2020

Stress and Job Satisfaction as Predictors of Teacher Turnover Intentions

Alrick Thompson
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Alrick Wilson-Thompson

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Edoardo Naggiar, Committee Chairperson, Psychology Faculty
Dr. Derek Rohde, Committee Member, Psychology Faculty
Dr. Richard Thompson, University Reviewer, Psychology Faculty

Chief Academic Officer and Provost
Sue Subocz, Ph.D.

Walden University
2020

Abstract

Stress and Job Satisfaction as Predictors of Teacher Turnover Intentions

by

Alrick Wilson-Thompson

MS, Walden University, 2016

BA, University of Phoenix, 2013

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

May 2020

Abstract

High teacher turnover is problematic because of the costs associated with recruiting and training new hires. However, some of the factors originating outside of the working environment that may influence teacher turnover intentions are not fully understood. The purpose of this quantitative correlational design study was to examine the extent to which job satisfaction, commuting stress, and financial stress are predictors of teacher turnover intentions. The study involved a purposive sampling of 227 teachers within a school district in the South Eastern part of the United States. Hobfoll's conservation of resources theory provided the theoretical framework for the study. Validated instruments included the Commuting Stress Measure, the Financial Stress Survey, the Teaching Satisfaction Scale, and the Job Turnover Intention Scale. Multiple linear regression analysis and correlation techniques were used to examine the combination of commuting stress, financial stress, and job satisfaction's effect on teacher turnover intentions. Results showed that a combination of the three predictor variables significantly predicted turnover intentions ($r = 0.545$, $p < 0.001$). Results from this study will have the potential of bringing about positive social changes in the lives of stakeholders within this school district. Using findings from the study, school leaders may be able to implement changes that reduce teachers' stress levels and improve their job satisfaction levels. By leadership expressing interest in these factors, teachers will feel better understood and this may influence increased productivity and teacher retention, which may also improve student learning and performance.

Stress and Job Satisfaction as Predictors of Teacher Turnover Intentions

by

Alrick Wilson-Thompson

MS, Walden University, 2016

BA, University of Phoenix, 2013

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

May 2020

Dedication

I dedicate this dissertation to my daughter, Kacy, and my three beautiful grandchildren, Justin, Julissa, and Alecia. Together, you were a source of comfort to me when things went wrong. You helped to motivate me along my course when I felt like giving up. Words are not enough to express my gratitude to you for the laughter and joy I found in you when I got discouraged. Achieving this doctoral degree is one of the greatest milestones in my life. Please note that I did not allow age and circumstances to limit me from working towards my goals. I therefore implore you also to aim high, work hard, and have faith. Remember, with Christ all things are possible.

Acknowledgments

First, I thank my Heavenly Father for giving me the wisdom, knowledge, understanding, and strength to survive this challenging program. Special thanks to the members of my dissertation committee, Dr. Edward Naggiar and Dr. Derek Rohde, for their untiring efforts in supporting and inspiring me to get this point. Thanks also to my university research reviewer, Dr. Richard Thompson, other professors, academic advisors, program Director, my pastor, members of the education committee at my church, fellow classmates at Walden University, and the participants of the study for the role they played in my success. Thanks also to my spouse, my mother, my daughter, grandchildren, relatives, and also to my friends who have been a source of encouragement and help during my doctoral journey.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Turnover intention is a strong predictor of job turnover in organizations (Aldridge & Frazer 2016; Aponsah-Tawiah, Annor, & Arthur, 2016; Ghavifekr & Pillai, 2016; Reeves, Pun, & Chung, 2017; Skaalvik & Skaalvik, 2017). High job turnover cases among teachers are major sources of concern for stakeholders within school districts in the South Eastern United States, given the high cost associated with recruiting and training of new teachers (Alliance for Excellent Education, 2018; Florida Department of Education [FDOE], 2018; Mai, Christian, Ellis, & Porter, 2016; United States Census Bureau, 2017; Wong & Lashington, 2015). Turnover intentions are often related to work-related issues such as long working hours and job insecurity (Aponsah–Tawiah et al., 2016; Tziner, Rabinu, Radomski, & Belkin, 2016; Wong, & Lanchinger, 2015). However, other reports indicate that many young working adults including teachers are developing turnover intentions and returning home to live with their parents. This is due to high living expenses while they are still paying student loan debts (Bleemer, Brown, Donghorn, & van der Klaaw, 2017; Fry, 2016).

Furthermore, due to the rapid population growth within school districts in South Eastern United States, many employees are currently experiencing long commuting times and extreme traffic congestions (United States Census Bureau, 2018). Factors such as these, which are outside of the work environment, may contribute to teacher turnover intentions (see Aponsah- Tawiah et al., 2016; Bleemer et al., 2017; Fry, 2016; Simpson, Maylor, McConville, Stewart-Knox, Meunier, Andriollo- Sanchez, & Coudray, 2014). As a result, rather than focusing on factors originating only within the workplace, the

objective of this study was to examine whether these current trends are related to the high teacher turnover rate in this region.

The purpose of the study was to help leaders of public schools within South Eastern United States School District to understand the extent to which three key variables--job satisfaction, financial stress, and commuting stress--are predictors of teacher turnover intentions. Results from this study may have the potential of bringing about positive social changes in the lives of stakeholders within schools in South Eastern United States. By having a better understanding of factors that relate to turnover intentions, leaders can raise awareness and implement changes. When leadership expresses interest in these factors, teachers feel better understood, and this may influence increased productivity and teacher retention (Aldridge & Fraser, 2016; Ghavifekr & Pillai, 2016).

In addition to examining the influences of turnover intentions, I consider the background to the problem in this chapter. The problem statement, the purpose, the nature of the study, the research question and hypotheses, and the theoretical framework are also within this chapter. Also included in this chapter are the study's operational definitions and discussion of the assumptions; scope and delimitations; limitations; and significance of the study, including its implications for social change.

Background

Teacher turnover intention that often translates to actual turnover is costing the U.S. federal government $2.2 billion to $2.6 billion annually (Alliance for Excellent Education, 2018). Teacher turnover not only affects costs associated with recruiting and

training of new staff, but it also minimizes the nation's capacity to ensure effective teaching to all students (Alliance for Excellent Education, 2018; Heritage, Gilbert, & Roberts, 2017; Mai et al., 2016). Reports from the United States Census Bureau (2018) and FDOE (2018) indicated that the school district within South Eastern United States is currently witnessing a rise in student enrollment. While the student population is increasing, the district is also experiencing a rise in teacher turnover (Alliance for Excellent Education, 2018; FDOE, 2018).

The school district within the South Eastern United States is one of the largest school districts in this area. Reports from schools within the South Eastern United States showed that enrollment for the 2017-2018 school year was 93,167 students, with an expected growth rate of 3% to 5% over the following five to 10 years (The National Center for Education Statistics (2019). In the beginning of the school year, there were 42,100 students enrolled in elementary schools, 20,683 in middle schools, and 28,368 in high schools. At the time of this study, there were more than 4,500 teachers in this region These teachers represent 50.5% of full-time instructional staff in the South Eastern region of the United States (NCES, 2019; United States Department of Labor, Bureau of labor and Statistics, 2015).

Reports from the School District Public Records in 2018, indicated that teachers with undergraduate degrees earn $40,000, teachers with master's degrees earn $42,500, teachers with specialist degrees earn $44,000, and teachers with doctoral degrees earn $45,000. However, these figures are different from those given by the FDOE. The FDOE contended that the average annual salary of a certified teacher is currently $55,

723 (FDOE, 2018), but this amount is not guaranteed for all students who are pursuing teaching certification in Florida. The FDOE (2018) further stated that the salary of a certified educator will depend on the district size, amount of classroom experience, degree level, and subject taught by the teacher. In comparison to other regions in the United States, teachers within the school district in the South Eastern United States earn significantly lower salaries than other teachers with similar qualifications, talents, and experiences (UNESCO, 2017).

In addition, recent reports from the United States Census Bureau (2018) indicated that the South Eastern region of the United States is one of the fastest-growing communities within the nation and that transportation and finding affordable housing is challenging. Teachers living in this region are experiencing extreme difficulties, not only with finding affordable housing, but also having to manage with extreme traffic congestion and arriving late at work. Recent reports indicate that the cost of renting a house has doubled in some areas (United States Census Bureau, 2018). Reports from the United States Census Bureau (2018) indicated that to date, there are 385,070 housing units; the median value of a housing unit is $171, 100, the median mortgage is $1, 366, and median rent is $984 in this area. The median household income in 2016 was $50,000 (United States Census Bureau, 2018). The cost of housing is therefore out of reach for many teachers because at the time of the study their salaries are below the median household income.

Interestingly, although the economy is improving, many young working adults such as teachers and nurses are experiencing financial stress (Bleemer et al., 2017; Fry,

2015). These young working adults are choosing to return home to live with their parents or relatives due to the high cost of renting while still having student loan debts to repay (Bleemer et al., 2017; Fry, 2015; Vespa, 2017). Consequently, it is unclear whether those issues are related to the high turnover among teachers in this region, thus creating a need for further investigation of possible reasons for teacher turnover intentions that often lead to actual teacher turnover. Furthermore, examining factors other than those that exist in the school environment can disclose areas such as commuting stress and financial stress from living expenses that affect teachers and possibly influence their turnover intentions.

Problem Statement

Turnover intentions resulting in actual job turnover cases are major contributors to financial losses in organizations (Mai et al., 2016; Tziner, Rabinu, Radomski, & Belkin, 2015; Wong et al., 2015). The Bureau of Labor and Statistics (2017) reported that for the year 2015 there were 33.4 million job turnover cases, which represented 26.3% of all employment. Research has indicated the need for more studies that focus on the financial stress associated with living expenses and the cost of commuting, as these may be related to turnover intentions in organizations (Breaugh, 2014; Hubler, Brandon, Gardener, Larzelere, & Busby, 2016). The general problem was that within the school system, leaders have reported a decrease in student achievement, low productivity, and high cost of training new teachers when experienced teachers develop turnover intentions and then quit their jobs (Alliance for Excellent Education, 2018; Heritage et al., 2017; Mai et al., 2016). Specifically, the problem was that many leaders of educational institutions do not understand the extent to which a combination of financial stress,

commuting stress, and job satisfaction are predictors of turnover intentions among teachers in public schools within South Eastern United States.

Purpose

The purpose of this quantitative correlational study was to examine the extent to which a combination of job satisfaction, commuting stress, and financial stress associated with living expenses are predictors of teacher turnover intentions. The targeted population were teachers within public schools in the South Eastern United States. Numerous researchers have extensively studied problems within the school environment and how they predict teacher turnover and turnover intentions (e.g., Reeves et al., 2017; Reiser, Murphy, & McCarthy, 2016; Sun, Saultz, & Ye, 2017). However, according to my review of the current literature, knowledge about problems outside of the school environment and how they predict turnover intentions among teachers remains unclear (see Breaugh, 2014; Hubler et al., 2016). Results from this study may help guide leaders of educational institutions on developing strategies that can improve teacher job satisfaction, lobby for more affordable housing for teachers, offer financial education training to teachers, and find ways to reduce transportation problems within the United States. Addressing these issues should help to retain teachers, improve student performance, and prevent costly fees associated with training new staff when experienced teachers quit their jobs because of the turnover intentions that they develop.

Nature of the Study

Researchers have the option of using one of three methods of analyses when studying problems. Wholin and Arum (2015) and Schoenherr, Ellram, & Tate (2015)

listed these three methods as qualitative, quantitative, and mixed methods. I made the decision to follow a quantitative method because quantitative studies offer the best approach to determine what relationships exist between variables based on the collected numeric data (see Wohlen & Aurum, 2015; Wouters et al., 2014; Simon & Goes, 2013). A quantitative approach was ideal for this study because with this approach, I was able to use inferential statistics to generalize findings from data to a broader population (see Wohlen & Aurum, 2015; Wouters et al., 2014).

Scholars have noted that a quantitative research method provides a valuable foundation for most studies as they reduce the chances of researcher bias (Frankfort-Nachmias, Nachmias, & DeWaard, 2015; Wouters et al., 2014). Frankfort-Nachmias et al. (2015), noted that by examining the relationships between variables, that quantitative research can prove effective. Quantitative research allows the researcher to refine numeric data by asking "*if*" in questions (see Wohlen & Aurum, 2015; Wouters et al., 2014). Further, the purpose of this study was to examine the extent to which a combination of three predictor variables (financial stress, commuting stress, and job satisfaction), can predict one criterion variable (turnover intentions). It was my aim to generalize the findings from this study sample to the study population based on the numeric data that I collected. I therefore concluded that a quantitative approach would generate the answer to my research question. Therefore, there was no need to use a qualitative nor a mixed methods approach. Additionally, by using an outsider's approach when collecting data in a quantitative study, I was able to predict and explain a

phenomenon; which could not have occurred in qualitative methods (see Rittichainuwat & Rattanaphinanchai, 2016).

Further, in quantitative studies, researchers also have the option of following either an experimental, a quasi-experimental, or a correlational design (see Schoenherr, Ellram, & Tate, 2015). Schoenherr et al. (2015) noted that in experimental design studies, researchers examine cause and effect relationships between variables. Researchers also control or randomly assign participants in experimental design studies. In the quasi-experimental studies, the researcher will assign participants to groups based on existing stratification (see Schoenherr et al., 2015), but this approach was not practical for this study. This study also followed a correlational design as the study identified the relationship that existed between predictor variables and criterion variable within a particular industry (Wohlen & Aurum, 2015; Wouters et al., 2014). Schoenherr et al. (2015), mentioned that one of the defining characteristics of a correlational study involves examining multiple factors relating to or influencing one another, thus aligning with the purpose of the study. The objective of this study was to examine the extent to which a combination of job satisfaction, financial stress, and commuting stress was a predictor of turnover intentions among teachers. It was not my aim to randomly assign participants nor to control variables; therefore, a correlational design was the most appropriate design for this study.

Research Question and Hypotheses

The primary objective of the study was to understand the extent to which a combination of three predictor variables--job satisfaction, financial stress, and

commuting stress--is a predictor of turnover intentions among teachers in the school district in South Eastern United States. The research question (RQ) and hypotheses were as follows:

RQ: To what extent does a combination of financial stress, commuting stress, and job satisfaction predict teacher turnover intention in school district of South Eastern United States?

Null Hypothesis (H_0): A combination of financial stress, commuting stress, and job satisfaction is not a significant predictor of teacher turnover intentions in school district of South Eastern United States.

Alternative Hypothesis (*Ha*): A combination of financial stress, commuting stress, and job satisfaction is a significant predictor of teacher turnover intentions in South Eastern United States?

I set the significance level at .05. With this setting, a *p* value less than the level of significance (alpha) would lead to H_0 being rejected while a *p* value greater than or equal to the level of significance would result in H_0 being accepted.

Theoretical Framework

I used the conservation of resources theory (COR; Hobfoll, 2002) as my theoretical framework for understanding the decisions employees make when they are stressed. Hobfoll (2002) proposed that employees will react when there is instability and threats to their resources. This theory provided a theoretical lens through which to understand how commuting and experiencing financial stress from living expenses relate to turnover intentions. It allowed for prediction of what people will do when their stress

levels are high and resources are threatened. The theory proposes that people will always seek to conserve resources (Hobfoll, 2002). For teachers, not being able to save or conserve resources after being paid for the work they do may cause them to feel that their resources are being depleted. To escape the threat to their resources, teachers may then search for alternative jobs that will allow them to save and conserve their resources while taking care of their financial responsibilities. In addition, in the review of literature in Chapter 2, I consider other theories that may be relevant to understanding the decisions employees make when they experience stress at or away from their workplace environment. These theories include the theory of motivation - hygiene factors (Hertzberg, 1968), the two-construct model of job satisfaction theory (Hertzberg, Mausner, & Snyderman (1959), and the theory of job satisfaction (Hagedorn, 2000),

Operational Definitions

Commuting stress: The stress a commuter experiences as exhausting to his or her resources and well-being (Aponsah-Tawiah et al., 2016; Legrain et al., 2015).

Financial stress: A psychological response to economic or financial difficulties that creates worry and anxiety over the inability to meet financial responsibilities, (Montpetitt, Knapp, & Bergamon, 2015).

Job satisfaction: A concept that is defined variously as the fulfillment an employee finds in his or her job (Lu & Gursoy, 2016), the extent to which an employee dislikes or likes a job, or employees' affective reactions to their work (Skaalvik & Skaalvik, 2017). For this study I used "the fulfillment an employee finds in his or her job" (Lu & Gursoy, 2016).

Job turnover: The act of quitting or vacating jobs either through voluntary or involuntary processes. It is also the number or percentage of employees who quit their jobs and who are then replaced by other employees (Heikonen, Pietarinen, Pyhallok, Toon, & Soini, 2017; Reeves, Pun, & Chung 2017).

Turnover intentions: The desire or intention an employee has to leave his or her current job in a voluntary manner (Lu & Gursoy, 2016). It is also the operational definition for this study. This term is also defined as the probability that an employee plans to leave an organization (Mobley et al., 1978).

Assumptions

A researcher cannot research all angles, aspects and areas related to a topic, so a researcher has to set boundaries. These boundaries are known as delimitations (Chinchilla- Rodriguez, Miguel, & De Moya-Anegon, 2015). Delimitations may present issues as the researcher defines the scope of the research (Chinchilla- Rodriguez et al., 2015).

Assumptions

Assumptions are facts or conditions that are obvious in a study that researchers should identify but also to avoid actively examining them for proof (Hollinger, Yerramalli, Singh, Mitra, & Sukhatme, 2015). One assumption for this study involved truth. I assumed that teachers would reveal the truth about the level of satisfaction they experienced from their jobs and the financial stress that they were experiencing. I assumed that teachers were financially stressed because of high cost of living expenses. I also assumed that teachers in this School District in South Eastern United States were

mostly satisfied with the jobs that they were performing and that they would understand the survey questions in regards to their job satisfaction, their financial stress, and their commuting stress experiences.

Scope and Delimitations

Delimitations involve the choices the researcher makes in regard to the scope or extent of the study (Chinchilla- Rodriguez et al, 2015; Yousaf, 2015). The scope of the study involved only K-12 public school teachers within South Eastern United States. For this survey, I excluded teachers from other states and also university professors whose experiences with commuting stress, financial stress, and satisfaction on the job might have been different. Their experiences may not have fallen within the scope of this study. In addition, turnover intentions among teachers are influenced by several factors such as workload, class size, and indiscipline within the school environment (see Skaalvik & Skaalvik, 2017; Mai et al; 2016). However, I chose only to focus on job satisfaction from within the school environment along with financial stress and commuting stress that are outside of the schools' environment.

Limitations

Limitations are potential weakness within a study (Smith, 2014). Limitations may occur because of uncontrolled variables in a study that may restrict the study's generalizability (Yousaf, 2015). These limitations may need confinement. One potential weakness of this study involved the population from which the sample was taken. Responses from the teachers involved in the survey may not reflect the way other educators feel about job satisfaction and stress from commuting, and living expenses in

other school districts, private schools, or higher educational institutions. Likewise, assumptions might not show how the findings of the study may relate to turnover intentions among different teacher populations within the education system. Based on this limitation the findings of the study may not be relevant to all teachers because of the specific population being examined.

In addition, concerns over non-response rate and non-response bias are common to studies that use surveys for data collection (Wouters, Maesschalck, Peters, & Roosen, 2014). Nevertheless, Hoglinger, Jan, and Dickman (2016), noted that the level of convenience and anonymity that surveys offer to participants can increase response rate. Likewise, by using purposive sampling, which is a type of non-probability sampling strategy, the study will be prone to representiveness, and selection bias (Frankfurt-Nachmias et al, 2015). To mitigate these biases, Wouters et al. (2014) recommended using more than one means of recruiting strategies to secure participants. However, recruiting participants by using several means was not necessary. I recruited participants by gaining permission from the director of research and accountability at the School Board (see Appendix A for my introductory letter and Appendix B for the director's approval letter). The director then forwarded the letter of introduction, the consent form, and a link to the survey to principals on my behalf. These principals then forwarded these documents to their teachers.

Another limitation involved the design of the study. Researchers sometimes infer causation when they are analyzing data in studies with correlational designs (see Bleske-Rechek, Morrison, & Heidtke, 2015). To mitigate this issue when interpreting results, I

made it a priority not to infer that one variable caused another variable. Regardless of these concerns, researchers are confident that the nature of the study, and the use of non-probability sampling technique are suitable for this study (see Wouters et al, 2014).

Significance

Examining the extent to which a combination of job satisfaction, financial stress, and commuting stress are predictors of turnover intentions promises to have significant positive implications for social changes among teachers and the society. Findings from this study should bring about some awareness of the decisions that employees make when they experience stress associated with the cost of commuting and living expenses. These results should provide leaders of organizations with a better understanding of employee stress, job satisfaction, and turnover intentions. As contended by Breaugh (2014), and Ghavifekr and Pillai (2016), perceptions of job satisfaction usually vary because of an employee's age, gender, and years of service. Employers should seek to create work environments that influence employees to have the desire to remain committed to a job, regardless of employee's demographic differences (Breaugh, 2014; Ghavifekr & Pillai, 2016). Likewise, leaders of organizations should consider implementing sustainability practices which may influence teacher's decision to join and remain committed to their organizations.

This study also has the potential of becoming a learning resource. Students of Industrial and Organizational Psychology and Human Resource professionals who are desirous of finding ways to increase staff retention should benefit from this resource. Altogether, results from the study should have positive implications not just for teachers,

but also for all stake holders of the school district**.** Leaders of school districts should see an increase in teacher productivity and teacher retention, and a reduction in the cost associated with recruiting and training of new staff when teachers develop fewer turnover intentions.

Implications for Knowledge

By examining commuting stress, financial stress, and job satisfaction as possible predictors of teacher turnover intentions, this study will reduce gaps in the literature surrounding occupational stress, commuting stress, financial stress, job satisfaction, and turnover intentions. To date, numerous researchers have examined factors within the work environment that lead to job turnover and turnover intentions, but only few researchers have explored factors outside of the work environment and their relationships to turnover intentions, thus creating a need for further investigation.

Further, as one of the fastest growing regions in the nation, authorities in South Eastern United States are expressing concerns over affordable housing and transportation for its residents. To understand whether these problems are related to the high rate of teacher turnover now affecting this growing population, this study is addressing the need by examining the extent to which commuting stress, financial stress, and job satisfaction are possible predictors of turnover intentions among teachers. Altogether, this study should contribute to the advancement of the body of knowledge, as it serves as a further research tool that describes the range of effects regarding stressors affecting employees and turnover intentions among teachers.

Implications for Social Change

Results from this study will have the potential of bringing about positive social changes in the lives of stakeholders within this school district in South Eastern United States. When leaders of school districts embrace a better understanding of factors such as financial stress, commuting stress, and job satisfaction, as they relate to turnover intentions, they can raise awareness and implement change. If leadership expresses interest in these factors, teachers will feel better understood and this may influence increased productivity and teacher retention (Aldridge & Fraser, 2016; Ghavifekr & Pillai, 2016). Usually, students suffer the most when teachers develop turnover intentions and eventually leave the classroom (Alliance for Excellent Education, 2018; Mai et al., 2016). Researchers noted that teacher turnover has contributed to a decrease in student achievement, and that some schools are experiencing 6% - 9% decrease in Language Arts and Mathematics scores (Mai et al., 2016; Heritage et al., 2017; Alliance for Excellent Education, 2018). Results from the study should help to inform the government about the need to implement changes that can increase student's scores and also increase teacher job satisfaction.

Results from the study should also help employers to consider the need to offer financial education training to employees. When leaders of educational institutions become aware of the issues that affect teachers' wellbeing and morale, they will be better able to make changes where necessary. Aldridge and Fraser (2016), noted that when employees are happy with their environment, they experience more enjoyment and satisfaction, less episodes of illnesses, and also develop a positive emotional wellbeing.

Summary

In Chapter one I presented an overview of the cost of job turnover, its effects on students, and the need to examine factors outside of the school environment as possible predictors of turnover intentions. Much research has been conducted on issues within the school environment and how they influence turnover and turnover intentions among teachers. However, research on issues outside of the school environment and how they influence turnover and turnover intentions still remains unclear.

Chapter 1 also included an outline of the purpose, background to the problem, research questions, and hypotheses. The theoretical foundation, significance, limitations, delimitations, and implications for social change are also included in Chapter 1. Chapter 2 provided a detailed review of current and previous studies that are relevant for this study. In the literature review, I discussed financial stress, commuting stress, job satisfaction, and teacher turnover intentions in more detail.

Chapter 2: Literature Review

The literature review is an analysis and synthesis of various literature concerning teacher turnover intentions. Researchers should contribute something new to a topic by thoroughly reviewing what other scholars have done, according to Chu (2015). Therefore, I reviewed literature on a variety of topics, including job satisfaction, financial stress, commuting stress, and teacher turnover intentions. The literature review consists of both current and previous studies that are relevant to understanding the extent to which a combination of financial stress, commuting stress, and job satisfaction are predictors of turnover intentions among teachers in public schools within South Eastern United States. The chapter begins with an overview of the literature search strategy and theoretical foundation for the study.

Literature Search Strategy

The search process for this literature review included a review of peer-reviewed articles and books. To find articles, I reviewed dissertations and doctoral studies. I also performed bibliographic mining and used key word phrases when using Internet search engines and library databases. I obtained sources for this literature review from ProQuest, EBSCOhost, and Google Scholar. The key words I used in the search for relevant research included *job satisfaction*, *turnover intentions*, *financial stress*, and *commuting stress*. More than 85% of the sources in this literature review came from peer-reviewed articles that were published within the past 5 years. This was to ensure academic rigor as stipulated by the Doctor of Philosophy in Psychology program at Walden University. Teacher job satisfaction and its relationship to stressors originating

outside of the working environment have attracted the attention of only a few researchers (Hubler, 2016; Mai et al, 2016). This limitation in the knowledge base has provided an opportunity for further research.

Theoretical Framework

For the theoretical base for this study, I used the conservation of resources theory (Hobfoll, 2002). In addition, the two-factor theory of work motivation (Hertzberg et al., 1959), the theory of motivation and hygiene factors (Hertzberg, 1959), and the two-construct model of job satisfaction theory (Hagedorn, 2000) were relevant for understanding the decisions employees make when they are stressed. Hobfoll (2002) noted that instability occurs when there is a threat to resources, loss of resources, or some insufficient gain of resources following significant investments. For teachers, not being paid a livable wage that can take care of their financial responsibilities such as caring for their families; purchasing a house; paying the rent; or affording health care, dental care, utilities, vacations, and a retirement fund may lead to feelings of failure (see Hobfoll, 2002).

Other researchers have applied Hobfoll's (2002) conservation of resources theory in similar ways. For example, Lebert and Voorpostel (2014) examined turnover as a strategy to escape job insecurity. Lebert and Voorpostel found that men facing job insecurity were more likely to voluntarily withdraw from their jobs. However, the study showed that only women without preschool-aged children were likely to voluntarily quit their jobs because of job insecurity (Lebert & Voorpostel, 2014). Lebert and Voorpostel contended that the threat of the loss of a resource can provoke a stress reaction that in

turn prompts the individual to act to change the situation. Lebert and Voorpostel assumed that when employees perceive their work situation as insecure, they will either seek to improve their working conditions with their current employer or quit their jobs. These studies should prove useful for understanding that when teachers perceive that their work situations or their environments are insecure, that they will seek to quit their jobs or even change where they live.

In another study, Aponsah-Tawiah et al. (2016) applied Hobfoll's conservation of resources theory while examining commuting stress to job satisfaction and the mediating role of burnout. Results from the study indicated that commuting stress was positively related to burnout and job turnover intentions but there was no direct relationship to job satisfaction (Aponsah-Tawiah et al., 2016). Aponsah-Tawiah et al. did not examine commuters' reaction to the cost of commuting, thus creating a gap for further investigation.

Theories of job satisfaction, motivation, and commitment are also relevant for understanding the decisions employees make. In the two-factor theory of motivation, Hertzberg et al. (1965) noted that motivators and hygiene factors influence job satisfaction. In this two-factor theory of motivation, motivators are also known as intrinsic factors (Herzberg et al., 1965). These may include job responsibility, achievement, recognition, the work itself, and advancement, whereas hygiene factors or extrinsic factors include job security, work conditions, pay, interpersonal relationships, and supervision (Hertzberg et al., 1965). However, Hertzberg et al. theorized that individuals experience more job satisfaction from intrinsic factors than from extrinsic

factors. Experiencing more intrinsic factors or motivators often influences more job satisfaction and lead to more job commitment (Hertzberg et al.1965).

In later research, Hertzberg (1966) recognized 11 factors that, if inadequately met, could lead to job dissatisfaction. These factors include status, company policy, interpersonal relationships with peers, interpersonal relationships with subordinates, working conditions, and potential for growth (Hertzberg, 1966). Later, building on Hertzberg's theory, Hagedorn (2000) used triggers and mediators to explain how events in life could influence job satisfaction. Triggers are life events such as financial difficulties and commuting stress that are either related or not related to the job but could affect job satisfaction (Hagedorn, 2000). However, mediators include Hertzberg's motivators and hygiene factors. These motivators are situations or variables that moderate the relationship between variables and produce interacting effects (Hagedorn, 2000). This theory proved relevant for understanding the extent to which financial stress and commuting stress, along with job satisfaction, are predictors of turnover intentions among teachers in South Eastern United States.

Other recent researchers who have included Herzberg's motivation-hygiene theory in their studies are Derby -Davis (2014), Kula and Guler (2014), and Lumadi (2014). Derby-Davis (2014) used Hertzberg's motivation–hygiene theory in a correlational study design to examine the factors and demographic variables contributing to job satisfaction and intentions to remain in the nursing field. Derby-Davis also used the theory in another correlational study of the factors and demographic variables that contribute to job satisfaction and intentions to remain in the nursing field. Results from

the study demonstrated that motivation and hygienic factors such as work environment, employee-supervisor relationships, and training significantly influence nurses' decisions to remain on the job (Derby-Davis, 2014). Although Kula and Guler used the same theoretical approach, their findings indicated that supervisor support significantly had a positive and significant impact on the performance of law enforcement officers in Turkey. Likewise, in a mixed-methodology approach, Lumadi found high levels of teacher satisfaction in schools where leaders place emphasis on Hertzberg's motivation–hygiene factors. These teachers were allowed to be involved in changing of school policy and procedures.

Studies by Lumadi (2014), Kula and Guler (2014), and Derby-Davis (2014) indicate the importance of hygiene factors for influencing job satisfaction among employees. However, other studies are demonstrating that motivational factors are also important for influencing job satisfaction. For example, Fong (2015) found that several of Hertzberg's motivational factors may increase job satisfaction among teachers. Fong listed growth, advancement, responsibility, work and recognition from Hertzberg's motivational factors as factors that could increase teachers' job satisfaction and desire to remain committed to their jobs. Nevertheless, Fong then posited that teachers will experience dissatisfaction whenever there is an absence of Hertzberg's hygiene factors such as status, job security, collegial interaction, and salary. Fong's study demonstrates a nonlinear relationship between employee satisfaction and dissatisfaction. Fong contended that although an increase exists in one factor, an adversely corresponding effect may not occur on the other.

Interestingly, Hertzberg's motivation- hygiene theory was also built on Maslow's hierarchy of needs theory of human motivation, (Hertzberg, 1966). In this theory, Maslow postulated that job satisfaction and job dissatisfaction are two completely independent considerations (Hertzberg, 1966). This information should prove useful when determining what actions school administrators should take to reduce the high level of job turnover and turnover intentions among teachers. Recently, actions such as job-embeddedness and the use of job applicant's' bio- data, have caught the attention of leaders and researchers as possible solutions to reduce job turnover intentions in organizations (Breaugh, 2014; Heritage & Gilbert, 2016).

Literature Review Related to Key Variables and/or Constructs

Job Turnover Intentions

Job turnover intention is the probability that an individual will leave an organization, usually in a voluntary manner (Mobley et al., 1978; Heritage, et al. (2016). Predicting turnover intentions in organizations has recently attracted the attention of researchers. Whereas Breaugh (2014), noted the significance of applicant's bio data, Heritage et al. (2016), advocated for the use of job embeddedness for reducing voluntary job turnover and turnover intentions among employees. Breaugh (2014), provided evidence on the use of job applicants' biodata and other information about applicants that could be used to predict voluntary turnover in organizations.

Results from a simple correlational analysis and logistic regression analysis demonstrated that first time applicants were more likely to quit their jobs than applicants who had previously applied for jobs (Breaugh, 2014). Likewise, applicants that

submitted their personal history information had lower rates of voluntary turnover than applicants that chose not to submit their personal history information (Breaugh, 2014). The researcher also found that voluntary job turnover rate was 33.3 % among applicants who were already employed, whereas applicants that were unemployed had a 66.7 % voluntary turnover rate (Breaugh, 2014).

Further, applicants chosen through employee referrals had a lower turnover rate than applicants that were not referred by employees. Breaugh noted that at the end of 240 days period that voluntary turnover rate for employee referrals was 31.8 %, whereas non- referrals turnover rate was 53.4%. However, the researcher did not find a correlation between commuting distance and voluntary turnover. The researcher recognized the relatively short distance of only seven miles travelled by participants as a limitation in the study and suggested future studies to examine commuting cost and time (Breaugh, 2014). Although this study involved customer service agents for a large call center, it provided a gap for studying teachers' commuting stress. It also offers a useful model for identifying teachers that are prone to develop turnover intentions and quit their jobs easily.

In addition, examining applicants' biodata information is one pre- hire strategy that may prove effective in reducing the cost associated with voluntary turnover intentions and actual turnover in organizations (Breaugh, 2014). Although examining applicants' biodata could become an effective strategy for reducing the cost associated with turnover intentions and actual turnover, other researchers have noted the importance of implementing job embeddedness in organizations, and also using person organization

– fit strategies (Heritage et al., 2016). Studies are indicating that these practices are reducing job turnover intentions that eventually lead to actual job turnover in organizations (Heritage et al., 2016; Holton, Smith, Lindsay, and Burton, 2014).

In a longitudinal survey study, Holton et al. (2014), noted the importance of job attitudes and job embeddedness in predicting job turnover. Job embeddedness involves the direct influences that employers use to connect employees to their jobs so employees will have good reasons to remain committed to their organizations (Holton et al., 2014). These may include wages, holiday incentives and opportunities for career advancement (Holton et al., 2014). Holton et al. maintained that job embeddedness involves three components, namely person - organization fit or person – group fit. Results from the study supported earlier studies that encourage hiring people based on their compatibility with the organization. Person organization fit involves both values and goals congruence where employers hire individuals based on their value congruence and individuals select the jobs they want on that same basis (Holton et al.,2014).

The second component in job embeddedness involves person – organization informal connections. Person- organization informal connections involve connections between individual and other employees (Heritage et al., 2017; Holton et al., 2014). The third component involves perceived loss. Perceived loss involves an individual's perceived loss of benefits that will occur after the employee leaves an organization (Holton et al., 2014). Results from the study demonstrated that job embeddedness was negatively correlated to job turnover and that and job satisfaction was significantly negatively related to turnover in the military (Heritage et al., 2017). The results also

showed that person – organization fit was negatively related to job turnover in the military (Holton et al., 2014).

Similarly, Heritage et al. (2017), noted that employers can reduce the cost associated with job turnover and turnover intentions by taking specific steps to integrate new hires in an organization. Heritage et al. noted that providing transparent job descriptions, promising awards and responsibilities during the recruitment process enhances job- embeddedness in an organization. The study indicated that encouraging new hires to get involved in professional societies, social clubs, and research groups, may help to reduce turnover intentions in organizations (Heritage et al., 2017). The researchers maintained that although job embeddedness was a significant determinant of job turnover intentions, this strategy should not replace other already established determinants of turnover intentions such as job satisfaction and burnout (Heritage et al., 2014).

Although these studies were conducted among university employees and members of the military, they provide a useful model for examining the potential benefits of implementing job embeddedness strategies in the teaching profession to reduce the cost associated with turnover intentions. While some researchers have focused on strategies in job embeddedness to reduce turnover intentions, Mai et al. (2016), and Luu (2016), studied the role of psychological contracts. These researchers have found that psychological contracts can influence the way employees behave even before they develop turnover intentions.

Researchers examining determinants of turnover intentions and job turnover have noted that psychological contracts involve the perceptions employees hold about the reciprocal obligations between themselves and the organization (Mai et al., 2016; Luu, 2016). According to Mai et al. and Luu, psychological contracts also involve a sense of mutual binding that influence employees to develop trust and a willingness to do more than what is required through formal contracts. Luu also examined psychological contracts on knowledge sharing in theater companies. The study examined corporate social responsibility as an antecedent, and entrepreneurial orientations as a moderator between the relationship between psychological contracts and knowledge sharing.

Luu (2016), noted that corporate social responsibility is the degree to which an organization benefits and also contributes to society while adhering to ethical or responsible conduct in treating each stakeholder of the company. According to Luu, companies adhering to ethical corporate social responsibility treat their employees in ways that create reciprocity in employee relationship to their employers. In these companies the employers infuse the meaning of social exchange into their psychological contract duties to their employees that go beyond economic or contractual exchanges thus influencing employee loyalty and commitment (Luu, 2016).

Luu (2016), then posited that in companies that foster entrepreneurial orientations, leaders will support creative solutions, innovativeness, experimentation, and novelty when pursuing a competitive advantage. As hypnotized, Luu found that ethical corporate social responsibility positively relates to psychological contracts, while legal and economic corporate social responsibility that confines employees to formal and

calculative exchange terms, were negatively related to psychological contracts. Further, the study revealed that entrepreneurial orientations moderated the relationship between psychological contracts and knowledge sharing (Luu, 2016).

Results indicated that in an organization that supports innovativeness, individuals that perceive psychological contracts often exhibit stronger social exchange such as knowledge and skills sharing (Luu, 2016). Luu noted that these individuals were more committed and willing to share and pass on their performance skills to others, thus building up the company. Although the research had examined members of a theater company, this model can have significant implications for leaders of educational institutions that seek to reduce turnover intentions that often translate to actual turnover. Leaders of educational institutions can use this model to encourage knowledge sharing among teachers. By using this model, teachers can share their knowledge and expertise with inexperienced teachers who may develop turnover intentions due to lack of experience and expertise (see Luu, 2016).

Similarly, Mai et al. (2016), examined the effects of turnover intentions on organizational citizenship behaviors and deviance behaviors in organizations. Unlike Luu (2016), Mai et al. made a distinction between two types of psychological contracts. Mai et al. recognized that psychological contracts can either be relational or transactional. The researchers developed a model that depicted the effect of turnover intentions on employees' behaviors even before they leave an organization. The results demonstrated that employees who were already thinking about leaving an organization had weak

relational contract orientations (see Chovwen, Balogun, & Olowokere, 2014; Mai et al., 2014).

Relational contract orientations are long term and economic in nature and focus on long term obligations, loyalty, social, and economic support (Mai et al., 2014, Luu, 2014). Luu noted that employees with weak relational contracts would not exhibit long term loyalty and they often display little involvement in organizational citizenship behaviors. However, Mai et al. found these same employees had strong transactional contract orientations. Furthermore, transactional contract orientations involve short term monetary obligations with limited involvement by both parties (Mai et al., 2016). In these orientations, employees expect immediate compensation for their contributions (Mai et al., 2016; Luu, 2014). The researchers theorized that these behaviors are problematic because they lead to decreased organizational citizenship behaviors and deviant behaviors in organizations (Mai et al., 2016; Luu, 2014).

Lebert and Voorpostel (2016), examined voluntary turnover as a strategy to escape job insecurity in organizations. The study indicated that family factors did not influence turnover intentions and voluntary job turnover in women and men in the same way. Results demonstrated that men were more likely to quit their jobs when they experience job insecurity (Lebert & Voorpostel, 2016). However, women were less likely to quit their jobs especially when they had preschool aged children at home and their levels of economic hardship were low (Lebert & Voorpostel, 2016). In addition, Lebert and Voorpostel found that a family's economic hardship also influenced voluntary turnover in men but a partner's job insecurity would lower turnover intentions for

women. Although these results have implications for many employees, the researchers did not examine the effects of these variables on employees within the teaching profession. This gap offered the opportunity for further study as the results did not portray how teachers in different types of households would react in economic hardships.

Wong and Lashinger (2015), examined the influence of frontline manager job strain on burnout, commitment and turnover intentions. This cross-sectional study used the responses of 159 front line managers from 14 teaching hospitals in Canada as participants. Results from the study indicated that managers' job strain was positively related to burnout which also contributed to lower levels of organizational commitment and higher levels of turnover intentions (Wong & Lashinger, 2016). Whereas Mai, et al. (2016), reported organizational behaviors as tardiness, absenteeism, and poor work performance when employees develop turnover intentions. The results suggested that future researchers should use intervention studies to assess job strain and implement strategies and working conditions that support front line managers in their daily practice (Wong & Lashinger, 2016). Although the study did not examine teachers within K- 12 schools, this study also offered a useful model for investigating how working conditions in schools can support teacher job satisfaction and lower turnover intentions among teachers.

Tziner, Rabinu, Radomski, and Belkin (2015), studied the mediating role of burnout and job satisfaction on work stress and turnover intentions at the workplace. Although the study involved only hospital physicians, results may also have implications for teachers. Like Veldman, Admiral, Tartwijk, Mainhard, and Wubbels (2016) that

studied stress among teachers, Tziner et al. recognized that physicians endured many stressful conditions on the job. The study cited strenuous working conditions, too many patients and too little time to deal with each patient as predictors of turnover intentions (Tziner et al., 2016). Long hours, unreasonable working conditions, night shifts, and loss of autonomy were other conditions that affected their job satisfaction and turnover intentions (Tziner et al., 2016).

Results from the study showed work stress was positively related to burnout. There was also a strong negative relationship between burnout and work satisfaction (Tziner, et al., 2016). Wong and Lashington (2015), identified lack of resources; work life imbalance, work overload, and the inability to give effective care to patients as the greatest predictors of job turnover intentions among frontline health care managers. Nevertheless, results indicated that teachers and physicians reacted differently to job satisfaction (Wong & Lashington, 2015). The results indicated that unlike teacher job satisfaction that relates to turnover intentions, physicians' job satisfaction was negatively related to turnover intentions (Tziner et al., 2016).

Consequences of Turnover Intentions

Turnover intention is an employee's willingness to leave a current workplace in a voluntary manner (Aponsah – Tawiah et al., 2016; Tziner et al., 2015). Researchers have noted the significant financial losses in organizations when employees develop turnover intentions and then eventually quit their jobs Mai, et al.,2016; Wong, & Lanchington, 2015). In some companies, actual job turnover within four years has reached over 40 percent (Wong & Lashinger, 2016).

Recent studies have indicated that some companies are spending thousands of dollars in attracting, recruiting, selecting, and training new hires to deal with turnover issues (Lebert & Voorpostel, 2016). Whereas Mai et al., (2016) recognized increased accident rates and poor customer service in some organizations as some of the consequences of turnover intentions and turnover. Veldman et al. (2016) noted loss of knowledge and skills when employees voluntarily leave their jobs.

Understanding Teacher Turnover Intentions

Teacher turnover intention is a worldwide growing problem that often leads to high cost of replacing teachers when they actually leave their jobs (Aldridge & Frazer, 2016; Skaalvik & Skaalvik, 2016). Hertzberg's motivation – hygiene theory provides a lens through which analyzing and understanding what pushes teachers out of the profession and what pulls them away from the profession. Mulei, Waita, Mueni, Mutune, Kalai, and Mulei (2016), contended that both push and pull factors are responsible for the decisions that employees make towards exiting the classroom.

Some factors that push teachers' out of the profession include lack of autonomy, heavy work load, and lack of support (see Mai et al, 2016). Whereas, factors such as attractive salary and benefits, opportunities for career advancement are pull factors in other companies that pull teachers away from their profession (Mulei et al., 2016). (Mai et al. noted that turnover intention represents the high cognitive shift employees make when they start detaching from an organization. Turnover intention occurs sometimes from changes within the organization, task performance evaluations, stressful work environment, and work overload (Aponsah- Tawiah, Annor & Arthur, 2016). However,

the intentions to quit often depend on whether job satisfaction levels decline or improve (Aldridge & Fraser, 2016; Skaalvik & Skaalvik, 2016). In the teaching profession, Aldridge and Frazer (2016), and Ghavifekr and Pillai (2016) and Skaalvik and Skaalvik (2016), found job satisfaction is a crucial factor that influences teacher turnover intentions.

Literature surrounding teacher turnover intentions and teacher retention suggests that there are numerous reasons that influence teachers to leave their jobs. Studies conducted by Heikonen, Pietarinen, Pyhallok, Toon and Soini (2017), Reeves, Pun, and Chung (2017), Reiser, Murphy, and McCarthy (2016), Makela, Hirvensalo, Laakso, and Whipp (2014), and (Veldman et al., 2016), showed that turnover intentions often lead to voluntary transitions to other schools, retirement, or other career options. Makela et al. (2014), investigated reasons behind the high levels of turnover among Physical Education teachers. Veldman et al, 2016) and Makela et al. recognized teacher turnover as a major problem that represents instability in teaching.

Unlike other researchers, Makela et al. (2014), divided teacher turnover into three distinct components, namely teacher attrition, area transfer, and migration. From the 230 samples in the study, Makela et al. found that 23% of physical education teachers moved out of teaching Physical Education within 10 years, while 13% left the profession. The study cited workload, respect, rewards, colleagues, working conditions, pupils, and administration as reasons for teachers to leave the profession (Makela et al.2014). Makela et al., and Wong and Lashington, 2015), then noted that understanding how these

conditions in the working environment contribute to job satisfaction can help to decrease turnover among teachers.

Heikonen et al. (2017), noted the high level of early career teachers that leave the teaching profession. However, in their study, Heikonen et al examined the interrelations between turnover intentions of early career teachers and their perceived inadequacy in student teacher interaction and turnover intentions. From 284 participants, only 98 or 35% of teachers reported turnover intentions (Heikonen et al., 2017). The in-service teachers' data was analyzed by structural equation modeling. The structural equation modelling demonstrated a negative relationship between early career teacher's sense of professional agency and turnover intention, that was completely mediated by teacher perceived inadequacy in teacher student interaction (Heikonen et al, 2017).

Heikonen et al. (2017) asserted that early career teachers' insufficient experiences in solving socially, pedagogically, and challenging student problems have a significant effect on their capacity for active reflection and transformation of knowledge. Heikonen et al further contended that early career teacher turnover intentions do not always begin at the workplace but rather from problematic experiences in teacher education and during in-service teaching when they perceive themselves as teachers. Although teacher's turnover intentions do not always lead to actual turnover, Heikonen et al., then realized that these intentions may affect teachers' efforts and their effectiveness.

In addition, the stress associated with the need for accountability in education and merit pay have attracted the attention of researchers. Reiser et al. (2016), noted that it is the teacher's perception of imbalance between resources and demands that increases the

vulnerability to stress, burnout and job dissatisfaction. While examining the role of stress prevention and mindfulness technique for reducing stress among teachers, Reiser, Murphy, and McCarthy (2016), recognized that job demands such as large class size, classroom management, student discipline, changes in education policy, and the need for increased accountability in schools have led to increased stress, lower job satisfaction, and more turnover intentions among teachers.

In contrast, Sun, Saultz, and Ye (2017), did not support the claim that the pressure for more school accountability influenced turnover and turnover intention in schools, but noted that results were inconclusive. Sun et al. found a null effect of No Child Left Behind policy (NCLB) accountability on voluntary turnover in schools or in cases where teachers voluntarily transfer between schools. Results also indicated a negative relationship between the need for accountability and involuntary teacher turnover. Sun et al. also noted that the No Child Left Behind act reduced the involuntary teacher turnover rates in schools. However, other studies are indicating that teacher turnover intentions often result from teachers' perceived level of job satisfaction (Aldridge and Frazer, 2016).

Teacher Job Satisfaction and Hertzberg's Motivation–Hygiene Theory

Job satisfaction plays a significant role in an individual's desire to quit or remain committed to a job (Aldridge & Frazer, 2016; Skaalvik & Skaalvik, 2017; Tziner, Rabinu, Radomski, & Belkin, 2015). As a multifaceted construct, job satisfaction has its root in the work of Herzberg et al. (1965), but has also attracted the attention of numerous other researchers (Aldridge and Fraser, 2016). Some researchers have defined job

satisfaction as the negative or positive evaluative judgments that people make about their jobs (Aldridge & Fraser, 2016; Reeves et al., 2017; Veldman, Admiral, Tartwijk, Mainhard, & Wubbels, 2016).

Ghavifekr and Pillai (2016) defined job satisfaction as a multidimensional phenomenon that is influenced by external and internal factors. Other researchers have defined job satisfaction as employees' affective or cognitive evaluation of their jobs (Aponsah-Tawiah et al., 2016; Vahasantanen, 2015). This may include the individual's thoughts and feelings about different aspects of the job. However, Skaalvik and Skaalvik (2017), defined job satisfaction as employees' affective reactions to their work. Though these definitions have similarities, for the purpose of this research, job satisfaction is the positive or pleasurable feelings that teachers achieve from their jobs.

Some researchers have operationalized job satisfaction from two different approaches. In the facet approach, job satisfaction focuses on how employees evaluate certain aspects of their jobs (Tziner et al., 2015). This may include wages, opportunities for promotion, training, incentives, holidays, and their supervisors. Whereas in the global approach, researchers focus on the employee's overall negative or positive evaluation of a job (Tziner et al., 2015; Randi et al., 2015; Aponsah- Tawiah et al., 2016). Nevertheless, Ghavifekr and Pillai (2016), and, Ryan, Embse, Prendergast, Saeki, Segool, and Schewing (2017), argued that factors such as work, environment, responsibility, and rewards relating to job satisfaction differ in industries. Therefore, understanding Hertzberg's theory on intrinsic and extrinsic motivation is relevant for this study.

Fong (2015), then found that several of Hertzberg's motivational factors may increase job satisfaction among teachers. Fong listed growth, advancement, responsibility, work and recognition from Hertzberg's motivational factors that could increase teachers' job satisfaction and desire to remain committed to their jobs. Nevertheless, Fong posited that teachers will experience dissatisfaction whenever there is an absence of Hertzberg's hygiene factors such as status, job security, collegial interaction and salary. These studies demonstrate a non- linear relationship between employee satisfaction and dissatisfaction. Although an increase exists in one factor, an adversely corresponding effect may not occur on the other (Fong, 2015).

Additionally, job satisfaction involves the feelings that individuals have towards their jobs. These feelings can either be bad or good feeling (Lu & Gursoy, 2016). Skaalvik and Skaalvik (2017), noted that organizations that support their employees will benefit from their employees, as support increases employees' motivation, performance and commitment. Lu and Gursoy (2016) contended that employees' decision on whether to remain committed to an organization or exit an organization, depends on the level of job satisfaction they experience.

Nevertheless, Boccuzzo, Fabbris and Pacagnella, 2015), recognized that job satisfaction is complex and depends on the expectations of the employee. Hertzberg's Motivation – Hygiene Theory is relevant for understanding teachers' job satisfaction and the decisions they make. Hertzberg, et al. (1965), developed this theory for the purpose of understanding and explaining employees' satisfaction with their companies. Hertzberg et al. posited that employee satisfaction is influenced by the intrinsic factors that

motivate the employee. Li, Sheldon and Liu (2015) suggested that an employee's interest and enjoyment in their work stimulates their intrinsic motivation.

Intrinsic Job Satisfaction

Intrinsic job satisfaction is usually influenced by employee's need to self-realization, self-actualization, recognition and reward, advancement, the work itself and responsibility. Hertzberg (1965), contended that the satisfaction employees feel are influenced by factors that motivate their performance. Likewise, Zwickel et al. (2016), and Knight and Kleiner (2015), suggested that intrinsic motivation plays a key role in employees' desire to quit their jobs. Subsequently, intrinsic job satisfaction influences employees' decision to remain committed to an organization or quit working for that organization (Hertzberg, 1965). Hertzberg et al., (1959) posited that the opposite of job satisfaction is dissatisfaction. Unfortunately, some organizations suffer from poor employee performance when management fail to pay attention to the work environment and manage employees' job satisfaction (Ghavifekr & Pillai, 2016; Imran, Arif, Cheema, & Azeem, 2014, Reeves et al., 2017; Veldman et al, 2016).

Work. Factors relating to job satisfaction in teaching usually differ from other industries (Ryan et al., (2017). For example, Ryan et al. and Ghavifekr and Pillai (2016), argued that in comparison to other industries, teachers have more difficult jobs that involve higher levels of emotional labor and other job demands that produce significant stress and influence on job satisfaction. Ryan et al. examined the role of teacher stress and educational accountability policies on turnover intentions. From data collected from 1866 teachers across the country, the results demonstrated that state - specific

accountability predicted high rates of stress, teacher burnout, test stress, and teacher turnover intentions.

Nevertheless, results showed that teachers with more experience exhibited lower levels of teacher migration between schools. Ryan et al. (2017) also contended that factors relating to merit pay have reduced the levels of teacher job satisfaction. Likewise, performance evaluations, tenure decisions, and test-based accountability in performance evaluations are factors that contributes to teachers' stress, reduced levels of job satisfaction, and the decisions teachers make regarding job turnover (Ryan et al., 2017). Likewise, Ghavifekr and Pillai (2016), and Embse, Prendergast, Segool, and Schewing (2017), found federal level and state level changes in educational accountability policies have significantly influenced teacher stress level and job satisfaction.

Responsibility. Furthermore, Ghavifekr and Pillai (2016) maintained that teachers were fairly satisfied with their jobs and that responsibility factors were the biggest contributors to their job satisfaction. Ghavifekr and Pillai divided teacher responsibility in three aspects, namely accountability for work, responsibility for the teacher to make and uphold relationships with teachers and students, and also responsibility to participate and uphold school policies. Researchers noted that employees demand responsibility and usually feel more responsible in an environment where their managers empower them to make decisions and complete tasks (Lyon, 2016; Onkila, 2015).

Lyon posited the importance of delegation of authority for building employee satisfaction and commitment. Delegation of authority involves sharing of power between

supervisors and managers with employees (Lyon, 2016). Ghavifekr and Pillai noted that encouraging a positive and open climate with professional teachers' behavior has influenced high levels of job satisfaction among the participants in the study. Although this study was conducted among teachers in Malaysia, results from the study can have significant implications for schools that are experiencing high levels of teacher turnover in this country (Ghavifekr & Pillai, 2016).

Results indicated the necessity for school administrators to provide positive organizational climate and enhancing job satisfaction among teachers (Ghavifekr & Pillai, 2016). Likewise, empowering workers to complete tasks influences responsibility. Onkila (2015), noted that employees demand responsibility as responsibility can influence the external satisfaction of workers. Lions (2016) then posited that delegating authority to employees gives them the opportunity to build employees' skills in working with others in the company.

Opportunities for advancement. Nevertheless, factors relating to opportunities for advancement, promotion in pay, title and status, influence teachers' job satisfaction and their commitment towards remaining in the teaching profession (Ghavifekr & Pillai, 2016; Reeves et al., 2017). Ghavifekr and Pillai, also noted the importance of having a part in school wide decisions increases teacher morale and add to their job satisfaction. Additionally, Parsa, Idris, Samah, and Wahat (2014), recognized that employees usually reap rewards in their jobs when they invest in their education. Parsa et al., (2014), maintained that learning new skills and certifications empowers the employee to advance in organizations.

Recognition and awards. High levels of teacher job satisfaction occur when teachers receive awards of recognition for the work they perform (see Ghavifekr & Pillai (2016). Ghavifekr and Pillai contended that encouraging teachers to pursue advance degrees adds to their levels of job satisfaction. Also, employees expect regular recognition for their achievement. Researchers noted that recognition is one of the strongest motivating factors in organizations (Ghavifekr & Pillai, 2016).

Zwickel et al., (2016), and Knight and Kleiner (2015), suggested that employee recognition, whether verbal or handwritten, can be meaningful to the employee. Zeb, Jamal, and Ali (2015), likewise found teachers are motivated and experienced increased job satisfaction when they receive recognition and rewards for their contribution and also for the jobs they perform. Additionally, Knight and Kleiner identified motivation, sense of pride, and satisfaction when teachers are recognized for their work. Altogether, studies by these researchers lend credence to the Hertzberg's motivation – hygiene factor theory that suggested that the satisfaction and enjoyment employees get out of their jobs will stimulate their intrinsic motivation.

Extrinsic Job Satisfaction

Extrinsic job satisfaction includes working conditions. According to Gelard and Rezaei (2015), and Wilson (2015), extrinsic job satisfaction includes Hertzberg's hygiene factors such as working conditions, salary and benefits, supervision and job security. Gelard and Rezaei supported Hertzberg's theory by suggesting that an employee's job satisfaction is also influenced by the environment. These factors often cause the employees to seek jobs in environments where they feel safe and happy.

Working conditions. Several studies have indicated a link between employee job satisfaction and working conditions. For example, Raziq and Maulabakhsh (2015), Zeb et al. (2015), found that working environment and working conditions are positively related to employee motivation and employee job satisfaction. Raziq and Maulabakhsh (2015), found an increase in performance when employees feel that their environments are suitable and safe. Furthermore, companies that have allowed employees to set their own schedules have reported more employee job satisfaction (Knight & Kleiner, 2015). Likewise, companies that gave employees the choice of working from homes in remote areas have reported increased job satisfaction and increased productivity (Knight & Kleiner, 2015).

Knight and Kleiner (2015), suggested that allowing employees to work from home in remote areas reduces the stress associated with travelling, thus increasing productivity and also increasing job satisfaction. Ghavifekr and Pillai (2016), reported school environment, supervisors' feedback, interpersonal relationships, school goal structure, organizational climate, veteran teachers' experience, self-efficacy and school policy as other determinants of teacher job satisfaction. Findings from the study indicated a positive relationship between school organizational climate and teachers' job satisfaction (Ghavifekr & Pillai, 2016).

Organizational climate. Ghavifekr and Pillai (2016), studied the influence of organizational climate on job satisfaction. The study examined the relationship between school's organizational climate and teachers' job satisfaction in Malaysian schools. Results indicated that a significant positive relationship existed between school's

organizational climate and teachers' job satisfaction (Ghavifekr & Pillai, 2016). Interestingly, participants in the study reported that they were fairly satisfied with their jobs and cited responsibility as a factor that led to their job satisfaction (Ghavifekr & Pillai, 2016). The study did not indicate any differences in job satisfaction levels when comparing genders.

However, results showed significant differences in job satisfaction levels based on teachers' years of service. Ghavifekr and Pillai (2016), noted that policy makers and principals can increase teacher job satisfaction by creating a positive organizational climate by recognizing professional teachers' behavior factor as a valuable contributor. However, Ghavifekr and Pillai's study did not examine how factors outside of the school's environment contributed to teacher job satisfaction. Therefore, study by Ghavifekr and Pillai offered a useful model for examining how factors both within and outside of the schools' environment could enhance job satisfaction among teachers.

Supervision. Supervision involves the amount of control and regulation provided by administration (Kula & Guler, 2014; Mathieu & Babiak (2016). The absence or inadequate level of supervisory support can decrease the level of job satisfaction an employee feels, whereas adequate supervisory support increases job satisfaction (Kula & Guler, 2014). Ghavifekr & Pillai (2016), noted that within the school context, supervision is an influential factor in teacher job satisfaction. Ghavifekr and Pillai further classified supervision into two separate fields, namely feedback and policy. Usually, the timing, appropriateness, depth, and frequency of feedback can affect teacher job satisfaction. Ghavifekr and Pillai contended that when teachers feel that they receive the

support they need they feel a sense of importance from the feedback they receive and this can influence their level of job satisfaction. However, policy involves the procedures and rules that limit the teachers' freedom. Ghavifekr and Pillai then posited that policies and school procedures often contributed to dissatisfaction among teachers.

Salaries and benefits. Teachers' perceived equity and adequacy of monetary compensation for the work they perform influences the level of satisfaction they feel. This includes teachers' annual income and also financial recognition for their accomplishments (Wren, Berkowitz& Grant, 2014). However, Ghavifekr and Pillai (2016), found that dissatisfaction over pay usually occur among new teachers where pay increases according to tenure and academic qualifications. New teachers often feel the least satisfied as their pay scale is the lowest while they are doing the same task as other teachers (Ghavifekr & Pillai., 2016). Wren et al. (2014), also found that employees that are satisfied with their pay and benefits usually have lower intentions to leave their job. However, when they feel they are not been adequately compensated they feel dissatisfied. Ghavifekr and Pillai maintained that unsatisfactory pay scale influences job satisfaction. Nevertheless, even a positive or general level of benefits and salary is not sufficient for influencing a strong sense of teacher job satisfaction (Ghavifekr & Pallia, 2016).

Incentives. Studies are showing a positive relationship between incentives and job satisfaction (Knight & Kleiner, 2015). Providing incentives to employees increases employee job commitment and willingness to do extra work (Imran et al., 2014). Knight and Kleiner noted that although incentive do not have to be costly, employees feel motivated and willing to go an extra mile when their employers give them incentives.

Support. Aldridge and Frazer (2016), Gözükara & Çolakoğlu (2015), and Skaalvik and Skaalvik (2017), identified leadership, lack of resources, parental support, administrative support, and heavy workload as other factors that influence stress and job satisfaction among teachers. Skaalvik and Skaalvik noted that organizations that support their employees will benefit from their employees, as support increases employees' motivation, performance and commitment. Altogether, studies by Aldridge (2016), Skaalvik and Skaalvik (2017), Ghavifekr & Pillai, 2016), Reeves et al. (2016), and Veldman (2017), lend credence to Hertzberg's Motivation – Hygiene theory that posited that employees will experience job satisfaction in environments that satisfy their needs.

Job security. Employees' job satisfaction also depends on their feelings of job security (Ouyang, Sang, & Peng (2015). Job insecurity reduces the level of satisfaction an individual has (Zheng Diaz, Tang & Tang, 2014). Researchers found that in an organization that is undergoing restructuring and downsizing, employees often develop a sense of negative perception about the security of their jobs (Zheng et al., 2014). Zheng et al. found employees exhibit negative behaviors when they feel that their jobs are not secure. Nevertheless, other researchers are indicating that collaboration and autonomy are factors that influence teacher job satisfaction and retaining teachers (Reeves et al., 2015).

Teacher autonomy. Teacher autonomy is a desirable working condition that significantly influences teachers' professional status and their levels of job satisfaction (Skaalvik & Skaalvik, 2014; Vangrieken, Grosemans, Douchy, & Kryndt, 2017). Teachers' autonomy involves the degree of independence and authority to which teachers

work and make decisions (Chang & Anderson, 2015; Vangrieken et al., 2017). Autonomy also involves the teachers' freedom to schedule the pace of their work and determining how to accomplish their tasks (Skaalvik & Skaalvik, 2014). Teachers' autonomy involves creating their own innovative materials and using them. In their early work, Skaalvik and Skaalvik supported the use of teacher autonomy in schools for improving teacher job satisfaction. Skaalvik and Skaalvik (2014), found that when tested separately, both teacher autonomy and teacher self-efficacy were positively related to teacher engagement and job satisfaction. Although these researchers supported the use of teacher autonomy for improving teacher morale and job satisfaction, new directions in research are indicating a shift towards encouraging more collaboration among teachers (Reeves et al., 2017).

Teacher collaboration. The debate over teacher collaboration and teacher autonomy in schools for influencing student achievement and teacher satisfaction continues to attract the attention of several researchers. Whereas some researchers advocate for collaboration, Aldridge, and Frazier (2016), and Reeves et al. (2017), found collaboration produces different results in different cultures. Aldridge and Frazier found that in Japan, teachers are more accepting of collaboration and they also achieve more favorable results in students' achievement from collaboration. Furthermore, Japanese teachers also experience more job satisfaction from collaboration (Aldridge & Frazer, 2016).

Nevertheless, when working collaboratively in the United States, teachers experience higher student achievement but reduced levels of teacher job satisfaction

(Reeves et al., 2017; Aldridge & Frasier, 2016). Reeves et al. (2017), recognized that teachers in the United States value autonomy and often work in isolation. Furthermore, teachers in the United States are not comfortable commenting on their colleagues' work. They believe commenting and making suggestions on their colleagues' work will impede on their colleagues' autonomy, and that will lower their levels of job satisfaction (Aldridge & Frazier, 2016; Reeves et al., 2017).

Likewise, while examining the role of stress prevention and mindfulness technique for reducing stress among teachers, Reiser, Murphy, and McCarthy (2016), noted that job demands such as large class size, classroom management and student discipline, changes in education policy, and the need for increased accountability in schools have led to increased stress and lower job satisfaction among educators. Reiser et al. (2016), also noted that it is the teacher's perception of imbalance between resources and demands that increases the vulnerability to stress, burnout, and job dissatisfaction.

Teacher-student relationships. Veldman, Admiral, Tartwijk, Mainhard, and Wubbels (2016), studied the satisfaction achieved from the relationship between teacher and students. Veldman et al. examined the role of veteran teachers' job satisfaction as a function of personal demands and resources on the relationships with their students. Results from the study indicated a relationship between aspirations in teacher student relationships and teacher job satisfaction. Veldman et al. noted that teachers usually experience low job satisfaction whenever they fail to experience good teacher student relationships. However, whenever veteran teachers realized their aspirations in teacher student relationships their levels of job satisfaction increased (Veldman, et al.,2016).

Veldman et al. (2016), posited the importance of building relationships with student as one of the most influential attributes that leads to job satisfaction and a willingness to remain in the teaching profession. Likewise, Troesch and Bauer (2017), examined second career teachers' job satisfaction, job stress, and role of self-efficacy in comparison to first career teachers. Results from the study demonstrated that second career teachers experience higher levels of job satisfaction and low levels of job stress. Study by Troesch and Bauer indicated that second career teachers were more satisfied with their jobs than first career teachers.

Interestingly, Hertzberg's motivation- hygiene theory was also built on Maslow's (1943) hierarchy of needs theory of human motivation. In this theory, Maslow (1943), postulated that job satisfaction and job dissatisfaction are two completely independent considerations. Hertzberg's motivation- hygiene factors indicated that certain workplace factors in the schools' environment can influence teacher job satisfaction while other factors can cause dissatisfaction. This information should prove useful when determining what actions school administrators should take to reduce the high level of job turnover and turnover intentions among teachers.

Understanding Teacher Commuting Stress and Job Satisfaction

Stress is a situation in which an environment overwhelms an individual (Legrain Eluru, & El Geneidy, 2016; Reiser et al., 2016; Ryan el al., 2017). Researchers have defined teacher stress as feelings that teachers get when they perceive life's demands exceed their coping resources (Lazarus & Folkman, 1984). Later, Ryan et al. (2017), and Mai et al., 2016), noted that the stress affecting teachers has led to teacher absenteeism,

burnout, and attrition, and that teachers endure significant stress, both inside and outside of the work environment.

However, studies have indicated that not all stress is bad. Early research demonstrated that stress is the body's nonspecific response to any demand (see Selye, 1976). Selye (1976), contended that each individual has an alarm reaction, a stage reaction, and stage exhaustion, and that each individual has a limited amount of resources to control the stress they experience. Selye's Stress of Life theory maintained that heredity and a number of outside factors play a significant role in the way individuals adapt or respond to stress. Further, the feeling of stress is individualistic and each individual will not respond to the same stressor in the same way (see Selye, 1976).

Responding to stress is individualistic as stress motivates some individuals while other individuals get impaired health (Selye, 1976). For example, Aponsah- Tawiah et al. (2016), noted that chronic exposure to stress is positively related to impaired health and poor work performance. Likewise, Cutrona, Abraham, Russell, Beach, Gibbons, Monick and Philibert (2015), found stress increases the risk of type two diabetes mellitus. Whereas Tziner et al. (2015), realized that stress relates directly to burnout.

Researchers have defined commuting stress as a subjective psychological factor, that impacts the commuter's behaviors while they are appraising the environment and conditions of commuting (Aponsah- Tawiah et al., 2016; Legrain, Eluru & El-Geneidy, 2015). Legrain et al. (2015), also maintained that commuting stress has been linked to poor work performance, inability to focus and complete tasks, and shortened job tenure. Commuting to and from work represents one of the growing lists of stressors outside of

the working environment that affects employees (Aponsah- Tawiah, 2016; Lebert & Voorpostel, 2016).

Study by Olsson, Garling, Ettima, Friman, and Fujii (2013), showed that on average, commuters spend between 40 and 80 minutes or 4 % to 10% of their waking time commuting to work. Studies are also indicating that average commuting times are increasing due to traffic congestion (Aponsah- Tawiah 2016; Legrain et al., 2015). However, little is known about commuting stress and its relationship to teacher job satisfaction and turnover intentions. Further, Breaugh (2014), and Aponsah- Tawiah, noted some indirect evidences linking commuting stress to how individuals evaluate their jobs are worth exploring, as stress can impair employees' health and performance.

Recently, Legrain et al. (2015), indicated that commuting stress affects the way employees feel throughout the day. The study demonstrated that driving own vehicles to work produce more stress that taking other modes of transportation. In addition, different types of transportation modes produce their own type of stressor (Legrain et al., 2015). Legrain et al. and Brutus, Javadian, and Panaccio (2017), explored modes of commuting and also found that driving one's own car to work instead of taking public transit influences the most stress. Legrain et al. then theorized that when employees drive themselves to work instead of taking public transportation, they experience more stress because they had to budget their time to deal with adverse weather conditions and impediments along the way. The study, however, indicated that the mode used by commuters to get them to the bus terminals and train stations, and the waiting time also influence commuting stress (Legrain et al., 2015).

For pedestrians, Legrain et al. (2015), found satisfaction with time was not significantly associated with stress among pedestrians. However, the study showed that pedestrians did not feel safe with traffic and this was positively associated with stress. For drivers, Legrain et al. realized that low satisfaction with the time spent commuting to work was significantly associated with stress. Legrain et al. noted that time and predictability produce the most stress when compared to other modes of commuting. The study revealed that walking to transit station in comparison to driving to the station was negatively associated with stress. Further, using two modes of commuting instead of one mode was more stressful (Legrain et al., 2015).

In their study, Brutus, Javadian and Panaccio (2017), also supported findings from earlier studies by Sposato (2012), and Legrain et al (2015), that link commuting stress to modes of commuting. Brutus et al. (2017), found some modes of commuting influence more stress. However, study examining riding to work by Brutus et al., demonstrated different outcomes. The study indicated that cycling to work is linked to a number of advantages. Brutus et al. indicated that riding a bicycle to work at times can become more economical and influences the least amount of stress. Brutus et al. then theorized that the energy burnt during cycling and the endorphins released put the employee in a good mental state for the rest of the day and that could influence their job satisfaction.

Likewise, Loong, Lierop, and El- Geneidy (2015), supported the role of cycling to commuters increased energy levels at work or school. Results from study by Loong et al. indicated that cyclists have the highest odds of being energized and being punctual for work. Whereas drivers had the lowest odds of feeling energized and the highest odds of

arriving at work late (Loong, et al., 2015). In addition, commuters' satisfaction with travel mode was associated with higher odds of feeling energized and being punctual. Nevertheless, Loong et al. contended that mode of commute and weather conditions significantly influence commuters' energy level and their punctuality.

However, Gao, Rasouli, Timmermans, and Wang (2017) examined the effects of travelers' mood and personality on traveler's satisfaction. Results indicated that mood directly influences travel satisfaction. From random selection, the study included 1268 respondents in Xi'an, China. Gao et al. then contended that earlier studies on travel satisfaction might have been biased because they had ignored examining the influence of ones' personality and mood before and during their commuting experience.

Diab, Lierop, and El-Geneidy (2017), examined commuters' willingness to recommended transit. The study included 2014 users of transits in Montreal Canada. Results indicated that users' satisfaction with experience on board, waiting time, and travel time with a particular transit service increased their likelihood for them to recommend that transit service to their friends, coworkers or family members (Diab et al., 2017). Interestingly, commuters' willingness to continue using that same transit in the future did not correlate with their willingness to recommend the service to others (Diab et al., 2017).

These studies may have implications for some employees that are living in close proximity to their workplaces, especially where traffic safety is not an issue. However, for teachers that are living far distances from their workplaces, driving own cars to work or taking public transit is more ideal. As earlier stated, job satisfaction is the individuals'

affective or cognitive evaluation of their jobs (Aldridge & Frazer, 2016; Reeves et al., 2017; Veldman, et al., 2016). Job satisfaction involves the feelings and thoughts that employees have about different aspects of their jobs that may be influenced by factors both within the work environment and outside of the work environment (Fong, 2015).

Teacher Commuting Stress and Turnover intentions

Aponsah- Tawiah. et al (2016) provided evidence of commuting stress affecting employees. Results from the study demonstrated an indirect effect of commuting stress on turnover intentions. However, Aponsah – Tawiah et al. noted that burnout played a mediating role by significantly mediating the relationship between commuting stress and job satisfaction. Results from the study supported the hypothesis that burnout would mediate the effect of commuting stress on job satisfaction and turnover intentions (Aponsah- Tawiah et al., 2014).

Aponsah-Tawiah et al., (2016), found long term exposure to commuting stress negatively affects employees' health, performance, evaluation of their jobs and their intention to quit. Aponsah- Tawiah et al. posited the need for researchers to examine the effect of commuting stress on employees and also recommended a study that measures the cost of commuting. Aponsah- Tawiah et al. had examined employees within a university setting in Ghana, so results may not be applicable for teachers within K 12 schools in South Eastern United States. Further, this study did not indicate how the cost of commuting along with experiencing financial stress associated with living expenses would correlate with turnover intentions among teachers, thus providing the opportunity for further investigation.

One useful theory for understanding the influence that stressful commuting will have on teacher turnover intentions is Hobfoll's (1989) Conservation of Resources theory (COR). Given the fact that commuting to work requires affective, cognitive, and physical effort, this research contends that costly, difficult, or demanding commute will pose as potential threat to resources. In the Conservation of Resources theory, Hobfoll (1989), posited that when individuals experience resource loss, that they are more susceptible to future resource losses. Further, study by Aponsah- Tawiah et al. (2016), suggested that experiencing commuting stress may result in hostility, feeling of time pressure, anxiety, and frustration. Aponsah – Tawiah et al noted that these negative psychological feelings can affect an employee's job-related responsibilities and performance.

In addition, studies are indicating that employees feel overwhelmed and experience lower levels of work life when they have to struggle to meet job demands because of difficult commuting (Aponsah- Tawiah, 2016; Diab, Lierop, & El-Geneidy, 2017). Whereas, study by Stone and Schneider (2016), and Naess (2014), indicated that commuting episodes were rated high in stress and tiredness. The study also showed that commuting episodes were rated low in meaningfulness when compared with other activities in the day. Stone and Schneider noted that longer commute was weakly associated with increased stress and tiredness and that commuting is a low wellbeing experience.

Hobfoll (1989), contended that when employees face resource losses that the need to maintain resources will influence forces that prevent further losses. One way to reduce the threat that employees experience through commuting is to withdraw from their jobs.

Withdrawing from a job may be one solution that employees think of when they experience stress from commuting. Aponsah- Tawiah et al. (2016), noted that withdrawal from a job may be one coping mechanism in response to the stress associated with commuting. However, Aponsah- Tawiah et al. noted the scarce literature surrounding commuting stress and turnover intentions, but mentioned an earlier study by Novaco et al. (1990) that linked commuting satisfaction to job change. Studies indicated that when employees were not satisfied with their commuting experience that they would change their jobs within 18 months, indicating that they would rather quit their jobs instead of changing residence (Aponsah- Tawiah et al., 2016).

Triggers in the Theory of Motivation (Hagedorn's (2000), can also explain how events in life could influence job satisfaction. Hagedorn's theory explains how triggers such as financial difficulties and commuting stress that are either related or not related to the job, could affect job satisfaction. Hagedorn's theory also includes mediators. These mediators are included in Hertzberg's motivators and hygiene factors. Mediators are situations or variables that moderate the relationship between variables and produce interacting effects (Hagedorn, 2000). This theory should prove relevant for understanding how job satisfaction, financial stress, and commuting stress, are predictors of turnover intentions among teachers in South West Florida.

Financial Stress From Living Expenses and Turnover Intentions

Stress from living expenses involves concerns over the money used for paying for food, utilities, mortgage, rent, automobiles, health insurance, and life insurances (Hubler, Burr, Larzelere and Busby, 2015). Researchers have noted that concerns over the

inability to meet ones' financial obligations can become potent stressors (Barlett & Anderson, 2014; Montpetit, Knapp, & Bergeman, 2015; Sturgeon, Zaitra, & Okun, 2014; Walsh, Brown, & Gibson, 2016). Many individuals experience financial stress when the economy goes through prolonged economic downturn or at the loss of a job (Montpetit el al., 2015). Nevertheless, some individuals experience financial stress even when they have jobs. Reports from the United States Census Bureau (2018), indicated that many individuals are experiencing financial stress, as in 2016 there were 40.6 million people living in poverty.

Financial stress is defined as the feelings associated with the inability to meet ones' economic responsibilities (Gutierrez, Park, & Wright, 2017; Hubler, Burr, Larzelere, & Busby, 2016;). Financial stress involves the tension or pressure individuals experience from family, personal, and financial situations (Hubler et al., 2015; Hudson, Dwyer & Neilson, 2014; Montpetit et al., 2015). Nevertheless, studies are indicating that society's beliefs, attitudes, and other psychological factors influence financial stress (Hubler et al., 2016). Financial stress also occurs from an individual's perceived inadequacy at meeting financial obligations when financial resources are scarce or inadequate (Walsh et al., 2016; Gutierrez, 2017).

Adequate financial resources are important as they maintain stability in an individual's life (Sturgeon et al., 2017). Financial resources are needed to provide basic necessities in life such as housing, food, and medical care. However, the absence of adequate financial resources may affect an individual in a number of ways. Cutrona, Abraham, Russell, Beach, Gibbons, Gerrard, Monick, and Philibert (2014), identified

financial stress as a risk factor for many health disorders such as malnutrition, hypertension, diabetes, and inflammation in the blood stream.

Sturgeon et al. (2014), examined the associations between financial stress and interpersonal event: a diary study of middle-aged adults and their life circumstances. From a sample of 182 participants Sturgeon found a significant and positive relationship between daily negative interpersonal events and positive interpersonal events. Sturgeon et al. then posited that age-related factors often modify the effects of stressors. The study indicated that financial stress was related to both negative and positive interpersonal events which were significantly modified by employment status, parenting responsibilities, and income (Sturgeon et al., 2014).

The study demonstrated that employees experiencing financial stress were subject to changes in their interpersonal functioning (Sturgeon et al., 2014). Nevertheless, although this study has implications for some teachers, the sampling population only included middle aged adults. The sampling population did not include younger employees that also make up the teaching profession and who were subjected to job satisfaction and turnover intentions.

Individuals, however, have different coping mechanisms. Montpetit et al. (2016), noted that the factors that are responsible for the differences in the individual's appraisal and management of stress are environmental and genetic. Genetic factor includes an individual's dispositions, whereas environmental factors include the family and community in which the individual lives (Hubler et al., 2015; Montpetit et al., 2015).

Factors such as age, marital status, and income can make a difference in the ways in which financial stress affects individuals (see Mills, 2016; Montpetit et al., 2015).

Further, while studying the role of family determinants in dual earner couples' intentions, Lebert and Voorpostel (2017), found family factors such as financial stress and job insecurity influence turnover and turnover intentions differently for women and men. The study indicated that economic hardships usually influence men to voluntarily quit their jobs in order to find higher paying jobs. In addition, the study showed that women were less likely to quit their jobs when they experience stress during times of economic hardships (Lebert & Voorpostel, 2017; Mills, 2016).

Lebert and Voorpostel (2016) demonstrated that in comparison to women without children, women with young children that need daycare were less likely to give up their jobs. Women with children preferred to remain with their employers (Lebert & Voorpostel, 2016). Nevertheless, Lebert and Voorpostel's study did not examine how differently individuals in various sectors responded to economic hardships. Given that in comparison to other professions, teachers receive less income (Mai et al., 2016), this study creates a gap for further exploration to see how teachers would respond when they are faced with economic or financial stress.

Montpetit et al. (2015), provided evidence of financial stress affecting individuals. The study indicated financial concerns can pose as potential stressors and can negatively affect psychological wellbeing (Aldridge & Frazer, 2016; Mai et al., 2015; Skaalvik & Skaalvik, 2017). The study investigated whether neighborhood stress mediates the relationship between financial stress and psychological wellbeing, and whether social

integration would moderate the relationship neighborhood stress and psychological wellbeing (Montpetit et al., 2015). The researchers noted that results from the study were consistent with both hypotheses.

Further, the inability to meet one's financial obligations has several negative consequences. Studies are indicating that the stress associated with the inability to afford basic living expenses can become a threat to an individual's psychological and physical well-being, (Cutruna et al., 2014; Hubler et al., 2016). When this occurs, individuals may suffer from anxiety, depression, and frequent illnesses (Cutruna et al., 2014; Hubler et al., 2015; Montpetit et al., 2015). Lebert and Voorpostel (2016) also noted that when employees are faced with financial hardships, they are more likely to seek other career opportunities.

In addition, studies on African American women demonstrated that when individuals experience financial strain, that they were more likely to experience high levels of hemoglobin A1C that leads to diabetes (Cutruna et al., 2014). Cutruna et al. noted that financial stress is a psychological stressor that predicts higher levels of inflammatory marker when controlling for some known predictors of inflammation. Study results support the role of inflammatory factors in mediating the effects of psychosocial stressors on type 2 diabetes (Cutruna et al., 2014). Further, results from the study indicated that the association between financial strain and hemoglobin A1C is mediated by an inflammatory marker sil-6r.

Cutruna et al. (2014), maintained that inflammation is one mechanism through which psychosocial stressors such as financial stress increases the risk for diabetes.

Similarly, study by Lebert and Voorpostel (2016), found that financially stressed employees are more likely to suffer from frequent illnesses, display frequent absenteeism, tardiness, and theft from employer. Lebert and Voorpostel noted that some financially stressed employees are unable to contribute to retirement funds. In addition, some financially stressed employees also lose the ability to focus on their jobs and often make frequent mistakes that lead to low productivity in the workplace (Lebert & Voorpostel, 2016). The study also indicated that employees experiencing financial stress are usually forced to make decisions concerning place of residence, career options, transportation options, and childcare options (Lebert & Voorpostel, 2016). When this occurs, the new place of residence might force an individual to change jobs.

In their study, Gutierrez, Park, Bradley, and Wright (2017), examined how individuals react when they experience disappointments from the divine, and how religious struggle mediates the impact of financial stressors on psychological distress. The researchers noted that many individuals assume that religion provides solace, strength, and support to people when they are confronted with financial difficulties (Gutierrez et al., 2017). However, after using an intensive longitudinal data collected from 439 participants, the results indicated that acute financial stress had a direct effect on depression, whereas acute financial stressors did not have a direct effect (Gutierrez et al., 2017). The results also indicated that religious struggle with the divine mediated the effect of acute financial stressors on depression but not the effect of chronic financial stress on depression. Although researchers have found a positive link existing between financial stress and low productivity, existing literature suggest the need for additional

research on financial stress and job turnover intentions (Hubler et al., 2015; Montpetit et al., 2015).

One useful framework for conceptualizing the role of financial stress to job turnover intentions is Hobfoll's Conservation of Resources theory that postulates that when individuals sense that their resources are being threatened, that they will look for avenues to avoid the threat. Likewise, Framework of the Family Relatedness of Work Decisions, can explain the decisions individuals make when their resources are threatened (Greenhaus and Powell, 2006). In this framework, Greenhaus and Powel posited that individuals usually consider their family situations when they have to make career decisions.

The theory maintained that needs, demands, responsibilities, family members, societal preferences, and organizational demands are responsible for shaping individuals work domain decisions (Greenhaus & Powell, 2006). Based on this premise, the researcher assumes that when employees perceive that their earnings cannot adequately meet their financial obligations such as paying for rent, mortgage, student loans, utilities, and health care, that they will consider other career options. As a result, employees will start thinking about the possibility of finding better paid jobs to improve their financial status.

Teacher Financial Stress and Job Satisfaction

Financial stress among teachers is a real problem. Although literature on teacher financial stress is scarce, studies are indicating that inadequate teacher compensation is one factor that affects teachers' level of job satisfaction and their willingness to remain

committed to the teaching profession (Aldridge & Frazer, 2016; Ghavifekr, & Pillai, 2016; Lebert & Voorpostel, 2017; Skaalvik & Skaalvik, 2017). Like other professionals, teachers also have financial responsibilities. Responsibilities such as repaying student loans, mortgage, rent, monthly utility bills, car loans, insurance, health insurance, child care, and feeding their families (Aldridge & Frazer, 2016; Lebert & Voorpostel, 2017). Further, when compared to other professionals, teachers are known to receive much lower compensation for the work they perform (Aldridge & Frazer, 2016). While studies are indicating that increased salaries influence job satisfaction in other industries, studies are also indicating that inadequate teacher salaries are linked to low job satisfaction (Wren et al., 2014; Ghavifekr & Pillai, 2016).

Inadequate salary that causes a strain on teachers' ability to take care of their financial responsibilities can result in financial stress. When this occurs, teachers may develop feelings of inadequacy and dissatisfaction instead of being satisfied with their jobs (Ghavifekr & Pillai, 2016; Wren et al., 2014;). Reports from schools in South Eastern United States revealed that the base salary for a beginning teacher with a bachelor's degree is $40,000.00 (National Center for Education Statistics (NCES), 2019) Teachers with Master's degrees get a stipend of $2,500.00, teachers with Specialist degree get $4000.00 stipend while those with Doctoral degrees get $5,000.00 stipend. To date, teachers in this school district in the South Eastern United States have an average of 11.2 years of experience and approximately 35% of teachers have earned an advanced degree (NCES, 2019). Nevertheless, when compared to other states, teachers with similar qualifications and experience earned higher salaries (NCES, 2019). For example, in

New Jersey, a beginning teacher's salary is $44,872, while in Hawaii a beginning teacher earns $43,157 (Bureau of Labor and Statistics, 2018).

In addition, data from the Bureau of Labor and Statistics (2017), indicated that teachers with four-year teaching degrees earned at least 12% lower salaries than individuals in other skilled occupations with similar qualifications. Furthermore, due to the introduction of furlough days, budget constraints, and also the rate of inflation, teachers' salaries have declined, leaving them with less funds to take care of their financial responsibilities (Bureau of Labor and Statistics, 2017). This disparity in compensation can become a factor that affects the level of satisfaction teachers feel and may cause those teachers to develop the desire to go to states where compensation is greater.

Consequently, not only will teachers develop the desire to go to states where compensation is greater, but recent studies are indicating that many young working adults are returning home to live with parents due to escalating rent (see Bleemer, 2018; United States Census Bureau 2018; Vespa, 2017). Further, although the economy is improving and more jobs are available, millennials are choosing to live at their parental homes or with relatives because of high cost of living while having to repay student loan debts (United States Census Bureau, 2018; Vespa, 2017). For teachers, the inability to afford purchasing a home after investing in obtaining teaching degrees will be linked to feelings of inadequacy and a decrease in job satisfaction (Hobfoll, 1993).

One useful framework for understanding the role of financial stress to job satisfaction and turnover intentions among teachers is to understand the theory of

Conservation of Resources. In this theory, Hobfoll (1993), noted that individuals react to stress when they figure out that their resources are under threat. In this case, whenever teachers are stressed due to high mortgage rates, rent, food, and medical expenses, that they will search for other pathways to reduce their problems. Further, teachers do not remain young forever. Ortman, Velkoff, and Hogan (2014), noted that as the population ages, one out of every five Americans will be over the age of 65 years by the year 2050. These individuals will be subjected to economic and disaster losses and the stress of living on inadequate financial resources (Sturgeon et al., 2014; Walsh, Gibson & Brown, 2016). So, the thought of preparing for older age without having enough financial resources will influence worry among teachers (Walsh et al., 2016).

The Conservation of Resources theory (Hobfoll, 1993), provides a useful lens through which to understand why the threat of living on inadequate financial resources can become stressful for teachers. The South Eastern Region of the United States is prone to the threat of disasters such as hurricanes and flooding sometimes leave many individuals including teachers and their families homeless. According to the conservation of resources theory, in an event where resources are suddenly depleted an individual's coping ability becomes overtaxed (Hobfoll, & Lilly, 1993). In cases where individuals do not have the resources to recoup, that they are left vulnerable to post-traumatic symptoms (Hobfoll, 1993).

Further, Hobfoll's theory posited that the threat of a loss of resources provokes a stress reaction that in turn influences action to change the situation. As a result, teachers facing financial stress will continue to look for other avenues that offer better

compensation (Ghavifekr & Pillai, 2017; Wren et al., 2013). Because other industries compensate their employees for their individual talents and skills, teachers will be attracted to those industries. When skilled and experienced teachers exit the teaching profession for betted payed jobs, the result will have a lasting negative effect on schools (Knight & Kleiner, 2015; Raziq & Maulabakhsh, 2015).

Collectively, the review of these studies has significant implications for this study that seeks to provide answer for the major inferential research question, "To what extent does a combination of commuting stress, financial stress, and job satisfaction predict turnover intentions among teachers in the South Eastern United States?" The Conservation of Resources theory (Hobfoll, 1993), provides a useful lens through which to understand why the threat of living on inadequate financial resources, and stressful commuting, can influence turnover intentions among teachers in this region. By studying the relationships between these variables, leaders of educational institutions should become aware of the issues that affect teachers and be motivated towards making positive changes. By making positive changes to increase teacher job satisfaction, leaders of educational institutions will benefit from the reduction of the cost associated with turnover intentions that oftentimes lead to actual teacher turnover.

Summary and Conclusions

Chapter 2 introduces the ways in which teacher commuting stress, financial stress, and job satisfaction could predict teacher turnover intentions. Previous studies have extensively examined factors in the working environment that influence turnover intentions and turnover. Nevertheless, does financial stress associated with living

expenses influence teacher turnover intentions? How does the stress that is associated with commuting influence teacher turnover intentions? What are some intervention strategies that leaders can implement that can reduce teacher turnover intentions? Getting the answers to all of these questions might not occur in one study.

However, studying the relationships between these variables has the potential of helping teachers and educational institutions through increased awareness. Because little is known about other outside factors and how they influence teacher turnover intentions, this study extends the literature on job turnover intentions and the stress literature. Further, understanding the relationships between these variables could assist leaders of school districts and school administrators to spend less on strategies to recruit and train new teachers when experienced teachers develop turnover intentions and quit their jobs.

The review of professional literature included 120 peer reviewed sources which provides the foundation for the study. Chapter 3 will provide a description of the methods that the study will use to collect data from respondents. Chapter 3 will also give a description of the measuring instruments, data collection techniques and procedures, and data analysis techniques. Likewise, this chapter will explain the rationale for using the research design and the research method.

Chapter 3: Research Method

In this nonexperimental, correlational research study, I examined teacher turnover intentions. As researchers have noted, such intentions often translate to actual turnover in schools (Mai et al., 2016; Skaalvik & Skaalvik, 2017). This chapter includes the research design and rationale for this quantitative study. In addition, I outlined the study's procedures for data collection and data analysis. The procedure for securing participants, the managing of threats to validity, and ethical issues are also discussed.

Research Design and Rationale

Selecting the most appropriate method and design when investigating a problem is essential in studies. The three most widely used methods for conducting studies are quantitative, qualitative, and mixed methods (see Wholin & Aurum, 2015; Chu, 2015). Researchers often use qualitative methods when their aim is to understand specifics about the experiences of a population (Wholin & Aurum, 2015). Qualitative researchers rely on participants' experiences generated mainly through interviews, observations, and stories, making qualitative research more prone to personal interpretation and bias (see Chu, 2015; Fassinger & Marrow, 2013). In contrast, in quantitative studies researchers mostly collect data, then confirm or reject hypotheses, based on the general data that they collect (Frankfurt-Nachmias et al., 2015; Wholin & Aurum, 2015). To obtain answers for complex questions that require both quantitative and qualitative approaches, a mixed-methods approach is ideal (see Wholin & Aurum, 2015. This study involved deductive research only so a quantitative method was the most ideal choice. I chose this type of study because as a quantitative study, it allows the researcher to begin with a theory or

hypothesis (see Wohlen & Aurum, 2015). Furthermore, as a quantitative study, the researcher will conduct research to prove whether the hypothesis or theory is supported by specific evidence (see Wohlen & Aurum, 2015).

The purpose of this quantitative, correlational design study was to determine to what extent a combination of three independent variables--commuting stress, financial stress, along with job satisfaction, is a predictor of teacher turnover intentions. Research design refers to the ways in which researchers choose to answer different questions (see Chu, 2015; Wholin & Aurum, 2015). Four major nonexperimental research designs that quantitative researchers can choose from are surveys, causal comparative, descriptive, and correlational (Schoenherr et al., 2015). As the foundation of the study involved examining the relationships between variables, it aligned well with the tenets of correlational research design. The study also included self-reported surveys, which also aligned well with correlational studies (see Quratulain & Khan, 2015). Frankfurt-Nachmias et al. noted that correlational research involves testing relationships by collecting data or information from a specific population. Correlational research design studies do not involve manipulation or assigning participants to groups, interventions, or tests and, as such, are also nonexperimental (see Chu, 2015; Wholin & Aurum, 2015)

My research involved examining relationships between variables and making predictions. Therefore, quasi-experimental designs and experimental designs that involve the use of causation and random assignments of participants (see Chu, 2015; Wholin & Aurum, 2015) were not applicable for this study. In conducting a cross-sectional study, I collected data at one point in time. Cross-sectional studies allow the researcher to

compare several different variables at the same time (Schoenherr et al., 2015). By using a quantitative correlational design, I had the ability to identify the strength of the relationships that exist between predictor variables and criterion variable within a particular industry (see Chu, 2015; Wholin & Aurum, 2015).

Methodology

Population

The population for this study were teachers within the South Eastern United States. The study involved a purposive sample of 118 full-time teachers who had met the inclusionary criteria for the study. Frankfurt-Nachmias et al. (2015), and Wilson and Lipsey, 2001), noted that researchers use purposive sampling when they are sampling with a purpose in mind as they seek to involve one or more specifically predefined groups of individuals. Purposive sampling was effective for this study because the targeted sample of public-school teachers within South Eastern United States had met the inclusionary criteria and were readily available. The inclusionary criteria for participation were the following: (a) teachers must be full-time employees and (b) teachers must have worked within the South Eastern United States. Teachers who were substitutes or working in part-time positions were not included in the study. Likewise, principals, assistant principals, and school administrators were not invited to participate in the survey, as they might have had different levels of job satisfaction due to their responsibilities and nature of work (see Mai et al., 2016; Skaalvik & Skaalvik, 2014; Vangrieken, et al., 2017). The job of principals and assistant principals may also include implementing procedures that influence the duties of the teaching staff and their level of

job satisfaction (Mai et al., 2016; Vangrieken et al, 2017). According to Hanushek et al. (2015), full- time employees are considered to be the most appropriate population as they are more likely to have the information that is relevant for a study on teacher turnover intentions. Results from this study may prove worthwhile to improving teacher job satisfaction, reducing stress among teachers, and reducing the costs associated with voluntary turnover among teachers in this region.

Sampling and Sampling Procedures

Researchers have the option of using either a probabilistic or a nonprobabilistic method of sampling when conducting studies (see Creswell, 2018; Davies & Hughes, 2014; Roman, 2017). Types of probabilistic sampling methods include stratified, random, simple random, and cluster random (Creswell, 2018). I chose not to use a probabilistic sampling method because probabilistic sampling requires that the researcher have access to a compiled list of the study's population, which was not practical for this study (see Chu, 2015; Wholin & Aurum, 2015)

Types of nonprobability sampling include quota sampling, convenience sampling, purposive sampling, and snowball sampling (Creswell, 2018; Frankfort-Nachmias et al., 2015). I did not use a convenience sampling strategy because in this type of sampling participants usually enter the study based on their close proximity to the researcher (Creswell, 2018). Creswell noted that convenience sampling can be ineffective at times, as the researcher usually solicits the participation of individuals who are close, available, and willing to participate. Consequently, this might not be a good representation of the entire population (Frankfurt-Nachmias et al., 2015). Although quota sampling offers a

more flexible approach, the use of minimum quotas in quota sampling often leads to biased samples, Frankfurt Nachmias et al. (2015) noted.

I chose to include purposive sampling in this study because it is a type of nonprobability sampling technique that researchers often use when they target a particular group of individuals who can provide rich information for studies (Creswell, 2018; Frankfort-Nachmias et al., 2015; Davis & Hughes, 2014). Some social scientists value this type of sampling as responses from participants represent how the entire study population feels about a particular issue or phenomenon (Creswell, 2018; Davies & Hughes, 2014; Frankfort-Nachmias et al., 2015). Social scientists often use purposive sampling when it is difficult to precisely define a sampling population and when having a compiled list of all the individuals who are representative of the population is impossible (Creswell, 2018; Davies & Hughes, 2014). Additionally, purposive sampling is more appropriate when time and resources are limited (Creswell, 2018; Frankfurt- Nachmias & Nachmias, 2008).

Creswell (2018) noted that use of the purposive sampling technique can increase validity in studies because the researcher is sampling with a purpose in mind. In this type of sampling, participants are sought because they have first-hand knowledge and experiences of a phenomenon. These participants are able to provide rich information that is required to help the researcher to understand the phenomenon and answer research questions (Creswell, 2018; Frankfurt-Nachmias et al., 2015). Robinson (2014) recognized that the nonrandom approach in purposive sampling ensures that the survey will include the feedback obtained from a particular group of individuals. Further,

purposive sampling was effective for this study because the targeted population involved teachers in the South Eastern United States who met the inclusionary criteria and were also available and willing to participate in a voluntary manner. To meet the inclusionary criteria for this study, teachers needed to have worked (a) within public schools in the South Eastern United States, and (b) in full-time positions.

Creswell (2018) and Chen, Mao, & Liu (2016) recommended that researchers should ensure that sample sizes are attainable. Researchers should also allow sufficient time for data collection and other phases of the research process (Creswell, 2018). Some researchers prefer to the use of high statistical power because it reduces the chance of researcher bias (McNeish & Stapleton (2016). Faul, Erdfelder, Buchner & Lang (2009), recognized that using low statistical power makes it difficult for researchers to discriminate between the null hypotheses and the alternative hypotheses.

Likewise, low statistical power is also prone to the occurrence of researcher bias (Faul et al, 2007). Seaman, Seaman, & Allen (2015), noted that a study needs a statistical power between 80-90% to detect significant differences between variables. Furthermore, when conducting a power analysis, four items that are necessary are the significance threshold, the sample size, the effect size, and the population variance of effect (see Nuzzo, 2016). However, Nuzzo (2016), noted that of these four items, the researcher has the most control over the sample size.

Justification of sample size. Determining the minimum sample size to produce meaningful statistical results in a study requires conducting a power analysis. Bradley, and Brand (2013) and Cohen (1998) maintained that when conducting a power analysis,

that the researcher should have knowledge of power level, the alpha level, the effect size, and sample size for the study. Likewise, Acharya (et al., 2013), posited the need for researchers to consider sample sizes, sampling methodology, and response rates to achieve valid results. To calculate statistical power analysis within social and behavioral sciences, researchers often use the G* Power Analysis which was developed by (Faul et al., 2009). The G* Power 3 gives the researcher the option of using one of five types of power analyses. The *a priori* power analysis in G* Power is effective for calculating the sample size based on the population effect size, the significance level, and the power level (Faul et al, 2009).

Farrokhyar, Reddy, Poolman, & Bhandari (2013), and Soper (2017), recognized that by using an *a-priori* analysis, that the researcher can lower the risk of both the Type -1 error and the Type -11 error. Type-1 error involves rejecting the null hypothesis that should have been accepted, while Type-11 error involves accepting the null hypothesis when it should have been rejected (Farrkhyar et al., 2013; Soper, 2017). Cohen (1998), and Farrokhyar et al. (2013), recognized .80% power and 0.5% significance levels as the minimum accepted values in an a-priori power analysis.

As recommended by Soper (2017), and Cohen, I used .80% power level. Cohen, recommended a power level of .80% in studies, because using smaller values can lead to the risk of committing a Type 11 error, whereas using larger values can sometimes result in difficulties acquiring the required sample size. Soper noted that researchers in organizational research rarely use large effect sizes. Likewise, the use of medium effect

sample sizes is common in studies on job satisfaction and job turnover in organizations (Roman, 2017; Skelton, 2017).

By using G* Power to calculate the sample size, I had to set the power level, the alpha level, and the effect size (see Cohen, 1988; Seaman et al., 2015). I chose to use .05 because it the traditional level of significance that most researchers in the social sciences use (see Cohen 1988; Seaman et al., 2015). I set the power level at .80, as this level is effective when minimizing the risk of committing the type 11 error (Cohen, 1988; Seaman et al., 2015).

So, with an error probability level of 0.05, and a medium effect size set at (f = 0.15), calculations resulted in a minimum sample size of *N*=76 that will be required for this study (Soper, 2017). I chose to use the effect size index by Cohen (1988). This effect size index indicates .02 as small, .15 as medium, and .35 as large effect sizes for *f2* (multiple and multiple partial correlation) studies (Cohen, 1988). In similar study that tested job satisfaction and turnover intentions, Buttigieg and West (2013), included an $\alpha = .05$, medium effect size of (f = 0.15) and calculations resulted in a sample size of 76, thus making *N*=76 an acceptable sample size for this study.

However, to increase the sample size, using a power greater than .80 is recommended. From the literature, Seaman et al. (2015), recommended the use of high power in quantitative studies. Therefore, with

- Cohen's medium effect size of .15,
- power level of $1 - \beta = .95$, and
- the traditional alpha at $\alpha = .05$,

the minimum sample for a multiple linear regression study analysis is calculated at 118 participants (Farrokhyar et al., 2013). This calculation is consistent with recommendations by Seaman et al. (2015), VanVhoorhis and Morgan (2007), and Cohen (1988), who recommended that studies with correlational and regression analyses should have at least 50 samples, and that as the number of predictor variables increase, the number of samples should also increase. Therefore, this study required a minimum of 118 participants which is based off calculations involving three predictor variables in an *a-priori* evaluation of a multiple regression model in G*Power Analysis (Faul et al., 2009). However, from the 240 participants that responded to the survey, only 227 questionnaires were usable as some participants did not answer all the questions.

Procedures for Recruitment, Participation, and Data Collection

I drew a nonprobability sample or 227 participants from teachers within the South Eastern United States School District. By using Survey Monkey, an internet survey provider, data collection for this study involved a cross- sectional online survey. Frankfurt- Nahmias et al. (2015), noted that cross-sectional surveys are effective when the researcher wishes to collect data on a phenomenon only once instead of collecting data at several points in time. Further, cross-sectional studies also enable researchers to investigate a situation where assigning samples to an experimental or control group would be unethical (see Schoenherr et al.,2015).

I chose online data collection because of its many advantages. For example, regardless of participants' geographical location, a mobile device or computer and internet access can allow participants to complete surveys at any time (see Reuter and

Schaefer, 2016). Whereas, in-person data collection may prove inconvenient for both the participant and the data collector to meet at the same time and also at the same location (see Skelton, 2017; Roman, 2017). Some scholars noted that some populations do not have internet access (see Schoenherr et al., (2015). However, my population involved teachers within the South Eastern United States where completing the survey with mobile devices, computers, and internet access was not a major concern.

Further, Hollinger, Jann, & Dickmann (2016) and SurveyMonkey (2014), recognized level of anonymity experienced by participants as another advantage of completing surveys online. Having the intention to quit a job is a sensitive topic that most individuals do not want their employers to know about. However, by having access to online surveys, Wouters, Maesschalck, Peters, & Roosen (2014), maintained that employees are more willing to reveal more accurate responses because of the level of anonymity that online surveys offer. In addition, complete confidentiality might remain as a concern for some individuals when they complete surveys with online servers (see Skelton, 2017; Wouters et al., 2014).

To address this issue, I provided informed consent forms that participants had to read and understand before they could access the survey on line. The informed consent also explained the steps that I had taken to ensure anonymity and confidentiality of participants' data. To access the online survey through Survey Monkey, each participant acknowledged and agreed to informed consent by clicking on the link that took them to the survey. Participants also had the right to withdraw from the study at any time. I also

informed participants about their right to withdraw from the study at any time without facing penalties.

Some scholars prefer in-person data collection instead of online data collection. Shapka, Domene, Khan, and Yang (2016) and SurveyMonkey (2016), noted that the quality of both online and in-person data collection is the same. Likewise, Anderson and Titov (2014), recognized that obtaining significant results from collected data is also possible when researchers use online surveys. Schoenherr et al. (2015), recognized the use of providing prescreening questions to participants in online surveys as an advantage as this will help to determine participants' eligibility, and thus increases number of usable surveys. Furthermore, online surveys are more convenient and cost effective (Wang, Rothschild, Goel, & Gelman, 2015). Nevertheless, Schoenherr, et al. (2015), recognized that researchers are unable to tell whether participants are interested in the study and if they have read or fully understood survey questions. To address this issue, I asked each participant to read and fully understand the accompanying details about the survey before completing the questionnaire.

After securing approval from the Institutional Review Board at my university and the Board of Education for the school district in South Eastern United States, I then uploaded the survey into Survey Monkey. I then submitted the Letter of Invitation (see Appendix C) along with the Consent Form and the link to the survey, to the Director of Research and Accountability at the South Eastern United States. The Director then forwarded the Letters of Invitation, Consent Forms, and links to the surveys to the principals. The principals then forwarded the documents to the teachers in the targeted

schools. Participants had two weeks in which to complete and submit their responses. I did not conduct a pilot study since the survey instruments were already validated and used by other researchers.

Instrumentation and Operationalization of Constructs

Data collection instruments included the Turnover Intention Questionnaire by Cohen (1988), The Commuting Stress Measure by Aponsah- Tawiah et al. (2016), the Financial Strain Survey by Hetling, Stylianou, and Postmus (2015), and the Teaching Satisfaction Questionnaire by Ho and Au (2006).

Commuting Stress Scale. To measure teachers' commuting stress, that is the stress a commuter experiences as exhausting to his or her resources and wellbeing, I used the Commuting Stress Scale by Aponsah- Tawiah et al. (2016). The Commuting Stress Measure (CSM), is a reliable and validated instrument that has ten items. Items on this scale were scored on a five-point Likert type scale ranging from (1= strongly disagree, 2 = disagree, 3= neither agree nor disagree, 4= agree, to 5 = strongly agree).

This scale was appropriate for this study as items on the scale aligned well with the framework for my study that assessed commuters overall stressful experiences to and from work. Items on the scale are:

(1) It takes me longer than necessary to commute to work.

(2) It takes me longer than necessary to commute back home after work.

(3) I am unable to avoid heavy traffic on my way to work.

(4) I am unable to avoid heavy traffic on my way back home after work.

(5) I have to leave home earlier than I would like because of heavy traffic congestions.

(6) Traffic congestion is a frequent inconvenience.

(7) My journey to and from work is often interrupted by traffic signals.

(8) I am satisfied with my journey to and from work.

(9) My journey to and from work is unpleasant.

(10) I worry about my journey to and from work due to traffic accidents.

Previously, results from a study using this same instrument indicated that commuting stress was significantly correlated with burnout ($r = .28$, $p < .01$), and turnover intentions ($r = .15$), ($p < .05$) (Aponsah- Tawiah et al. 2016). In addition, commuting time was significantly correlated with commuting stress ($r = .35$, $p < .01$), and turnover intentions ($r = .40$, $p < .01$) (Aponsah- Tawiah et al., 2016). Aponsah- Tawiah et al. noted that validating the scale involved conducting exploratory factor analysis (EFA), since the scale was a combination of existing and newly created items. Furthermore, the CSM scale has a coefficient alpha reliability measure of .90, thus confirming its effectiveness to measure participants' experience with commuting stress.

Financial Strain Survey (FSS). To measure teacher financial stress, I used the Financial Strain Survey by Aldana and Liljenquist (1998). Hetling et al. (1998), defined financial stress as an individual's psychological response to economic or financial difficulties that create worry and anxiety over the inability to meet financial responsibilities. Validity and reliability of this 18-item instrument were already established by Aldana and Liljenquist (1998). Aldana and Liljenquist noted that high

levels of financial strain have been associated with many problems such as decreased self- esteem that often leads to depression and marital conflicts. Factors within the Financial Strain Scale have demonstrated that it is reliable and suitable for measuring financial stress of teachers. For instance, four out of five factors (relationships, physical, and credit card usage) from the scale had achieved .80 Cronbach's alpha and above where .70 to .95 are considered as acceptable inter item test reliability measures (Adana & Liljenquist, 1998). The developers noted that although the education factor had only achieved .62 Cronbach's alpha, retaining it on the scale was important as it was statistically reliable (Aldana & Liljenquist, 1998).

In a recent study, Hetling, Stylianos, and Postmus (2015), also used the Financial Strain Survey to measure financial strain in the lives of survivors of intimate partner violence. Hetling et al. assessed the internal consistency of the FSS by examining Cronbach's alpha coefficient and item total correlations of the total sub-scales for the five subscales. Hetling et al. noted that subscales demonstrated strong internal reliability with Physical Symptoms = .84, Poor Financial Education =.84, Poor Relations = .80, Financial Strain = .84, Unable to meet obligations = .82. Only Poor Credit Usage achieved .54. Hetling et al. (2015), theorized that low income and Hispanic women who had made up the sampling had very little or no experience with credit cards, and that might have resulted in the low score for credit card usage.

However, by using correlation analysis the study examined the concurrent validity of the FSS. Guided by Cohen's (1988) recommendations, Hetling et al. (2015), used the cutoff effect size of 0.3 for moderate practical importance, and 0.5 for crucial practical

importance. Hetling et al. then noted that the FSS was moderately negatively correlated with economic self-efficacy ($r = -.490$, $p<.001$) and Economic Self Sufficiency ($r = -.454$, $p<.001$) and moderately positively correlated with Difficulty with Income ($r= .435$, $p<.001$) (Hetling et al., 2015). The FSS Poor Financial Education Subscale achieved ($r=.743$, $p<01$) suggesting a strong positive correlation with the Unable to Meet Obligations Subscale.

I chose this instrument as it aligned well with the framework for assessing teachers' level of stress associated with living expenses. Hetling et al. (2015), noted that the FSS provides a scale that can be used by practitioners, advocates, and researchers when examining financial stress, and therefore does not require permission for its usage. The Financial Strain Survey consists of 18 Likert -type questions that asked participants to indicate their level of financial stress. Participants made responses by circling either 1= Never; 2 = Rarely; 3= Sometimes; 4= often; or 5= Always. Items on the scale consisted of statements relating to education, relationships, physical/ emotional wellbeing, credit card usage, and meeting obligations. Items were:

(1) I know how interest works on my current account.

(2) I feel financially educated.

(3) I feel well informed about financial matters.

(4) There are disagreements about money in my home

(5) I tend to argue with others about money

(6) My relationships with others are affected by my financial problems

(7) I am unable to sleep well because of financial worries.

(8) I get headaches from worrying over money matters.

(9) My muscles get tense when I add up my bills?

(10) My financial situation causes me to feel heartburn or an upset stomach.

(11) I pay my bills on time.

(12) I take on new debts to get nicer things.

(14) I get new credit card to get to pay off older ones.

(15) I make purchases on credit cards, hoping that I will have money later.

(16) I find it difficult to pay my bills

(17) Many of my bills are past due.

(18) I don't have enough money to pay my bills.

Teaching Satisfaction Scale (TSS). To measure teachers' job satisfaction, I used the TSS (Ho & Au, 2006). Teaching satisfaction is the fulfillment an employee finds in his or her job (Ho & Au, 2006). Ho and Au noted that the TSS was specifically designed for teachers, research, and educational purposes, and therefore did not require permission for its use. The scale has five items with anchors 1= strongly disagree to 5= strongly agree. The questions asked teachers how they felt about their jobs. Items on the scale are:

1. In most ways being a teacher is close to my ideal
2. My conditions of being a teacher are excellent
3. I am satisfied with being a teacher
4. So far, I have gotten the most important things I want to be a teacher
5. If I could choose again, I would change almost nothing.

Choosing this scale to measure teacher's job satisfaction was ideal for this study as the items on the scale aligned well with the purpose of this study. In addition, the TSS was found to correlate moderately with Warrs Job Satisfaction Scale (WJSS), and the Brayfield- Rothe Job Satisfaction Scale (BJSS). When compared to these scales, Ho and Au (2006), noted that TSS allowed teachers to arrive at a subjective judgement on job satisfaction from a variety of situational and psychological appraisals. Further, the TSS was ideal for this study as it had already demonstrated good internal reliabilities, criterion related validities, and construct validities.

Ho and Au (2006) noted that the scores on the TSS were validated on a sample of 202 secondary and elementary school teachers. On a two-week test-retest, the TSS, demonstrated adequate reliability coefficient of .76. Its Cronbach internal- consistency alpha coefficient was .77. Furthermore, its corrected item – total correlations for its five items were .56, .56, .63, and .34, suggesting a good internal consistency for its scores (Ho & Au, 2006).

To assess convergent validity of the TSS, scores were assessed through correlations with the Warrs Job Satisfaction Scale (WJSS) and the Brayfield- Rothe Job Satisfaction Scale (BRJSS). Ho & Au noted that TSS had correlated positively (a)with BRJSS (r= .50) and the (b) with WJSS (r = .47). Likewise, the TSS had also correlated positively with the three subscales of the WJSS Satisfaction with Employee Relations (r=.42), Intrinsic satisfaction (r =.42), and Extrinsic Satisfaction (r= .35).

In addition, the TSS had also demonstrated adequate Criterion-related validity with those on other scales such as the GHO, the SES, and the TSI. These scales had

demonstrated that teachers with lower job satisfaction were more likely to experience psychological distress (r = -.31). Further, the study showed that low teaching satisfaction was associated with more somatic symptoms (r = - 20), more anxiety and worry (r = -.33 and more depression (r= - .27) (Ho & Au, 2006). For psychological distress, Ho and Au noted that the results showed that teachers with lower levels of teaching satisfaction experienced poorer health, more anxiety, and depression symptoms. For teaching stress, Ho and Au noted that correlations were found between the TSS, and the TSI, but noted that teaching satisfaction was not associated with external pressure (r =-.015) and relationship with colleagues and students (r =.079). The study also demonstrated that teachers with high self-esteem experienced a higher level of teaching satisfaction (r = .22).

Job Turnover Intention Scale. Measuring turnover intentions--that is, the desire or intention an employee has to leave his or her current job (Cohen, 1988; Mobley, Horner, Hollingsworth, 1978) required use of the Job Turnover Intention Scale (Cohen, 1988). The Turnover Intentions Scale has three items that are based on the definition of Mobley et al. (1978). Cohen noted that the scale has three dimensions, namely the Job, the Organization, and the Occupation. Data from participants are collected when they indicate their agreement with the three items, namely, "As soon as it is possible, I will leave the organization," "I am actively searching for an alternative to this organization," and "As soon as it is possible, I will leave the organization." The same items are used in the other dimensions by replacing the term "organization" with "job" and "occupation." Items on the scale ranged from 1 (strongly agree) to 5 (strongly disagree), which

indicates that a higher score meant weaker turnover intentions. Other users of the scale include Miller, Katerberg, and Hulin (1979), and Michaels & Spector (1982), while measuring job turnover intentions among employees (see Cohen, 1988).

I chose to use this scale because job turnover intention is a multidimensional construct that affects an individual's attitude to the job, the occupation, and also to the organization (see Cohen, 1988). Furthermore, to date the scale has demonstrated acceptable reliability and validity scores. The resultant Cronbach's alpha was 0.94 for intentions to leave the organization, 0.89 for intentions to leave the job, and 0.92 for intentions to leave the occupation (Cohen, 1988). For this study, I used subscale "B" (Intentions to Leave the Job) that has a Cronbach's Alpha of .89. Items on this scale are:

1. I think about leaving the job.
2. I am actively searching for a job.
3. As soon as possible I will leave the job.

I used these three items to measure teacher turnover intentions because employees usually exhibit increased rates of turnover behavior when they have frequent thoughts of leaving an organization (see Cohen, 1988; Mobley et al., 1978). In addition, when employees are deciding to leave an organization they usually consider or explore the availability of other job alternatives, and lower rates of turnover intentions are associated with employees that are affectively committed to an organization (Cohen, 1998). Cohen noted that these questions are ideal for measuring the turnover intentions of employees as these intentions relate to searching for other job alternatives and intentions to quit.

The validity and reliability of the three-item Turnover Intention scale were already established by Cohen (1988), Yucel (2012), and Yin Fah et al. (2010), (see Buttigieg and West, 2013). While studying the relationship between commitment forms and work outcomes in Jewish and Arab Cultures, Cohen found that Arab nurses were more committed to remain with their organizations than Jewish nurses. Their commitment was also associated with their work behaviors and attitude to work (Cohen, 1988). Cohen's study had 283 Arab and Jewish nurses in three hospitals.

To date, this test has yielded .90 Cronbach's alpha and above in most studies where .70 to .95 are considered as acceptable inter item test reliability measures. Further, when measuring turnover intentions among different samples, other researchers have reported Cronbach's alpha within the range of .70 and .90 (see Cohen, 1988). Likewise, while examining 65, 142 health care workers on the effect of quality leadership on social support and job design, Buttigieg and West (2013), achieved Cronbach's alpha of .92 for the scale that measured turnover intentions. Buttigieg and West found a positive relationship existing between turnover intentions as the criterion variable and predictor variables. There was also a negative relationship between turnover intentions and job satisfaction, with $p < .01$, and $r = -.54$ (Buttigieg & West, 2013). Likewise, Chen et al. (2014) confirmed validity of this scale by demonstrating how it correlated with actual turnover among employees one year after they had completed the survey, thus confirming that this scale was suitable for this study. See Appendix D for documentation of permission to use the Job Turnover Intention Scale.

Data Analysis Plan

Pre-analysis data screening and cleaning procedures. Ensuring that data is clean before actual data analysis is important, otherwise, the interpretations I make during the data analysis process maybe flawed (Field, 2018; Frankfurt- Nachmias et al., 2015). The pre-analysis phase includes screening for missing and incomplete data, outliers, and near perfect correlations among variables, and violations of assumptions (Creswell, 2018, Frankfurt-Nachmias et al., 2015). Further, Reuter and Schaefer (2016), noted that some disadvantages associated with online surveys include the researcher's inability to answer questions that might arise during the survey, and also the researcher's inability to observe participants' behaviors.

To address this issue each participant completed an informed consent form. This consent form also outlined the importance of accurate responses and honesty. If participants were not willing to agree to these terms, they had the option of not participating in the survey without facing penalties. However, if they agree with the terms, I required all participants to answer all questions fully and truthfully. Nevertheless, regardless of reminders, Reuter and Schafer (2016), noted that some participants sometimes often deviate from answering questions truthfully and provide inaccurate and incomplete answers.

Improving the quality of the final data will require performing data screening and data cleaning procedures. Data cleaning involves identifying incomplete and inaccurate data (Creswell, 2018, Frankfurt-Nachmias et al., 2015). I began the screening process by first reviewing responses and looking out for incomplete surveys and those with missing

responses. Reuter and Schafer (2016), and Frankfurt Nachmias et al. (2015), also recommend omitting participants' results that dramatically skew the entire study.

Managing missing data. Researchers have various methods of managing missing data. Some scholars recommend identifying and omitting responses with incomplete and missing data during the data cleaning process. Field (2018), posited the need to replace missing data with plausible information. Replacing missing data can occur either by (a), using latent variable model to input data, (b) assuming that the data is distributed while applying reasonable standards before inputting data, or (c), using a model that is most applicable for categorical data. I followed recommendation from Reuter and Schafer (2016), and Creswell (2018), who recommended deleting responses that contain incomplete and missing data. Scholars noted that identifying and omitting responses with missing, incomplete and inaccurate responses can improve the quality, integrity, and validity of the study.

Managing assumptions pertaining to the statistical analyses. Green & Salkind (2011), recommended the random effects - model as more appropriate when using multiple linear regression for non - experimental studies. However, issues pertaining to assumptions are common in multiple linear regression analysis and random effects model (Frankfurt- Nachmias et al., 2015). Some assumptions that are common include outliers, linearity, multicollinearity, and normality of residuals.

Researchers often posit the need for bootstrapping in inferential statistics. Bootstrapping is useful in inferential statistics when assumptions are questioned (Williams & Bornemann, 2016). Bootstrapping involves test and re- testing the data

generating process to detect issues that might affect the statistical assumptions (Kapilko & Lansink, 2015). Since my study involved 227 samples there was no need to use bootstrapping technique with 95% confidence interval to detect issues that might affect the assumptions pertaining to multiple regression analysis. Researchers often recommend for linearity, normality of residuals and homoscedasticity failures (see Field, 2018). However, only a few outliers were present and therefore did not require data transformation.

Managing multicollinearity. Sometimes multicollinearity occurs between variables, making it difficult to draw inferences (Mirsha, 2016). This issue occurs when there is a strong correlation between two or more predictor variables (Frankfurt-Nachmias et al., 2015). I included the Variance Inflation Factor (VIF), to detect the presence of multicollinearity (Barker & Shaw, 2015). I also used SPSS Version 25 to check the correlation coefficient values, and used a normal probability plot to confirm that this assumption was not violated.

Managing outliers, skewness, and kurtosis. Williams & Bormann (2016) & Field (2018), identified several strategies that researchers could use to manage outliers. In an analysis, outliers are measurements that significantly vary from the majority of the results (Chen et al., 2014; Filzmoser et al.,2014). One strategy is to ensure that the data is entered correctly into the software. Another strategy is to delete the outliers if the data was entered correctly (Filtzmoser, et al., 2014). Tabachnick & Fidell (1989), noted that where cases are part of an intended sample, the researcher has the option of keeping the cases, transforming them, or minimizing their influence by changing the scores.

To detect the presence of outliers that can significantly skew the results of the study, I created scatterplots (Green & Salkind, 2014; Filzmoser, et al., 2014). By creating scatterplots on the SPSS Software, I was able to visualize the presence of correlations and outliers. I chose to run the analysis with them because not many outliers existed.

Managing homoscedasticity. The assumption of homoscedasticity or variance in linear regression analysis, is a situation in which the error term, otherwise known as the noise or random disturbance in the relationship between the dependent and independent variables, is the same across all values of the independent values (Field, 2018; Frankfurt-Nachmias et al., 2015). Graphically, checking for homoscedasticity required scatterplots (Feld, 2018).

Managing independence. Independence is the lack of auto correlation and involves the assumption that for any two variables the residuals will be equal to zero (Field, 2018). Screening for independence required the Durbin- Watson values with results that should be less than 1 or greater than 3 (Field, 2018).

Managing normality of residuals. The assumption of normality of residuals is important in statistics especially when dealing with small sample sizes (Field, 2018). A Q-Q scatter is effective for identifying normal distribution of data. Normality exists when the study data points closely follow the normal or expected outcomes. Field recommended a histogram and normal probability plot as effective for measuring the normality of residuals. For this study I used histograms and normal probability plots to test for normality of residuals.

Managing linearity. Linearity is an assumption that is common in multiple linear regression analysis (Field, 2018). This assumption occurs when the relationship between criterion and predictor variables are aligning closely. To test for linearity, Field recommended the use of scatterplots or partial regression plots. To determine linearity, I used scatterplots in the analysis.

Data analysis overview. Conducting statistical analysis requires careful consideration about what the data is telling us. It also requires considering whether statistical techniques such as Pearson's Correlations and multiple regression analysis are appropriate for the purpose of the study (Creswell, 2015; Frankfurt- Nachmias et al., 2018;). To reiterate, the goal for conducting this study was to answer the underlying research question: "To what extent does a combination of job satisfaction, financial stress, and commuting stress a predictor of teacher turnover intentions in public schools the South Eastern United States?"

Null Hypothesis (H_0): A combination of financial stress, commuting stress, and job satisfaction is not a significant predictor of teacher turnover intentions in public schools in South Eastern United States.

Alternative Hypothesis (*Ha*): A combination of financial stress, commuting stress, and job satisfaction is a significant predictor of teacher turnover intentions in public schools in South Eastern United States

Data analysis included a multiple linear regression analysis. I exported data from the survey into version 21 of the SPSS statistical package for analysis. By conducting a multiple linear regression analysis, I tested the study's hypotheses. This test required the

use of the Statistical Packages for Social Sciences software, also known as SPSS. The multiple linear regression analysis measured the degree of linearity between the variables. I choose not to use a simple linear regression model since a simple linear regression model would examine one dependent variable and one independent variable, thus not making it appropriate for this study (see Creswell, 2018).

Likewise, an Analysis of Variance method, commonly known as ANOVA is effective when comparing groups that differ in numerous ways, and therefore did not align well with this study (see Sullivan, 2016). Since this study involved more than one predictor variables, a multiple linear regression analysis was most suited for the analysis (Sullivan, 2016; Creswell, 2018).

Multiple linear analysis. I used multiple linear regression analysis to assess the magnitude, nature and direction of the relationships among and between variables (Cohen & Blake, 2015). Further, by using the results from the multiple linear regression analyses, I was able to study the relationship between a single dependent variable and several independent variables (Cohen & Blake, 2015). A multiple linear regression analyses was useful for allowing me to determine the relative importance of each predictor variable on the criterion variable (see Creswell, 2018; Frankfurt-Nachmias et al., 2015). By using a multiple linear regression analysis, I addressed assumptions that are related to multiple linear regression analysis namely linearity, outliers, normality, homoscedasticity, and multicollinearity (Creswell, 2018; Field, 2018). As recommended by Faul et al. (2009), I also noted and observed the output parameters for the power analysis as these indicated whether I should accept or reject the null hypothesis.

Inferential statistics. To determine the probability and significance of the null and alternate hypotheses, the use of inferential statistics was important (Sullivan, 2016). Inferential Statistics, in the form of Pearson's Product- moment correlation coefficient, helped to determine the linear correlation between predictor variables and criterion variable (Creswell, 2018; Sullivan, 2016). I compared the *p*-value to a predetermined alpha of .05 to determine the significance and probability of the null hypothesis and alternate hypothesis.

Sullivan (2016), noted that the *p*-value serves as the measurement of significance for studies. In actuality, the probability of discovering the observed, or a greater result when the null hypotheses is true, is the *p*- value. This *p*- value eventually served as the significance for this study. For this study I set the *p*- value at .05. Seaman, Seaman, & Allen (2016), and Green & Salkind (2014), recognized that determining the level of significance of the hypotheses in studies is essential, as doing so can help to prevent the Type 1 errors. Scholars noted that a predetermined *p*-value of .05 or greater would result in rejecting the alternative and accepting the null hypotheses. However, if the significance level should be less than .05 the null hypotheses should be rejected and the alternate hypotheses accepted (see Sullivan, 2016).

Nevertheless, Sullivan, 2016), noted that researchers should use some degree of judgment when determining significance levels, and rejecting and accepting hypotheses. Comparing the *p*-value to a predetermined alpha of .05 to determine the probability and significance of the null and alternate hypotheses is important. Creswell (2018), and

Sullivan maintained that this process will help to determine what relationship exists between independent variables and dependent variable.

Further, The Pearson's Product -moment correlation analysis measured the strength and direction of linear dependence between the variables (Frankfurt -Nachmias et al,2015; Sullivan, 2016). Fields (2018), noted that when plotted on a two- dimensional axis, the values of the correlational coefficient, Pearson's *r* should range from -1 +1, where -1 indicated a strong negative correlation, and +1 would indicate a strong positive correlation between the variables. Further, if the correlation coefficient is calculated close to zero, then there would be no significant correlation between the variables (Frankfurt- Nachmias et al., 2015). Green & Salkind (2014)), noted that a Pearson's correlation test assumed that all data are normally distributed.

Threats to Validity

Validity of research involves how well an instrument can measure the items that a researcher is investigating (Schoenherr et al. (2015). Statistical conclusion validity, construct validity, internal validity, and external validity are the four major types of validity (Schoenherr et al., 2015; Frankfurt – Nachmias et al., 2015). Internal validity involves the errors that occur while measuring the variables in the study. External validity involves how well the researchers can generalize the findings of the study to a larger population (Creswell, 2018; Frankfurt – Nachmias et al., 2015). Whereas statistical conclusion validity involves the use of fair and appropriate tools for analyzing data during the research process (Frankfurt – Nachmias et al.,2015; Schoenherr et al., 2015).

Internal Threats to Validity

Avery, Der, Whitsel & Sturmer (2014), and Frankfurt- Nachmias et al. (2015), maintained that studies with non- experimental designs have fewer internal validity concerns than studies with experimental designs. For example, in non- experimental studies, internal validity concerns are removed because researchers do not seek to find causation (Creswell, 2018). For this non – experimental correlational study, establishing causation was not necessary. However, to reduce the occurrence of Type 1 errors I chose to set the *p*- value to .05 (see Frankfurt- Nachmias et al, 2015). In addition, as discussed in Chapter 1, representiveness and selection bias are two potential risks to generalizability in non-probability studies. To reduce these risks, I used, emails, and voluntary participation. In addition, the use of surveys added anonymity, and thus reduced the threat to internal validity (Creswell, 2018; Frankfurt- Nachmias et al., 2015).

External Threats to Validity

External validity in studies involves the use of appropriate sample sizes. Seamans et al. (2015), recognized that having the appropriate sample size within a study is essential to preventing Type 11 errors. Therefore, determining the right sample size required the use of power (McNeish & Stapleton, 2016; Seaman et al., 2015). The sample size should be 118 as calculated by an a – priori sample size evaluation for a multiple regression model in G* Power 3, in which 30 is considered as sufficient in a normally distributed population (Faul et al., 2009). However, it is essential that I obtained the appropriate number of participants in order to meet the required sample size

so that I could avoid making the Type 11 error (Seaman et al., 2015; McNeish & Stapleton, 2016).

Statistical Conclusions Regarding Threats to Validity

Appropriate use of statistics to infer the covariance of two variables is involved in statistical conclusion Validity (Frankfurt- Nachmias et al., 2015; Shadish, Cook, & Campbell, 2006). It involves the understanding that during the research process, the researcher uses appropriate and fair tools to analyze the data (Cohen, & Swerdlik, 2004; Frankfurt- Nachmias et al., 2015). Three standard statistical conclusion validity threats are (a) Preliminary tests of assumptions, (b) discontinuing the rules for data collection without controlling for Type-1 error rates, and (c) using regression to investigate bivariate relations while indicating that threats occur even though the data is not detailed and through enough (Cohen & Swerdlik, 2004; Creswell, 2018; Frankfurt- Nachmias et al., 2015)..

The power of statistical tests depends on the effect size, the reliability of the sample and results, and the significant criterion (Cohen, 1998; Seaman et al., 2015). The significant criterion is important as it involves how well the research can prove that a phenomenon exists, or the risk of erroneously rejecting the null hypothesis (Cohen, 1998; Seaman et al., 2015). According to Cohen, an alpha error or Type 1 error, involves the risk of rejecting a true null hypothesis. Whereas, a beta error, also known as Type 11 error involves the risk of accepting a false null hypothesis (Farrokhyar et al., 2013). Setting the alpha level at a low of .001 is associated with making the Type 1 error. To avoid this error, and to assure statistical conclusion validity for this study, I set the

statistical power at .95 and a significance level or *p*- value of .05 instead of .001 This is to reduce the probability of Type II errors to 5% (Farrokhyar et al., 2013). Statistical conclusion validity also involves determining the right sample size which is also a component in external validity (Seaman et al., 2015). As calculated by the G* Power calculator, the sample size of 118 is an appropriate sample size for this study (Faul et al., 2009).

Before drawing conclusions and sharing results, researchers recommend confirming whether assumptions of statistical tests are met (Barker & Shaw, 2015; Farrokhyar et al., 2013). As recommended by Barker & Shaw (2015), to increase the study's validity, I ensured that assumptions such as normality, linearity, homoscedasticity, and reliability of measurements that pertain to multiple regression analysis were met before presenting any results. After the completion of the survey I performed data analysis with the SPSS data software. For analysis purposes I created graphs and statistical tables by using SPSS Version 21. Scholars have noted the effectiveness of using SPSS software for performing data analysis for studies (Field, 2015). Verifying the data produced by SPSS also required a visual review of all outputs and bootstrapping. Field (2018) and Kapelko & Lansink (2015), noted that bootstrapping is an effective method that increases the validity of studies, and that during the process, the researcher should discover where issues or errors occur during the data generating process.

Ethical Procedures

Permission to conduct studies must follow some form of procedures (Creswell, 2018; Walden,n.d.). Before conducting the study, I needed permission from the Institutional Review Board (IRB) at Walden University, and then the Director in charge of Research and Accountability at the South Eastern United States School District. The Institutional Review Board is responsible for reviewing proposals for conducting research to ensure that researchers follow all necessary guidelines to protect participants from harm. However, risk of harm was not a potential issue for my study, as participants were teachers, and were not knowingly belonging to any groups of protected individuals (see Locke Spirduso, & Silverman, 2014).

Potential participants received letters of invitation that outlined the nature of the study. This letter also informed participants about the confidentiality of their responses and that their responses would have remained anonymous. Participants did not state their names while completing the survey, so, their responses remained anonymous and confidential (see Locke et al., 2014). Before accessing the survey, participants also had to acknowledge that they are not members of any protected category of individuals. They also acknowledged that they understood the nature of the study. Scholars defined protected participants as mentally incompetent individuals, individuals with neurological impairments, victims of crime, individuals with AIDS, and inmates in prisons (see Creswell, 2018; Judith-Cohn, Kielwaser-Withrow, Owen, & Ward, 2014).

Preventing ethical dilemma in studies is important, so assuring each participant of the use of sound practices that should protect their data and privacy was important (see

Hollinger et al, 2016; Locke et al., 2014). The letter of invitation and the consent form informed participants that their participation was voluntary. They also informed participants that they had the right to withdraw from the study at any time without facing penalties (Hollinger, 2016; Locke, 2014). I informed participants of my intention to keep data safe on a password protected lap-top, and also to destroy their data by deleting them after five years (see Judith- Cohn et al, 2014). I also disabled the tracking mechanism features that accessed and stored the internet protocol addresses of the participants in the survey. Disabling this tracking mechanism caused each participant to remain anonymous (Locke, et al, 2014). This action prevented me from linking participants to their responses. These measures were to ensure the ethical protection of each participant (see Hollinger et al, 2016; Locke, et al., 2014).

Participants did not receive monetary incentives. In the letter of invitation, I provided participants with my contact information such as telephone numbers and email addresses. Making this information available to the study's participants was to clear up misunderstandings should any occurred during the survey (see Locke., 2014). To access the online survey through Survey Monkey, each participant acknowledged and agreed to informed consent by clicking on the link at the bottom of the form to complete the survey.

Further, before conducting the survey, I developed processes and procedures that ensured the ethical protection of participants. Judith-Chon, et al. (2014), noted that the *Belmont Report* requires all participants to be respected and ethically protected. Further, Resnik (2015), noted that the IRB's role at Walden University is to protect the welfare

and rights of individuals and ensure that there are no undue risks to participants. So, before collecting data, the IRB at Walden University evaluated and approved the ethical conduct of the study.

Summary

This study involved a quantitative method, a correlational design, and multiple linear regression analysis and inferential statistics to examine the extent to which a combination of job satisfaction, financial stress, and commuting stress is a predictor of turnover intentions among teachers within South Eastern United States. The study examined the relationships between predictor variables (a) commuting Stress, (b) Financial Stress, and (c) Job Satisfaction, and criterion variable (teacher turnover intentions). Survey Monkey facilitated the survey. In the survey, questions were related to participants' experiences with financial stress, commuting stress, and job satisfaction on turnover intentions. Participants' responses indicated the role that the three predictor variables played in predicting turnover intentions. The study assessed the magnitude of the relationships between independent variables and dependent variable. Findings for the study are presented in Chapter 4. Likewise, areas for future research are presented in Chapter 4.

Chapter 4: Results

The purpose of conducting this quantitative correlational study was to examine the extent to which financial stress, commuting stress, and job satisfaction are predictors of teacher turnover intentions in public education schools in the South Eastern United States. In this chapter I present the study's findings. I include a review of the data collection process and descriptive analysis. I also describe the reliability of the survey instruments and the data screening and cleaning procedures I used in the survey. Also included in this chapter are the tests of assumptions for the study's multiple regression analysis and how I handled these assumptions. I also review the multiple regression and inferential statistical tests that I performed in SPSS. The predictor variables were financial stress, commuting stress, and job satisfaction. The criterion variable was turnover intentions.

Data Collection

During the 2 weeks I allotted to data collection, there were 240 teachers that responded to the survey. After omitting incomplete surveys, the final study included 227 samples. This sample size was appropriate for minimizing threats to external validity (see Creswell, 2018). As an online survey it also offered anonymity and thus reduced threats to internal validity (see Creswell, 2018). I opened the survey to prospective participants between May 17th and May 31st, 2019.

The research question was, "To what extent does a combination of financial stress, commuting stress, and job satisfaction predict turnover intentions among teachers in the South Eastern United States?" The Null Hypothesis (H_0) was, A combination of

financial stress, commuting stress, and job satisfaction is not a significant predictor of teacher turnover intentions in the South Eastern United States.

. The Alternative Hypothesis (*Ha*) was, A combination of financial stress, commuting stress, and job satisfaction is a significant predictor of teacher turnover intentions in. I set the significance level at .05 (2-tailed). According to Seamans et al. (2016), if the *p* value is less than the level of significance (alpha), the null hypothesis should be rejected. If the *p* value is greater than or equal to the level of significance, the null hypothesis should be accepted (Seamans et al., 2016).

Demographics

The survey included both male and female teachers who had met the inclusionary criteria. I solicited participation from these teachers because they were full-time instructional teachers within the South Eastern United States. I used Survey Monkey, an online survey provider to conduct the survey (see Survey Monkey, 2019)

Descriptive Statistics for Study Variables

I received 240 responses during data collection. The study required a minimum of 118 samples to prevent a Type II error. The final analysis included 227 respondents because in the data cleaning process I eliminated 13 responses that had incomplete and missing data. An electronic survey format (a Likert scale in Survey Monkey) limits missing and incomplete data that might corrupt the final data analysis (see Survey Monkey, 2019). This process allowed me to discard surveys that could have corrupted the final analysis. Scholars have noted that identifying and omitting responses with missing, incomplete, and inaccurate responses can improve the quality, integrity, and

validity of the study (see Brandon, Long, Loraas, Mueller- Phillips & Vansant, 2014; Creswell, 2018). In Table 1, I present the descriptive statistics for the study's criterion and predictor variables.

Table 1

Descriptive Statistics for Study Variables

Variables	*M*	*SD*
Commuting Stress Measure	5.58	8.28
Financial Stress Scale	46.88	10.17
Teaching Satisfaction Scale	15.00	4.90
Turnover Intention Scale	8.58	3.16

Note: $N = 227$.

Reliability of Survey Instruments

One reliable method of evaluating the internal reliability of measures is to use Cronbach's alpha (Creswell, 2018; Frankfurt-Nachmias et al., 2015). The Commuting Stress Measure scale had a coefficient alpha reliability measure of .90 in a study conducted by Aponsah-Tawiah et al. (2016). The Financial Stress Scale had previously achieved .80 Cronbach's alpha and higher in studies where .70 to .95 are considered as acceptable inter-item test reliability measures (Adana & Liljenquist, 1998). Likewise, the TSS also demonstrated adequate reliability coefficient of .76. Its Cronbach internal-consistency alpha coefficient was .77 (Ho & Hu, 2006). For the Job Turnover Intentions Scale (TIS), the resultant Cronbach's alpha in previous studies was 0.89 (see Bothma & Roodt, 2013; Cohen, 1999), suggesting adequate internal reliability. These scores

confirm the scales' effectiveness to measure participants' responses. Table 2 is an outline of the Cronbach's alpha reliability for the survey instruments.

Table 2

Cronbach's Alpha Reliability for Survey Instruments

Scale	No. of Items	α
Financial Stress (FSS).	18	.80
Commuting Stress (CSM).	10	.90
Job Satisfaction (TSS).	5	.77
Turnover Intentions (TIS).	3	.90

Screening and Cleaning Procedures

I began the screening process by first reviewing responses and looking for incomplete surveys and those with missing responses. I followed recommendations from Robinson (2014), and Creswell (2018), who recommended deleting responses that contain incomplete and missing data. Scholars noted that identifying and omitting responses with missing, incomplete, and inaccurate responses can improve the quality, integrity, and validity of the study (see Creswell, 2018).

Results

Testing of Assumptions Pertaining to the Statistical Analyses

Multicollinearity. Sometimes multicollinearity occurs between variables, making it difficult to draw inferences (Mirsha, 2016). This issue occurs when there is a strong correlation between two or more predictor variables (Frankfurt-Nachmias et al., 2015). I included the variance inflation factor (VIF) to detect the presence of multicollinearity (Barker & Shaw, 2015). Variance inflation factor values that are greater than 10 indicate strong correlations whereas VIF values of 1 indicate no correlations between variables

(Mirsha, 2016). Results of the VIF values in Table 3 showed no evidence of multicollinearity between the outcome variable and commuting stress (1.06), financial stress (1.12), and teaching satisfaction (1.15). Table 3 presents the VIF values, the coefficients, tolerance, significance, and Durbin-Watson values.

Table 3

Test for Multicollinearity

	Unstandardized coefficients		Standardized coefficients		Collinearity Statistics		Durbin-Watson
	B	Std Error	Beta	Sig.	T	VIF	
Constant	13.93	1.33	-	<0.001			1.907
CSM	0.02	0.02	0.04	.417	.946	1.06	
FSS	0.04	0.02	0.11	0.025	.895	1.12	
TSS	-0.52	0.04	-0.70	<0.001	.871	1.15	

Note: Dependent Variable = Turnover Intentions

Independence. I screened for independence by using the Durbin- Watson values with results that should be less than 1 or greater than 3 (see Field, 2018). Independence is the lack of auto correlation between variables. It involves the assumption that for any two variables the residuals will be equal to zero (Field, 2018). Based on the results in Table 3, there was an absence of autocorrelation according to the Durbin-Watson statistic (1.91).

Outliers, skewness, and kurtosis. To detect the presence of outliers that could significantly skew the results of the study, I created scatterplots as recommended by (Filzmoser, et al., 2014; Green & Salkind, 2014). By creating scatterplots on the SPSS Software, I was able to visualize the presence of correlations and outliers. However, Field (2018), recognized that managing outliers, skew, and kurtosis in an analysis can be

difficult because the researcher must decide whether to run the analysis with or without outliers. I chose to run the analysis with them, because not many outliers existed as evidenced in Figures 1, 2 and 3).

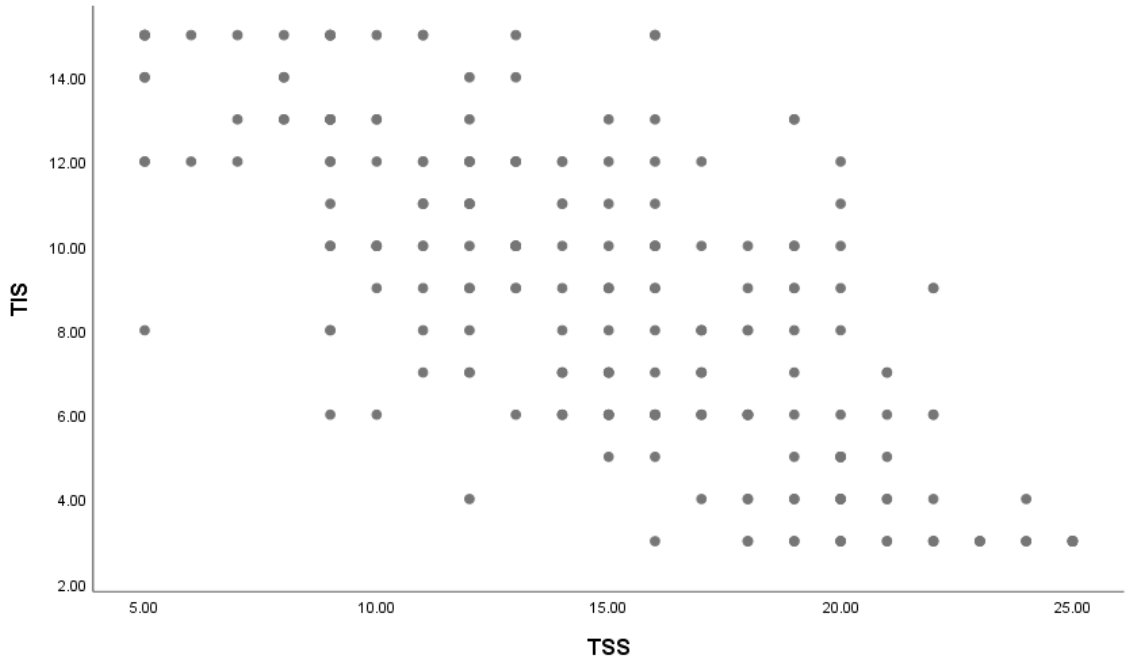

Figure 1. Scatterplot of turnover intentions and job satisfaction.

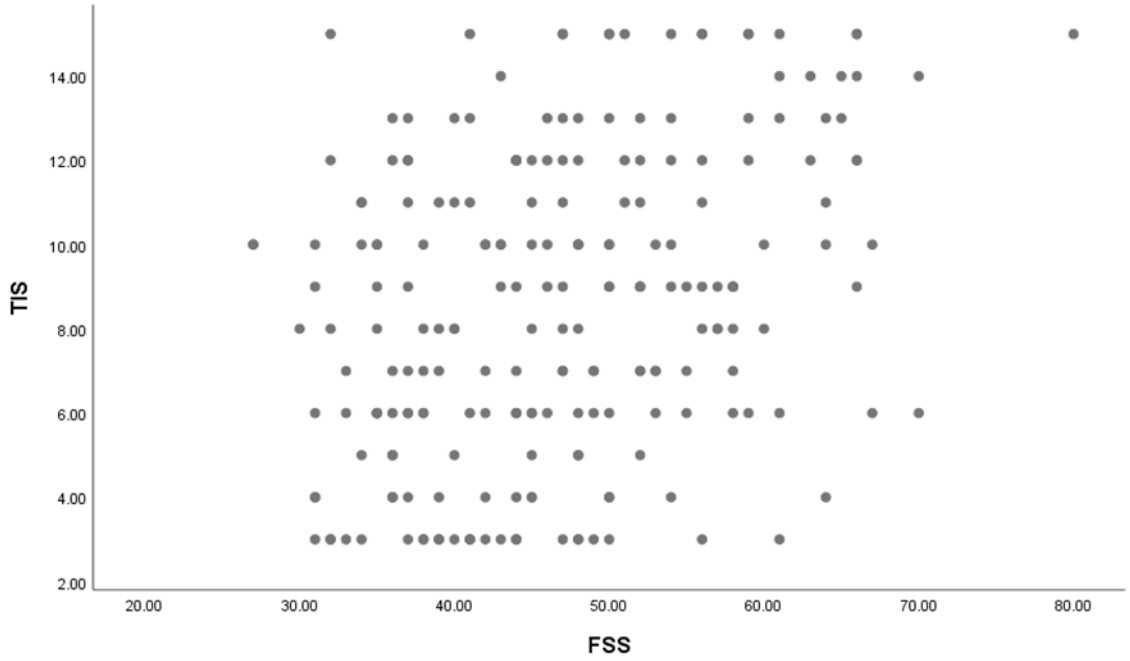

Figure 2. Scatterplot of turnover intentions and teaching satisfaction

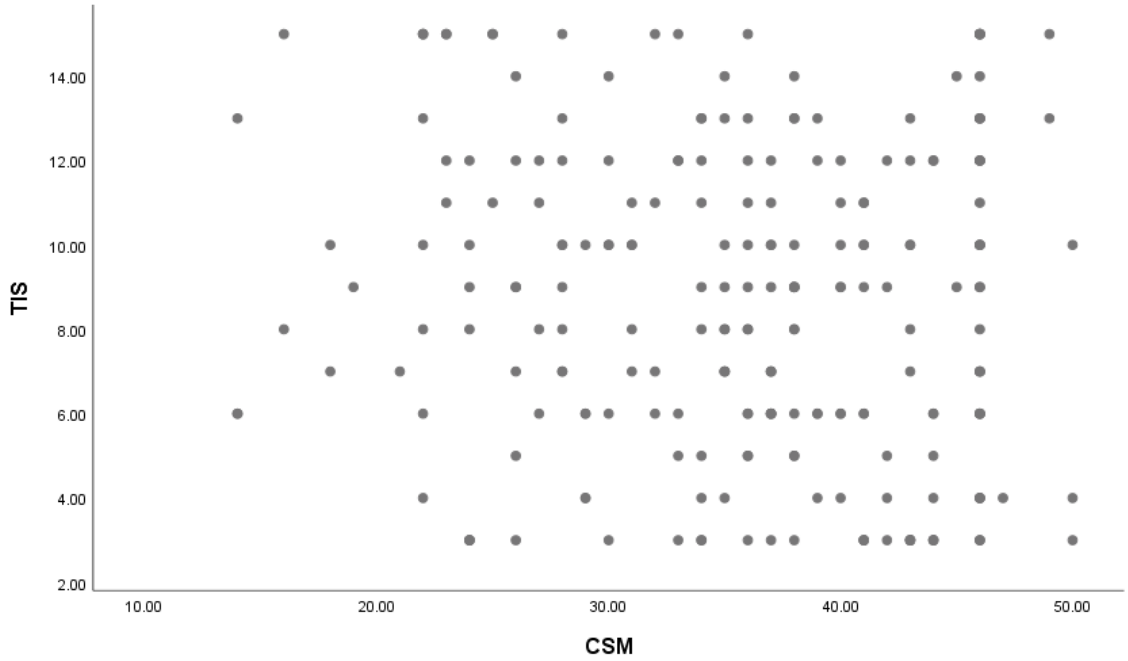

Figure 3. Scatter plot of commuting stress and turnover intentions

Homoscedasticity. To check for homoscedasticity, I used scatterplots. A straight line through the center of the scatter plot would show that similarity exist on both sides of the line, which would suggest the presence of homoscedasticity in this study (Field, 2018). Results indicated that the residuals were normally distributed (Figure 4), and homoscedasticity was presented (Figure 5).

Normality of residuals. For this study I used histogram (Figure 4), and normal probability plots to test for normality of residuals. Field (2018), recommended a histogram and normal probability plot as effective for measuring the normality of residuals. The residuals were normally distributed (Figure 4), and homoscedasticity was presented (Figure 5). A scatterplot of the predicted outcomes against the standardized

residuals showed a linear relationship (Figure 6). Results indicated that this assumption was not violated.

The normal bell-curve in this histogram indicates normal distribution of residuals.

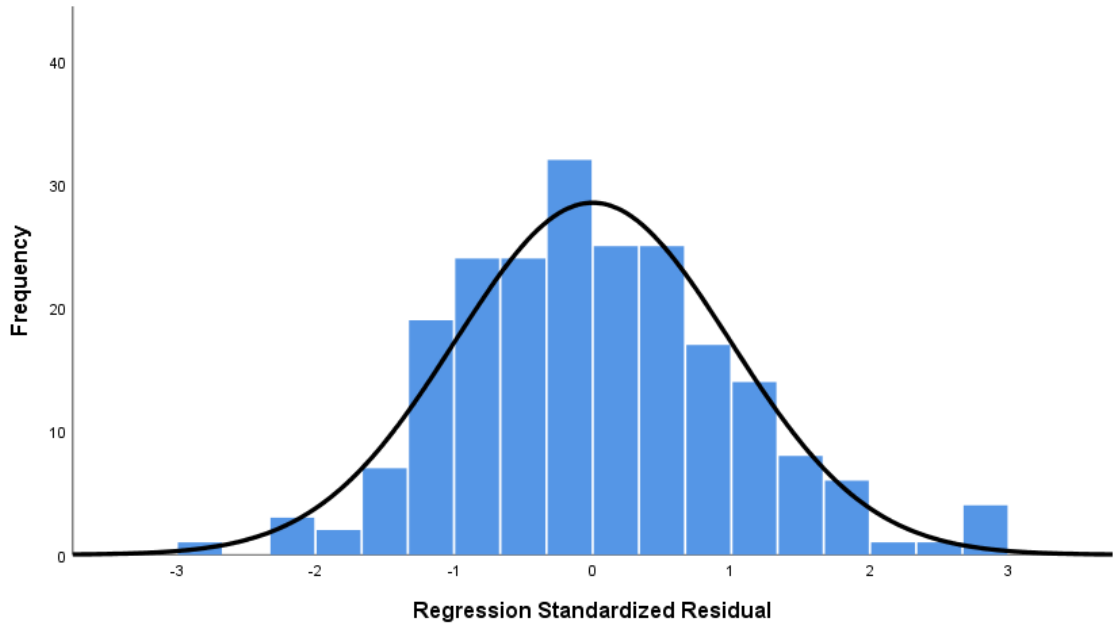

Figure 4. Histogram of turnover intentions

By checking the normal probability plot, in Figure 5, and the Histogram in Figure 4, I observed no presence of violations to normality. The plots were linear. They were randomly scattered within the-3.0 and 3,0 ranges on the x and y-axis. Likewise, the normal bell-curve in the histogram in Figure 4 is an indication that residuals were normally distributed (Field, 2013). By checking for normal distribution of residuals, I was able to gain confidence that the study's assumptions were valid.

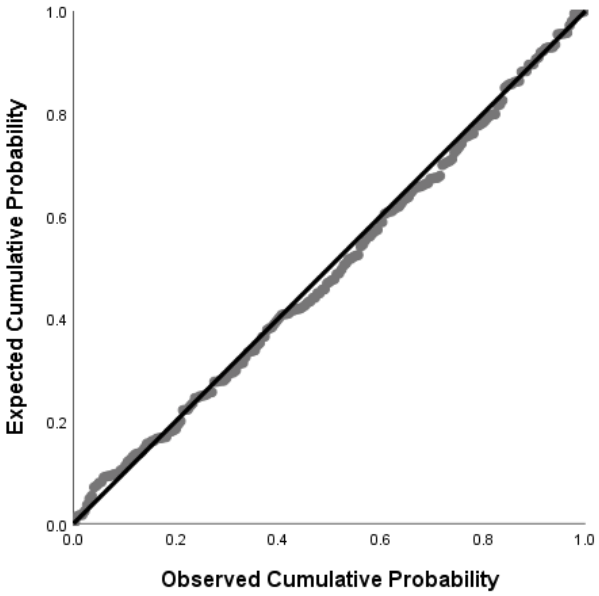

Figure 5. Normal P-P plot of turnover intentions

Linearity. To determine linearity, I used scatterplots in the analysis. Linearity is an assumption that is common in multiple linear regression analysis (Simpson et al., 2014). This assumption occurs when the relationship between criterion and predictor variables are aligning closely. To test for linearity, Frankfurt- Nachmias et al, 2015), and Fields (2018), recommended the use of scatterplots or partial regression plots. A scatterplot of the predicted outcomes against the standardized residuals as depicted in Figure 6, showed a linear relationship between variables.

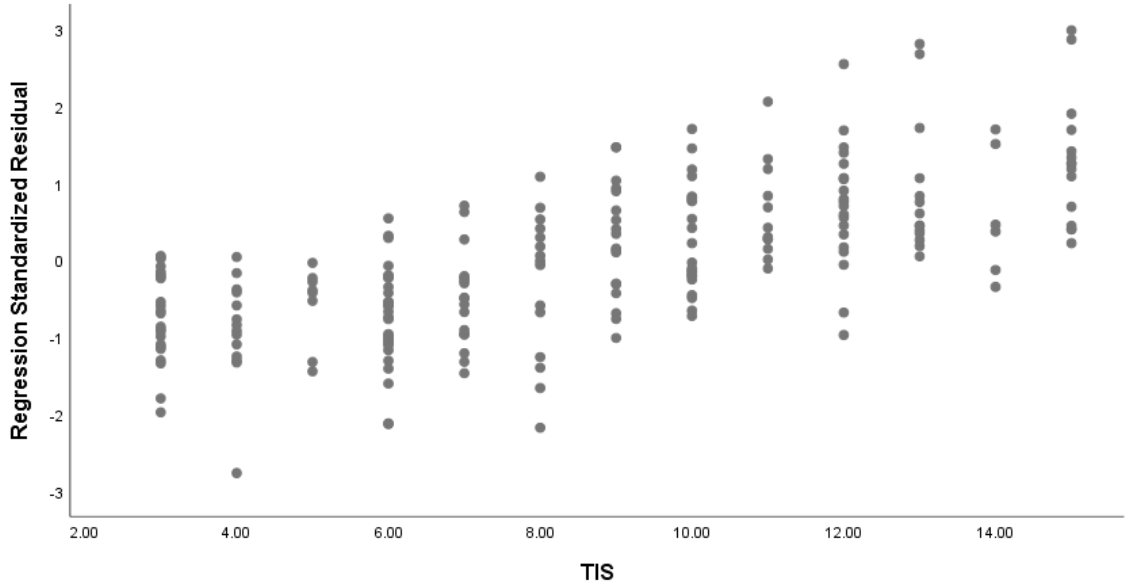

Figure 6. Plot of predicted values and standardized values

This scatterplot of the predicted outcomes against the standardized residuals showed a linear relationship (Figure 6). This assumption occurs when the relationship between predictor variables are aligning closely. To test for linearity, Field (2018; Locke, 2014), recommended the use of scatterplots or partial regression plots. Based on the results of the scatterplots, I determined that linearity occurred between study variables during the process of analysis.

Preliminary Correlations

By using the Pearson's *r* correlations analysis, I conducted a preliminary analysis of variables and found statistically significant relationships between Turnover Intentions and Financial Stress. There was also a statistically significant relationship between Teaching Satisfaction and Turnover Intentions. All correlations are presented in Table 4.

Table 4.

Pearson's r Correlation between 3 predictor variables and turnover intentions

Variables	*1*	*2*	*3*	*4*
1. CSM	-			
2. FSS	-0.15			
3. TSS	0.22	-0.31		
4. TIS	-0.13	-0.33	-0.73	

Note N = 227. Correlation is significant at the 0.05 level (2 tailed); $p < 0.001$.

Inferential Results

I used Multiple Regression Analysis with $a = .05$, to examine the research question, "To what extent does a combination of financial stress, commuting stress, and job satisfaction predict turnover intentions among teachers in the South Eastern United States School District?

Entry of the three predictor variables in the model significantly predicted turnover intentions ($r = 0.545$, $p < 0.001$). Financial Stress ($B = 0.04$, $p = 0.027$) and Teaching Satisfaction ($B = -0.52$, $p < 0.001$) were significant predictors of Turnover Intentions (TIS). Commuting Stress (CSM), also predicted turnover intentions ($B = 0.02$, $p = 0.42$). Combining the three predictor variables resulted in a significance level of ($p < 0.001$), which is less than the predetermined $a = .05$. I therefore accepted the alternative hypothesis which states "A combination of financial stress, commuting stress, and job satisfaction is a significant predictor of teacher turnover intentions in the South Eastern United States School District.

I conducted preliminary analysis to access whether the assumptions pertaining to multiple linear analysis were violated. The Durbin-Watson statistic in Table 3 indicated that the assumption of Independence which involves auto-correlation, was not violated

(1.91). The Variance Inflation Factor (VIF) in Table 2, showed no evidence of multicollinearity between the outcome variable and Commuting Stress (1.06), FSS (1.12), and TSS (1.15). The residuals were normally distributed (Figure 4), and homoscedasticity was presented (Figure 5). A scatterplot of the predicted outcomes against the standardized residuals showed a linear relationship (Figure 6). Entry of the three predictor variables into the final model constituted a significant increase in shared variance, $R^2 = 0.545$, F (3,209) = 83.39, $p < 0.001$, indicating that the combination of the three predictor variables was able to predict a significant amount of turnover intentions ($r = 0.545$, $p < 0.001$). Table 5 gives a summary of the Regression Analysis of predictor variables.

Table 5

Regression Analysis Summary of Predictor Variables

Predictor Variables	B	SE	B	p-value
Constant	13.93	1.33	-	< 0.001
CSM	0.02	0.02	0.04	0.054
FSS	0.04	0.02	0.11	0.027
TSS	-0.52	0.04	-0.70	< 0.001

Note: Dependent Variable = Turnover Intentions. $R^2 = 0.545$, F (3,209) = 83.39, $p < 0.001$, B = Unstandardized beta coefficient, SE = standard error, β = Standardized beta coefficient.

Unstandardized beta coefficients, standard errors, and standardized beta coefficients for the regression model are presented in Table 4. Based on the results of analysis, I concluded that financial stress, commuting stress, and job satisfaction were significant predictors of turnover intentions for teachers in the South Eastern United Stated States School District. I concluded that teachers experiencing financial stress and

low levels of job satisfaction are more likely to develop turnover intentions. These results confirm previous scholars' findings on studies on job turnover intentions and stress (Mai et al., 2016; Aldridge,2016; Skaalvik & Skaalvik, 2017; Ghavifekr & Pillai, 2016). Overall, results of the regression analysis were statistically significant as they were able to predict teacher turnover intentions ($r = 0.545$, $p < 0.001$).

Summary and Transition

In Chapter 4 I presented the study's findings. I presented results from descriptive analyses, inferential statistics, and Pearson's Correlation Statistics. I also presented how I handled assumptions that were associated with multiple regression analysis. To illustrate results, I included scatter plots, histogram, and correlational tables.

The results of the analysis indicated that I should reject the null hypothesis and accept the alternative hypothesis that states that a combination of financial stress, commuting stress, and job satisfaction is a significant predictor of turnover intentions among teachers in the South Eastern United States School District. To test the hypotheses, I used Pearson's *r* correlation analysis. I used descriptive analysis to evaluate the associations between the variables.

Results of Pearson's *r* correlations analysis indicated that financial stress significantly predicted turnover intentions. There was also a statistically significant relationship between Turnover Intentions and Financial stress at ($r = 0.34$, $p < 0.001$). Likewise, teaching satisfaction significantly predicted turnover intentions at ($r = -0.73$, $p < 0.001$). Commuting Stress also predicted Turnover Intentions ($r = -0.13$, $p = 0.054$). Entry of the three predictor variables together into the model constituted a significant

increase in shared variance and resulted in $R^2 = 0.054$, F (3,209) = (83.39, $p < 0.001$). Results of combining these three variables in this analysis demonstrated that a combination of financial stress, job satisfaction, and commuting stress, is a significant predictor of turnover intentions.

In Chapter five, I included a discussion on how the findings confirmed or extended the knowledge in the discipline. I described the limitations of the study, its generalizability, and trustworthiness, validity, and reliability. I also made recommendations for future research, implications for social change, and conclusion. I also made a personal reflection on my dissertation process.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Chapter 5 includes a discussion of the results of the study as well as the study's limitations and implications for social change. I present a general discussion of the findings in relation to the research question, make recommendations for future study and practice, and offer my reflections and a conclusion to the study. The research question was, To what extent does a combination of financial stress, commuting stress, and job satisfaction predict turnover intentions among teachers in the South Eastern United States School District.

I used a purposive sampling of 227 teachers. Data collection involved an online survey conducted via Survey Monkey. The targeted population were teachers within public schools in the South Eastern United States School District. I conducted this study with the intention to provide leaders of educational institutions with useful information for predicting and reducing the costs associated with turnover intentions among teachers.

Comparison of Study Results to Information from Literature Review

Results from my study indicated that the financial stress that teachers experience was a significant predictor of turnover intentions. Likewise, job satisfaction and commuting stress were significant predictors of teacher turnover intentions in the South Eastern United States School District. Results from this study align well with those of other scholars. For example, Aponsah-Tawiah et al. (2016), found employers were more likely to develop turnover intentions when they experience significant levels of commuting stress. Similarly, these results confirm some findings from other studies

whose authors examined stress, employee job satisfaction, and employee turnover intentions. For example, Lebert and Voorpostel (2017) found that family factors such as financial stress and job insecurity influence turnover and turnover intentions. In contrast, Ryan et al. (2017) found that factors relating to merit pay are associated with reduced levels of teacher job satisfaction. My study also confirmed that the financial stress that teachers experience was a significant predictor of turnover intentions among teachers in South Eastern United States School District.

From the literature review, I found that performance evaluations, tenure decisions, and test-based accountability in performance evaluations are factors that contribute to teachers' stress, reduced levels of job satisfaction, and the decisions teachers make regarding job turnover (see Ryan et al., 2017; Mai et al. 2016; Skaalvik & Skaalvik, 2017). Ghavifekr and Pillai (2016) and Embse et al. (2017) found that federal- and state-level changes in educational accountability policies have significantly influenced teacher stress and job satisfaction and the decisions they make regarding turnover. Teachers in the South Eastern United States School District also experience test-based accountability and performance evaluations that are stressful. Results from my study also confirm that teachers make turnover intentions because of what they experience on the job. Measuring job satisfaction using the TSS (Ho & Hu, 2006) indicated that job satisfaction was a significant predictor of turnover intentions.

My study results also supported those of Aponsah-Tawiah et al. (2016). Aponsah-Tawiah et al. noted that withdrawal from a job may be one coping mechanism in response to the stress associated with commuting. Aponsah Tawiah et al. also found

that commuting stress predicted turnover intentions, as it was positively related to burnout and turnover intentions among employees in various occupations. By specifically examining teachers in the South Eastern United States School District I was able to extend the literature on job satisfaction, stress, and turnover intentions. Furthermore, by examining these factors

Other researchers have examined factors relating to turnover intentions in the school environment (see Aldridge and Frazer (2016), Ghavifekr and Pillai (2016), Reeves et al. (2017), and Skaalvik and Skaalvik (2017). My study focus differed in that I examined job satisfaction along with other factors outside of the school environment. Furthermore, studies specifically of financial stress and commuting stress among teachers in a single school district were not available. This study provided statistics that showed the significance of financial stress, commuting stress, and job satisfaction on teacher turnover intentions in the South Eastern United States School District.

In this study I presented empirical evidence of factors that are predictors of turnover intentions among teachers. The results confirm findings by prior scholars in the field of education. Makela et al. (2014) and Wong and Lashinger (2015), noted that understanding how conditions in the working environment contribute to job satisfaction can help to decrease turnover among teachers. Examining variables both within and outside of the school environment that contribute to job satisfaction may similarly provide knowledge that school leaders can use to reduce teacher turnover intentions. By combining job satisfaction along with factors outside of the school environment, I determined that a statistically significant correlation existed between turnover intentions,

and job satisfaction, financial stress, and commuting stress of teachers. Combining the three predictor variables resulted in a significance level of ($p < 0.001$). These empirical results, therefore confirm that factors that are predictors of turnover intentions are not just limited to the classroom environment but also to factors outside of the school environment.

Interpretation of the Findings

Findings from this study are consistent with Hobfoll's (2003) conservation of resources theory and Hertzberg's (1959) motivation-hygiene theory. Hobfoll theorized that employees experiencing loss, threats to loss, and insufficient gain after substantial investments will react by withdrawing. My study findings are consistent with this theory in that respondents indicated that teacher job satisfaction was a predictor of their turnover intentions. Previous researchers (e.g., Aldridge, 2016; Ghavifekr & Pillai, 2016; Reeves et al., 2016; Skaalvik & Skaalvik, 2017; Veldman, 2017) have found evidence supporting Hertzberg's motivation–hygiene theory that posits that employees will experience job satisfaction in environments that satisfy their needs (Hertzberg et al., 1959). My research findings also lend credence to Hertzberg et al.'s theory. Hertzberg et al. theorized that individuals experience more job satisfaction from intrinsic factors than from extrinsic factors. These may include job responsibility, achievement, recognition, the work itself, and advancement (Hertzberg et al., 1965). Experiencing more intrinsic factors or motivators often leads to more job satisfaction and job commitment (Hertzberg et al, 1965).

Similarly, Hagedorn (2000) used triggers and mediators to explain how events in life could influence job satisfaction. Results from my study also reinforce this theory. According to Hagedorn, triggers are life events such as financial difficulties and commuting stress. These triggers or mediators are either related or not related to the job but could affect job satisfaction (Hagedorn, 2000). In my study, I found a combination of the three predictor variables resulted in a significance level of ($p < 0.001$). This result indicates that the conservation of resources theory (Hobfoll, 2003), the motivation - hygiene theory (Hertzberg et al, 1965), and Hagedorn's (2000) two-construct model of job satisfaction theory still apply to teachers in the South Eastern United States School District. By examining factors both within and outside the school environment, leadership will see the need to make improvements where necessary to reduce turnover and turnover intentions among teachers.

Implications

With an expected population growth rate of 5% within the next five years, retaining teachers within the South Eastern United States School District is crucial. Results from this study can help to bring about positive social changes, not just to teachers, but also to families, the education system, and the society. Addressing social change should include creating improvements within and outside the schools that can decrease teacher stress and anxiety. Leadership in schools can use results from this study to intentionally make improvements in educational practices. Decreasing the stress levels of teachers and improving their job satisfaction can have a lasting effect on their physical and mental health (see Sonnentag & Fritz, 2015).

If leadership understand the relationship between financial stress, commuting stress, job satisfaction, and turnover intentions, they can implement changes within the school environment that affect teachers. Ghavifekr (2016), and Mai (2016), noted that employers should seek to create work environments that influence employees to have the desire to remain committed to their jobs. Likewise, leaders of educational institutions should consider implementing sustainability practices within schools which may influence teacher's decision to join and remain committed to their organizations.

In the long term, decreasing turnover can have favorable results not just for educational institutions, but for the society. By reducing job turnover, educational institutions can reduce the cost of recruiting and hiring new teachers to replace those that develop turnover intentions and eventually leave their jobs. Furthermore, reducing turnover intentions that eventually lead to actual turnover among teachers can lead to improved student learning and performance. By raising awareness about the difficulties that teachers experience, the study has the potential of addressing a local problem through data analysis, and effectively addressing a gap in the literature on stress, job satisfaction, and job turnover.

Recommendations

From this quantitative study, I was able to use empirical evidence to determine that a combination of financial stress, job satisfaction, and commuting stress was a significant predictor of turnover intentions among teachers in the South Eastern United States School District. I therefore recommend that in the future, researchers should conduct qualitative studies that specifically explore the impact of teacher turnover in this

area. Similarly, qualitative studies such as case studies may prove worthwhile in exposing teachers' experiences with job satisfaction and other stressors within the school environment which may influence job turnover intentions and eventually turnover in schools.

Additionally, I recommend that leadership in education begin the process of increasing teacher job satisfaction by becoming aware of the issues within the school environment that affect teachers. By frequently administering staff surveys among teachers, leadership will become aware of issues that are contributing to teacher satisfaction and their dissatisfaction. By implementing favorable and appropriate changes, leadership will begin to see a reduction in the cost associated with teacher turnover in schools.

Limitations

Limitations are potential weakness within a study (Smith, 2014). One potential weakness of this study involved the population from which the sample was taken. Responses for this study came from teachers within South Eastern United States School District. Therefore, results from the survey may not reflect the way other educators feel about job satisfaction, stressful commuting, and financial stress from living expenses in other school districts, private schools, or higher educational institutions. Likewise, assumptions might not show how the findings of the study may relate to turnover intentions among different teacher populations within the education system. Based on this limitation, the findings of the study may not be relevant to all teachers because of the specific population I examined.

In Chapter 1, I noted that concerns over non-response rate and non-response bias are common to studies that use surveys for data collection (Wouters, Maesschalck, Peters, & Roosen, 2014). However, during the data collection process, non-response rate was not an issue because responses exceeded required minimal number of participants. From the response rate, I confirmed what Hollinger, Jan & Dickman (2016), had noted. Hollinger et al. (2016), noted that the level of convenience and anonymity that surveys offer to participants can increase response rate.

Likewise, by using purposive sampling, which is a type of non-probability sampling strategy, the study would be prone to representiveness, and selection bias (Frankfurt-Nachmias et al., 2015). I did not experience any form of selection bias because I did not know any of my respondents. I recruited participants by gaining permission from the Director of Research and Accountability for schools in the South Eastern United States School District. The Director then forwarded the letters of invitation, along with the consent form and a link to the surveys to principals on my behalf. These principals then forwarded these documents to their teachers. The teachers completed the surveys without ever knowing me. Therefore, I had no influence over their responses.

Another limitation involved the design of the study. Researchers sometimes infer causation when they are analyzing data in studies with correlational designs (Bleske-Rechek, Morrison, & Heidtke, 2015). To mitigate this issue, when I was interpreting results, I made it a priority not to infer that one variable had caused another variable.

Conclusion

Careful analysis of data indicated that the financial stress that teachers experience was a significant predictor of turnover intentions. Likewise, job satisfaction was a significant predictor of turnover intentions of teachers. Commuting stress was also a predictor of turnover intentions. However, when all three predictor variables were loaded together in the model, Pearson's *r* correlations indicated that there was an increase that resulted in a statistically significant correlation. This result indicated that a combination of the three predictor variables was a significant predictor of teacher turnover intentions in the South Eastern United States School District.

As I analyzed the results of this survey, I pondered at the ease of my data collection process. Teachers had two weeks in which to think about the study so that they could make up their minds about whether or not they should partake in the survey. However, within hours of opening the survey on line, I received more responses than the study required. The minimum required sample was 118. However, before the two weeks were ended, I had collected 240 responses. After omitting incomplete surveys my final data analysis involved 227 responses.

Careful analysis of data indicated that the financial stress that teachers experience was a significant predictor of turnover intentions. Likewise, job satisfaction and commuting stress were significant predictors of turnover intentions of teachers. I believe teachers were eager to respond to the survey because of their desire for changes. I am aware that this study alone will not bring about desired changes that are needed to stop financial stress and increase job satisfaction among teachers. However, by analyzing and

presenting empirical evidences from this study, the process of examining the need for changes can begin.

From this study, I found Hobfoll's Conservation of Resources theory is still relevant for teachers as it made predictions on how employees react under stress and limited resources. I also recognized the importance of Herzberg's Motivation Hygiene Theory, that emphasized the importance of providing opportunities for teachers to feel appreciated, valued, and satisfied with their jobs (see Hertzberg, 1965). The study confirmed that teachers will develop turnover intentions when they are financially stressed, and when they are not satisfied with their jobs.

It is my desire that the results of this study will begin the process of dialog between teachers and leadership within the educational system. Positive changes can occur by examining the issues that teachers encounter on the job and also off the job that affect their job satisfaction levels. By raising awareness about the difficulties that teachers experience, this study has the potential of addressing a local problem through data analysis, and effectively addressing a gap in the literature on stress, job satisfaction, and turnover intentions. Further, by finding ways to reduce turnover intentions that often lead to actual turnover, educational institutions can reduce the cost associated with recruiting and training new teachers when experienced teachers develop turnover intentions and quit their jobs.

This quantitative study provided empirical evidence that problems that can predict turnover intentions among teachers are not just limited to the school environment. The analysis found that financial stress and commuting stress were also significant predictors

of turnover intentions. Therefore, leadership in educational institutions should also look beyond the school environment to find ways in which they can assist teachers who are struggling financially and with their daily commute to and from work. It is my desire to see leadership of educational institutions take proactive measures to bring about changes in the educational system that can influence teacher job satisfaction that can lead to positive social changes in the lives of teachers.

It is my desire that the results of this study will begin the process of dialog between teachers and leadership within the educational system. Positive changes can occur by examining the issues that teachers encounter on the job and also off the job that affect their job satisfaction levels. By raising awareness about the difficulties that teachers experience, this study has the potential of addressing a local problem through data analysis, and effectively addressing a gap in the literature on stress, job satisfaction, and turnover intentions. Further, by finding ways to reduce turnover intentions that often lead to actual turnover, educational institutions can reduce the cost associated with recruiting and training new teachers when experienced teachers develop turnover intentions and quit their jobs.

I am aware that this study alone cannot give teachers the level of job satisfaction that they need to remain committed to their jobs. However, this study can influence the first step towards positive changes. By becoming aware of the issues that influence teacher job satisfaction and dissatisfaction, leadership can begin implementing changes. Implementing chances in the educational system can lead to improved teacher job satisfaction. Not only will teachers benefit from improving job satisfaction, but students

will also benefit. By decreasing turnover intentions in schools, students' performance will improve. Likewise, by decreasing job turnover intentions, leadership will experience reduced cost associated with turnover when experienced teachers quit their jobs.

References

Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it? *Indian Journal of Medical Specialties, 4,* 330-333. http://dx.doi.org/10.7713/ijms.2013.0032

Aldana, S., & Liljenquist, W. (1998). Validity and reliability of the Financial Strain Survey. *Financial Counseling and Planning, 9*(2), 11-19. Retrieved from https://pdfs.semanticscholar.org/5e6d/ec24eefd9ce08e933768791d83cd4fcb4de9.pdf?_ga=2.120049163.2024493672.1576191723-83431900.1575390695.

Aldridge, J. M., & Frazer, B. J. (2016). Teacher's views of school climate and its relationship with teacher self-efficacy and job satisfaction. *Learning Environment Resource, 19,* 291-309. http://dx.doi.org/10.1007/s10984-015-9198-x

Alliance for Excellent Education (2014). Teacher attrition: a costly loss to the nation and to the states. Retrieved from https://all4ed.org/articles/teacher-attrition-a-costly-loss-to-the-nation-and-to-the-states-alliance-analysis-finds-that-teacher-vacancies-cost-the-united-states-close-to-5-billion-annually/.

Andersson, G., & Titov, N. (2014). Advantages and limitations of Internet-based interventions for common mental disorders. *World Psychiatry, 13*(1), 4-11. http://dx.doi.org/10.1002/wps.20083

Aponsah-Tawiah, K. A., Annor, F. & Arthur, B. G. (2016). Linking commuting stress to job satisfaction and turnover intention: The mediating role of burnout. *Journal of Workplace Behavioral Health, 31*(2),104-123. http://dx.doi.org/10.1080/15555240.2016.1159518

Avery, C. L., Der, J. S., Whitsel, E. A., & Sturmer, T. (2014). Comparison of study design used to detect and characterize pharmacogenomic interactions in nonexperimental studies: A simulation study. *Pharmacogenetic Genomics, 24*, 146-155. http://dx.doi.org/10.1097/FPC.0000000000000027

Barlett, C. P, & Anderson, C. A. (2014). Bad news, bad times, and violence: The link between economic distress and aggression. *Psychology of Violence, 4*(3), 309–321 http://dx.doi.org/10.1037/a0034479

Barker, L. E., & Shaw, K. M. (2015). Best (but oft-forgotten) practices: Checking assumptions concerning regression residuals. *American Journal of Clinical Nutrition, 103*, 533-539. http://dx.doi.org/10.3945/ajcn.115.113498

Bleemer, Z., Brown, M., Lee, D., & van der Klaauw, W. (2017, July). *Tuition, jobs, or housing: What's keeping millennials at home?* (Staff Report No. 700). Retrieved from https://www.newyorkfed.org/research/staff_reports/sr700.html

Bleske-Rechek, A., Morrison, K. M., & Heidtke, L. D. (2015). Causal inference from description of experimental and non-experimental research: Public understanding of correlation-versus-causation. *The Journal of General Psychology, 142*(1), 48-70. http://dx.doi.org/10.1080/00221309.2014.977216

Boccuzzo, G., Fabbris, L., & Pacagnella, O. (2015). Job-major match and job satisfaction in Italy. *International Journal of Manpower, 37*, 135-156. http://dx.doi.org/10.1108/IJM-03-2014-0083.

Bothma, C. F. C., & Roodt, G. (2013). The validation of the turnover intention scale. *SA Journal of Human Resource Management, 11*(1), 1-12. http://dx.doi.org/10.4102/sajhrm. v11i1.507

Bradley, M. T., & Brand, A. (2013). Alpha values as a function of sample size, effect size, and power: Accuracy over inference. *Psychological Reports, 112*, 835-844. http://dx.doi.org/10.2466/03.49.pr0.112.3.835-844

Brandon, D. M., Long, J. H., Loraas, T. M., Mueller-Phillips, J., & Vansant, B. (2014). Online instrument delivery and participant recruitment services: Emerging opportunities for behavioral accounting research. *Behavioral Research in Accounting, 26*(1), 1-23. http://dx.doi:10.2308/bria-50651

Breaugh, J. A., (2014) Predicting voluntary turnover from job applicant biodata and other applicant information. *International Journal of Selection and Assessment, 22*(3), 321-332. http://dx.doi:10.1.1.454.6009

Brutus, S., Javadian, R., Panaccio, A. J. (2017) "Cycling, car, or public transit: a study of stress and mood upon arrival at work", *International Journal of Workplace Health Management, 10* 1, pp.13-24. http://dx.doi.org/10.1108/IJWHM-10-2015-0059.

Bureau of Labor and Statistics; U.S. Department of Labor. (2017). *Establishment data state and area employment annual averages.* Retrieved from http://www.bls.gov/sae/eetables/sae_annavg213.pdf

Buttigieg, S. C., & West, M. A. (2013). Senior management leadership, social support, job design, and stressor-to-strain relationships in hospital practice. *Journal of*

Health Organization and Management, 27, 171-192. http://dx.doi.org/1108/14777261311321761

Chang, Y., Leach, N., & Anderman, E. M. (2015). The role of perceived autonomy support in principals' affective organizational commitment and job satisfaction. *Social Psychology of Education, 18*, 315-336. http://dx.doi.org/10.1007/s11218014-9289-

Chen, T. T. (2016). Predicting analysis times in randomized clinical trials with cancer immunotherapy. *BMC medical research methodology, 16(1)*, 1-9. http://dx.doi:10.1186/s12874016-0117-3

Chen, M., Mao, S., & Liu, Y. (2014). Big data: A survey. *Mobile Networks and Applications, 19*, 171-209. http://dx.doi.org/10.1007/s11036-013-0489-0

Chinchilla-Rodriguez, Z., Miguel, S., & De Moya-Anegon, F. (2015). What factors affect the visibility of Argentinean publications in humanities and social sciences in Scopus? Some evidence beyond the geographic realm of research. *Scientometrics, 102*, 789-810. http://dx.doi.org/10.1007/s11192-014-1414-4

Chovwen, C. O., Balogun, S. K., & Olowokere, B. O. (2014). Determinants of job-hopping experience among private and public- sector employee' turnover intention. *IFE Psychologia, 22*(2), 114-124. Retrieved from https://www.ajol.info/index.php/ifep/article/view/111111

Chu, H. (2015). Research methods in library and information science: A content analysis. Library & Information Science *Research, 37(1)*, 36-41. http://dx.doi.org/10.1016/j.lisr.2014.09.003.

Cohen, J. (1988). *Statistical power of abnormal-social psychological research:* A review. Hillsdale, NJ: Erlbaum. Retrieved from http://dx.doi www.utstat.toronto.edu/~brunner/oldclass/378f16/reading/CohenPower.pdf

Cohen, G., Blake, R. S., & Goodman, D. (2015). Does turnover intention matter? Evaluation the usefulness of turnover intention rate as a predictor of actual turnover rate. *Review of Public Personnel Administration,* 1-24. http://dx.doi:10.1177/0734371X15581850.

Cohen, R. J.; Swerdlik, M. E. (2004). *Psychological testing and assessment (6th edition).* Sydney: McGraw-Hill.

Cokley, K., & Awad, G. H. (2013). In defense of quantitative methods: Using the "master's tools" to promote social justice. *Journal for Social Action in Counseling and Psychology, 5* (2), 26-41. Retrieved from http://jsacp.tumblr.com/

Creswell, J. W. (2018*). Research Design, Qualitative, Quantitative, and Mixed Methods Approaches (5th Ed.*). London, UK: Sage.

Cronbach, L. J. (1970). *Essentials of psychological testing (3rd ed.).* New York, NY: Harper.

Cutruna, C. E., Abraham, W.T., Russell, D. Beach, S., Gibbons, F., Gerrard, G., Monick, M., & Philibert, R. (2015). Financial strain, inflammatory factors, and hemoglobin. A1clevels in African American women. *British Journal of Health Psychology, 20*. 662-679. http://dx.doi: 10.1111/bjhp.12120

Davies, M. B., & Hughes, N. (2014). *Doing a successful research project: Using qualitative or quantitative methods*. New York, NY: Palgrave Macmillan.

Department of Health, Education and Welfare (1978). *The Belmont report: Ethical principles and guidelines for the protection of human subjects of research.* DHEW Publication No. (OS) 78-0012. Washington, DC.: National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. Retrieved from https://videocast.nih.gov/pdf/ohrp_belmont_report.pdf

Derby-Davis, M. J. (2014). Predictors of nursing faculty's job satisfaction and intent to stay in academe. *Journal of Professional Nursing, 30*(1), 19-25. http://dx.doi: 10.1016/j.profnurs.2013.04.001.

Diab, E., van Lierop, D. & El-Geneidy (2017). Recommending Transit: Disentangling users' willingness to recommend transit and their intended continued use for publication. *Travel Behavior and Society, 6*, 1-9. Retrieved from http://tram.mcgill.ca/Research/Publications/Recommending_transit.pdf

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149–1160. http://dx.doi:10.3758/BRM.41.4.1149.

Farrokhyar, M., Reddy, D., Poolman, R., & Bhandari, M. (2013). Practical tips of surgical research: Why perform a priori sample size calculation? Canadian *Journal of Surgery, 56*, 207-213. http://dx.doi:10.1503/cjs.018012.

Fassinger, R., & Morrow, S. L. (2013). Toward best practices in quantitative, qualitative, and mixed-method research: A social justice perspective. *Journal for Social Action in Counseling & Psychology, 5*(2), 69-83. http://dx.doi.org/=10.1.1.671.7347&rep=rep1&type=pdf

Field, A. (2018). *Discovering Statistics. Using IBM SPSS Statistics 5th Ed*. Los Angeles: Sage.

Filzmoser, P., Ruiz-Gazen, A., & Thomas-Agnan, C. (2014). Identification of local multivariate outliers. *Statistical Papers, 55*(1), 29-47. http://dx.doi.org/10.1007/s00362-013-0524-z

Florida Department of Education (2018) *Fast facts.* Retrieved http://www.fldoe.org/core/fileparse.php/7766/urlt/CTSA1617.pdf

Fong, H. W. B (2015). *Job satisfaction and dissatisfaction factors influencing contract renewal of Generation Y and non-Generation Y teachers working at international schools in Asia* (Doctoral dissertation). Retrieved from Liberty University. (3737152).

Frankfort-Nachmias, C., Nachmias, D., & DeWaard, J. (2015). *Research Methods in the Social Sciences (8th ed.).* New York, NY: Worth.

Fry, R. (2016). For First Time in Modern Era, Living with Parents Edges out Other Living Arrangements for 18-to 34-Year-Olds: Share Living with Spouse or Partner Continues to Fall. Retrieved from https://eric.ed.gov/?id=ED575479

Gao, Y., Rasouli, S., Timmermans, H.J.P. & Wang, Y. (2017). Understanding the relationship between travel satisfaction and subjective well-being considering the role of personality: a structural equation model. *Transportation Research. Part F: Traffic Psychology and Behavior, 49,* 110-123. http://dx.doi.org/10.1016/j.trf.2017.06.005

Gelard, P., & Rezaei, S. (2015). The relationship between job motivation, compensation satisfaction and job satisfaction in employees of tax administration - A case study in Tehran. *Asian Social Science, 12*(2), 165-171. http://dx.doi:10.5539/ass.v12n2p165

Ghavifekr, F., Pillai, S (2016) The relationship between school's organizational climate and teacher's job satisfaction: Malaysian experience. *Asian Pacific Education Review. 17*, 87-61. http://dx.doi:10.1007/s12564-015-9411-8.

Gözükara, İ., & Çolakoğlu, N. (2015). The impact of manager support and work Family conflict on job satisfaction. *Business Management Dynamics, 5*(6), 13-25. Retrieved from http://www.bmdynamics.com

Greenhause, J., & Powell, G. N. (2006). When work and family are allies: a theory of work – family enrichment. *The Academy of Management Review, 31, (1),*72-92. http://dx.doi:10.5465/AMR.2006.19379625.

Gutierrez, I. A., Park, C. L., Wright, B. R., (2017). When the divine defaults: A religious struggle mediates the impact financial stressors on psychological distress. *Psychology of Religion and Spirituality 9* (4) 387-398. doi.org/10.1037/rel0000119.

Hanushek, E. A., Schwerdt, G., Wiederhold, S., & Woessmann, L. (2015). Returns to skills around the world: Evidence from PIAAC. *European Economic Review, 73*, 103-130. http://dx.doi.org/10.3386/w19762

Hagedorn, L. S. (2000). Conceptualizing faculty job satisfaction: Components, theories, and outcomes. *New Directions for Institutional Research 2*, 5-20. http://dx.doi: 10.1002/ir.10501

Heritage, B., Gilbert, J. M., Roberts, L. B., (2016) Job embeddedness demonstrates incremental validity when predicting turnover intentions for Australian university employees. *Frontiers in Psychology 2*, 582. http://dx.doi:10.3389/fpsyg.2016.00582.

Herzberg, F. (1965). The motivation to work among Finnish supervisors. *Personnel Psychology, 18,* 393-402. http://dx.doi:10.1111/j.1744-6570. 1965.tb00294.x

Herzberg, F. (1966). *Work and the nature of man.* Cleveland, OH: The World Publishing Company.

Heikonen, L., Pieterren, J., Pyhallo, K., Toon, A., & Soni, J. (2017). Early career teacher's sense of professional agency in the classroom: association with turnover intentions and perceived inadequacy in teacher student interaction. *Asia Pacific Journal of Teacher Education, 45* (3) 250-266. http://dx.doi: 10.1080/1359866X.2016.1169505

Hetling, A., Stylianou, A.M., & Postmus, J. L. (2015). Measuring financial strain in the lives of survivors of intimate partner violence. *Journal of Interpersonal Violence 30*(6), 1046- 1064.http://dx.doi.org/10.1177/0886260514539758.

Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, *44*(3), 513–524. https://doi.org/10.1037/0003-066X.44.3.513

Hodson, R., Dwyer, R. E., & Neilson, L. S., (2014) Credit card blues: the middle class and the hidden costs of easy credit. *Sociological Quarterly Journal of Midwest Sociological Society, 55*, 315-340. http://dx.doi: 10.1111/tsq.12059.

Hoglinger, M., Jann, B., & Diekmann, A. (2016). Sensitive questions in online surveys: An experimental evaluation of different implementations of the randomized response technique and the crosswise model. *Survey Research Methods, 10*, 171187. http://dx.doi.org/10.18148/srm/2016.v10i3.6703

Holtom, B. C., Smith, D. R., Lindsay, D. R., & Burton, J. P. (2014). The relative strength of job attitudes and job embeddedness in predicting turnover in a U.S. Military academy. *Military Psychology, 26*(5-6), 397-408. https://dx.doi.org/10.1037/mil0000055

Ho, C.-L., & Au, W.-T. (2006). Teaching Satisfaction Scale Retrieved from *PsycTESTS*. doi: http://dx.doi.org/10.1037/t05416-000

Hubler, D.S., Burr, B., Larzelere, R. E., & Gardener, B. C. (2016) The intergenerational transmission of financial stress and relationship outcomes. *Marriage & Family Review, 52* (4) 373-391. http://dx.doi: 10.1080/01494929.2015.1100695.

Imran, H., Arif, I., Cheema, S., & Azeem, M. (2014). Relationship between Job Satisfaction, Job Performance, Attitude towards Work, and Organizational Commitment. *Entrepreneurship and Innovation Management Journal, 2* (2) 135-144. Retrieved from https://pdfs.semanticscholar.org/43e3/6864ea970e77cf6a2fa201c59d9cf7f6a74a.pdf

Judith-Cohn, T. M., Kielwaser-Withrow, K., Owen, M., & Ward, J. (2014). Ethical principles of informed consent: Exploring nurses' dual role of care provider and researcher. *Journal of Continuing Education in Nursing, 45*(1), 35-42. http://dx.doi:10.3928/00220124-20131223-03.

Kapelko, M., & Lansink, A. O. (2015). An international comparison of productivity change in the textile and clothing industry: A bootstrapped Malmquist index approach. *Empirical Economics, 48,* 1499-1523. http://dx.doi.org/10.1007/s00181-014-0835-5

Knight, V., & Kleiner, B. (2015). Excellence in incentive programs. Journal of International Diversity, 24-34. Retrieved from http://www.franklinpublishing.net

Kula, S., & Guler, A. (2014). Influence of supervisor support on job satisfaction levels: An evaluation of Turkish national police (TNP) officers in the Istanbul police department. *International Journal of Criminal Justice Sciences, 9,* 209-224. Retrieved from http://www.sascv.org/ijcjs/

Lebert S., Voorpostel, M., (2016) Turnover as a strategy to escape job insecurity: The role of family determinants in dual earner couples. *Family economic (37*) 407-421. http://dx.doi. 10.1007/s10834-016-9498-z

Legrain, A., Eluru, N., & El-Geneidy, A. M. (2015). Am stressed, must travel: the relationship between mode choice and commuting stress. *Transportation Research Part F.* 34, 141-151. http://dx.doi.org.ezp.waldenulibrary.org/10.1016/j.trf.2015.08.001.

Locke, L., Spirduso, W. W., & Silverman, S. J. (2014). *Proposals that work: A guide for planning dissertations and grant proposals* (6th ed.). New York, NY: Sage.

Loong, C., van Lierop, D., & El-Geneidy A. (2017). On time and ready to go: An analysis of commuters' punctuality and energy levels at work or school. *Transportation, 33. Research Part F: Traffic Psychology and Behavior, 45*, 1-13. http://dxdoi.:10.1016/j.trf.2016.11.014

Lyon, P. R. (2016). Making the case for manager delegation of authority. *Human Resource Management International Digest, 24*(5), 1-3. http://dx.doi.:10.1108/HRMID032016-0025

Lumadi, M. W. (2014). Exploring factors faced by teachers in curriculum implementation. *Mediterranean Journal of Social Sciences, 5,* 171-178. http://dx.doi:10.5901/mjss. 2014.v5n6p171.

Lu, A. C. C., & Gursoy, D. (2016). Impact of job burnout on satisfaction and turnover intention: Do generational differences matter? *Journal of Hospitality & Tourism Research, 40*(2), 210–235. http://dx.doi.:10.1177/1096348013495696.

Luu, T. T. (2016) Psychological contract and knowledge sharing: CSR as an antecedent and entrepreneurial orientation as a moderator. *Corporate Communications: An International Journal, 21* (1),2-19, https://doi.org/10.1108/CCIJ-09-2014-0058

Lyons, P.R. (2016). Making the case for manager delegation of authority. *Human Resource Management International Digest 24*, 5, 125-133. https://dx.doi.org/10.1108/HRMID-03-2016-0025

Mai, M. K., Christian, J. S., Ellis, A. P., & Porter, C. O. (2016). Examining the effects of turnover intentions on organizational citizenship behaviors and deviance behaviors: a psychological contract approach. *Journal of Applied Psychology 2*, 1-12. http://dx.doi: 10.1037/apl0000115.

Makela, K., Hirvensalo, M., Laakso M.L., & Whipp P. R. (2014). Physical education teachers in motion: an account of attrition and area transfer, Physical *Education and Sport Pedagogy, 19:*4, 418-435, http://dx.doi: 10.1080/17408989.2013.780590.

Mathieu, C., & Babiak, P. (2016). Corporate psychopathy and abusive supervision: their influence on employees' job satisfaction and turnover intentions. *Personality and Individual Differences, 91*, 102-106. http://dx.doi: 10.1016/j.paid.2015.12.00.

McNeish, D. M., & Stapleton, L. M. (2016). The effect of small sample size on two-level model estimates: A review and illustration. *Educational Psychology Review, 28,* 295-314. http://dx.doi:10.1007/s10648-014-9287-x.

Mills, M.J. (2016) Review of Gender and work – family experience: An intersection of two domains. *Work and Employment Society 30* (2) 481-483.https://doi.org/10.1080/13668803.2016.1183903

Mirsha, S. K. (2016). Shapely value regression and the resolution of multicollinearity. *Journal of Economics Bibliography, 3,* 498-515. http://dx.doi:10.1453/jeb. v3i3.850

Mobley, W. H., Horner, S. O., & Hollingsworth, A. (1978)). An evaluation of percursors of hospital employee turnover. *Journal of Applied Psychology. 63*, 408-414. https://doi.org/10.1037/0021-9010.63.4.408

Montpetitt, M. A., & Knapp, A., E., & Bergamon, C. S. (2015). Financial stress, neighborhood stress, and well-being: meditational and moderational models. *Journal of Community Psychology,43*(3), 364-376. http://dx.doi: 10.1002/jcop.21684.

Mulei, K. O., Waita, K. J., Mueni, K. B., Mutune, M. J., & Kalai, J., (2016). Factors influencing teacher attrition in public secondary schools in Mbooni-East Sub-County, Kenya. *International Journal of Education and Research 4* (3) 367-382. Retrieved from https://www.ijern.com/journal/2016/March-2016/27.pdf

Naess, P. (2014) Tempest in a tea pot: the exaggerated problem of transport related residential self- selection as a source of error in empirical studies. *Journal of Transport and Land Use, (7)* 57-79. http://dx.doi.org/10.1016/j.trf.2015.08.001.

National Center for Alternative Certification (NCAC) (1998). *How Can I Become a Teacher?* Retrieved from http://www.teachnow.org/index.asp No Child Left Behind Act (2002). *Education and the workforce*. Retrieved March 13, 2018. Retrieved from https://dx.doi www.congress.gov/bill/107th-congress/house-bill/1

National Center for Education Statistics (2019). Common Core of Data *America's Public Schools Retrieved from https://dx.doi www.nces.ed.gov/ccd/*

Novaco, R. W., Stokols, D., & Milanesi, L. (1990). Objective and subjective dimensions of travel impedance as determinants of commuting stress. *American Journal of Community Psychology, 18*, 231–257. http://dx.doi:10.1007/bf00931303

Nuzzo, R. L. (2016). Statistical power. *PM&R, 8(9)*, 907-912. http://dx.doi: 10.1016/j.pmrj.2016.08.004

Olsson, L. E., Garling, T., Ettema, D., Friman, M., & Fujii, S. (2013). Happiness and satisfaction with work commute. *Social Indicators Research 111* (1) 255-266. http://dx.doi:10.1007/s11205-012-0003-2.

Onkila, T. (2015). Pride or embarrassment? Employees' emotions and corporate social responsibility. *Corporate Social Responsibility and Environmental Management, 22*, 222-236. http://dx.doi.:10.1002/csr.1340.

Ouyang, Z., Sang, J., Li, P., & Peng, J. (2015). Organizational justice and job insecurity as mediators of the effect of emotional intelligence on job satisfaction: A study from China. *Personality and Individual Differences, 76*, 147-152. http://dx.doi: 10.1016/j.paid.2014.12.004.

Parsa, B., Idris, K. B., Samah, B. B. A., Wahat, N. W. B. A., & Parsa, P. (2014). Relationship between quality of work life and career advancement among Iranian academics. *Procedia-Social and Behavioral Sciences, 152*, 108-111. http://dx.doi: 10.1016/j.sbspro.2014.09.164.

Quratulain, S., & Khan, A. K. (2015). How does employees' public service motivation get affected? A conditional process analysis of the effects of person-job fit and

work pressure. *Public Personnel Management, 44,* 266-289. http://dx.doi.org/10.1177/0091026014568461

Randi, I., Ruppel, C. P., & Zeidler, P., (2015) Work strain, job satisfaction, and intention to quit: the moderating effect of long-term orientation. *International Journal of Stress, 23*(1), 23- 43. http://dx.doi.org/10.1037/a0039755.

Raziq, A. & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia-Economics and Finance, 23,* 717-725. http://dx.doi:10.1016/S22125671(15)00524-9.

Reeves, P. M., Pun, W. H., Chung, K. S. (2017). Influence of teacher collaboration on job satisfaction and student achievement. *Teaching and Teacher Education 67,* 227-236. https://doi.org/10.1016/j.tate.2017.06.016

Reiser, J. E., Murphy, S. L., & McCarthy, C. J. (2016) Stress prevention and mindfulness: a psycho- educational and support group for teachers. *Journal for Specialists in Group Work 41* (2)117-139. http://dx.doi: 10.1080/01933922.2016.1151470.

Resnik, D. B. (2015). Some reflections on evaluating institutional review board effectiveness. *Contemporary Clinical Trials, 45*(Part B), 264-264. http://dx.doi:10.1016/j.cct.2015.09.018.

Reuter, K. E., & Schaefer, M. S. (2016). Illegal captive lemurs in Madagascar: Comparing the use of online and in-person data collection methods. *American Journal of Primatology, 1*-9. http://dx.doi.org/10.1002/ajp.22541

Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology, 11*(1), 25-41. http://dx.doi.:10.1080/14780887.2013.801543

Roman, A. (2017). *Relationships between women's glass ceiling beliefs, career advancement satisfaction, and quit intention* (Doctoral Dissertation). Retrieved from Walden University (10286666).

Rittichainuwat, B., & Rattanaphinanchai, S. (2015). Applying a mixed method of quantitative and qualitative design in explaining the travel motivation of film tourists in visiting a film-shooting destination. *Tourism Management, 46,* 136147. http://dx.doi.org/10.1016/j.tourman.2014.06.005

Ryan, S. V., Embse, N. P., Prendergast, L. L., Segool, S. E., & Schewing, N. (2017). Leaving the teaching profession. the role of teacher stress and educational accountability policies on turnover intent. *Teaching and Teacher Education 66,* 1-11. https://doi.org/10.1016/j.tate.2017.03.016

Schoenherr, T., Ellram, L. M., & Tate, W. L. (2015). A note on the use of survey research firms use to enable empirical data collection. *Journal of Business Logistics, 36,* 288- 300. http://dx.doi:10.111/jbl.12092.

Seaman, C. A., Seaman, J. E., & Allen, E. I. (2015). The significance of power. *Quality Progress, 48*(7), 51-53. Retrieved from http://asq.org/qualityprogress/index.html

Selye H. (1976). *The Stress of Life (Rev. Ed.)*. New York: McGraw-Hill.

Shadish, W.; Cook, T. D.; Campbell, D. T. (2006). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin.

Shapka, J. D., Domene, J. F., Khan, S., & Yang, L. M. (2016). Online versus in-person interviews with adolescents: An exploration of data equivalence. *Computers in Human Behavior, 58,* 361-367. http://dx.doi.org/10.1016/j.chb.2016.01.016

Simon, M. K., & Goes, J. (2013). *Dissertation and scholarly research recipes for success* (2013). Lexington, KY: Dissertation Success, LLC. http://dx.doi:10.1108/09727981111175993.

Simpson, E. E., Maylor, E. A., McConville, C., Stewart-Knox, B., Meunier, N., Andriollo-Sanchez, M., Coudray, C. (2014). Mood and cognition in healthy older European adults: The Zenith study. *BMC Psychology, 2*(1), 1-13. http://dx.doi.org/10.1186/2050-7283-2-11

Skaalvik, E. M., Skaalvik, M., (2017) Motivated for teaching? Associations with school goal structure, teacher self-efficacy, job satisfaction, and emotional exhaustion. *Teaching and Teacher Education. 67,* 152-160. http://dx.doi.org/10.1016/j.tate.2017.06.006

Skaalvik, E. M., Skaalvik, S., (2014). Teacher self-efficacy and perceived autonomy: relations with teacher engagement, job satisfaction, and emotional exhaustion. *Psychological Reports. Employment Psychology and Marketing114* 1,68-77 http://dx:doi: 10.2466/14.02.PR0.114k14w0.

Skelton, A. R. (2017). *Job satisfaction and job embeddedness as predictors of manufacturing employee turnover intentions* (Doctoral Dissertation). Retrieved from Walden University. (10623083).

Smith, A. (2014). *How to write a research proposal.* Raleigh, NC: Lulu Press, Inc.

Soper, D. (2017). *Calculator: A-Priori sample size for multiple regression*. Retrieved from http://dx:doi:www.danielsoper.com/statcalc/calculator.aspx?id=1.

Sonnentag, S., & Fritz, C. (2015). Recovery from job stress: The stressor-detachment model as an integrative framework. *Journal of Organizational Behavior, 36*, S72S103. http://dx.doi:10.1002/job.1924

Stone, A. A., Schneider, S. (2016). Commuting episodes in the United States: their correlates with experimental wellbeing from the American time use survey. *Traffic Psychology and Behavior 42* (1) 117-124. http://dx.doi10.1016/j.trf.2016.07.004

Sturgeon, J. A., Zaitra, A. J., Okun, A., (2014). Associations between financial stress and interpersonal event. A Daily diary of study of middle-aged adults and their life's circumstances. *Psychology and Aging 29 (4)* 803-813. http://dx.doi.org/10.1037/a0037961.

Sullivan, L. (2016). Hypothesis testing – Analysis of Variance (ANOVA). *Boston University of Public Health.* Retrieved from http://dx.doi:sphweb.bumc.bu.edu/otlt/MPH-Modules/BS/BS704_HypothesisTesting

Sun, M., Saultz, A. & Ye, Y. C. (2017). Federal policy and the teacher labor market: exploring the effects of NCLB school accountability on teacher turnover, *School Effectiveness and School Improvement, 28* (1) 102-122, http://dx.doi.: 10.1080/09243453.2016.1242506.

SurveyMonkey. (2016a). *Security statement.* Retrieved from https://dx:doi:www.surveymonkey.com/mp/policy/security/

SurveyMonkey. (2014b). *Making surveys anonymous*. Retrieved from http://dx.doi: www.help.surveymonkey.com/articles/en_US/kb/how-do-I-make-surveys anonymous

Troesch, L. M., & Bruer, C. E. (2017) Second career teachers: Job satisfaction, job stress, and the role of self- efficacy. *Teaching and Teacher Education 67*: 389- 398. http://dx.doi:10.1016/j.tate.2017.07.006

Tziner, A., Rabinu, E., Radomski, R., &Belkin, Belkin, A. (2015). Work stress and turnover intentions among hospital physicians: the mediating role of burnout and work satisfaction. *Journal of Work and Organizational Psychology 31*, 207-213. http://dx.doi.org/10.1016/j.rpto.2015.05.001.

United States Census Bureau (2018). *Quick Facts Florida*. Retrieved from https://www.census.gov/quickfacts/FL

U.S. Department of Labor, Bureau of Labor Statistics. (2015). *Job openings and labor turnover survey news release*. Retrieved March 13, 2018 from http://www.bls.gov/news.release/jolts.htm

Vahasantanen, K. (2015). Professional agency in the stream of change: understanding education change and teachers' professional identities. *Teaching and Teacher Education 17*, 783-805. http://dx.doi.org/10.1016/j.tate.2014.11.006

Vangreiken, K., Grossmans, I., Dochy, F., Kyndt, E. (2017). Teacher Autonomy and collaboration: A paradox? Conceptualizing and measuring teachers' autonomy

and collaborative attitude. *Teaching and Teacher Education 67*, 302-315. http://dx.doi: 10.1016/j.tate.2017.06.021

VanVoorhis, C. W., & Morgan, B. L. (2007). Understanding power and rules of thumb for determining sample sizes. *Tutorials in Quantitative Methods for Psychology3*(2), 43-50. http://dx.doi: 10.20982/tqmp.03.2. p043.

Veldman, I., Admiral, W., Tartwijk, J., Mainhard T.& Wubbels T., (2016). Veteran teachers' job satisfaction as a function of personal demands and resources in the relationships with their students, *Teachers and Teaching, 22*:8, 913-926. http://dx.doi:10.1080/13540602.2016.1200546.

Vespa, J. (2017). The changing economics and demographics of young adulthood:1976-2016.Retrieved from. http://dx.doi:www.census gov/content/dam/Census/library/publications/2017/demo/p20-579.pdf

Walden, (n. d.). *Walden University's Institutional Review Board for Ethical Standards in Research. Module 5 EDAD 8145:* Research in Practice. Retrieved from http://researchcenter.waldenu.edu/Office-of-Research-Integrity-and Compliance.htm

Walsh, J., Brown, L. M., Gibson, A. (2016) Peace of minds price tag: the psychological costs of financial stressors on older adults' post disaster. *Translational Issues in Psychological Science 2* (4) 408-417. http://dx.doi.org/10.1037/tps0000089.

Wang, W., Rothschild, D., Goel, S., & Gelman, A. (2015). Forecasting elections with non-representative polls. *International Journal of Forecasting, 31*, 980-991.http://dx.doi: 10.1016/j.ijforecast.2014.06.001

Williams, R., & Bornmann, L. (2016). Sampling issues in bibliometric analysis: Response to discussants. *Journal of Informetrics, 10,* 1253-1257. http://dx.doi.org/10.1016/j.joi.2016.09.013

Wilson, N. A. (2015). Factors that affect job satisfaction and intention to leave of allied health professionals in a metropolitan hospital. *Australian Health Review, 39*, 290-294. http://dx.doi:10.1071/AH14198.

Wilson D. B, Lipsey, M.W. (2001). The role of method in treatment effectiveness Research.: Evidence from meta-analysis, *Psychological Methods, 6,* 413-429. http://dx.doi: 10.1037//1082-989X.6.4.413

Wong, C. A.& Laschington, H. K. (2015). The influence of frontline manager job strain on burnout, commitment, and turnover intention: a cross sectional study. *Internal Journal of Nursing Studies, 5*2, 1824-1833. http://dx.doi..org/10.1016/j.ijnurstu.2015.09.006 0020-7489/ 2015.

Wohlin, C., & Aurum, A. (2015). Towards a decision-making structure for selecting a research design in empirical software engineering. *Empirical Software Engineering, 20,* 1427-1455. http://dx.doi.org/10.1007/s10664-014-9319-7

Wouters, K., Maesschalck, J., Peeters, C. F., & Roosen, M. (2014). Methodological issues in the design of online surveys for measuring unethical work behavior: Recommendations on the basis of a split-ballot experiment. *Journal of Business Ethics, 120,* 275-289. http://dx.doi.org/10.1007/s10551-013-1659-5.

Wren, B. M., Berkowitz, D., & Grant, E. S. (2014). Attitudinal, personal, and job-related predictors of salesperson turnover. *Marketing Intelligence & Planning, 32* (1),

107-123. http://dx.doi:10.1108/MIP-04-2013-0061.

Yousaf, A., Sanders, K., & Abbas, Q. (2015). Organizational/occupational commitment and organizational/occupational turnover intentions: A happy marriage? *Personnel Review*, *44*, 470-491. doi:10.1108/PR-12-2012-0203

Zeb, A., Jamal, W., & Ali, M. (2015). Reward and recognition priorities of public sector universities teachers for their motivation and job satisfaction. *Journal of Managerial Sciences, 9*, 214-224. Retrieved from http://www.qurtuba.edu.pk/

Zheng, X., Diaz, I., Tang, N., & Tang, K. (2014). Job insecurity and job satisfaction: The interactively moderating effects of optimism. *Career Development International, 19*, 426-446. http://dx.doi:10.1108/CDI-10-2013-01.

Zwickel, K., Koppel, J., Katz, M., Virkstis, K., Rothenberger, S., & Boston-Fleischhauer, C. (2016). Providing professionally meaningful recognition to enhance frontline engagement. *The Journal of Nursing Administration, 46,* 355-356. http://dx.doi:10.1097/NNA.0000000000000357.

Appendix A: Letter of Introduction
The Superintendent

South Eastern United States

Dear Sir,

I am a student at Walden University where I study Psychology. As part of my doctoral program, the institutional Review Board at Walden University has approved my proposal to conduct a research in your school district. My study is entitled "Predicting Teacher Turnover Intentions: The Role of Financial Stress, Commuting Stress, and Job Satisfaction."

This letter is to request your permission to conduct this study in your school district. Dr. Edward Naggiar has authorized this study to be conducted in the South Eastern United States. The purpose of the study is to investigate possible reasons for teacher turnover in the county. All full- time teachers who are desirous of participating in the study are invited to complete the survey. Teachers will participate on a voluntary basis. Their participation will be greatly appreciated for the completion of this study.

Please find the attached Walden University IRB Letter of Approval, and the Research Study Participation information page. Upon your approval, please forward the Research Study Participation information page to your schools' principals asking them to disseminate to all full-time teachers that are currently employed in the district. A link to Survey Monkey, a survey service provider will be provided for teachers to access the survey. Teachers will have until May 1, 2019 to complete the survey.

I look forward to participation in this study. You may also contact me at [for any further queries or clarifications. Thank you.

Yours respectfully,

Alrick Thompson

Appendix B. Letter of Approval

Dear Mr. Thompson,

Our District Research Committee has reviewed your proposed study, “Stress and Job Satisfaction as Predictors of Teacher Turnover Intentions,” and approved it with the following requirements/suggestions.

- Since you are only targeting 150 teachers, perhaps if you chose a number of schools to send the survey to depending on your interest in level (elementary, middle, high) or geographic area (zone), we could avoid sending out the survey to all of our 5,500 teachers.
- We suspect that expecting respondents to spend one hour on the surveys may limit the number of folks who are willing to participate. You might consider cutting down the time required for your surveys.
- Please send an introductory statement and the survey link to me (email address below). It usually works out pretty well if I send it to principals to pass along to their teachers.
- The survey must be voluntary on the part of teachers.
- Please plan to provide my office with a copy of the final report when the study has concluded.

Please contact me if you would like to discuss anything further. Otherwise, send me your introductory information and the survey link when you are ready. We look forward to seeing the results of your study

Sincerely,

Director, Accountability, Research & Assessment

Appendix C: Letter of Invitation

May 5, 2019

Subject: Job Satisfaction, Stress, and Teacher Turnover Survey

Dear potential participant,

My name is Alrick Thompson, a doctoral candidate at Walden University. I am conducting an online research survey to examine the role of job satisfaction, commuting stress, and financial stress associated with high cost of living, and how they may relate to job turnover in South Eastern United States School District. I am looking for volunteers to participate in an anonymous online survey. The survey will take approximately 15 to 20 minutes to complete.

Only full-time instructional teachers can give the data that is needed for a study that examines job satisfaction and its relationship to other stressors and turnover. Since you meet the inclusionary criteria as a full-time instructional teacher and work within the county, you are asked to participate. Principals, Vice Principals, School Administrators, and Substitute Teachers do not meet the inclusionary criteria, because they may have different experiences with job-satisfaction. Therefore, they will not be eligible to participate, as they will not be able to provide the type of responses needed for this type of study.

Your participation is voluntary, and you will not receive monetary compensation. However, by raising awareness about the difficulties that teachers experience, the study has the potential of addressing a local problem through data analysis, and effectively addressing a gap in the literature on stress, job satisfaction and job turnover. Your

participation will be anonymous as you will not be asked to provide any information that can be traced back to you. Further, your data will be stored on my password protected laptop, and backed up with a password protected hard-drive to maintain your privacy and confidentiality. In accordance with the regulations set by the Institutional Review Board at my University, I will destroy the data after five years.

Your participation will be greatly appreciated. Before completing the survey, please make sure that you read and understand the attached consent form. Please note that the survey will be available online until the end of May, 2019.

Additionally, if you have any questions or concerns, please feel free to contact me Thank you in advance.

Yours respectfully,

Alrick Thompson

Appendix D: Permission to Use the Job Turnover Intention Scale (Cohen, 1999)

Subject: Job Turnover intentions

Dear Mr. Aaron Cohen

I am a student at Walden University and writing my doctoral study entitled "Stress, and Job-satisfaction as Predictors of Teacher Turnover Intentions." I hereby respectfully request your permission to use the Job Turnover Intention Scale as the items on the scale align well with my study.

1. I think about leaving the job.
2. I am actively searching for a job.
3. As soon as possible I will leave the job.

I propose to use your 5-point Likert-type rating scale ranging from: (1= strongly agree, to 5= strongly disagree), to measure teachers' intentions to leave their jobs.

Should the manner in which I propose to use this scale be acceptable to you, please indicate by responding to me at alrick.thompson@waldenu.edu. Your permission will be greatly appreciated. Thank you.

Yours respectfully,

Alrick Thompson

Cohen, Aaron. (1999). The relation between commitment forms and work outcomes in Jewish and Arab culture. *Journal of Vocational Behavior, Vol 54(*3), 371-391. doi: 10.1006/jvbe.1998.1669, © 1999 by Elsevier. Reproduced by Permission of Elsevier.

Response

“Permissions: Test content may be reproduced and used for non-commercial research and educational purposes without seeking written permission. Distribution must be controlled, meaning only to the participants engaged in the research or enrolled in the educational activity (PsycTests, 2019).”

PsycTESTS Citation: Cohen, A. (1999). *Turnover Intention Scale* [Database record]. Retrieved from PsycTESTS. doi: http://dx.doi.org/10.1037/t10116-000