have been many articles indicating that students, particularly in low-income neighborhoods, suffer from learned helplessness (Strauss, 2013; Catapano, 2014; Gordon and Gordan, 2006). Additionally, Gordon and Gordon (2006) found that learned helplessness negatively affects three aspects of an individual's cognitive and behavioral functioning. The first aspect is motivational, in which students fail to make efforts because they feel that circumstances are beyond their control. The second aspect is cognitive, which is the notion that failure is inevitable. The third aspect is emotional, which involves students starting to see themselves in a worse light, leading to depression and self-esteem issues.

Although much literature exists on alleviating learned helplessness in students, there is no literature discussing learned helplessness in teachers. Finley (2018) found that teachers report symptoms of depression and shame. Stapleton (2019) found that 18% of

teacher respondents to an anonymous survey had symptoms of depression, 62% met criteria for an anxiety diagnosis, and nearly 20% had severe anxiety, higher than national averages. This seems to suggest that something about being in the teaching profession leads to higher rates of anxiety, depression, and low self-esteem. Additionally, research suggests that the phenomenon of *teacher burnout* is actually work-induced depression (Diaz, 2018).

A number of studies on learned helplessness have been conducted in a variety of disciplines. Bahadir-Yilmaz (2015) found that there was no significant difference of levels of learned helplessness among first-year nursing students compared to students in the final year of the program, as measured by the Learned Helplessness Scale (Quinless and Nelson, 1988). Additionally, Stoeffler (2019) found that the learned helplessness theory offers insights and perspective to improve practice in social work.

Conversely, Seligman (2006) further explains that the one way to alleviate learned helpless is through learned optimism. By encouraging people to focus on the positive, they are less likely to immediately default to the belief that they are unable to do something. His book *Learned Optimism (2006)* explains how focus on either the pessimistic or optimistic can absorb emotions in all aspects of life for better or for worse. In his book *Flourish (2013),* Seligman delves into five major facets of positive psychology that play a crucial role in happiness. The first facet is positive emotion, which includes pleasant feelings. The second facet is engagement, which is being completely absorbed in a task. The third facet is meaning, which gives the beholder a sense of belonging. The fourth facet is accomplishment, which includes feelings of success and

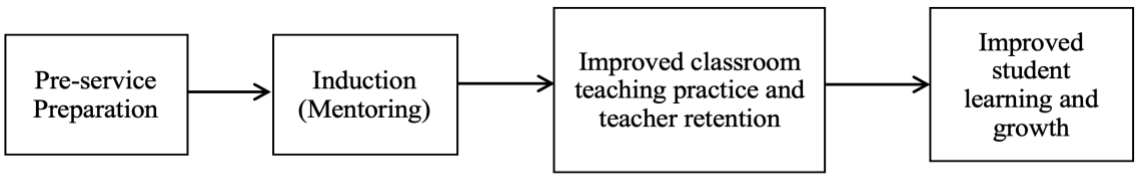
achievement. The final facet is positive relationship building, which is a vibrant social life in both personal and professional settings.

Seligman's theory connects to new teacher mentoring in a variety of ways. First, it connects to the phenomenon of almost half of teachers leaving the profession within five years (Ingersoll, 2018). It is plausible to think that there is some connection between such a high attrition rate, above-average depression and anxiety rates in teachers, and the theory of learned helplessness. Second, it would seem as though a successful mentor-mentee relationship would be predicated upon fostering learned optimism. As stated previously, Chhauger, Rose, and Joseph (2017) found that higher levels of optimism predict higher levels of physical, cognitive, and emotional engagement. Thus, if a mentor-mentee relationship between a veteran teacher and a first-year teacher fosters optimism, then that teacher may more likely be committed to continued work. The use of the learned helplessness framework is novel because, although research in anxiety and depression in teachers exists, and much research exists in learned helplessness in students exists, previous research hasn't linked learned helplessness to anxiety and depression in teachers. Although learned helplessness could be a contributing factor, more research is necessary in this area.

Theory of New Teacher Development. As stated in chapter one, Ingersoll and Strong (2011) created a model that illustrates how preparation of teachers leads to student success. This model views teachers as human capital. By retaining quality human capital, the ultimate result would be greater student academic learning and growth. (Ingersoll and Strong, 2011). The model contends that schools must develop preservice preparation programs for teachers. Within this preparation program is new teacher induction; one

component of which is mentoring (McBride, 2012). Successful induction leads to improved classroom teaching practices, which, in turn, would lead to higher teacher retention, and, ultimately, to improved student learning and growth. This is illustrated below in Figure 1 and is consistent with the findings of Stanulis and Floden (2009). They found that mentor preparation led to stronger mentees, which led to better classroom management, stronger instruction, and, ultimately, improved student outcomes.

Figure 2.1. Theory of New Teacher Development



Adapted from: Ingersoll & Strong, (2011)

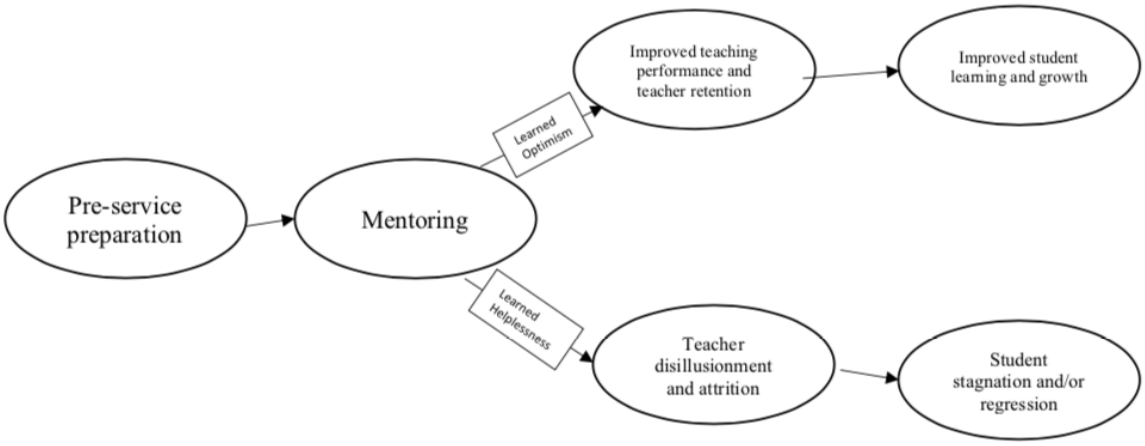
The theory connects to the researcher's study because it suggests that without a proper mentoring program, teachers will not grow; teachers will not stay, and, as a result, students will not learn. By looking at the means by which mentors conduct activities are most strongly tied to job satisfaction, insight could be gained regarding strategies mentors could use to increase job satisfaction, which would ultimately lead to greater student success.

The two theories can be seen in conjunction with each other because, as previously mentioned, learned helplessness in teachers can be viewed as a deterrent to improvements in teaching. If new teachers perceive that negative aspects of their job are beyond their control, they might start to feel disillusioned, exhibit symptoms of mental illness, and, ultimately, leave the profession, thus leaving students with a revolving door

of teachers whose well-beings are compromised. Conversely, if teachers are conditioned to be more optimistic, as many of the aforementioned mentoring activities may foster optimism, their performance may improve, leading to improved student learning and growth. Figure 2 on the next page illustrates this.

Essentially, as Ingersoll and Strong (2011) suggested, a strong mentoring program will lead to stronger improvements in instruction and in student success. At the same time, since the research suggests that quality mentoring is correlated to job satisfaction, it could also be a factor in the alleviation of helplessness, anxiety, and depression in teachers, thus fostering teachers that are stronger and healthier in mind.

Figure 2.2. Theory of Teacher Development, Learned Helplessness, and Optimism



Adapted from Ingersoll & Strong (2011) and Seligman (1991)

Literature Review: A Brief History of Mentoring

The word mentor is rooted in antiquity. It comes from *The Odyssey*, from the name Mentor, who served as a teacher to Telemachus Odysseus' son (Shea, 1997). Shea also explains that this practice has existed throughout ancient Greece, with noteworthy

examples being Plato mentoring Socrates and Freud mentoring Jung. Over the years, people have the sense that a mentor is a wise friend, teacher, and advisor (Hussung, 2015).

Mentoring was adopted in many other professions before making its way into education. Richardson (2003) found that mentoring became a conventional phase of induction to one's workplace, and it eventually became accepted as a common practice in many professions. It may have been some type of brief induction over a few days, or the mentorship may have been more structured, lasting over the course of many years. Richardson (2003) further notes that formal professional mentorships first appeared in medicine, law, and divinity programs, but, until at least the 1980s, there lacked formal mentoring programs for teachers. Often, schools only had informal mentorships, in which experienced teachers spontaneously aided new teachers in the spirit of being helpful. Until the requirement of mentoring programs became law in various states, the only orientation teachers received was for their benefits program (Richardson, 2003). As shown in the literature, other lines of employment have had either formal or informal mentoring programs for years, so it makes sense that a more formal mentoring practice made its way into public education.

Mentoring in Education in General

Much research has been done in the discipline of mentoring within a school setting. Ingersoll and Kralik (2004) stated that new teacher induction programs which included a mentoring component began to emerge in the United States during the mid 1980s. Scott (2008) also found that a need for a statewide mentoring program was identified around that time. Barrera (2008) examined the relationship between perceived

educational support needs of practicing educators, as well as the use of important characteristics and practices associated with successful mentoring and induction programs.

Mignott (2011) found that teachers' engagement in their mentoring program had a strong correlation with their success. She also found a statistically significant correlation between mentoring, student success, and a more positive teacher outlook. Furthermore, she found that mentoring led to more positive student learning experiences. Her study concluded that a significant percentage of teachers perceived their positive mentoring experience as a significant part of their career in teaching. Similarly, Stanilus' (2009) findings indicated that the improvement in the beginning teachers' state test scores from fall to spring was greater for a group that received mentoring than for the control group of new teachers.

In an extensive study conducted by the New Teacher Center (Goldrick, 2016), nine policy recommendations were made with regard to the development of new-teacher mentoring programs. The first recommendation was that all new teachers receive two years of mentoring. The second recommendation was that states should require a rigorous process for mentor selection with ample time for training. The third recommendation was to provide release time for mentors and mentees to collaborate. This recommendation echoes Fiemen-Nemser's (1996) finding that time must be built into the mentor's and mentee's schedules to meet, to collaborate, and to discuss pedagogical issues. The fourth recommendation was to reduce teaching time for new teachers so that they have time for observation and feedback. The fifth recommendation was for states to create mentoring program standards. The sixth recommendation was for appropriate funding for induction

programs. The seventh recommendation was for educators to complete an induction program in order to receive proper teaching certification. The eighth recommendation was that states consistently evaluate their induction programs. The final recommendation was for states to adopt formal standards for teaching and learning conditions. It should be noted, however, that no recommendation was made as to the activities in which mentors and mentees should engage other than observation and reflection.

Furthermore, Fiemen-Nemser (1996) identified mentoring in education as a means of overall school reform. As such, it must be supported by a professional culture in schools that values the process, supports inquiry and collaboration, and possesses a thorough understanding of the learning process. Furthermore, the NEA (2002) suggested that if a well-designed mentoring program is implemented, it will not only improve teacher effectiveness, it will also decrease teacher turnover rates. These ideas reflect some of the recommendations for New York State public school districts discussed in the next section of this chapter.

Mentoring in New York State Education

According to the NYSED website, a teacher with an Initial Certificate must accrue 175 hours of professional development in order to receive their professional certification. A year of mentoring as a new teacher must be included as part of these hours, but the number of hours each district and city offer is up to them, as long as they are logged and those records are kept for seven years (NYSED, 2012). New York City, for example, requires a minimum of 40 hours allocated to mentoring activities (Nobel, 2018).

In the 1980s, the New York City Department of Education also developed a mentoring program called the Retired Teachers as Mentors Program (NYCRTMP). This program provided about 70 hours of contact time between a retired teacher, who served as a mentor, and a first-year teacher. This contact time was broken up over a period of one year (Crown, 2009).

Although new-teacher mentoring programs had been piloted in New York State since the 1980s, it was not until 2004 that the New York State education commissioner's law required all teachers to receive a year of mentoring in their first year of teaching (NYSED, 2012). New teachers could be assigned a mentor who was either school-based or district-based. Mentoring programs are required as part of the district's professional development plan and are to be developed in conjunction with the union's collective bargaining agreement (NYSUT, 2012). Andrews and Quinn (2005) found that it didn't matter whether a new teacher was assigned a new mentor from the school or the district; it mattered simply that they were assigned a mentor.

Boyer, et al. (2004) developed a rationale as to why New York's teachers should be mentored. First and foremost, they say, mentoring provides new teachers with encouragement and support. Second, mentoring provides the new teacher with valuable information regarding the school's culture and community. Third, mentoring helps to build cultural understanding between students and families. Finally, mentoring provides mentees the opportunity to reflect on their practice. This not only provides support for fledgling teachers, but it also provides a sense of satisfaction in the mentors.

The New York State Education Department (2010) stated that there are 11 aspects in the implementation of a quality mentoring program. The first aspect is that a mentoring

program should have a statement of purpose. The second aspect is that there should be a decision-making mentor committee formed. The third aspect is that the mentor should provide the mentee guidance and support. The fourth aspect is that there should be a formal mentor selection process. The fifth aspect is that all mentors should experience formal training. The sixth aspect is that mentor-mentee activities should be consistent with the goals of the mentoring program. The seventh aspect is that appropriate time, including before, during, or after school, should be allotted for mentor-mentee activities to occur. The eighth aspect is that districts may negotiate with local teachers' unions in forming mentor-mentee pairings. The ninth aspect is that there should be options for full-time and part-time teachers, as even part-time teachers may accrue service time in their tenure area. The tenth aspect is developing a quality evaluation system to determine the effectiveness of the mentoring program. The final aspect is developing an operational budget for all supported expenditures.

According to NYSUT (2011), successful district-based mentoring programs are created in collaboration between district and union employees, with implementation of the program being consistent with each district's collective bargaining agreement. The mentoring program must be a part of each district's official professional development plan. Additionally, the mentoring experience must be confidential. No part of the mentoring process should be used in the evaluation process for the first-year teacher, and the mentor should not disclose any information.

The Early-Career Teacher Experience

The first year of any profession is like no other, and teaching is no different. Moir (1992) most famously articulated this in her model entitled *Phases of First Year*

Teaching. She posits that first-year teachers begin in the Anticipation Stage, which is an optimistic time before they actually set foot in a classroom. They feel ready to make a difference. Next is the Survival Stage, in which those teachers feel overwhelmed by everything. This leads into the Disillusionment Stage, in which they feel nothing they are doing is having an impact, and, as a result, feel disheartened. The final stages are the Rejuvenation Stage and the Reflection Stage, in which the teachers start to, once again, feel better about what they did and reflect on the changes they will make next year to ensure that their instruction will be more effective (Moir, 1992).

Wong and Wong (1998) articulate what a new teacher must do in their seminal work *The First Days of School*. They note that there are three characteristics of an effective teacher. First, an effective teacher has exemplary classroom management skills. Second, the teacher focuses on mastery. Finally, the teacher maintains positive expectations in order to ensure and maximize student success. The authors offer dozens of strategies on how to embody those characteristics, such as standing at the door to greet students, creating seating charts, and writing frequent letters home to parents (Wong and Wong, 1998).

All of these suggestions may seem overwhelming to the new teacher. As a first-year teacher, Jones (2012) wrote an article for *Educational Leadership* on what a good mentor must do for a new teacher. He stated that a mentor should constantly be prepared, make workloads manageable, create a community of practice, and offer to coteach. This is a reflection of the overwhelming reality of a first-year teacher (Jones, 2012).

This is of note because, often, the paradigm in education is that first-year teachers must focus solely on classroom management, yet this is problematic in the sense that

students need to be well educated in addition to being well managed (Rutherford, 2002). In essence, with all that new teachers have to focus on, such as controlling a class, learning the school, and remembering names, they must still focus on the goal of providing young people a quality educational experience. Saphier (1997) and Marzano, et. al. (2001) offer suggestions for how teachers of any part in their career can improve instruction. Their works are often given to new teachers, which may be an information overload.

To combat this overload, a number of educators have offered school-wide solutions. Robbins (2015) writes about how leaders should build a school-based culture focused on collaboration and learning through peer coaching. Danielson (2009) suggests constantly holding rewarding professional conversations, thereby promoting a positive environment of inquiry and support. Liesfield and Miller (2005), with help from *StrengthsFinder* (Rath, 2007), suggest creating a community of leveraging teachers' strengths, as opposed to overly focusing on their deficiencies. Martin, Buelow, and Hoffman (2015) completed a qualitative study on what new teachers felt they needed the most in terms of support. The results indicated that the support that teachers most valued was having a mentor. The teachers felt that the mentor should be someone with whom they have a strong and trusting relationship. Furthermore, the study indicated that teachers felt they needed more structured professional development. Essentially, the middle school teachers craved a more structured induction program. The literature supports the notion that it takes a village to raise a new teacher.

Why Is Mentoring Beneficial?

The Journal *EL,* formerly known as *Educational Leadership*, among other publications, has published numerous articles on why mentoring new teachers is one of the best sources of professional development a teacher can receive. Holloway (2001) wrote about how mentoring programs have a positive effect on first-year teachers, while also having a positive effect on the mentors too.

Rockoff (2004) posited that when mentees have school-based mentors, rather than district-based mentors, there are higher rates of retention. This suggests that school-specific knowledge may be an important skill for mentors to possess. Additionally, he discovered evidence that students of teachers who received mentoring showed higher gains in both reading and math. This aligns with Ingersoll and Strong's (2011) theory of teacher development which will be presented later in this chapter.

Drago-Severson (2009) writes that mentoring is one of the four major pillars of practice for adult growth. She notes how mentoring is a relationship that evolves over time, and, although mentees are in various stages of their adult development, there are a variety of ways in which mentors can approach working with a mentee based on the state of adult development at which they currently lay.

Ronfeldt and McQueen (2017) utilized data from two surveys to determine whether or not new teacher induction programs have any correlation with a lower likelihood of teacher attrition and migration. To determine who received more supports, they ran a series of two-level multilevel logistic regression. They did the same thing to determine if teachers who received more supports were less likely to migrate schools or leave the profession altogether. They found that being involved in a new-teacher

induction program led to lower levels of both teacher attrition and migration. That is, not only are teachers more likely to stay in the profession, they are less likely to transfer schools, with the exception being black teachers. Additionally, it found that of six major induction supports identified, a mentoring program had the second highest correlation to retention with supportive communication being the highest (Ronfeldt & McQueen, 2017). However, this study did not focus on the specific supports in induction, nor did it focus on specific mentoring practices.

Suggested Mentoring Practices

A wealth of books and articles discussing best mentoring practices exists; however, none of these pieces of literature examines the extent to which these practices correlate to job satisfaction. Grossman and Davis (2012) found that just as teachers must differentiate their instruction, mentors must tailor their expertise to meet the individual needs of new teachers. They suggest a balance of both instructional content and emotional needs.

Lipton and Wellman (2003) suggest building a learning-focused relationship by fully paying attention to the mentee, responding with empathy, creating a space that is safe, reviewing all necessary schedules, offering a wealth of resources, and providing any necessary information about which new teachers may not be aware. Additionally, Drago-Severson (2009) posits that mentoring is a means for accessing new information, sharing advice on adjusting to new roles, facilitating learning, furthering a school's mission, tapping both emotional and logistical support, and discovering creative strategies. She notes that all of these accomplishments help both the mentor and the mentee.

In a document that the National Education Association (1999) released, an emphasis is placed on the confidential nature of the mentor-mentee relationship, echoing the aforementioned prioritization of confidentiality from NYSUT (2012). Given that mentoring has a peer-to-peer dynamic, it is deemed vital that there is trust in the relationship so that inadequacies as a teacher can be discussed (NEA, 1999).

Rowley (1999) wrote about how there is a need to identify and prepare quality mentors. He writes that a good mentor is committed to the role, accepting of the new teacher, skilled at providing correct and appropriate supports, adept at various interpersonal contexts, maintains a love of lifelong learning, and consistently exudes confidence and optimism. Similarly, Clark (2001) found that effective mentoring focuses on teacher development, includes regular, differentiated interactions focused on guiding, offers constant professional development for the mentor, contains positive interactions, and offers personal and professional rewards to both the mentor and the mentee.

Rutherford (2005) suggested that mentors and mentees collaboratively set up a calendar, keeping in mind Moir's (1992) *Phases of First Year Teaching,* and dividing the calendar into six sections: Personal, which focuses on work-life balance; Professional, which focuses on professional development opportunities; Curriculum, Instruction, and Assessment, which includes readable resources; Organizational Systems, which deals with grading and record keeping; Students, which focuses on building relationships and learning capacity of students; and Colleagues, which is about building relationships with other adults in the building. Rutherford also suggested using sentence stems to guide discussion.

Gardinier and Wisling (2018) recommend four practical strategies to build a high-quality program for mentoring. First, they suggest that mentors set clear expectations. Second, they recommend internal mentors, as opposed to mentors who are hired from outside the school building. Third, they suggest having new mentors also get mentored. Finally, they recommend putting the relationship first and consistently tending to it.

Boreen et.al. (2009) suggest that mentors focus on the following four questions to make beginning teachers feel more welcome in their new position:

- How can I help the new teacher learn about the culture of this school?
- How can I assist the new teacher in developing rapport with students?
- What suggestions can I make and what approaches can I model for proactive classroom management?
- What strategies can I suggest to help the new teacher win the respect of students and colleagues? (p.26)

The New Teacher Center (2018) discusses three approaches a mentor should consider when providing differentiated coaching with a new teacher mentee. The first is the instructive approach. In the instructive approach, the activities are mentor-directed. The mentor provides the mentee with direct strategies to succeed in the profession, such as pedagogical suggestions and directions for following district requirements. Next is the collaborative approach. In the collaborative approach, both the mentor and the mentee identify problems, formulate conclusions, and construct material as equally as possible. Although the mentor guides all discussions, the mentor does so without giving directives. Last is the facilitative approach. In this approach, as expected by its name, the mentor facilitates the mentee's thinking and takes a Socrative method to solving problems. At

this stage, the new teacher is doing most of the directing; as such, they are the main contributor to their own development. In essence, this series of approaches operates on a continuum that moves from least autonomous to most autonomous.

Similarly, Lipton and Wellman (2003) state that there are *three Cs* in the continuum of mentor-mentee interactions: consulting, collaborating, and coaching. Consulting, much like the aforementioned instructive approach in the New Teacher Center's (2016) model, is mentor-directed, providing the mentee with necessary instruction and resources. Collaborating, much like the aforementioned collaborative approach in the New Teacher Center's (2016) model, involves the mentor and mentee co-developing materials while building a collegial relationship. The final stage in the continuum is coaching. Much like the aforementioned facilitative approach in the New Teacher Center's (2016) model, the coaching phase promotes self-directed learning in the new teacher.

Gordon (2000) created a needs assessment for beginning teachers, which has been adapted for the survey used in this study. In this assessment, he lists 25 activities in which mentors and mentees could engage, including communicating with various stakeholders, completing paperwork, planning instruction, deepening understanding of curriculum, and time management.

Challenges and Drawbacks to Mentoring

Given all the red tape that exists in any public service, it in no surprise that there are hindrances in mentoring public school teachers. Cartolano (2006) found that a particular district on Long Island, in spite of its three-year new teacher induction program, ranked 19th out of 22 in retention rates, which led the researcher to conclude

that the mentoring program in this anonymous district had no impact on new teacher retention.

Oftentimes schools will select a mentor for a new teacher out of convenience, rather than basing it on the specific needs of the teacher (Benson-Jaja, 2010). Building on this idea, it was found that mentoring activities are also often chosen out of convenience instead of basing them on the needs of the new teacher (Hill-Carter, 2010). Additionally, Worthy (2005) found that the mentoring process could be complex and haphazard; if the selection process is too haphazard, then it will not provide mentees with the support and training that they need. Feiman-Nemser (2012) wrote about how teacher induction does little more than ease teachers into their new roles, as opposed to welcoming them into a professional community. However, Bieler (2012) found that experienced teachers need to help craft a learning community with new teachers by building ideas, navigating curriculum, grading together, disciplining together, and observing and reflecting together.

Fay (2018) found that millennials value relationships, and, as such, having relationships with school leaders is important. In Fay's study, most millennials indicated that they didn't feel that they had a personal relationship with their mentor. Wider (2012) revealed that mentoring programs did not improve teacher retention. Although the program met teachers' emotional needs, they did not show evidence of improved teacher retention. In essence, Fay concluded that districts should include providing research-based evidence to enhance mentoring programs in high-need districts.

Although one immediate goal of mentoring is to increase teacher job satisfaction and retention, the ultimate goal is to increase student achievement, which will be discussed in the theoretical framework (Ingersoll & Strong, 2011). Rockoff (2004)

conducted a study in New York City through which he compared test scores of inexperienced teachers who received mentoring with those of more experienced teachers who had not received mentoring. The study found no significant differences in standardized test scores between those who had received the mentoring and those who had not (Rockoff, 2004).

In a conversation with Linda Darling-Hammond (Scherer, 2012), she articulated how great schools that support new teachers do so by constant collaboration, but many schools may not take the risk because of the challenges it poses, such as reorganizing the schedule. Ultimately, despite all of the recommended activities that exist, schools may not be able to utilize the activities due to the preestablished systems that neglect to promote teacher collaboration.

Summary

The available research, including journal articles, books, and websites, articulates favorable viewpoints of mentoring. Generally speaking, mentoring has been shown to have positive effects on teacher retention and student outcomes. However, not all literature reached similar conclusions, as a small minority of research suggests that mentoring had no effect on teacher retention.

Gaps in the Research

All of this literature suggests that although there is a tremendous amount of variety in both the quantity and quality of new teacher mentoring, there is a lack of quantitative data that suggest which specific mentoring practices are perceived as most effective, whether or not mentoring activities and mentor-mentee relationship correlate to

job satisfaction, and whether or not that efficacy is consistent across districts of varying percentages of economically disadvantaged students. This study aimed to fill those gaps.

CHAPTER 3

Methodology

This chapter describes the methods and procedures employed in this study. The research questions, research design sample, data collection procedures, instruments, and methods for data analysis are presented.

Research Questions

As stated previously, the purpose of this study was to determine the specific activities in which new teacher mentors and their mentees engage, and if these specific activities have an effect on mentees' perceptions of their job. As such, the researcher developed a methodology and followed through on that methodology so that three research questions could be answered:

1. To what degree do mentoring activities differ in schools with higher percentages of economically disadvantaged students?
2. To what extent is there a correlation between specific mentoring practices and new teachers' job satisfaction?
3. To what extent is teacher satisfaction correlated with mentor activities and mentor relationship? Does this correlation vary by percentage of economically disadvantaged students?

Null Hypotheses

H_0 #1: There are no significant differences in mentoring activities in districts with higher numbers of economically disadvantaged students.

H_0 #2: There is no correlation between specific mentoring practices and new teachers' job satisfaction.

H_0 #3: Neither specific mentoring activities nor the quality of the relationship between the mentor and the mentee will be more strongly correlated with job satisfaction.

Alternative Hypotheses

H_1 #1: There are significant differences in mentoring activities in districts with higher numbers of economically disadvantaged students.

H_1 #2: There is a correlation between specific mentoring practices and new teachers' job satisfaction.

H_1 #3: Specific mentoring activities and/or the quality of the relationship between the mentor and the mentee will be more strongly correlated with job satisfaction.

Research Design and Data Analysis

This study was quantitative. The researchher utilized a survey design to answer the research questions. A survey design was deemed appropriate for this study because the data were obtained directly, the researcher expected the answers to be reliable, and the researcher knew how he planned to quantitatively analyze the answers (Vogt, et.al., 2012). As stated previously, to answer the first research question regarding the degree to which mentoring activities differ in schools with higher percentages of economically disadvantaged students, 36 one-way ANOVAs were run to determine significant differences among each independent group. In this study, the dependent variable was time spent engaged in mentoring activities, and the independent variable was categories of economically disadvantaged students: very low economically disadvantaged (0-20%

economically disadvantaged,) low economically disadvantaged (20-40% economically disadvantaged,) medium economically disadvantaged (40-60% economically disadvantaged,) high economically disadvantaged (60-80% economically disadvantaged,) and very high economically disadvantaged (80-100% economically disadvantaged.) The first 18 ANOVAs ran utilized all teachers who participated in the study, while the second 18 ANOVAs ran utilized only early-career teachers.

As stated earlier in the study, to answer the second research question regarding the extent to which there is a correlation between specific mentoring practices and new teachers' job satisfaction and desire to remain in their school, the researcher ran a bivariate correlational analysis, which determined which specific mentoring activities had the strongest correlation to job satisfaction. Scores in job satisfaction from participants ranged from a lowest possible job satisfaction of 8 to a highest possible job satisfaction of 48.

To answer the third research question regarding the extent to which teacher satisfaction is correlated with mentor activities and mentor relationship, once again, a bivariate correlational analysis was run to determine which elements, if any, in mentor relationship have a stronger correlation with job satisfaction than do the specific activities in which mentors and mentees engage. Additionally, a bivariate correlational analysis was run separately to determine whether or not mentoring activities and the mentor and mentee relationship's correlation with job satisfaction remain consistent across schools with varying percentages of economically disadvantaged students. Moreover, a composite mentoring relationship score was calculated by taking the sum of each of the

components of the mentoring relationship section of the survey, resulting in a composite score of 12 to 72 for each participant.

Sample/Participants

Convenience sampling was used in this study. Convenience sampling was appropriate because it was determined that the group being sampled could reasonably be used to answer the research questions (Vogt, et.al., 2012). The researcher contacted a colleague in the state commissioner's office, who put him in contact with the superintendent of a regional office. In addition to granting permission for teachers at the satellite school to participate in the survey, the superintendent of the regional office also agreed to distribute the survey to superintendents who utilize the district offices, ensuring that more teachers from a wide variety of districts would have the opportunity to take the survey.

The sample in this survey included 651 teachers across nine school districts on Long Island, including 40 teachers at the regional site. The primary focus of the study was early-career teachers. The reason for this was twofold. First, as stated in the introduction, nearly half of teachers in urban areas leave the profession within their first five years (Ingersoll, 2018), so this research targeted the needs of teachers in the early stages of their careers. Second, given the recency effect (Jones & Goetthals, 1972), it is more likely that teachers would have a more vivid recollection of their mentoring experiences within their first five years of teaching.

Although the focus of the study was on early-career teachers, the decision was made to survey all teachers, as a larger data could disaggregated for percentage of economically disadvantaged students. A request for permission to survey teachers in

various districts was sent to 50 superintendents across Long Island. Of the 50 requests, nine plus the regional site granted permission, four denied permission, and 36 never replied.

Instruments

Three surveys were adapted into a single survey for this study (see Appendix B). The first survey was adapted from Gordon's (2000) *How to Help Beginning Teachers Succeed* and was further adapted to one part of the *Survey for Mentor Program Participants* utilized in Watson's (2012) *Analysis of New York State Mentoring Programs*. The first purpose of this instrument was to determine if a new teacher was mentored. If so, the survey's second purpose was to identify which beginning teacher needs were best met by their program's components.

According to Watson, to increase validity, the instrument was first administered electronically to members of the Capital Area Assistant Superintendents' Group for feedback and reflection. This group is comprised of assistant superintendents and administrators for instruction working within the Capital District area in New York State. The members of this group are administrators who are responsible for the development, coordination, and evaluation of mentoring programs. According to Watson, "Their insight into the survey instrument contributed valuable information to the revision of survey items including the addition of open-ended items and a more refined rating scale. All recommendations for changes were considered and, where appropriate, changes were made to the survey instrument" (p.38).

The second survey was an adaptation of the *Mentorship Effectiveness Scale*. Originally authored by Berk, Berg, Mortimer, Walton-Moss, and Yeo in 2005, it was also

utilized in Morina's (2012) *Mentoring and Retention in First-Year Teachers: A Mixed Methods Study.* The Mentorship Effectiveness Scale contains a Likert scale consisting of 12 items, using a six-point continuum (Berk, et al., 2005). This was used to measure the strength of the relationship between the mentor and the mentee, from the perspective of the mentee. Morina (2012) calculated a Cronbach's alpha coefficient to assess the internal reliability of the Mentorship Effectiveness Scale as it applies to teachers. According to Morina, "The Mentorship Effectiveness Scale was reviewed by experts in new teacher mentoring to assess its validity for use with teachers." (p. 56).

The third survey is an adaptation of the *Anticipated Turnover Scale* (ATS), originally authored by Hinshaw and Atwood in 1982, utilized in Morina's (2012) *Mentoring and Retention in First-Year Teachers: A Mixed Methods Study*. The *Anticipated Turnover Scale* also consists of 12 items rated on a seven-point Likert scale. The *Anticipated Turnover Scale* was chosen to measure the influence on teacher retention because it was originally developed to measure retention in nursing, which, like teaching, has one of the highest turnover rates among all professions (Hinshaw & Atwood, 1982, 1984). In terms of the ATS's validity and reliability, according to Morina, "(The authors) used Cronbach's alpha coefficient to estimate internal consistency; standardized alpha was .84…Principal components factor analysis and predictive modeling techniques were used to estimate construct validity… The resultant total model was 72.6% accurate in predicting persons who stayed with the organization and those who left. Consequently, anticipated turnover is a valid and reliable measure of employee retention" (p. 57).
The reason that the researcher gave one abbreviated survey, as opposed to all three surveys as a whole, is because it was decided that there was a greater likelihood that

teachers, given their lack of free time, would complete an abbreviated survey. This took, on average, fewer than five minutes, as opposed to each of the three surveys, which could take close to an hour.

The survey consisted of four parts. The first part consisted of demographic information, including the participants' gender, the level at which the participants currently taught, the number of years teaching, the percentage of students at the participants' school who qualify as economically disadvantaged (broken down into the five aforementioned categories), and whether or not the participant received a mentor in their first year of teaching. For the third question, involving the number of years the participant had taught overall, the decision was made to create three categories:1-5 years, 6-16 years, and more than 16 years. The first category was created to be the main target of the survey, as 50% of all teachers leave the profession within five years (Ingersoll, 2018). The reason for the second category was because, as mentioned previously, the New York State education regulation which required all first-year teachers to receive a mentor took effect for the 2004-2005 school year (NYSED, 2012), so, at the time of the survey's distribution, those who received mentoring in the first year it was required and have stayed a teacher would be in their 16th year of teaching.

The second part of the survey was the adaptation of Gordon's (2000) survey. The third part of the survey was the adaptation of the *Mentorship Effectiveness Scale* (Berk, 2005). The final part of the survey was the *Anticipated Turnover Scale* (Hinshaw & Atwood, 1982). The anonymity of the survey enhanced the validity of the survey, as teachers were more likely to answer honestly since their responses would be anonymous, confidential, and via the internet (Rutledge, 2015).

The survey was piloted by the researcher during the summer of 2019, in a doctoral research independent study seminar. The pilot study was completed with participants in an anonymous district-wide summer program, with teachers from various grade levels and districts participating in the study. During the pilot, the researcher found in a correlational analysis that the top three mentor-mentee activities most associated with teacher job satisfaction, according to these results, were mentee observing and reflecting on the mentor's instruction (r = .37), mentor and mentee observing and reflecting on other teachers' instruction (r = .32), and mentor and mentee attending professional development together (r = .22) However, this study did not account for a variation of economically disadvantaged students. Additionally, the sample size was limited (n = 36), so the researcher decided to distribute the survey on a larger scale in various districts to increase statistical power and to decrease the likelihood of the Type II error.

To further ensure validity and reliability of the study, participants' answers to surveys were both anonymous and confidential. Additionally, it is assumed that those who answered the questions in the survey were the actual teachers to whom the survey was sent, as opposed to a friend or a relative who had access to the email. It is further assumed that people with all strengths of opinions answered the questions, not just those who are highly passionate either way about their experiences. Finally, it is assumed that those who completed the survey maintain vivid recollections of their mentoring experiences, even though mentoring may have been completed more than one year in the past.

Procedures/Interventions

The researcher first sought approval for research via a proposal defense to his dissertation committee. After receiving approval, the researcher sought further approval to conduct research from three entities. First, he received approval from the authors of the original survey instruments. Dr. Stephen P. Gordon, author of the needs assessment in *How to Help Beginning Teachers Succeed* (2000), gave permission, but, because the copyright was held by the Association for Supervision and Curriculum Development (ASCD), the researcher sought and received permission from ASCD, as well. The researcher also received approval from Dr. Ron Berk to adapt his *Mentoring Effectiveness Scale* (2005). On an interesting note, in addition to his permission, Dr. Berk sent the researcher a plethora of articles on utilizing humor in research, in an attempt to ease the arduousness of the writing process. At the time of this writing, the efficacy of these articles is still inconclusive. Finally, the researcher received approval from Drs. Hinshaw and Atwood to use their *Anticipated Turnover Scale* (1982).

Second, the researcher sought approval to conduct research from St. John's University's Independent Review Board. The proposal was approved with exempt status, as the study involved no known risks to participants. See Appendix A for a copy of the Independent Review Board approval.

While waiting for approval, the researcher used BEDS data from NYSED (2019) to create a document stating the percentage of students in a school who are considered economically disadvantaged. BEDS data was publicly available on The New York State Education Department's website. Their Economically Disadvantaged spreadsheet displayed two values for every school in the state: the number of economically

disadvantaged students and the number of non-economically disadvantaged students. However, the data set did not include the percentage of economically disadvantaged students. To create the list of the percentage of economically disadvantaged students at each school, the researcher took the number of economically disadvantaged students and divided that value by the total number of students (sum of economically disadvantaged and not economically disadvantaged) at the school. For example, if a school had 240 economically disadvantaged students and 260 students who were not economically disadvantaged, the percent of economically disadvantaged students would be 240 divided by 500, or 48%. Every single public school in Nassau County and Suffolk County was included on the attachment, even though only a small percentage of schools in Nassau and Suffolk were given the survey. The researcher chose to include all schools on the document to help preserve participants' anonymity.

Third, the researcher sought approval from each school district's superintendent by sending 50 individual emails to various superintendents across Nassau and Suffolk Counties, including three regional support centers. Of the 50 superintendents, ten approved, six declined, and 34 did not respond to the request. For the superintendents that approved, a protocol was established. The researcher sent the survey directly to the superintendent to forward to their teachers. This approach was taken due to the fact that emails sent from someone directly in the district, as opposed to a mass email from outside the district, would not appear in teachers' spam folders, thus increasing the likelihood of teacher responses. A link to the survey was embedded in the email. The email reminded participants that the survey was anonymous, confidential, and that their IP addresses would not be collected. Additionally, the email stated that teachers would be given three

weeks to complete the survey. Reminder emails were sent each week on Sunday evenings by the researcher to the superintendents to forward to their teachers. Finally, the email informed superintendents that upon successful completion of the study, they would be sent an executive summary of both the major findings and the recommendations, which could be shared with those responsible for supervising the districts' new-teacher mentoring program.

For the pilot study conducted in the summer of 2019, the survey was sent via Google Forms. However, Google Forms contains a variety of data privacy issues (Stewart, 2018), so the recommendation was made by the researcher's dissertation committee that the researcher use a different survey software. As a result, the researcher built the survey using Qualtrics.

After rebuilding the survey with Qualtrics, the researcher had colleagues test the survey on various devices. Although the survey worked on PC, Mac, Android, iPad, and Chromebook, there was an issue with the survey on iPhones. The links embedded in the survey, which take participants to pages that list the percentage of economically disadvantaged students in their respective schools, did not work on iPhones with the most current iOS operating system. After contacting Qualtrics for customer support, it was determined that it was an iOS issue and that an iOS update would possibly remedy the situation. The most recent update was downloadable three weeks before the survey was administered. Unfortunately, the update failed to remedy this technical issue, so the decision was made to rebuild the survey using another software.

The survey was rebuilt a second and final time using Survey Monkey. The format remained the same, and, once again, the researcher had colleagues test the survey for both

functionality and user-friendliness on all commonly used, potential devices: PC, Mac, iPhone, Android, iPad, and Chromebook. The researcher also included people outside of the field of education who would be able to provide feedback on the user experience. At last, the embedded links worked on all devices, and the user feedback offered to the researcher was positive. So, it was determined that the third version of the survey would be the one sent to participants.

As previously stated, data were collected over a period of three weeks. Table 3.1 below displays the demographic information of the participants. Once all data were collected, they were transferred to SPSS, cleaned, and analyses were run. The results are discussed in the next chapter.

Table 3.1

Demographic Information of Participants

Years Taught	1-5	6-16	>16	Total
Percentage of Economically Disadvantaged Students				
Very Low	42	105	136	283
Low	44	72	146	262
Medium	9	10	41	60
High	6	6	9	21
Very High	10	9	6	25
Total	111	202	338	651

CHAPTER 4
Results

Research Questions

As stated previously, the purpose of this study was to determine the specific activities in which new teacher mentors and their mentees engage and if these specific activities have any impact on mentees' perceptions of their job. As such, the researcher developed a methodology and followed through on that methodology so that three research questions could be answered:

1. To what degree do mentoring activities differ in schools with higher percentages of economically disadvantaged students?
2. To what extent is there a correlation between specific mentoring practices and early-career teachers' job satisfaction?
3. To what extent is teacher satisfaction correlated with mentor activities and mentor relationship? Does this correlation vary by percentage of economically disadvantaged students?

Null Hypotheses

H_0 #1: There are no significant differences in mentoring activities in districts with higher numbers of economically disadvantaged students.

H_0 #2: There is no correlation between specific mentoring practices and early-career teachers' job satisfaction.

H_0 #3: Neither specific mentoring activities nor the quality of the relationship between the mentor and the mentee will be more strongly correlated with job satisfaction

Alternative Hypotheses

H_1 #1: There are significant differences in mentoring activities in districts with higher numbers of economically disadvantaged students.

H_1 #2: There is a correlation between specific mentoring practices and early-career teachers' job satisfaction.

H_1 #3: Specific mentoring activities and/or the quality of the relationship between the mentor and the mentee will be more strongly correlated with job satisfaction.

Research Question 1: To what degree do mentoring activities differ in schools with higher percentages of economically disadvantaged students?

Thirty-six One-Way Analyses of Variance (ANOVAs) were performed in order to determine if there were significant differences among the five groups, ranging from very low to very high economically disadvantaged, on the eighteen dependent variables, which were the mentoring activities. Two samples were used: the full sample, regardless of number of years of experience, and the subsample of early-career teachers. Tables 4.1 and 4.2 display the descriptive statistics of the dependent variables by group.

For the first sample, all teachers, ANOVAs revealed significant differences between the following five dependent variables among the five groups: Communicating with Parents, $F(4,335)= 2.48$, $p= .044$; Understanding the School's Evaluation Process, $F(4,335)= 3.49$, $p= .008$; Dealing with Stress $F(4,335)= 3.47$, $p= .009$; Becoming Aware of Special Benefits/Services Provided by the School District, $F(4,335)= 3.60$, $p= .007$; and Completing Paperwork, $F(4,335)= 4.00$, $p= .004$. The null hypotheses were rejected in these variables.

Table 4.1

Descriptive Statistics for Dependent Variables by Group – Very Low to Moderate

	Very Low		Low		Moderate	
	M	*SD*	*M*	*SD*	*M*	*SD*
Understanding of Curriculum	2.99	1.20	2.96	1.20	2.62	1.20
Time Management	2.82	1.17	2.84	1.23	3.14	1.11
Observing/Reflecting on Another Teacher's Instruction	2.48	1.16	2.35	1.16	2.57	1.24
Observing/Reflecting on Mentor's Instruction	2.38	1.11	2.43	1.21	2.62	1.37
Observing/Reflecting on My Own Instruction	3.06	1.11	3.31	1.31	3.19	1.28
Co-Planning Lessons/Units and Assessments	2.48	1.34	2.57	1.38	2.38	1.28
Organizing and Managing Classroom	2.59	1.18	2.81	1.34	2.86	1.39
Communicating with Parents	2.40	1.09	2.63	1.18	2.57	1.08
Communicating with Other Teachers	2.77	1.22	2.94	1.31	3.00	1.55
Communicating with Administration	2.58	1.11	2.64	1.14	2.71	1.06
Discussing Appropriate Strategies for Students with Special Needs (i.e. IEPs, ENLs, etc.)	2.68	1.20	2.75	1.23	2.86	1.28

(Table 4.1 continues)

(Table 4.1 continued)

Using a Variety of Teaching Methods	2.88	1.19	2.99	1.23	3.14	1.46
Administering Standardized Tests	1.81	.962	2.03	1.05	2.24	1.14
Attending Meetings/Professional Development Together	2.35	1.05	2.60	1.03	2.67	1.39
Understanding the School's Evaluation Process	2.39	1.11	2.60	1.03	2.86	1.24
Dealing with Stress	2.26	1.26	2.64	1.36	2.95	1.50
Becoming Aware of Special Benefits/Services Provided by the School District	2.13	1.11	2.34	1.12	2.71	1.39
Completing Paperwork	2.47	1.08	2.78	1.12	3.00	1.23

Note. *M* = Mean; *SD* = Standard Deviation.

Table 4.2

Descriptive Statistics for Dependent Variables – High, Very High, and Early-Career

	High		Very High		Early-Career Teachers	
	M	*SD*	*M*	*SD*	*M*	*SD*
Understanding of Curriculum	2.38	1.04	2.62	1.26	3.06	1.13
Time Management	2.46	1.27	2.62	1.61	2.99	1.19
Observing/Reflecting on Another Teacher's Instruction	2.46	1.33	2.23	1.42	2.60	1.10

(Table 4.2 continues)

(Table 4.2 continued)

Observing/Reflecting on Mentor's Instruction	2.08	1.32	2.00	1.47	2.51	1.14
Observing/Reflecting on My Own Instruction	3.15	1.28	3.00	1.35	3.27	1.18
Co-Planning Lessons/Units and Assessments	1.69	0.86	2.23	1.36	2.57	1.33
Organizing and Managing Classroom	2.54	1.26	2.23	1.42	2.98	1.17
Communicating with Parents	1.77	1.17	2.08	1.12	2.72	1.12
Communicating with Other Teachers	2.38	1.04	2.69	1.44	3.06	1.23
Communicating with Administration	2.08	0.86	2.23	1.17	2.83	1.01
Discussing Appropriate Strategies for Students with Special Needs (i.e. IEPs, ENLs, etc.)	2.62	1.04	2.69	1.25	2.99	1.07
Using a Variety of Teaching Methods	3.00	1.41	2.69	1.25	3.14	1.19
Administering Standardized Tests	1.62	0.65	1.85	0.69	2.01	1.02
Attending Meetings/Professional Development Together	2.00	0.71	2.23	0.93	2.56	1.03
Understanding the School's Evaluation Process	1.62	0.77	2.31	1.11	2.77	1.10
Dealing with Stress	1.69	0.95	2.23	1.59	2.89	1.35

(Table 4.2 continues)

(Table 4.2 continued)

Becoming Aware of Special Benefits/Services Provided by the School District	1.46	0.78	1.77	1.17	2.52	1.15
Completing Paperwork	1.77	1.67	2.38	1.26	2.81	1.03

Note. *M* = Mean; *SD* = Standard Deviation.

However, ANOVAs revealed no significant difference between the following 13 dependent variables among the five groups: Understanding of Curriculum, $F(4,335)= 1.36$, $p= .247$; Time Management, $F(4,335)= .76$, $p= .553$; Observing/Reflecting on Another Teacher's Instruction, $F(4,335)= .41$, $p= .804$; Observing/Reflecting on Mentor's Instruction, $F(4,335)= .82$, $p= .516$; Observing/Reflecting on My Own Instruction, $F(4,335)= .78$, $p= .536$; Co-Planning Lessons/Units/Assessments, $F(4,335)= 1.40$, $p= .235$; Organizing and Managing Classroom, $F(4,335)= 1.11$, $p= .353$; Communicating with Other Teachers, $F(4,335)= .86$, $p= .486$; Communicating with Administration $F(4,335)= 1.16$, $p= .326$; Discussing Appropriate Strategies for Students with Special Needs, $F(4,335)= .15$, $p= .962$; Using a Variety of Teaching Methods, $F(4,335)= .41$, $p= .799$; Administering Standardized Tests, $F(4,335)= 1.76$, $p= .137$; and Attending Meetings/Professional Development Together, $F(4,335)= 1.95$, $p= .101$. The null hypotheses were retained in these variables (See Table 4.3).

Because the ANOVAs led to a significant difference in group means on five of the dependent variables, a post hoc Tukey analysis was conducted to investigate which of the means were different among the five groups. Regarding communicating with parents, the analysis revealed no significant differences among the five groups. Regarding understanding the school's evaluation process, the analysis revealed that participants in

the group of high percentage of economically disadvantaged students differed from both moderate percentage of economically disadvantaged students (mean difference = 1.21, p = .010) and low percentage of economically disadvantaged students (mean difference = 0.98, p = .016). Regarding dealing with stress, the analysis revealed no significant differences among the five groups. Regarding becoming aware of special benefits and services provided by the school district, the analysis revealed that participants in the group of high percentage of economically disadvantaged students differed from the group of moderate percentage of economically disadvantaged students (mean difference = 1.25, p = .015). Finally, regarding completing paperwork, the analysis revealed that participants in the group of high percentage of economically disadvantaged students differed from both moderate percentage of economically disadvantaged students (mean difference = 1.01, p = .018) and low percentage of economically disadvantaged students (mean difference = 1.23, p = .017).

For the second sample, early-career teachers, ANOVAs revealed significant difference of the following three dependent variables among the five groups: Observing/Reflecting on Mentor's Instruction, $F(4,83)= 3.18$, $p= .018$; Becoming Aware of Special Benefits/Services Provided by the School District, $F(4,83)= 2.89$, $p= .027$; and Completing Paperwork, $F(4,83)= 3.20$, $p= .017$. The null hypotheses were rejected in these variables.

ANOVAs revealed no significant difference between the following 15 dependent variables among the five groups: Understanding of Curriculum, $F(4,83)= 1.96$, $p= .108$; Time Management, $F(4,83)= 1.44$, $p= .228$; Observing/Reflecting on Another Teacher's Instruction, $F(4,83)= 1.78$, $p= .140$; Observing/Reflecting on my Own Instruction,

F(4,83)= .78, *p*= .536; Co-Planning Lessons/Units/Assessments, *F*(4,83)= 1.68, *p*= .162; Organizing and Managing Classroom, *F*(4,83)= 2.02, *p*= .100; Communicating with Parents, *F*(4,83)= 2.42, *p*= .055; Communicating with Other Teachers, *F*(4,83)= 1.27, *p*= .287; Communicating with Administration *F*(4,83)= 1.23, *p*= .303; Discussing Appropriate Strategies for Students with Special Needs, *F*(4,83)= .70, *p*= .597; Using a Variety of Teaching Methods, *F*(4,83)= .85, *p*= .500; Administering Standardized Tests, *F*(4,83)= 2.25, *p*= .070; Attending Meetings/Professional Development Together, *F*(4,83)= 1.80, *p*= .137; Understanding the School's Evaluation Process, *F*(4,83)= 1.71, *p*= .156; and Dealing with Stress *F*(4,83)= 1.66, *p*= .166. The null hypotheses were retained in these variables (See Table 4.4).

Because the ANOVAs led to significant differences in group means on three of the dependent variables, a post hoc Tukey analysis was conducted to investigate which of the means were different among the five groups. Regarding observing and reflecting on the mentor's instruction, the analysis revealed that participants in the group of very high percentage of economically disadvantaged students differed from low percentage of economically disadvantaged students (mean difference = 1.55, p = .028). Regarding becoming aware of special benefits and services provided by the school district, the analysis revealed that participants in the group of very high percentage of economically disadvantaged students differed from the group of moderate percentage of economically disadvantaged students (mean difference = 1.68, p = .017); the low percentage of economically disadvantaged students (mean difference = 1.50, p = .044); and the very low percentage of economically disadvantaged students (mean difference = 1.68, p = .017).

Table 4.3

One-Way ANOVA Results for All Teachers

DV1: Understanding of Curriculum					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	7.80	4	1.95	.14	.247
Within Groups	479.90	335	1.43		
Total	487.70	339			

DV2: Time Management					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	4.45	4	1.11	.76	.553
Within Groups	491.66	335	1.47		
Total	496.11	339			

DV3: Observing/Reflecting on Another Teacher's Instruction					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	2.26	4	.56	.41	.804
Within Groups	464.91	335	1.39		
Total	467.16	339			

(Table 4.3 continues)

(Table 4.3 continued)

DV4: Observing/Reflecting on Mentor's Instruction

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	4.54	4	1.14	.82	.516
Within Groups	465.99	335	1.40		
Total	470.53	339			

DV5: Observing/Reflecting on my Own Instruction

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	4.69	4	1.17	.78	.536
Within Groups	500.76	335	1.50		
Total	505.44	339			

DV6: Co-Planning Lessons/Units/Assessments

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	10.05	4	2.51	1.40	.235
Within Groups	602.60	335	1.80		
Total	612.64	339			

(Table 4.3 continues)

(Table 4.3 continued)

DV7: Organizing and Managing Classroom					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	7.18	4	1.80	1.11	.353
Within Groups	542.87	335	1.62		
Total	550.06	339			

DV8: Communicating with Parents					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	12.62	4	3.16	2.48	.044
Within Groups	425.96	335	1.27		
Total	438.58	339			

DV9: Communicating with Other Teachers					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	5.69	4	1.42	.86	.486
Within Groups	551.76	335	1.65		
Total	557.44	339			

(Table 4.3 continues)

(Table 4.3 continued)

DV10: Communicating with Administration					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	5.77	4	1.44	1.16	.326
Within Groups	414.93	335	1.24		
Total	420.69	339			

DV11: Discussing Appropriate Teaching Strategies					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	.89	4	.22	.15	.962
Within Groups	494.43	335	1.48		
Total	495.32	339			

DV12: Using a Variety of Teaching Methods					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	2.53	4	.63	.41	.799
Within Groups	514.04	335	1.53		
Total	516.58	339			

(Table 4.3 continues)

(Table 4.3 continued)

DV13: Administering Standardized Tests					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	6.90	4	1.72	1.76	.137
Within Groups	328.80	335	1.53		
Total	516.58	339			

DV14: Attending Meetings/PD Together					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	8.66	4	2.17	1.95	.101
Within Groups	371.49	335	1.11		
Total	380.15	339			

DV15: Understanding the School's Evaluation Process					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	16.16	4	4.04	3.49	.008
Within Groups	388.48	335	1.16		
Total	404.64	339			

(Table 4.3 continues)

(Table 4.3 continued)

DV16: Dealing with Stress					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	24.40	4	6.01	3.46	.009
Within Groups	581.26	335	1.74		
Total	605.31	339			

DV17: Becoming Aware of District Benefits/Services					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	18.24	4	4.56	3.60	.007
Within Groups	423.94	335	1.27		
Total	442.17	339			

DV18: Completing Paperwork					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	19.95	4	4.99	3.99	.004
Within Groups	418.23	335	1.25		
Total	438.17	339			

Table 4.4

One-Way ANOVA Results for Early-Career Teachers

DV1: Understanding of Curriculum					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	9.57	4	2.39	1.96	.108
Within Groups	101.14	83	1.22		
Total	110.71	87			

DV2: Time Management					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	7.98	4	1.99	1.44	.228
Within Groups	115.01	83	1.39		
Total	122.99	87			

DV3: Observing/Reflecting on Another Teacher's Instruction					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	8.32	4	2.07	1.78	.140
Within Groups	96.76	83	1.17		
Total	111.98	87			

(Table 4.4 continues)

(Table 4.4 continued)

DV4: Observing/Reflecting on Mentor's Instruction					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	14.87	4	3.72	3.18	.018
Within Groups	97.12	83	1.17		
Total	111.99	87			

DV5: Observing/Reflecting on my Own Instruction					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	6.51	4	1.63	1.18	.328
Within Groups	114.94	83	1.39		
Total	121.46	87			

DV6: Co-Planning Lessons/Units/Assessments					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	11.51	4	2.87	1.68	.162
Within Groups	142.07	83	1.71		
Total	153.59	87			

(Table 4.4 continues)

(Table 4.4 continued)

DV7: Organizing and Managing Classroom

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	10.61	4	2.65	2.02	.100
Within Groups	109.33	83	1.31		
Total	119.95	87			

DV8: Communicating with Parents

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	11.47	4	2.86	2.42	.055
Within Groups	98.42	83	1.18		
Total	109.89	87			

DV9: Communicating with Other Teachers

Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	7.55	4	1.89	1.27	.287
Within Groups	123.16	83	1.48		
Total	130.72	87			

(Table 4.4 continues)

(Table 4.4 continued)

DV10: Communicating with Administration					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	4.97	4	1.24	1.23	.303
Within Groups	83.48	83	1.01		
Total	88.44	87			

DV11: Discussing Appropriate Teaching Strategies					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	3.21	4	.80	.70	.597
Within Groups	95.78	83	1.15		
Total	98.99	87			

DV12: Using a Variety of Teaching Methods					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	4.79	4	1.19	.85	.500
Within Groups	117.57	83	1.41		
Total	122.36	87			

(Table 4.4 continues)

(Table 4.4 continued)

DV13: Administering Standardized Tests					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	8.91	4	2.23	2.25	.070
Within Groups	82.08	83	.99		
Total	90.99	87			

DV14: Attending Meetings/PD Together					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	7.32	4	1.83	1.80	.137
Within Groups	84.40	83	1.02		
Total	91.72	87			

DV15: Understanding the School's Evaluation Process					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	8.01	4	2.00	1.71	.156
Within Groups	97.44	83	1.17		
Total	105.46	87			

(Table 4.4 continues)

(Table 4.4 continued)

DV16: Dealing with Stress					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	11.79	4	2.94	1.66	.166
Within Groups	147.07	83	1.77		
Total	158.86	87			

DV17: Becoming Aware of District Benefits/Services					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	14.18	4	3.55	2.89	.027
Within Groups	101.77	83	1.22		
Total	115.95	87			

DV18: Completing Paperwork					
Source	Sum of Squares	df	Mean Square	F	Sig
Between Groups	12.27	4	3.06	3.21	.017
Within Groups	79.43	83	.95		
Total	91.71	87			

Research Question 2: To what extent is there a correlation between specific mentoring practices and early-career teachers' job satisfaction?

Eighteen Pearson's Correlations were run to determine if any of the 18 independent variables, meaning the 18 mentoring activities, were correlated with job satisfaction of early-career teachers. Results indicated significant positive correlations with job satisfaction among the following 16 independent variables in order from strongest significant positive correlation to weakest significant positive correlation: Understanding the School's Evaluation Process, $r(84) = .36$, $p = .001$; Time Management, $r(84) = .35$, $p = .001$; Understanding of Curriculum, $r(84) = .34$, $p = .001$; Observing/Reflecting on Mentor's Instruction, $r(84) = .33$, $p = .002$; Observing/Reflecting on my Own Instruction, $r(84) = .32$, $p = .003$; Completing Paperwork, $r(86) = .31$, $p = .003$; Using a Variety of Teaching Methods, $r(84) = .30$, $p = .005$; Discussing Appropriate Strategies for Students with Special Needs, $r(84) = .30$, $p = .005$; Dealing with Stress $r(86) = .29$, $p = .006$; Co-Planning Lessons/Units/Assessments, $r(84) = .27$, $p = .011$; Becoming Aware of Special Benefits/Services Provided by the School District, $r(84) = .27$, $p = .012$; Organizing and Managing Classroom, $r(84) = .27$, $p = .013$; Communicating with Parents, $r(84) = .25$, $p = .019$; Observing/Reflecting on Another Teacher's Instruction, $r(84) = .25$, $p = .023$; Communicating with Administration $r(84) = .24$, $p = .026$; and Attending Meetings/Professional Development Together, $r(84) = .24$, $p = .026$. The null hypotheses were rejected in these variables.

Table 4.5

Correlations with Job Satisfaction for Independent Variables – Early-Career Teachers

Independent Variable	Correlation with Overall Job Satisfaction
Understanding of Curriculum	.34**
Time Management	.35**
Observing/Reflecting on Another Teacher's Instruction	.25*
Observing/Reflecting on Mentor's Instruction	.33**
Observing/Reflecting on my Own Instruction	.32**
Co-Planning Lessons/Units/Assessments	.27*
Organizing and Managing Classroom	.27*
Communicating with Parents	.25*
Communicating with Other Teachers	.21
Communicating with Administration	.24*
Discussing Appropriate Teaching Strategies for Students with Special Needs	.30**
Using a Variety of Teaching Methods	.30**
Administering Standardized Tests	.06
Attending Meetings/Professional Development Together	.24*
Understanding the School's Evaluation Process	.36**
Dealing with Stress	.30**
Becoming Aware of Special Benefits/Services Provided by the School District	.27*
Completing Paperwork	.31**

Note. *p<.05, **p<.01,***p < .001.

Results indicated no significant positive correlation with job satisfaction among the following two independent variables: Communicating with Other Teachers, $r(86) = .21$, $p = .055$; and Administering Standardized Tests, $r(84) = .06$, $p = .570$; the null hypotheses were retained in these variables (See Table 4.5).

Research Question 3: To what extent is teacher satisfaction correlated with mentor activities and mentor relationship? Does this correlation vary by percentage of economically disadvantaged students?

In analyzing early-career teachers, 13 Pearson's Correlations were run to determine if any of the 12 independent variables, meaning the 12 aspects of mentoring relationship and composite mentoring relationship, were correlated with job satisfaction, and whether or not those correlations were stronger than the independent variables in mentoring activities. Results indicated strong positive correlation in all 13 aspects of relationship: My mentor was accessible, $r(84) = .48$, $p < .001$; My mentor demonstrated professional integrity, $r(84) = ..52$, $p < .001$; My mentor demonstrated content expertise in my area of need, $r(84) = .38$, $p < .001$; My mentor was approachable, $r(84) = .53$, $p < .001$; My mentor was supportive and encouraging, $r(84) = .59$, $p < .001$; My mentor provided constructive and useful critiques of my work, $r(86) = .58$, $p < .001$; My mentor motivated me on how to improve my work product, $r(84) = .55$, $p < .001$; My mentor was useful in providing direction in professional issues, $r(84) = .57$, $p < .001$; My mentor answered my questions satisfactorily, $r(84) = .52$, $p < .001$; My mentor acknowledged my contributions appropriately, $r(84) = .51$, $p < .001$; My mentor suggested appropriate resources, $r(84) = .47$, $p < .001$; My mentor challenged me to extend my abilities, $r(84) = .54$, $p < .001$; and composite mentoring relationship, $r(84) = .58$, $p < .001$. It should be

noted that all correlations for mentor relationship were statistically significant at the .001 level and that all correlations for the independent variables for mentoring relationship were stronger than any of the correlations for the independent variables for mentoring activities (See Table 4.6). The null hypothesis was rejected. Quality of the mentor-mentee relationship more strongly correlated with job satisfaction than with any mentor-mentee activity for early-career teachers.

In a Pearson's correlational analysis of all teachers surveyed, the mentoring activity most strongly correlated to job satisfaction was Understanding of Curriculum, $r(324)= .22$, $p < .001$; the second strongest activity most strongly correlated with job satisfaction was Co-Planning Lessons/Units/Assessments, $r(324)= .15$, $p = .008$. Upon a further correlational analysis of all teachers surveyed, six of the 12 aspects of mentoring relationship were more strongly correlated with job satisfaction than Understanding of Curriculum: My mentor was accessible, $r(324)= .23$, $p < .001$; My mentor demonstrated professional integrity, $r(324)= .24$, $p < .001$; My mentor was approachable, $r(324)= .23$, $p < .001$; My mentor was supportive and encouraging, $r(324)= .26$, $p < .001$; My mentor motivated me on how to improve my work product, $r(324)= .23$, $p < .001$; and My mentor was useful in providing direction in professional issues, $r(324)= .23$, $p < .001$. Additionally, the correlation of composite mentoring relationship score with job satisfaction, $r(324)= .25$, $p < .001$ was stronger than with the correlation between Understanding of Curriculum and job satisfaction.

Table 4.6

Correlations with Job Satisfaction for Mentoring Relationship – Early-Career Teachers

Independent Variable	Correlation with Overall Job Satisfaction
My mentor was accessible.	.48***
My mentor demonstrated professional integrity	.52***
My mentor demonstrated content expertise in my area of need.	.38***
My mentor was approachable.	.53***
My mentor was supportive and encouraging.	.59***
My mentor provided constructive and useful critiques of my work.	.58***
My mentor motivated me to improve my work product.	.55***
My mentor was useful in providing direction on professional issues.	.57***
My mentor answered my questions satisfactorily.	.52***
My mentor acknowledged my contributions appropriately.	.51***
My mentor suggested appropriate resources.	.47***
My mentor challenged me to extend my abilities.	.54***
Composite Relationship	.58***

Note. *p<.05, **p<.01, ***p < .001.

The other six aspects of mentoring relationship were more strongly correlated with job satisfaction than Co-Planning Lessons/Units/Assessments: My mentor demonstrated content expertise in my area of need, $r(324)= .17$, $p = .002$; My mentor

provided constructive and useful critiques of my work, $r(324) = .20$, $p < .001$;My mentor answered my questions satisfactorily, $r(324) = .19$, $p = .001$; My mentor acknowledged my contributions appropriately, $r(324) = .21$, $p < .001$; My mentor suggested appropriate resources, $r(324) = .20$, $p < .001$; and my mentor challenged me to extend my abilities, $r(324) = .20$, $p < .001$; and composite mentoring relationship, $r(84) = .58$, $p < .001$. Results indicated a stronger significant correlation with job satisfaction and the mentoring relationship than with mentoring activities for all teachers, and, once again the null hypothesis was rejected. The quality of the mentor-mentee relationship more strongly correlated with job satisfaction for all teachers.

After disaggregating the data for percentage of economically disadvantaged students, Pearson's correlational analyses determined other noteworthy correlations. From the group with a very low percentage of economically disadvantaged students, compositive relationship was not statistically significant with job satisfaction $r(252) = .02$, $p = .810$. Eight elements of mentoring activities were more strongly positively correlated with job satisfaction than with composite mentoring relationship: Understanding of Curriculum, $r(252) = .26$, $p = .001$; Time Management, $r(252) = .08$, $p = .332$; Observing/Reflecting on my Own Instruction, $r(252) = .16$, $p = .001$; Co-Planning Lessons/Units/Assessments, $r(252) = .153$, $p = .06$; Organizing and Managing Classroom, $r(252) = .09$, $p = .294$; Communicating with Other Teachers, $r(252) = .02$, $p = .776$, Using a Variety of Teaching Methods, $r(252) = .09$, $p = .268$; and Dealing with Stress $r(252) = .05$, $p = .541$.

From the group with a low percentage of economically disadvantaged students, composite relationship was statistically significant in relation to job satisfaction $r(126) =$

.33, $p < .001$. All 18 mentoring activities were more weakly correlated with job satisfaction than composite relationship, with the strongest of those elements being Observing/Reflecting on Mentor's Instruction, $r(126) = .21$, $p = .017$.

From the group with a medium percentage of economically disadvantaged students, composite relationship was statistically significant in relation to job satisfaction $r(18) = .51$, $p = .021$. Five mentoring activities were more strongly correlated with job satisfaction than was composite relationship: Co-Planning Lessons/Units/Assessments, $r(18) = .60$, $p = .005$; Organizing and Managing Classroom, $r(18) = .61$, $p = .004$; Communicating with Parents, $r(18) = .54$, $p = .015$; Administering Standardized Tests, $r(18) = .57$, $p = .005$; and Understanding the School's Evaluation Process, $r(18) = .52$, $p = .019$.

From the group with a high percentage of economically disadvantaged students, composite relationship was not statistically significant in relation to job satisfaction $r(11) = .46$, $p = .115$. Two mentoring activities were more strongly positively correlated with job satisfaction than was composite relationship, although neither were a statistically significant correlations: Observing/Reflecting on Another Teacher's Instruction, $r(11) = .51$, $p = .076$; and Observing/Reflecting on Mentor's Instruction, $r(11) = .49$, $p = .091$.

Finally, from the group with a very high percentage of economically disadvantaged students, composite relationship was not statistically significant in relation to job satisfaction $r(11) = .32$, $p = .280$. However, only one mentoring activity was more strongly positively correlated with job satisfaction than was composite relationship; although the correlation was also not statistically significant: Observing/Reflecting on Another Teacher's Instruction, $r(11) = .43$, $p = .141$ (See table 4.7).

Table 4.7

Correlations with Job Satisfaction – Disaggregated by Percentage of Economically Disadvantaged Students

	All	Very Low	Low	Mod.	High	Very High
Understanding of Curriculum	.22***	.26**	.18*	.48*	.28	-.25
Time Management	.14*	.08	.14	.45*	.42	-.02
Observing/Reflecting on Another Teacher's Instruction	.12*	-.03	.11	.51*	.51	.43
Observing/Reflecting on Mentor's Instruction	.14*	-.02	.21*	.28	.48	.15
Observing/Reflecting on my Own Instruction	.14*	.16*	.17	.18	.01	-.07
Co-Planning Lessons/Units/Assessments	.15**	.15	.08	.60**	.06	.13
Organizing and Managing Classroom	.12*	.09	.12	.61**	-.11	-.16
Communicating with Parents	.03	-.07	.06	.54*	-.26	.03
Communicating with Other Teachers	.09	.02	.14	.50*	-.22	-.04
Communicating with Administration	.02	-.01	.08	.30	-.56*	-.18
Discussing Appropriate Teaching Strategies for Students with Special Needs	.07	-.04	.15	.42	-.06	.13
Using a Variety of Teaching Methods	.12*	.09	.14	.51*	-.17	-.14
Administering Standardized Tests	.01	-.06	-.03	.57**	.19	.14

(Table 4.7 continues)

(Table 4.7 continued)

Attending Meetings/Professional Development Together	.08	-.07	.16	.50*	-.02	.09
Understanding the School's Evaluation Process	.08	-.05	.15	.52	.06	.03
Dealing with Stress	.08	.05	.14	.34	-.13	-.08
Becoming Aware of Special Benefits/Services Provided by the School District	.03	-.10	.11	.47*	-.34	-.15
Completing Paperwork	.04	-.01	.03	.40	.17	-.06
My mentor was accessible.	.23***	.03	.33**	.35	.46	.14
My mentor demonstrated professional integrity	.24***	.05	.32**	.40	.48	.25
My mentor demonstrated content expertise in my area of need.	.17**	.11	.16	.59**	.27	-.05
My mentor was approachable.	.23***	.01	.30**	.29	.74**	.28
My mentor was supportive and encouraging.	.26***	-.05	.35**	.25	.70**	.51
My mentor provided constructive and useful critiques of my work.	.20**	.04	.23*	.57**	.36	.30
My mentor motivated me to improve my work product.	.23***	.04	.29**	.61**	.32	.34
My mentor was useful in providing direction on professional issues.	.23***	.00	.35**	.41	.37	.42
My mentor answered my questions satisfactorily.	.19**	-.11	.38**	.33	.43	.08

(Table 4.7 continues)

(Table 4.7 continued)

My mentor acknowledged my contributions appropriately.	.21**	.01	.28**	.22	.43	.37
My mentor suggested appropriate resources.	.20**	-.01	.31**	.57**	.43	.26
My mentor challenged me to extend my abilities.	.20**	.03	.30**	.48*	.09	.32
Composite Relationship	.25***	.02	.33***	.51*	.46	.32

Note. *p<.05, **p<.01, ***p < .001.

Summary

This chapter analyzed research data obtained through nine K-12 school districts and one regional site across Long Island, with schools consisting of various percentages of economically disadvantaged students. The results were compiled from 651 responses generated from the survey sent to K-12 teachers across Long Island. The data were analyzed to determine whether there were significant differences in mentoring activities among the five groups of varying economically disadvantaged students. Most of the dependent variables indicated no significant differences in mentoring activities among the five groups; although there were significant differences between two or three groups in eight of the 36 dependent variables.

After Pearson's correlational analyses were conducted, it was determined that there were a number of mentor-mentee activities that had a statistically significant positive correlation with job satisfaction for early-career teachers, with the top three being understanding the school's evaluation process, time management, and understanding of curriculum. However, after another Pearson's correlational analysis was

run, it was determined that all aspects of mentoring relationships had stronger positive correlations with job satisfaction than did mentor-mentee activities among early career teachers.

This result remained consistent for all teachers surveyed; mentoring relationship had a stronger positive correlation with job satisfaction than did any mentor-mentee activities. Moreover, when disaggregated for percentage of economically disadvantaged students, composite mentoring relationship was still more highly correlated with job satisfaction than most of the mentor-mentee activities, the one exception being the group with a very low percentage of economically disadvantaged students. The next chapter will discuss the potential implications of these findings.

CHAPTER 5
Discussion

The purpose of this study was twofold: first, it aimed to add to the existing body of literature on mentoring for early-career teachers; second, it aimed to provide data-driven suggestions to schools and school districts to improve and enhance their mentoring programs. The researcher gathered participants in this study using convenience sampling. Participants were recruited via approval from various school superintendents in November and December of 2019, and participants took the survey in January of 2020. After data were collected, the researcher used SPSS to perform various quantitative analyses of both descriptive and inferential statistics. After running the analyses, the researcher arrived at the conclusions and implications explained on the following pages.

Implications of Findings

The first research question addressed the degree to which mentoring activities differ in schools with higher percentages of economically disadvantaged students. The results of the ANOVAs indicated only five significant differences out of a possible 180. These results suggested that activities in which mentors and mentees engage were consistent across varying degrees of economically disadvantaged students. Although much literature suggests that mentors should engage in a wide variety of activities with their mentees (Lipton & Wellman, 2003), the data collected suggested that this was not happening. Moreover, although understanding the school's evaluation process was, by far, the activity most strongly correlated with job satisfaction among early-career teachers, this activity was in the bottom half of frequency of occurrence. The most

commonly occurring mentor-mentee activity, the mentor observing the mentee teach and reflect on instruction, was less strongly correlated with job satisfaction than was the mentee watching the mentor teach.

The second research question examined the extent to which there is a correlation between specific mentoring practices and early-career teachers' job satisfaction. When examined in conjunction with the first question, the results suggested that although some mentor-mentee activities were more strongly correlated with job satisfaction than were others, these activities were not conducted with the same frequency as were activities with a weaker correlation with job satisfaction. Essentially, when examining the data from both research questions in conjunction with each other, the activities with the strongest correlation with job satisfaction were, generally, not the activities in which mentors and mentees engage, and this was consistent across all degrees of economically disadvantaged schools.

The third research question examined the extent to which teacher satisfaction correlated with mentor activities and the mentor relationship as well as whether or not this correlation varied by percentage of economically disadvantaged students. Results showed that, in almost all instances, with the exception of schools with a low percentage of economically disadvantaged students, the strength of the mentor-mentee relationship was generally stronger than was any specific activity in which mentors and mentees engaged. Since a strong mentor-mentee relationship had a strong correlation with job satisfaction, these results suggested a need for the mentor-mentee relationship to have primacy when designing a school's new teacher development program.

Table 5.1

Comparison of Four Weakest Correlations of Mentor Relationship and Four Strongest Mentoring Activities with Job Satisfaction among Early-Career Teachers

Independent Variable – Relationship	Correlation with Overall Job Satisfaction	Independent Variable- Activity	Correlation with Overall Job Satisfaction
My mentor demonstrated content expertise.	.38***	Understanding the School's Evaluation Process	.36**
My mentor suggested appropriate resources.	.47***	Time Management	.35**
My mentor was accessible	.48***	Understanding of Curriculum	.34**
Composite Relationship Score	.58***	Observing and Reflecting on Mentor's Instruction	.33**

Note. *p<.05, **p<.01,***p < .001.

Finally, as mentioned in the previous chapter, when examining the survey results for early-career teachers, all aspects of mentor-mentee relationship had a stronger correlation with job satisfaction than all mentor-mentee activities. Table 5.1 above illustrates this. These results suggest that the strength of the mentor-mentee relationship has a stronger correlation with job satisfaction than any of the activities in which mentors and mentees engage.

Ancillary Findings

After the researcher ran the numbers to answer his research questions, he also conducted a number of other inferential statistical analyses out of curiosity. Upon conducting an independent samples t-test, the researcher found that only 87% of early-career teachers received a mentor, in spite of new-teacher mentoring becoming mandatory through a 2004 regulation (NYSED, 2004). T-test results indicated a statistically significant difference in composite job satisfaction between early-career teachers who were mentored (mean = 38.90, SD = 7.09) and those who were not mentored (mean = 31.88, SD = 8.41), $t(97) = 3.26$, $p = .002$. The results suggested that early-career teachers who were mentored were significantly more satisfied with their job when compared to those who were not mentored.

Relationship to Prior Research

Upon completion of the study, the researcher noted a number of findings that connect with the existing body of research, literature on effective mentoring practices, and the theoretical frameworks guiding this study.

An appropriate place to begin this discussion is with the suggested mentoring practices from pages 9-12. The results of this study, specifically, the fact that the mentor-mentee relationship was more strongly correlated with job satisfaction and the fact that understanding of curriculum was the mentoring activity most strongly correlated with job satisfaction among early-career teachers, aligned with Grossman and Davis' (2012) findings that to meet the individual needs of new teachers, mentors must balance both instructional content and emotional needs. Furthermore, the findings of this study also

build upon Weisling and Gardiner's (2018) recommendation that, in mentoring, the relationship should be put first. Finally, the findings of this study echo the NEA's (1999) findings that trust must be built in the mentor-mentee relationship, as the results of this study indicated a significant positive correlation between the mentor's perceived personal integrity and job satisfaction.

The results of this study also connect to the work done by the New Teacher Center (2018). As discussed in Chapter 2, their work focuses on three approaches to mentoring: instructive, collaborative, and facilitative. Activities that lend themselves to each of the three approaches (for example, co-planning would fall into the collaborative category) were present in the significant findings. This suggests that no singular repertoire that mentors should focus on more with their mentees exists. All three approaches have value.

Finally, the results connect to both the theory of teacher development (Ingersoll & Strong, 2011) and Seligman's theories of learned helplessness (1972) and learned optimism (1991). As explained in Chapter 2, Ingersoll & Strong discuss how a quality mentoring program will lead to improved practice and teacher retention. The data collected and analyzed supports this theory. However, it is important to note that the results of this study only show a correlation between quality mentoring and job satisfaction; the study did not examine whether or not mentoring was a direct cause of job satisfaction.

The questions posed in the final section of the survey were indicative of participants' views on their jobs. It would stand to reason that the more satisfied a teacher is with their job, the more optimistic they are in their position, and the less likely they

would be to leave the profession. The facets mentioned in the mentoring relationship section of the survey help to foster optimism, which could explain why elements of the mentoring relationship were more strongly correlated with job satisfaction than were any of the prescribed mentor-mentee activities. Fostering optimism likely leads to happier, healthier teachers, which can, ultimately, lead to more improved student outcomes.

Limitations of the Study

One major limitation of the study was the limited sample size, particularly in areas with a high or very high percentage of economically disadvantaged students. Limited sample size decreases statistical power and could have led to type-II errors (Coladarci, et.al., 2008), which might have been why so many of the null hypotheses were retained. Additionally, this might have also had an effect on the lack of significance from the correlation coefficients from the categories with higher percentages of economically disadvantaged students.

A second limitation of the study was that it only focused on nine districts on Long Island and one regional support center. Although the nine districts had varying degrees of economically disadvantaged students, none of the districts were rural, and, as such, these results could not be generalized to a rural population. Furthermore, the economic standings of the districts might have been a confounding variable. Teachers could be satisfied not because of their mentoring, but because of the quality of support they received from parents, school administrators, district administrators, the teachers' union, and the human resource department.

Finally, a third limitation of the study was that the instrument used to collect data was a survey. Since the survey required teachers to recall their perceptions of both the

quality and the quantity of mentoring experiences that might have occurred many years ago, there is the possibility that these perceptions had become skewed or confabulated with the passage of time.

Recommendations for Future Practice

Upon arriving at the conclusions listed above, the researcher contacted all participating district superintendents to provide them with an executive summary of the key findings of the study, as well as with recommendations for future practice to enhance the mentoring programs at their schools, with the aim of building capacity in early-career teachers, which could, ultimately, lead to improved student outcomes. The recommendations are listed in order of importance.

First and foremost, schools, districts, and/or unions should mindfully choose mentors for new-teacher mentees that possess acumen in building relationships with people; this would assist the mentee in fostering relationships with not just the mentor, but with all stakeholders in the school. Since the research suggested that, in general, the strength of the mentor-mentee relationship was more strongly correlated with job satisfaction than with any specific activity in which mentors and mentees engaged, schools and school districts should act to employ mentors who are known for the connections they make with people.

Next, schools and school districts should, when possible, select mentors who both work in the same building as the mentee and teach in the same subject area as the mentee. The results of the survey indicated that the mentor-mentee activities most strongly correlated with job satisfaction were understanding the school's evaluation process, time management, curriculum planning, and observing the mentor teach. If a new teacher's

mentor were in the same subject area and effective, that mentor would be able to address all of those activities.

Finally, schools and school districts should act to design programs and activities that foster growth in the mentor-mentee relationship, such as monthly luncheons, team-building activities, and professional development. Doing so would provide more time for mentors and mentees to use meaningful activities to build a connection.

As mentioned in chapter two, districts are required by law to have a mentoring program as part of their professional development plan, and this plan must be created in collaboration with the teachers' union (NYSUT, 2012). If both mentor and mentee development are already required components of a district's professional development plan, it follows that the results in chapter four would be beneficial to the development of both mentors and mentees. As such, the researcher sent out an executive summary of the key results and recommendations to the superintendents of each of the districts that participated in this study, encouraging them to forward this information to colleagues. Furthermore, at the time of this writing, the researcher received an invitation to deliver professional development for mentors in his district's mentor training program, thereby potentially enhancing both mentor and mentee development.

Recommendations for Future Research

After reviewing the literature, conducting the study, drawing conclusions, and making recommendations for improvement in mentoring programs, the researcher identified further gaps in the literature, which will be addressed below with recommendations for future studies.

First, the researcher recommends that a qualitative study be conducted with new-teacher mentors and mentees to better understand the nuances of the mentor-mentee relationship. Bogdan and Bilken (2016) posit that qualitative studies provide more context in a naturalistic setting. Educational researchers may be able to gather further insight to the mentoring process through interviews and observations of new teachers and their mentors.

Second, the researcher recommends that studies be conducted on informal mentors, the veteran teachers without a formal title who serve as guides and friends for first-year teachers who may not have a positive relationship with their assigned mentor. It might be interesting and beneficial if relationships with informal mentors are more strongly correlated with job satisfaction than is the relationship with the formal mentor.

Finally, the researcher recommends that the study be replicated in urban districts, such as the New York City Department of Education. Since the researcher conducted the study on Long Island, an additional replicative study is recommended to examine the correlation of mentoring with job satisfaction in urban districts. With attrition rates being 50% higher in Title I schools (Carver-Thomas & Darling-Hammond, 2017) when compared with their suburban counterparts, it may be of value to know how strongly mentor-mentee activities and mentor-mentee relationship are correlated with job satisfaction in these areas of highest need.

Conclusion

While this study was conducted in a scientifically ethical fashion, it was fueled by the researcher's frustrations with new teacher development, in particular his own negative experiences being mentored in his first year. Although a significant amount of research

and literature exist on the benefits of new-teacher mentoring, as well as on best practices for new teacher-mentoring, and a substantial amount of funding is allocated for new-teacher mentoring in all districts in New York State, the findings of this study suggested that the research, literature, and best practices are largely ignored. This needs to change. Where does mentoring matter most? It matters everywhere. However, it is the way in which new teachers are mentored that will ultimately determine their approach to this relentlessly challenging profession, thereby either enhancing or diminishing the quality of students' education.

APPENDIX A

Institutional Research Board Approval

Federal Wide Assurance: FWA00009066

Nov 14, 2019 3:31 PM EST

PI: Zachary Boyt
CO-PI: Stephen Kotok
Dept: Ed Admin & Instruc Leadership

Re Initial - IRB-FY2020-225 WHERE DOES MENTORING MATTER MOST? TEACHERS' PERCEPTIONS OF THEIR FIRST-YEAR MENTORING EXPERIENCES AND THEIR EFFECT ON JOB SATISFACTION AMONG ECONOMICALLY DIVERSE SCHOOLS

Dear Zachary Boyt:

The St John's University Institutional Review Board has rendered the decision below for WHERE DOES MENTORING MATTER MOST? TEACHERS' PERCEPTIONS OF THEIR FIRST-YEAR MENTORING EXPERIENCES AND THEIR EFFECT ON JOB SATISFACTION AMONG ECONOMICALLY DIVERSE SCHOOLS.

Decision: Exempt

PLEASE NOTE: If you have collected any data prior to this approval date, the data needs to be discarded.

Selected Category: Category 1. Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.

Sincerely,

Raymond DiGiuseppe, PhD, ABPP
Chair, Institutional Review Board

Professor of Psychology

Marie Nitopi, Ed.D.
IRB Coordinator

APPENDIX B
Survey

Where Does Mentoring Matter Most?

THANK YOU FOR TAKING THIS BRIEF (5 TO 7 MINUTE) SURVEY ON YOUR EXPERIENCES OF BEING MENTORED. PLEASE ANSWER ALL QUESTIONS TO THE BEST OF YOUR RECOLLECTION. REMEMBER THAT ALL RESPONSES ARE BOTH ANONYMOUS AND CONFIDENTIAL!

SECTION 1 OF 4: BACKGROUND

What is your Gender?

- ○ Male
- ○ Female
- ○ Other

At what level do you currently teach during the regular school year? Check all that apply.

- ☐ Elementary School
- ☐ Middle School
- ☐ High School

How many years have you been teaching overall? Include this year.

- ○ 1 to 5 Years
- ○ 5 to 16 Years
- ○ More than 16 Years

What percentage of students at your school are economically disadvantaged? REFER TO THE ATTACHED DOCUMENTS BELOW IF YOU ARE UNSURE. Districts in each county are alphabetical, and to ensure your responses remain anonymous, every school in every district has been listed!

NASSAU COUNTY Percent Economically Disadvantaged 2019

SUFFOLK COUNTY Percent Economically Disadvantaged 2019

- ○ 0 to 19.999 percent
- ○ 20 to 39.999 percent
- ○ 40 to 59.999 percent
- ○ 60 to 79.999 percent
- ○ 80 to 99.999 percent

As a first-year teacher, did you receive a formal mentor?

- ○ Yes
- ○ No

SECTION 2 OF 4: MENTORING ACTIVITIES

(Adapted from How to Help Beginning Teachers Succeed (2nd Edition) by Stephen P Gordon. Copyright 2000, ASCD. Used with permission.)

To what extent would you say you engaged in the following activities with your mentors? Think only of your experience with your mentor during your first year of teaching.

	Never	Once or Twice Ever	Once or Twice A Month	Once Or Twice A Week	Daily or Almost Daily
Understanding of Curriculum	○	○	○	○	○
Time Management	○	○	○	○	○
Observing/Reflecting on another teacher's instruction	○	○	○	○	○
Observing/Reflecting on Mentor's instruction	○	○	○	○	○
Observing/Reflecting on my own instruction	○	○	○	○	○
Co-planning lessons/units/assessments	○	○	○	○	○
Organizing and Managing Classroom	○	○	○	○	○
Communicating with Parents	○	○	○	○	○

Communicating with Other Teachers	○	○	○	○	○
Communicating with Administration	○	○	○	○	○
Discussing appropriate teaching strategies for students with special needs (IEPs ENLs, etc.)	○	○	○	○	○
Using a variety of teaching methods	○	○	○	○	○
Administering Standardized Tests	○	○	○	○	○
Attending Meetings/Professional Development Together	○	○	○	○	○
Understanding the School's Evaluation Process	○	○	○	○	○
Dealing with Stress	○	○	○	○	○
Becoming Aware of Special Benefits/Services Provided by the School District	○	○	○	○	○
Completing Paperwork	○	○	○	○	○

SECTION 3 OF 4: MENTORING RELATIONSHIP

(Adapted from Mentorship Effectiveness Scale (reformatted 8/13/09) by Ron Berk. Copyright 2002 Johns Hopkins School of Nursing. Used with permission.)

To what extent would you agree with the following statements?

	Strongly Disagree	Disa-gree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
My mentor was accessible.	○	○	○	○	○	○
My mentor demonstrated professional integrity.	○	○	○	○	○	○
My mentor demonstrated content expertise in my area of need.	○	○	○	○	○	○
My mentor was approachable.	○	○	○	○	○	○
My mentor was supportive and encouraging.	○	○	○	○	○	○

My mentor provided constructive and useful critiques of my work.	○	○	○	○	○	○
My mentor motivated me to improve my work product.	○	○	○	○	○	○
My mentor was useful in providing direction on professional issues (e.g. networking).	○	○	○	○	○	○
My mentor answered my questions satisfactorily (e.g. clear, timely, comprehensive).	○	○	○	○	○	○
My mentor acknowledged my contributions appropriately.	○	○	○	○	○	○
My mentor suggested appropriate resources.	○	○	○	○	○	○

My mentor challenged me to extend my abilities (risk taking, trying new things, etc.	○	○	○	○	○	○

SECTION 4 OF 4: JOB SATISFACTION

(Adapted from *Anticipated Turnover Scale* by Jan Atwood and Ada Sue Hinshaw. Copyright 1984. Used with permission.)

To what extent would you agree with the following statements?

	Strongly Disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Strongly agree
I plan to stay in this position for at least another three years.	○	○	○	○	○	○
If I were to get a similar job offer from another school/district, I would take it.	○	○	○	○	○	○

If I were to get another job offer in another field, I would take it.	○	○	○	○	○	○
I wouldn't want to work anywhere else.	○	○	○	○	○	○
I could spend my entire career working in my current full-time position in my current school.	○	○	○	○	○	○
If I could go back to my college days, I would have chosen a different career route.	○	○	○	○	○	○
Deciding to stay or leave my position is not a critical issue for me at this point in time.	○	○	○	○	○	○
I plan to teach until I retire.	○	○	○	○	○	○

APPENDIX C
Letter to Superintendents

CONSENT LETTER

December 1, 2019

Dear Superintendent,

Hope all is well so far this school year. My name is Zach Boyt, and I am a doctoral candidate at St. John's University in the Department of Administrative and Instructional Leadership. I invite your teachers to participate in a research study entitled "Where Does Mentoring Matter Most?" My faculty sponsor is Dr. Stephen Kotok of the Department of Administrative and Instructional Leadership. The purpose of the research is to collect perspectives on the mentoring process as a new teacher as well as their current job satisfaction.

Participation in this research project is completely voluntary. Teachers may decline altogether or choose not to answer any questions they don't wish to answer. There are no known risks to participation beyond those encountered in everyday life. Their responses will remain confidential and anonymous.

I know your teachers' time is precious. There are never enough hours in a day. As such, the survey should only take approximately ten minutes to complete. The results of the survey could be used to inform mentors on the most effective practices to use with the new teachers they are mentoring.

To provide me consent to contact your teachers to participate in this brief but important survey, please reply to this email with your approval.

If you have any further questions, do not hesitate to email me. For questions about your teachers' rights as a research participant, you may contact the University's Human Subjects Review Board, St. John's University, at 718-990-1440. I thank you in advance for both your cooperation and your support of my academic endeavors.

All the best,

Zachary Boyt

Doctoral Candidate

Department of Administrative and Instructional Leadership

St. John's University

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APPENDIX D
Letter to Participants

CONSENT FORM

January 6, 2020

Dear Teachers,

Hope all is well so far this school year. My name is Zach Boyt, and I am currently a doctoral candidate at St. John's University in the Department of Administrative and Instructional Leadership. I invite you to participate in a research study entitled "Where Does Mentoring Matter Most?" My faculty sponsor is Dr. Stephen Kotok, of the Department of Administrative and Instructional Leadership. The purpose of the research is to collect your perspective on the mentoring process as a new teacher (if you were mentored), as well as your current job satisfaction. The questionnaire in the link below has been designed to collect information on this.

Your participation in this research project is completely voluntary. You may decline altogether or choose not to answer any questions you don't wish to answer. There are no known risks to participation beyond those encountered in everyday life. Your responses will remain confidential (only I will see the results) and anonymous (aside from you, no one, including myself, will know your specific answers). Although you will not be compensated for your efforts, just ten minutes of your time commitment will contribute greatly to mentoring research, so that improvements could be made to new-teacher mentoring programs.

By agreeing to participate in this project, you agree to answer the questions in the questionnaire to the best of your ability. It should take approximately ten minutes to complete. Please click on the link to the survey below, and complete the survey by Saturday, January 25th, 2020 at noon.

Here is the link:

Again, all responses are confidential and anonymous. If you have any further questions, do not hesitate to email me. For questions about your rights as a research

participant, you may contact the University's Human Subjects Review Board, St. John's University, at 718-990-1440. I thank you in advance for both your cooperation and your support of my academic endeavors.

All the best,

Zachary Boyt

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