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Parent-Teacher Relationships of Students Diagnosed With Autism, Job Burnout, and Stress as Predictors of Teacher Self-Efficacy

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Walden University
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Abstract

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by

Sohna Njie Shook

MPhil, Walden University, 2020

Med, Wichita State University, 2009

BS, Friends University, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Excessive workload, personal stress, and a lack of resources are some of the factors that contribute to teacher stress and burnout. One third of new teachers quit the teaching profession within their first 3 years, half leaving within 5 years, and 10% quitting every year after that. Research has identified a relationship between work stress and burnout among teachers. However, this relationship has not been explored among teachers who have students diagnosed with autism in their classrooms. The purpose of this study was to examine the relationship between teacher job-related stress, burnout, quality of parent-teacher relationships, and teacher self-efficacy among teachers who have students diagnosed with autism in their classrooms. Bandura's social learning theory was used to guide this research. A convenience sample of 221 secondary education teachers identified through Facebook groups completed an online survey. Multiple regression analyses showed that higher levels of personal accomplishment predicted higher levels of teacher self-efficacy. Higher levels of emotional exhaustion predicted lower levels of teacher self-efficacy. Higher levels of perceived negative interactions with students predicted lower levels of teacher self-efficacy. The results may be used for positive social change by developing strategies to increase positive interactions between teachers and students and acknowledging personal accomplishments of teachers. Administrators and stakeholders may find these strategies reduce levels of burnout and increase self-efficacy of teachers.

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Dedication

This dissertation is dedicated to my daughters Olivia Kay and Maya Sillah, my mother, father, siblings, and last, but certainly not least my amazing and supportive husband for always being my cheerleader. Thanks to you all for your limitless love and support made completion of this journey possible.

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Chapter 1: Introduction to the Study

The focus of this research was to investigate the relationship between job-related stress, job burnout, and the quality of parent-teacher relationships of students diagnosed with autism as these variables may be associated with teacher self-efficacy. As teachers become more stressed at work, many eventually will become burnt out from this profession due to the inability to cope with the demands of the job and leave (Steinhardt, Jaggars, Faulk, & Gloria, 2011). Ryan et al. (2017) reported that teacher stress and burnout has led to 40% to 50% of teachers leaving the job. Teachers who report feeling burnt out also find themselves exhibiting a negative attitude toward students that results in a ripple effect of defiant behavior (Herman, Hickmon-Rosa, & Reinke, 2018). Previous research has demonstrated a relationship between job burnout, job stress, and teacher self-efficacy in which low self-efficacy leads to high work stress, and high stress leads to job burnout (Antoniou et al., 2013; Yu et al., 2014). General education teachers face additional challenges of having to multitask and accommodate all students' learning capabilities (Helms-Lorenz & Maulana, 2016).

Teacher self-efficacy is a critical component to having a successful classroom and ranks as a significant teacher characteristic associated with instructional quality and student achievement (Miller, Ramirez, & Murdock, 2017). Teacher self-efficacy has also been associated with quality of instruction and the use of innovative teaching methods (Tschannen-Moran & Woolfolk-Hoy, 2001; Wolters & Daugherty, 2007). Teacher's self-efficacy can also alter how much effort teachers put forth in instruction, how long they will persevere when confronting problematic behaviors, and how resilient they are in the

face of changes happening in the education system (Miller et. al, 2017). Thus, research is needed specifically examining job burnout, stress, teacher-parent relationships, and self-efficacy among teachers who have students diagnosed with autism in their classrooms. Students diagnosed with autism often struggle with socially appropriate interactions with their peers and teachers which can be problematic in classrooms where social interactions are a daily occurrence (Link, 2019).

Educators and stakeholders may use the results from this study to better understand the importance of teacher's sense of self-efficacy in terms of managing their classrooms, improving interactions with teachers and students, delivering quality instruction, and teachers better understanding their own teaching styles. When teachers improve their self-efficacy, it results in better instructional quality, which can improve student achievement (Miller et al, 2017). Bandura (1997) found in his research on teacher self-efficacy that students perform better academically when they have teachers who have a high self-efficacy as opposed to teachers with low self-efficacy. Bandura (1997) also found that teachers who displayed high self-efficacy were able to solve problems in their classrooms easily, believed they could reach slow learners by encouragement, and used correct redirection methods. Teachers with low self-efficacy ignored problematic behaviors, blamed students' academic performance on students' abilities in the classroom, and used rigid disciplinary rules in their classrooms. This study has several positive social change implications. The results from this study may be used to reduce teacher burnout and job stress, increase in teacher self-efficacy, and ultimately lead to higher teacher retention. In addition, educators may use results from this study to develop

strategies to increase positive social interactions between teachers and students who have a diagnosis of autism, improve parent-teacher relationships, and enhance the education of children with disabilities. Educators may use the results from this study to develop effective teaching strategies to use with students who have a diagnosed disability and improve the quality of instruction.

In Chapter 1, I review the background of this study, explain the problem statement, and describe the purpose of the study. The research questions and hypotheses are listed, along with the theoretical framework and nature of the study, which I discuss in more detail in Chapters 2 and 3. This chapter also includes a discussion of the operational definitions, assumptions, and scope and delimitations. Finally, this chapter concludes with a discussion of the limitations and significance of this study.

Background

Teachers are viewed as pillars of support for students who determine the processes of learning and teaching students. Teacher support can positively influence students' engagement and achievement (Khani & Mirzaee, 2015). Skaalvik and Skaalvik (2015) identified the occupation of being a teacher a rewarding job, but this profession also causes a high degree of stress and burnout in teachers. Ryan et al. (2017) reported that teacher stress and burnout has led to 40% to 50% of teachers leaving the job. Excessive workload, personal stress, and a lack of resources are some of the factors that contribute to teacher stress and burnout (Skaalvik et. al., 2015). It is estimated that due to a combination of teacher stress and/or burnout, one third of new teachers quit the teaching profession within their first 3 years, half leaving within 5 years, and 10%

quitting every year after that (Yu, Wang, Zhai, Dai, & Yang, 2014). Because the shortage of teachers is growing, this poses a threat to the quality of the education system (Helms-Lorenz & Maulana, 2016).

Many teachers who remain in the profession will experience frustration and fatigue, which makes their teaching ineffective and harms students' education and the quality of the school system (Chang, 2009). A recent study by Davis (2016) examined factors that influenced teacher retention across the United States. Davis (2016) found that job satisfaction, stress, low salaries, and inadequate administrative support contributed to teacher burnout, costing states between $61.4 million and $133.6 million dollars a year to recruit, replace, and train new teachers. One stressor that teachers have identified that contributes to their frustration and fatigue is dealing with students' problematic behaviors while trying to manage their classroom (Hamama et al., 2013). General education teachers identify having a student with a mental health diagnosis placed in their classroom as problematic and a stressor (Ruble, Usher, & McGrew, 2011). Currently, 40% of students diagnosed with autism are placed in regular education classrooms for a majority of the school day (National Center for Education Statistics [NCES], 2015).

Students who have a mental health diagnosis spend 79% of their school day in general education classrooms, which poses concerns for teachers as they are expected to provide equal education and support to these students (Loefgren, 2011). One of the more challenging situations identified by teachers is working with students diagnosed with autism (Horrocks, White, & Roberts, 2008). Students diagnosed with autism have impairments that include impaired communication, social interaction, and understanding,

and they have restricted and narrow interests that make it challenging for teachers to meet their educational needs (Ruble et al., 2011). Competent and otherwise skilled educators report frequently not feeling fully capable of serving the needs of students diagnosed with autism (Horrocks et al., 2008). As Ruble et al. (2011) discussed, the responsibility for teaching students diagnosed with autism increases teachers' vulnerability to stress, burnout, and overall satisfaction in their job, which can be damaging to their self-efficacy.

Teachers are expected to manage students with learning and behavioral problems in the classroom, which can be overwhelming and influence their performance (Khani & Mirzaee, 2015). As teachers are balancing the pressure of performing in the classroom, many general education teachers express frustration in collaborating with parents of students who have a mental health diagnosis (Schultz, Sreckovic, Able, & White, 2016). Parents and teachers have to communicate effectively to ensure that children's needs are being met (Azad & Mandell, 2016). Previous research has suggested that parents and teachers have differing perceptions of how to educate students diagnosed with autism (Tobin et al., 2012). According to Mount and Dillon (2014), parents attribute their own stress to lack of professional support stemming from teachers misunderstanding their child's diagnosis.

Yu et al. (2014) found that work stress and self-efficacy were correlated with job burnout in teachers who did not teach students who have a diagnosed disability in their classroom. However, this study did not include teachers who had students diagnosed with a disability in their classroom. In addition, Yu et al. (2014) did not examine the quality of

the relationship between parents and teachers, work stress, burnout, and teachers' self-efficacy. Teacher's self-efficacy can alter how much effort teachers put forth in instruction, how long they will persevere when confronting problematic behaviors, and how resilient they are in the face of changes happening in our education system (Miller et al., 2017). However, research is needed to specifically examine job burnout, stress, parent-teacher relationships, and self-efficacy among teacher's who have students diagnosed with autism in their classrooms. There is a gap in the current literature because researchers have not specifically researched job-related stress, job burnout, and the quality of parent-teacher relationships of students diagnosed with autism.

In recent years, general education teachers have encountered challenges with having to accommodate students with diagnosed disabilities in general education classrooms (Mader, 2017). This can directly affect their self-efficacy and quality of teaching (Corona, Christodulu, & Rinaldi, 2017). This study determined the extent to which job-related stress, job burnout, and the quality of parent-teacher relationships are predictors of teacher self-efficacy.

Problem Statement

Teaching is one of the most stressful professions (Hamama, Ronen, Shachar, & Rosenbaum, 2013; Kokkinos, 2007). According to Brinson (2010), teaching ranks as one of the top five most stressful job professions. Teachers deal with a number of stressors that contribute to leaving the teaching profession. Richards (2011) conducted a study with general education teachers in which they identified top stressors leading to a change in careers. These stressors included feeling overcommitted to work, too many duties and

responsibilities, teaching needy students without enough support, little time to relax, teaching students who are not motivated to learn, and feeling constant pressure of being held accountable when students do not meet academic standards (Richards, 2011). Educating students with autism presents teachers with significant instructional challenges that can lead to job-related stress and burnout (Ruble et al., 2011).

Students who are diagnosed with autism have impairments that include impaired communication, social interaction and understanding, and restricted and narrow interests that make it challenging for teachers to meet their educational needs (Ruble et al., 2011). The responsibility for teaching students with autism increases teachers' vulnerability to stress and burnout, and overall satisfaction in their job (Ruble, et. al, 2011). These factors affect a teachers' self-efficacy in instruction with respect to teachers' beliefs in their ability to promote learning and engagement in their students (Wang, Hall, & Rahimi, 2015). Developing a positive relationship with parents/guardians is one way to improve a teachers' self-efficacy (Epstein & Jonsorn, 2004). However, previous research has suggested that parents and teachers have differing perceptions of how to educate students who have a disability, more specifically a diagnosis of autism (Tobin et al., 2012).

Previous research has demonstrated that healthy parent-teacher relationships are vital to student academic success (Miller et al, 2017). Teachers may also experience burnout and stress in their profession and self-efficacy appears to be an important factor that determines the quality of instruction and student academic outcomes (Miller et al., 2017). However, research is needed to examine job burnout, job-related stress, parent-teacher relationships, and self-efficacy among teacher's who have students diagnosed

with autism in their classrooms. The literature has not researched job-related stress, job burnout, and the quality of parent-teacher relationships of students diagnosed with autism. This study gave insight into the extent to which job-related stress, job burnout, and the quality of parent-teacher relationships are predictors of teacher self-efficacy among teachers who have students diagnosed with autism in their classrooms.

Federal legislation such as the Individual with Disabilities Education Act and No Child Left Behind Act have led to students with diagnosed disabilities being mainstreamed at increasing rates into general education classrooms (Rogers & Johnson, 2018). This presents challenges for general education teachers to ensure that these students' academic needs are being met. In addition, those challenges may affect teacher self-efficacy and the quality of instruction. The results from this study may be used by educators to develop strategies to increase positive interactions between teachers and students who have a diagnosis of autism, improve parent-teacher relationships, develop effective teaching strategies with students with a diagnosed disability, and improve the quality of teacher instruction.

Purpose of the Study

The purpose of this research study was to determine whether there was a relationship among teacher job-related stress, burnout, quality of parent-teacher relationships, and teacher self-efficacy. In this quantitative study, I focused on gathering data from general education teachers (Grades 6-12) who had students diagnosed with autism in their classrooms since students who have a diagnosis of autism often struggle with socially appropriate interactions with their peers and teachers and adolescence is the

prime age where social/emotional development blossoms (Link, 2019). I looked at the following independent variables: job-related stress (subscales include relationship with teachers', work and compensation, working with students,' and perceptions of respect from others), job burnout (subscales include emotional exhaustion, depersonalization, and personal accomplishment), and the quality of parent-teacher relationships (subscales include joining and communication). The dependent variable was specific components of teacher self-efficacy (subscales include student engagement, instructional strategies, and classroom management) in a secondary educational setting.

Research Questions and Hypotheses

I designed this quantitative study to determine the relationship between job-related stress, job burnout, and the quality of parent-teacher relationships and teacher self-efficacy. The research questions and the specific hypotheses related to each variable included the following:

RQ1: To what extent is there a relationship between the job-related stress total score, as measured by the teacher occupational stress factor questionnaire (TOSFQ) and teacher self-efficacy (instructional strategies, classroom management, student engagement and total self-efficacy score) as measured by the teacher sense of efficacy scale (TSES)?

$H_0$1: The total score of teacher stress, as measured by TOSFQ, is not a significant predictor of teacher self-efficacy, as measured by TSES.

$H_1$1: The total score of teacher stress, as measured by TOSFQ, is a significant predictor of teacher self-efficacy, as measured by TSES.

RQ2: To what extent is there a relationship between the job-related stress subscale of relationship with teachers, as measured by the TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement and total self-efficacy score), as measured by the TSES?

$H_0$2: Student relationship with teachers as measured by TOSFQ is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$2: Student relationship with teachers as measured by TOSFQ is a significant predictor of teacher self-efficacy as measured by TSES.

RQ3: To what extent is there a relationship between the job-related stress subscale of work and compensation, as measured by the TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score)**,** as measured by the TSES?

$H_0$3: Work and compensation, as measured by TOSFQ, is not a significant predictor of teacher self-efficacy, as measured by TSES.

$H_1$3: Work and compensation is a significant predictor of teacher self-efficacy.

RQ4: To what extent is there a relationship between the job-related stress subscale of working with students, as measured by TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$4: Working with students as measured by TOSFQ is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$4: Working with students as measured by TOSFQ is a significant predictor of teacher self-efficacy as measured by TSES.

RQ5: To what extent is there a relationship between the job-related stress subscale of perceptions of respect from others, as measured by TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score)**,** as measured by the TSES?

$H_0$5: Perceptions of respect from others as measured by TOSFQ is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$5: Perceptions of respect from others as measured by TOSFQ is a significant predictor of teacher self-efficacy as measured by TSES.

RQ6: To what extent is there a relationship between the job burnout subscale of emotional exhaustion, as measured by Maslach Burnout Inventory (MBI), and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$6: Emotional exhaustion as measured by MBI is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$6: Emotional exhaustion as measured by MBI is a significant predictor of teacher self-efficacy as measured by TSES.

RQ7: To what extent is there a relationship between the job burnout subscale of depersonalization, as measured by MBI, and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$7: Depersonalization as measured by MBI is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$7: Depersonalization as measured by MBI is a significant predictor of teacher self-efficacy as measured by TSES.

RQ8: To what extent is there a relationship between the job burnout subscale of personal accomplishment, as measured by MBI, and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$8: Personal accomplishment as measured by MBI is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$8: Personal accomplishment as measured by MBI is a significant predictor of teacher self-efficacy as measured by TSES.

RQ9: To what extent is there a relationship between the quality of parent-teacher relationship subscale of joining, as measured by the Parent-Teacher Relationship Scale (PTRS), and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$9: Joining (described as parent-teacher affiliation, support, dependability, availability, shared experiences, and beliefs) as measured by PTRS is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$9: Joining described as parent-teacher affiliation, support, dependability, availability, shared experiences, and beliefs) as measured by PTRS is a significant predictor of teacher self-efficacy as measured by TSES.

RQ10: To what extent is the relationship between the quality of parent-teacher relationship subscale of communication, as measured by the PTRS, and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$10: Communication between parents and teachers, as measured by PTRS is not a significant predictor of teacher self-efficacy, as measured by TSES.

$H_1$10: Communication between parents and teachers, as measured by PTRS is a significant predictor of teacher self-efficacy, as measured by TSES.

Theoretical Framework

The theoretical framework that I used in this study was Bandura's social learning theory (Bandura, 1977). Bandura (1977) focused on learning through modeling, practice, and observation. Within the context of social learning theory is self-efficacy. Self-efficacy is characterized as one's belief about their ability to perform specific actions or their behavior (Bandura, 1977). In an educational setting, social learning theory is looked at as whether a teacher is capable of performing a specific task. Often this will be seen in their performance in the classroom. Researchers who have used this theory have looked at how teachers recognize and learn what they need to know to meet their professional expectations and obligations in a classroom setting (Boudreau & Twigg, 2011). Self-efficacy in the education system has been shown to influence teacher behavior (quality of instruction) and student academic outcomes (Corona et al, 2017). In this research study, I used this theory to examine and understand how teacher job-related stress, job burnout, and interactions with parents are associated with teacher self-efficacy among teachers

who have students diagnosed with autism in their classrooms. I provide a more thorough discussion of the theoretical framework in Chapter 2.

Nature of the Study

The nature of this study was quantitative. The relationship among job-related stress, job burnout, and the quality of parent-teacher relationships was the focus using a non-experimental correlational design using survey methodology. I used a cross-sectional design to examine the relationships between variables where surveys are used to collect data from a population in a single period of time (Frankfort-Nachmias & Nachmias, 2012). I used job-related stress, job burnout, and the quality of parent-teacher relationships to predict teacher self-efficacy. I provide a more thorough discussion of independent and dependent variables in Chapter 3.

Operational Definitions

The operational definitions of terms that I used in this research study are as follows:

Autism: Autism is characterized as an individual having persistent deficits in social communication and social interaction across multiple contexts (American Psychiatric Association, 2013).

Autism spectrum disorder (*ASD*): Characterized as a developmental disorder that presents with atypical language and social behavior, along with restrictive and repetitive behaviors and unusual interests (American Psychiatric Association, 2013). For purposes of this study, I will use the term *autism.*

Burnout: Term used in the 1970s to describe the phenomenon of physical and emotional exhaustion with associated negative attitudes (Maslach & Schaufeli, 1993).

Communication: Component used in the parent-teacher relationship scale to measure the quality of relationship between parents and teachers (Vickers & Minke, 1995).

Depersonalization: Term used to describe the detachment within the self, regarding one's mind or body, or being a detached observer of oneself; a dimension scale examined in Maslach's burnout inventory (Maslach & Schaufeli, 1993).

Emotional exhaustion: Term used to describe a chronic state of physical and emotional depletion that results from excessive job and/or personal demands and continuous stress. It describes a feeling of being emotionally overextended and exhausted by one's work. It is manifested by both physical fatigue and a sense of feeling psychologically and emotionally drained; a dimension scale examined in Maslach's burnout inventory (Maslach & Schaufeli, 1993).

Inclusive classrooms: Inclusive classrooms also, referred to as a *special education classroom*, is where students with a diagnosed disability that affects their ability to be academically successful, and to receive the services and supports appropriate to their individual needs within the general education setting (Hardman et. al, 2014).

Job burnout: A negative affective response occurring because of chronic work stress. Burnout is often described as a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Jackson, 1981; Maslach, Jackson, & Leiter, 1996).

Joining: Component used in parent-teacher relationship scale to measure the quality relationship between parents and teachers. *Joining* is described as the parent-teacher affiliation, support, dependability, availability, shared experiences, and beliefs shared between parents and teachers (Vickers & Minke, 1995).

Mainstream classrooms: Hardman et al. (2014) described *mainstream classrooms* as a place where students remain in the general class program for the majority, if not all, of the school day, receiving special education when and where if needed.

Social learning theory: Theory that is based on the premise that people learn by observing from other people (Bandura, 1977). This theory identifies learning as the primary factor in a theory of human functioning and personality development (Salkind, 2008). The foundation for this theory is based on cognitive, social interactive, self-regulatory, and self-reflective capabilities and processes (Salkind, 2008).

Stress: The experience of negative or unpleasant emotions resulting from aspects of the work (Kyriacou, 2001).

Teacher occupational stress: Teachers' occupational stress is associated with several contextual factors such as time pressure, discipline problems, lack of resources, lack of professional recognition, lack of support and the diversity of tasks required (Kokkinos, 2007).

Teacher self-efficacy: Defined as the belief that teachers hold regarding their own ability to bring about effective instruction (McLeskey, Tyler, & Flippen, 2004; Singh & Billingsley, 1996).

Assumptions

There were a few assumptions that affected this study. The first assumption was that parents and teachers have regularly communicated with each other so that the teachers could make an accurate assessment of their relationship with their students. I made this assumption because teachers are required to update parents on their children's academic and/or behavior progress each term. The second assumption was that the participants understood the survey questions and answered questions honestly. By ensuring anonymity and the importance of scientific inquiry, teachers should have been willing to provide honest self-reports about their experiences in the workplace setting and their interactions with parents. The third assumption was that a quantitative study was the best methodology to look at teacher self-efficacy. I chose this method because I wanted to determine the relationship among the variables being assessed.

Scope and Delimitations

The scope of this study looked at job-related stress, job burnout, the quality of parent-teacher relationships, and teacher self-efficacy using the social learning theory model. However, to discuss teacher self-efficacy, I had to discuss job-related stress and how it contributed to job burnout. Previous research studies found that there was a correlation between job-related stress and burnout (Ekornes, 2017; Ryan et al., 2017; Travers & Cooper, 1996). In addition, having positive parent-teacher relationships can improve children's academic performance and decrease behavior problems in the classroom (Garbacz, McIntyre, & Santiago, 2016). I looked at how the quality of parent-teacher relationships can influence teachers' self-efficacy. I found it important to examine

job-related stress and job burnout as it pertains to teachers. I also determined that it would be too exhaustive and too wide in scope to identify all the different types of stress that one encounters, which is why only teacher job-related stress was my focus in this study. Finally, there was little research on the quality of parent-teacher relationships of students diagnosed with autism.

The delimitations in this study stemmed from the selection of secondary general education teachers (those who are certified to teach students in Grades 6-12). To participate in this study, teachers needed to have a minimum of 3 years of teaching experience, have one student diagnosed with autism in their classrooms, and have worked full-time. Individuals who did not fulfill those characteristics were excluded from the study. The results of this study were generalizable to secondary education teachers across the United States due to participants being recruited online.

Limitations

The first limitation was the timeframe of collecting the data from teachers. The school system allowed me to collect data during the first two terms of the school year (each term is approximately 9 weeks long). Teachers were still adjusting and getting to know their new students and parents at the beginning of the school year. Another limitation was the use of an online survey to gather information from participants rather than face-to-face interactions. If there were technical problems with using the online survey, this could negatively affect the data collection process.

The focus of the study was on teachers who have students diagnosed with autism in their classroom using a convenience sample. Although teachers may try to provide

honest and accurate responses, there may be inherent biased in those responses. This may include selective memory, exaggeration of answers, recalling interactions with students during incorrect times, and recalling positive/negative experiences incorrectly. However, I did not specifically assess the teacher-student relationship or the type of interactions that the teachers have with those students. In addition, because I was using a correlational design, it limited my ability to draw accurate conclusions about the causal nature of any significant relationships among the variables. A thorough explanation of the purpose of this study in the consent form and detailed instructions in the survey instruments potentially alleviated some of the limitations.

Significance

According to Woodcock (2013), teachers' past experiences with children with autism, whether good or bad, can form beliefs about their process of teaching. Once that belief has been formed, it can make it difficult for them to change that belief, which can affect how they interact with this population. Competent and otherwise skilled educators report frequently not feeling fully capable of serving the needs of students diagnosed with autism (Horrocks et al., 2008). In addition, other researchers have noted that many teachers who have backgrounds and training in special education are unprepared to work with children who have a diagnosis of autism (Cappe, Bolduc, Poirier, Popa-Roch, & Boujut, 2017). The responsibility for teaching students diagnosed with autism increased teachers' vulnerability to stress, burnout, and overall satisfaction in their job (Ruble et. al, 2011). Teachers viewed parental involvement as stressful as parents often have

expectations of teachers educating their students that are often perceived by teachers as too high and unrealistic (Tobin et. al, 2012).

The findings from this study allowed for practical applications in forging the relationship between teachers and parents and improve teachers' self-efficacy. Researchers have noted that that self-efficacy is a trait that determined how much effort teachers put forth in instruction, how teachers addressed problematic behaviors, and the ability of teachers to adapt to education policies (Corona et al, 2017). Research was needed to examine the extent to which job burnout, job-related stress, and parent-teacher relationships are related to self-efficacy among teachers who have students diagnosed with autism in their classrooms. This study added to the current literature by determining the relative stress of job burnout, job-related stress, and parent-teacher relationships in predicting self-efficacy among teachers who have students diagnosed with autism. The results from this study will assist educators in developing strategies to increase positive interactions between teachers and students who have a diagnosis of autism, improve parent-teacher relationships, and improve the quality of teacher led instruction in general education classrooms.

Summary

The relationship between job-related stress, job burnout, and the quality of parent-teacher relationships of students diagnosed with autism as predictors of teacher self-efficacy was the focus of this study. In Chapter 1, I provided a preview of this research study by discussing background information pertaining to the variables identified in this study; how this poses a problem in the education system; social learning theory as the

basis of the theoretical framework being used in this study; research questions/hypothesis; definitions to help the reader with understanding some of the terms used in this study; and assumptions, delimitations, and limitations of this study. In Chapter 2, I will provide a thorough review of the literature that supported this research study.

Chapter 2: Literature Review

Students with diagnosed disabilities are being mainstreamed into general education classrooms, which presents challenges for general education teachers to ensure that these students' academic needs are being met. This can affect teacher job performance and quality of instruction (Miller et al., 2017). For general education teachers, educating students with autism presents significant instructional challenges that can also lead to job-related stress and burnout (Ruble et al., 2011). The purpose of this study was to examine predictors of teacher self-efficacy among teachers who have students diagnosed with autism in their classrooms. In this research study, I determined the relative strength of teacher job-related stress, job burnout, and quality of parent-teacher relationship in predicting teacher self-efficacy.

Previous research suggests that parents and teachers have differing perceptions of how to educate students who have a disability, more specifically students with a diagnosis of autism (Tobin et al., 2012). Teachers may also experience burnout and stress in their profession and self-efficacy appears to be an important factor that determines the quality of instruction and student academic outcomes (Miller et al, 2017). However, research is needed to examine job burnout, job-related stress, parent-teacher relationships, and self-efficacy among teachers who have students diagnosed with autism in their classrooms. The literature has not examined job-related stress, job burnout, and the quality of parent-teacher relationships of students diagnosed with autism. This quantitative study addressed a gap in the literature by determining the extent to which there is a relationship among teacher job-related stress, burnout, quality of parent-teacher

relationships, and teacher self-efficacy. The results from this study may be used by educators to develop strategies to increase positive interactions between teachers and students who have a diagnosis of autism, improve parent-teacher relationships, and elicit positive social change implications.

In Chapter 2, I present an overview of the literature related to job stress, job burnout, and the quality of parent-teacher relationships of students diagnosed with autism. I discuss the literature review strategy, and I continue this discussion by defining and explaining Bandura's social learning theory and how it is applicable to teacher self-efficacy. I explain and define the mental health diagnosis of autism and characteristics of students diagnosed with autism. I discuss a brief overview of the Individuals with Disabilities Act, the difference between a mainstream classroom and special education classroom, and the responsibilities of special education teachers and general education teachers. Finally, I summarize the major themes in the literature, discuss what is known in relation to this topic, and discuss whether there was a relationship among teacher job-related stress, burnout, quality of parent-teacher relationships, and teacher self-efficacy as I transition into Chapter 3.

Literature Search Strategy

I implemented a computerized search strategy of literature using Walden University Library's multiple databases (Education Source, ERIC, PsycINFO, PsycARTICLES, and SAGE Premier). I conducted a thorough review of the literature. However, the focus of the literature search was from 2010 to the present. This resulted in a small number of studies on the topic of social learning theory or Bandura's theory. I

extended my search to include studies from the previous 30 years and had much more success also utilizing Google Scholar to further my search. I applied the following search terms: *autism spectrum disorder, parent-teacher relationship, stress, burnout, job burnout, special education teachers' experiences, teachers' experiences, adolescents, middle school, classroom behavior, teacher self-efficacy, Bandura theory,* and *self-efficacy.*

Theoretical Framework

The theoretical framework for this study was Albert Bandura's social learning theory (Bandura, 1997). Developed in the 1960s, this theory identified learning as the primary factor in a theory of human functioning and personality development (Salkind, 2008). The foundation for this theory is based on cognitive, social interactive, self-regulatory, and self-reflective capabilities and processes (Salkind, 2008). Starting in the 1960s, Bandura argued against Piaget's developmental stages of learning stating that a human's behavior and functioning is too complex to be placed into categories (Bandura, 1969).

Throughout the 1960s and 1970s, Bandura's social learning theory evolved, showing that a person's environment provided social cues that reinforce one's behavior to match another individuals' (Bandura, 1997). Throughout the 1970s, Bandura focused on individuals' beliefs, suggesting that the belief of successfully performing a task will give a desired outcome and increase one's self-belief (Bandura, 1977). The emphasis that Bandura placed on self-efficacy beliefs and outcome expectations in his social learning theory were congruent with an increasing interest in cognitive processes among

American psychologists (Salkind, 2008). Self-efficacy represents the most important predictor of human motivation and is defined as individual's views about their capacities to produce designated levels of performance and exercise influence over events that affect their lives (Bandura, 1997). According to Bandura (1997), individuals form self-efficacy beliefs by interpreting information regarding their own capabilities.

This information stemmed from four sources best explained by Bandura (1997) as mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. Mastery experiences, as defined by Bandura, (1997) provide information about one's successes, but also failures. An example of this is teachers' completing a practicum or field experience in a classroom. Generally, successful experiences increase self-efficacy beliefs, whereas experiences of failure lower them. Vicarious experiences as described by Bandura (1997) provide information about modeled attainments of others, which influence one's self-efficacy beliefs by demonstrating and transferring competencies (model learning) and provided a point of reference for social comparison.

Verbal persuasion by significant others can convince people of their capabilities, especially if this persuasion comes from a credible source (Bandura, 1997). Physiological and affective states provide information about physiological and affective arousal during situations in which the capability in the domain in question is demonstrated. In stressful situations, people read this somatic information as an indicator of dysfunction, thus negatively affecting self-efficacy beliefs. Social learning theory describes self-efficacy as both a multidimensional and domain-specific belief that can be different with each person's strength (Bandura, 1997). There are four areas that influence the behavior of a

person, which include, cognition, motivation, emotion, and decision making (Bandura, 1997).

Because this theory addresses one's self-efficacy, this theory has been utilized when examining teacher's beliefs in their ability to work with students. Montgomery and Miranda (2014) examined relationships between three factors related to teacher self-efficacy (collaboration with others, managing disruptive behavior, and the use of inclusive instruction) along with teachers' attitudes, concerns, and sentiments about students with developmental disabilities. Their results indicated that higher self-efficacy for collaboration was the only predictor of positive sentiments and attitudes. They also noted that there were fewer concerns about inclusive education for students with disabilities (Montgomery & Miranda, 2014). Klassen and Chiu (2010) looked at the relationship among teachers' years of experiences, characteristics of self-efficacy, and two types of stress (workload and classroom stress).

Their results showed that teachers' self-efficacy correlated with teaching experience for early and midcareer teachers, whereas those teachers who had been in the field for more than 10 years of experience had a decline in their self-efficacy. They attributed this to years of teaching experience, school type/setting, teaching grade, and classroom stress. Klassen and Chiu (2010) also reported a significant correlation between self-efficacy and job satisfaction. Their results showed that teachers who reported having a high self-efficacy with classroom management and instructional strategies had higher levels of job satisfaction. Teachers who had higher stress with their classroom caseload reported having lower job satisfaction. Klassen and Chiu (2010) noted that female

teachers had higher levels of both classroom and workload stress as compared with male teachers.

García-Ros, Fuentes, and Fernandez (2015) used the teachers' interpersonal self-efficacy scale to look at the validity of teachers' self-efficacy against three levels of burnout (emotional exhaustion, depersonalization, and personal accomplishment). Their results using this scale confirmed the importance of teachers' maintaining supporting and satisfactory relationships on the job to help decrease burnout (Garcia-Ros et al., 2015). Bandura (2001) noted that the level of one's involvement and tenacity can affect the level of one's involvement in a situation. Bandura (1997) asserted that a lack of confidence might lead one to avoid task demands and, as a result, impose self-limitations on skill acquisition. Bandura (1999) hypothesized that people will model behaviors that create positive results in their life.

The self-efficacy component of Bandura's theory has been used previously when addressing educational challenges because self-efficacy is an important teacher characteristic. Ying Guo, Conor, Yanyun, Roehrig, and Morrison (2012) demonstrated that teacher self-efficacy predicts teachers' teaching practices, which also correlates with student's academic achievement. The research questions specifically focused on job-related stress, job burnout, and parent-teacher relationships as predictors of teacher self-efficacy.

Autism Spectrum Diagnosis

The *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*) is the most widely accepted nomenclature used by clinicians and researchers for the classification of

mental disorders (American Psychiatric Association, 2013). In the DSM-5, Autism is characterized as an individual having persistent deficits in social communication and social interaction across multiple contexts (American Psychiatric Association, 2013). Autism is characterized as a developmental disorder that presents with atypical language and social behavior, along with restrictive and repetitive behaviors and unusual interests (American Psychiatric Association, 2013). The term 'autism' comes from the Greek word "autos" meaning "self," and was first used in the early 1900s to describe behavioral symptoms for patients with schizophrenia who had extreme difficulties in the social world (Dyches, 2010). The fourth revision of the DSM categorized the symptoms of autism into three distinct categories: pervasive developmental disorders (PDDs) PPD–not otherwise specified, and Asperger syndrome (American Psychiatric Association, 1994).

The classification of the PDDs did not change with the DSM IV–text revision (American Psychiatric Association, 2000). With the fifth edition of the DSM, the three PDDs are collapsed into one diagnostic disorder, autism. The diagnosis of Asperger syndrome and PDD–not otherwise specified are no longer given in the DSM-5. The new DSM-5 diagnostic disorder autism has two main criteria: (A) persistent social communication and social interaction deficits and (B) restricted, repetitive patterns of behavior, interests, or activities (American Psychiatric Association, 2013).

Students Diagnosed with Autism

The number of students estimated to have this diagnosis increased 78% between 2002 and 2012 and as many as 1 in 88 children are diagnosed as having Autism. (Center for Disease Control and Prevention, 2012). Gender differences are evident in autism;

males outnumber females substantially. Estimates of these differences are typically reported to be around 4 to 1 (Centers for Disease Control and Prevention, 2012). By age 5, children with Autism who qualify for special education will receive services determined by their individualized education plan (Hardman, Drew, & Egan, 2014). Children diagnosed with Autism demonstrate deficits in three core areas of functioning: communication, social interaction, and restrictive behaviors and interests (American Psychiatric Association, 2000).

Children with a diagnosis of autism can require unique services in the classroom. Teachers need specialized skills or training to address some of the more common behaviors associated with autism, such as repetitive movements, social difficulties, and delays in expressive and receptive language. According to Humphrey and Lewis (2008), if autism affects a child's education, it could be considered a condition that requires specialized educational services. However, autism does not automatically qualify a student for additional education services and support. Rather, the need for services is usually addressed in a child's individualized education plan. Additionally, only one-third of children with autism have an average or above average IQ (Ryan, Hughes, Katsiyannis, McDaniel, & Sprinkle, 2011).

History of Individuals with Disabilities Act

In 1975, US Congress passed the Education for All Handicapped Children Act to assist nearly four million US school-age students with disabilities between the ages of 6-21 with having access to free and appropriate public education (Hardman et. al, 2014). This act included provisions for an individualized education program, procedural

safeguards to protect the rights of students and their parents, nondiscriminatory and multidisciplinary assessment, and education with nondisabled peers to the appropriate maximum extent (Hardman et. al., 2014). The Education for All Handicapped Children Act was amended in 1986, to provide free and appropriate public education for preschool-age children ages 3-5 (Hardman et. al, 2014). Although this update did not mandate states to provide services to all infants and toddlers with developmental delays, it did establish financial incentives for state participation (Hardman et. al, 2014).

In 1990, Congress renamed the Education for All Handicapped Children Act to the Individuals with Disabilities Education Act (IDEA) with the purpose of this change to resemble a "people first" language and promote the use of the term disabilities rather than handicapped. The term autism became widely known after federal law recognized autism as a disability categorized in the Individuals with Disabilities Act of 1990 (Hardman et. al., 2014). According to Humphrey and Lewis (2008), if autism affects a child's education, it could be considered a condition that requires specialized educational services.

Mainstreaming Classrooms vs. Special Education Classroom

As Hardman et. al (2014) describes, mainstream classrooms are where students remain in the general class program for the majority, if not all, of the school day, receiving special education when and where if needed. Inclusive education is where students with disabilities receive the services and supports appropriate to their individual needs within the general education setting (Hardman et. al, 2014). Traditional model of special education classroom placement pulls the student out of the general education class

to receive support (Hardman et. al, 2014). Location of services can range along a continuum from inclusion in general education classrooms, to spending part of the day in general classes, to being self-contained in the general school or a school designated for students with Autism (Hardman et. al, 2014).

Friedlander (2009) noted that in addition to instructional practices, all other aspects of the general education classroom can affect how a child with autism will perform academically. For example, classroom presentation, organization, and student population can directly affect the education of a child with autism in a general education classroom. Although, students may exhibit these difficulties, teachers can use instructional accommodations and modifications to help both children with autism and their nondisabled peers (Natof & Romanczyk, 2009). Horne and Timmons (2009) stated that although the philosophy of inclusion focuses on fairness for all students, the inclusion process may not always result in the most appropriate services for children. Further, inclusion is a controversial issue among educational personnel for several reasons, including classroom support and resources, collaboration among school personnel, class size, teacher responsibility and training, time for planning and evaluation, and misconceptions about inclusion (Ross-Hill, 2009). Lindsay, Proulx, Thomson, and Scott (2013) also reported that many general education teachers struggle with managing their own needs while trying to keep up with understanding the social and behavioral impairments of students diagnosed with autism.

Special Education Teachers

Special education teacher preparation has evolved over the past 150 years, since special education teachers first appeared in residential settings (Brownell, Sindelar, Kiely, & Danielson, 2010). Special education teacher preparation continues to evolve with the IDEA mandating that students with disabilities have access to general education curriculum which requires that special education teachers be qualified to teach in core content (Brownell et. al, 2010). Some responsibilities of a special education teacher include linking student assessment information to the development of the individualized education plan (IEP) and access to the general curriculum, determining appropriate student accommodations and instructional adaptations, and delivering intensive instruction using specialized teaching methods (Hardman et. al, 2010). They are also responsible for coordinating a student's IEP, proposing instructional alternatives for the student, and working with others to implement recommendation of instruction (Hardman et. al., 2014). Special education teachers also serve as consultants to general educators and parents on effective instructional practices for students with disabilities (Hardman et. al, 2014).

While special education teachers' multi-task and are responsible for providing services to students who have a diagnosed disability, this causes additional stress and frustration. Saricam and Sakiz (2014) investigated the relationship between teacher self-efficacy and burnout in special education teachers. They noted that special education teachers have additional stressors and feel more exhausted and depersonalized as compared to those working in mainstream classroom. Saricam and Sakiz (2014) provided

a multitude of resources and specialized skills for special education teachers to meet each student's needs. They identified factors contributing to teachers' stress which included poor time management and spending time and energy to make sure that each student meets the same learning objectives as students who are in mainstream classrooms (Saricam & Sakiz, 2014).

Guo, Dynia, Pelatti, and Justice (2014) looked at self-efficacy in special education preschool teachers. Their findings showed that special education teachers who had a higher sense of self-efficacy showed more support and provided a more positive classroom environment than teachers with a low self-efficacy (Guo et. al, 2014). Boujet, Dean, Grouselle, and Cappe (2016) conducted a comparative study on general education teachers and teachers who have training to work with students who are diagnosed with Autism. They found that teachers who are trained to work with students diagnosed with Autism can count on help from their colleagues, use more problem-focused coping strategies, and are less emotionally exhausted than general education teachers (Boujet et. al, 2016).

Adera and Bullock (2010) examined job stressors and teacher satisfaction of special education teachers. They examined reasons that led to high turnover in special education. They cited reasons identified which include, overcrowded classrooms, inconsistencies in school expectations, not enough trainings on working with diverse behaviors, and too many non-instructional tasks (Adera & Bullock, 2010). Outside of the classroom, some factors that contributed to turnover included ambiguity of roles and responsibilities, lack of collaboration from colleagues, and lack of parental involvement

(Adera & Bullock, 2010). Wong, Ruble, Tu, and McGrew (2017) report that 20% of special educators each year transfer to back to solely general education teacher positions or to another position within special education due to burnout and stress from working with students with significant emotional and behavioral problems.

General Education Teachers

Currently, 40% of students diagnosed with autism are placed in general education classrooms for a majority of the school day (NCES National Center for Education Statistics, 2015). Students who have a mental health diagnosis spend 79% of their school day in general education classrooms, which poses concerns for teachers as they are expected to provide equal education and support to these students (Loefgren, 2011). General education teachers identify having students with a mental health diagnosis causing stress for them as they perform teaching tasks (Ruble et al., 2011). General education teachers do not believe they are prepared to implement such interventions. In fact, some general education teachers do not support an inclusive model of teaching citing their own lack of training preparation for teaching in inclusive settings (Ross-Hill, 2009). One of the most significant challenges teachers have identified is having adequate knowledge about autism and the lack of consultation, support, and advice they have access to within their school system (Lindsay et al., 2013).

Both elementary and secondary general education teachers have voiced concerns about their lack of confidence teaching in an inclusive classroom and feelings of low self-efficacy in working with special education students (McCray & McHatton, 2011). According to Horne and Timmons (2009), many teachers view inclusion unfavorably,

citing lack of training, lack of knowledge of the disorder, or lack of administrative support. Nevertheless, with the number of children diagnosed with autism increasing, general education teachers are more likely to have children diagnosed with autism in their classrooms. Able, Sreckovic, Schultz, Garwood, and Sherman (2015) looked at the social support needs of students diagnosed with autism from an educators' perspective. They found that educators need to know more about autism spectrum disorders and how to accommodate students diagnosed with autism in the classroom.

Buell, Hallam, Gamel-McCormic, and Scheer (1999) identified three key elements that affect educating children with disabilities: teacher attitudes towards and confidence in inclusive education, in-service training on inclusive education, and teachers' perceptions of the need for resources to promote inclusive education. The overall goal of the study was to explore relationships between teachers' self-efficacy concerning educating students with special needs and teachers' training needs. Overall, general education teachers were not assured in their abilities to satisfy tasks related to inclusive education practices. Forlin and Chambers (2011) examined general education teachers' perceptions of their preparedness with having students with diagnosed disabilities in their classrooms. They found that the lack of knowledge about district policies interfered with their confidence in being able to service this population.

General education teachers deal with a number of stressors that have contributed to leaving the teaching profession. Richards (2011) conducted a study with general education teachers in which they identified top stressors leading to a change in careers. These stressors included feeling overcommitted to work too many duties and

responsibilities, teaching needy students without enough support, little time to relax, teaching students who are not motivated to learn, and feeling constant pressure of being held accountable (Richards, 2011). Another study done by Skaalvik and Skaalvik (2011) identified variables contributing to challenges regular education teachers faced which include relationships with colleagues, parents, and school leadership.

Lindsay, Proulx, Thomson, and Scott (2013) looked at specific challenges that regular education teachers encountered when they have a student diagnosed with autism in their classroom. Teachers reported that they felt they lacked adequate information about autism spectrum disorders and ways to work with a child in the classroom who is having a behavior outburst. They also noted in this study needing to have a better relationship with parents and administration as a way to help improve their sense of dealing with this specific population of students (Lindsay et. al, 2013).

Parent-Teacher Relationships

There has been research demonstrating that the quality of parent–teacher relationships can support children's academic and behavioral outcomes and help educators with developing appropriate and effective support systems for these students (Mount & Dillon, 2014; Schultz et al., 2016; Sheridan, Bovaird, Glover, Garbacz, Witte, & Kwon, n.d). This relationship is strengthened through family school partnership collaborations (Garbacz et al., 2016). With the number of students placed in classrooms with general education teachers, parent involvement with the school also increases (Azad & Mandell, 2016). As children and youth who are diagnosed with autism increases, the need for parent and professional collaboration is essential for student success (Schultz et

al., 2016). Previous research also suggests that parents have conflicting experiences when engaging with their students' teachers.

Schultz et al. (2016) reported that parents felt resentment from teachers' due to the time and resources their child required from teachers. They also noted a lack of communication and collaboration as an important issue (Schultz et. al, 2016). On the other hand, teachers do not view parents as equal partners (Bezdek, Summers, & Turnbull, 2010). Bezdek et. al (2010) interviewed educators who indicated that they wanted parental involvement, but only up to a certain extent. If parents supported teachers' guidance on how to best work with their child, this made the relationship cordial. Other research has found that parents who did not follow through with suggested interventions had minimal involvement in their children's IEP meetings and lacked consistency in following through with educators and teachers (Schultz et al., 2016).

One factor that has been consistently identified as a predictor of family involvement for parents of students with emotional and behavioral disorders is maternal education, with higher levels of maternal education predicting more family involvement (Fantuzzo, Tighe, & Childs, 2000). Reupert, Deppeler, and Sharma (2015) examined parents' perspectives on their experiences with educators. They discussed the importance from a parents' standpoint of promoting parent–school collaboration to ensure that consistent efforts are made to provide an effective educational program that is specific to their child's learning needs. They also discussed the importance parents' play as primary stakeholders in the social and emotional development of their children (Reupert et. al, 2015). Having a strong and supportive parent-teacher relationship shows the unity

between adults and provides children with emotional and behavioral issues effective curriculum specific to their needs (Reupert et. al, 2015).

Researchers have looked for ways to improve the relationship between parents and teachers. Epstein and Jonsorn (2004) identified having planned parent-professional partnerships within the school setting necessary for increased parental involvement and advocacy. They put this task back on administration to help support, encourage, and guide parents on how to become involved in their child's education (Epstein & Jansorn, 2004). Having a positive communication between home and school increases a positive parent-teacher relationship (Epstein & Jonsorn, 2004). Suggestions for teachers on improving their relationship with parents included providing their children with having structured school and free time, flexibility around completion of assignments, identifying a safe place, and recognizing schools as a catalyst point to bring community agencies, parents, and teachers together as a support for students (Reupert et. al, 2015).

Azad, Wolk, and Mandell (2018) interviewed teachers and parents of students diagnosed with autism to examine the interaction between both parties. They identified four themes; parents and teachers were concerned about the different types of communication, neither group wanted to ask for more involvement, teachers wanted parents more involved in meetings about their children, and there was a lack of engaging in conversations due to a lack of expertise in parents understanding teachers or teachers understanding students diagnosed with autism.

Teacher Occupational Stress

Teachers face a number of stressors that contribute to leaving the teaching profession. According to Brinson (2010), teaching ranks as one of the top 5 stressful job professions. Otto (1986) conceptualized work-related stress as resulting from a mismatch or a lack of fit between external and internal job demands and external and internal resources. Kyriacou (2001) defined stress as the experience of negative or unpleasant emotions resulting from aspects of the work. Teachers may experience stress if the job demands do not fit their perceived capacity to meet the demands or their educational values.

Teachers' occupational stress is associated with several contextual factors such as time pressure, discipline problems, lack of resources, lack of professional recognition, lack of support and the diversity of tasks required (Kokkinos, 2007). More recently, Lamber, Boyle, Fitchett, and McCarthy (2019) looked at teacher stress in response to the classroom environment. They found that teachers' perception of balance between classroom demands and resources played a role in their occupational stress. Skaalvik and Skaalvik (2011) referred to the combination of work overload and hectic workdays with little time for rest and recovery as time pressure. Travers and Cooper (1996) found that teachers' stress was also a result of lack of social recognition, large class size, isolation, fear of violence, lack of classroom control, role ambiguity and limited professional opportunities. There have been several researchers who have looked at teacher stress. Ryan et al. (2017) reported that teacher stress correlated with adverse professional outcomes, including burnout, absenteeism, and attrition. They also noted that

while teacher stress has been widely studied in relation to teacher attrition, measures of stress have been highly variable across studies, without a unified conceptualization or definition (Ryan et. al, 2017).

Another study by Greenglass and Burke (2003) found that the most frequently mentioned stressors by teachers are students' emotional and behavioral problems, conflicting demands from parents and school administration, doubts about competence, and high workloads. Ekornes (2017) noted that psychological distress and burnout are correlated with stress. Antoniou, Ploumpi, and Ntalla (2013) identified teacher stressors which included business requirements, different activities within the school environment, lack of professional recognition, and teachers' perception of poor employee benefits. Each stressor identified is not necessarily the same for each teaching profession. Each teacher identifies their own stress as it relates to their personalities, values and skills, circumstances; however, they still lead to teacher burnout in the education profession (Antoniou et. al, 2013).

Job Burnout

It is estimated that between 5% and 20% of all U.S. teachers are burned out at any given time (Hakanen et. al, 2006). More recently, between 40%-50% of new teachers will become burnt out and leave the profession within the first five years of teaching (Ryan, et. al, 2017). In comparison with other professions, teachers show high levels of exhaustion and cynicism, the core dimensions of burnout (Maslach et al., 1996). The term burnout was initially used in the 1970s to describe the phenomenon of physical and emotional exhaustion with associated negative attitudes (Maslach & Schaufeli, 1993).

Kokkinos (2007) identified burnout as a negative affective response occurring because of chronic work stress.

Burnout is often described as a syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Jackson, 1981; Maslach et al., 1996). The most recent definition from Maslach and Leiter (2016) describes burnout as a psychological syndrome. They validated Maslach's (1981) three dimensions of burnout which include exhaustion, cynicism, and detachment from the job. For this study, job burnout in the education profession was assessed. Teacher burnout is conceptualized as a result from long term occupational stress and unpleasant, negative emotions resulting from aspects of work as a teacher (Szigeti, Balazs, Bikfalvi, & Urban, 2017).

When one experiences burnout, this becomes a breakdown of the occupational domain of their sense of their own efficacy (Friedman, 2003). Literature shows that burnout is extensively experienced among professionals who provide social and human services, including teachers from various branches (Jennett, Harris, & Mesibov 2003; Skaalvik & Skaalvik 2010). Research investigating burnout among teachers working in special educational school settings, has shown different findings regarding the role of gender in the experience of burnout. Some studies reported higher global levels of burnout among females (e.g. Maslach 1982; Poulin & Walter 1993). Sari (2004) found higher levels of emotional exhaustion and personal accomplishment among female teachers, and lower levels of depersonalization among male teachers. In a more recent study, Bermejo-Toro and Prieto-Ursua (2014) examined gender differences in relation to

teacher burnout. They found that females exhibited higher levels of psychiatric symptoms (i.e. depression, anxiety) than males in relation to teacher stress and/or burnout. At some point, almost all teachers become frustrated with their job or harbor negative feelings toward the profession (Maslach et. al, 2001). Yet, some teachers experience these emotions more acutely or with greater frequency (Maslach et. al, 2001). At some point, almost all teachers become frustrated with their job or harbor negative feelings toward the profession (Maslach et. al, 2001). Yet, some teachers experience these emotions more acutely or with greater frequency (Maslach et. al, 2001).

Teacher Self-Efficacy

Teacher self-efficacy is defined as the belief that teachers hold regarding their own ability to bring about effective instruction (McLeskey et al., 2004; Singh & Billingsley, 1996). Teacher self-efficacy has a long history in the education literature, with evidence documenting its impact on both teacher behavior and student outcomes (Corona et al., 2017). There have been associations between teacher self-efficacy and both positive and negative outcomes. Pfitzner-Eden (2016) identified these outcomes such as resilience, instructional quality, occupational commitment, job satisfaction, teaching performance, and even burnout. Commitment to finishing a teaching degree and student's academic achievement are associated with teacher self-efficacy (Pfitzner-Eden, 2016).

Teacher self-efficacy is a critical component to successful classrooms and ranks as a significant teacher characteristic associated with instructional quality and student achievement (Miller et al., 2017). Teacher self-efficacy has been associated with quality

of instruction and the use of innovative teaching methods (Tschannen-Moran & Woolfolk-Hoy, 2001; Wolters & Daugherty, 2007). Teacher's self-efficacy can alter how much effort they put forth in instruction, how long they will persevere when confronting problematic behaviors, and how resilient they are in the face of changes in the education system (Miller et. al, 2017). Some of these teaching methods mentioned by teachers who have students diagnosed with autism include the use of a picture exchange communication system (pecs) board, electronic devices, paraeducators in the classroom, and visual aids to help with smooth transitioning to different subjects in the classroom (Tschannen-Moran & Woolfolk-Hoy, 2001). Teacher efficacy is not only associated with teacher behaviors, but also has positive implications for student outcomes (Corona et. al, 2017; Deemer, 2004).

Deemer (2004) found a significant positive influence of teacher self-efficacy on mastery instructional practices. He suggested that teachers with more confidence in their teaching create classrooms that focus on student learning and effort. This relationship between teacher self-efficacy and classroom behaviors mean that teachers with higher sense of efficacy provide more effective classroom instruction resulting in higher student motivation and achievement. In a review of research on teacher self-efficacy, Ross (1998) reported that higher teacher self-efficacy has been associated with a range of beneficial teaching practices. These include setting more ambitious goals for oneself and one's students, selecting instructional strategies likely to improve student development, experimenting with new instructional programs in the classroom, and involving parents in student activities.

Ross's (1998) review of the research reported that teacher self-efficacy has been associated with student outcomes including achievement in various academic subjects, enhanced motivation, and increased self-esteem and prosocial attitudes. Yu et. al. (2014) conducted a study in which they found that work stress and self-efficacy were correlated with job burnout in teachers. However, they did not examine how the quality of the relationship between parents and teachers in addition to work stress and burnout impact teachers' self-efficacy. More recent research has suggested that teachers with high self-efficacy provide more support to students and create a more positive classroom environment (Guo, Connor, Yang, Roehrig, & Morrison, 2012**).** In a recent review of the literature on teacher self-efficacy, Kuronja, Cagran, and Krainc (2019) found research on teacher self-efficacy was a vital competence for teachers who work with students in an inclusive setting. They noted that teachers' self-efficacy is associated with teachers' readiness to work with children who have both academic and behavioral challenges.

Summary and Conclusions

In chapter 2, I discussed the clinical definition for autism, students diagnosed with autism, a brief history of the individuals with disabilities act, mainstream and special education classrooms, special education teachers, general education teachers, parent-teacher relationships, teacher occupational stress, job burnout, and teacher self-efficacy. Prior research indicates there was a correlation between job burnout, job stress, and teacher self-efficacy. Teacher self-efficacy is an important trait that teachers need to have successful instruction in their classrooms, manage disruptive behaviors in the classroom, and have a positive relationship with parents. Previous research has been able to show

that there is a correlation between job burnout, job stress, and teacher self-efficacy. However, there has not been any research examining job stress, job burnout, and parent-teacher relationships as potential predictors of teacher self-efficacy among teachers who have students diagnosed with autism in their classrooms. This research study addressed the gap by determining the relative strength of teacher job-related stress, job burnout, and quality of parent-teacher relationship in predicting teacher self-efficacy. In chapter 3, I provided information on how this quantitative survey study was performed, sampling and sampling procedures, measurement instruments, details of the research methodology, threats to validity, and ethical procedures.

Chapter 3: Research Method

In this research study, I investigated the relationship between job-related stress, job burnout, the quality of parent-teacher relationships, and teacher self-efficacy. Chapter 3 contains the following sections: the research design and rationale, population, sampling procedures, procedures for recruitment and participation, a discussion of the instruments that were used in this study and operationalization of constructs, data analysis plan, threats to validity, ethical procedures, and finally a summary of the chapter.

Research Design and Rationale

The nature of this study was a quantitative approach. Specifically, I used a nonexperimental correlational design to determine the relationship among job-related stress, job burnout, the quality of parent-teacher relationships, and teacher self-efficacy. This design allowed me to use surveys to collect data from a population at a single period of time and examine the relationships between variables (Frankfort-Nachmias & Nachmias, 2012). Using a correlational design allowed me to gather data in a natural setting and gather a good deal of information relatively quickly (Stangor, 2011). This design is also appropriate for my research questions, as my goal was to find relationships between variables.

In addition, this design is the most commonly used with survey research in which data are collected from a population at one specific time (Frankfort-Nachmias & Nachmias, 2008). Correlational designs have the ability to study everyday behavior, they can offer some information regarding the degree of the relationships between studied variables, and they are often the only way to study some phenomena (Stangor, 2011). The

dependent variable was teacher self-efficacy (subscales include instructional strategies, classroom management, and student engagement). The independent variables were job-related stress (subscales include relationship with teachers, work and compensation, working with students, and perceptions of respect from others), job burnout (subscales include emotional exhaustion, depersonalization, and personal accomplishment), and the quality of parent-teacher relationships (subscales include joining and communication).

Methodology

Population

The target population consisted of secondary general education teachers (those who are certified to teach students in Grades 6-12) with a minimum of 3 years teaching experience, who have students diagnosed with autism in their classrooms, and who worked full-time. I selected a minimum criterion of 3 years of teaching because teachers face the most challenges and encounter the most stress in their first 3 to 5 years of teaching (Ryan et. Al, 2017). It is estimated that as many as 40% to 50% of new teachers will become burnt out and leave this profession within the first 5 years of teaching (Ryan et al., 2017). I recruited both female and male participants from a range of ethnicities and experience in education. I recruited participants for this study online.

Sampling and Sampling Procedures

This study consisted of a nonprobability self-selected sample, based on convenience. Before engaging in the research study, I asked participants if they work full-time, have had a student diagnosed with autism in their classroom for a full school year, and if they have been on the job for at least 3 years. If they answer yes to each

question, they were accepted as a participant in this study. I used a convenience sample because it involves the selection of the most accessible subjects and because it is not costly in terms of time, effort, and money (Marshall, 1996).

Gathering willing participants was a challenge because teachers were busy adjusting to the new school year, were teaching students diagnosed with autism, and may not have had enough free time to participate in this study. Therefore, a convenience sample was a more logical choice and helped to expand the overall pool from which I gathered participants. I conducted a power analysis using the software G*Power to determine the appropriate sample size (Faul, Erdfelder, Lang, & Buchner, 2009). For the power analysis, I selected an α (significance level) of .01 a power level of .95, and an effect size (f^2) of 0.15, which represents a medium effect size based off of Cohen's effect size chart for a multiple regression (Cohen, 1988), and 10 predictor variables. The resulting sample size was 221. Previous studies have reported medium effect sizes for the relationships between teacher stress and burnout (Ryan et al, 2017), teacher burnout and personal abilities (Tang et al, 2001), and teacher burnout and teacher self-efficacy (Pfitzer-Eden, 2016).

Procedures for Recruitment and Participation

I used a survey method design through SurveyMonkey for online survey administration to participants after informed consent was completed online. I contacted teachers via social media to participate in the study voluntarily and also to receive their informed consent. I informed participants of my research study, what to expect as a participant, information on the sponsoring institution, and benefits for participating, and I

provided a guarantee of confidentiality (Creswell, 2009). Participants could have withdrawn participation at any time without consequence. This study did not have any follow-up procedures, as data collection occurred at one point in time.

Instrumentation and Operationalization of Constructs

Teachers' Sense of Efficacy Scale

The teachers' sense of efficacy scale (TSES) was developed by Tschannen-Moran and Woolfolk-Hoy **(**2001**)**. They developed a long and short form. I used the long-form version. The long form version contains 24 items on self-efficacy and has three subscales (student engagement, instructional strategies, and classroom management). For this study, I used the scores from all three subscales (student engagement: Items 1, 2, 4, 6, 9, 12, 14, and 22; instructional strategies: Items 7, 10, 11, 17, 18, 20, 23, and 24; classroom management: Items 3, 5, 8, 13, 15, 16, 19, and 21) and the total score.

The instructional strategies subscale (eight items) refers to a teachers' ability to present information to a student in an effective manner. An example item on this subscale is, "How well can you establish routines to keep activities running smoothly?" The classroom management subscale (eight items) refers to how teachers perceive their ability to manage behaviors in their classroom. An example item on this subscale is, "How much can you do to control disruptive behavior in the classroom?" The student engagement subscale (eight items) measures how teachers view their involvement with students. An example item on this subscale is, "How much can you assist families in helping their children do well in school?" This survey used a 9-point response scale (ranging from 1 = nothing to 9 = a great deal).

Cronbach's alpha scores were reported as follows: student engagement = .87, instructional strategies = .91, classroom management = .90, and total score = .94 (Tschannen-Moran & Woolfolk-Hoy, 2001). Klassen et al. (2009) looked at the validity of the TSES in five countries (United States, Canada, Cyprus, Singapore, and Korea). The teacher sense of self-efficacy subscales were correlated with a single item taken from the Caprara, Barbaranelli, Borgogni, and Steca (2003) job satisfaction survey. The question used to measure self-efficacy was, "I am satisfied with my job," with responses ranging from 1 = disagree strongly to 9 = agree strongly. Klassen et al (2009) reported significant positive correlations between job satisfaction and teacher self-efficacy for all four groups.

Klassen et. al (2009) reported that the direction and size of correlations were similar between all four groups reporting the correlation between job satisfaction and the TSES subscale of instructional strategies. Pearson correlations were as follows: Canada-elem./middle (.26), Cyprus (.45), Korea (.17), United States (.24), and Canada-Secondary (.27). Correlations between job satisfaction and the TSES subscale of student engagement were as follows: Canada-Elem/middle (.39), Cyprus (.39), Korea (.44), United States (.36), and Canada-Secondary (.34). Correlations between job satisfaction and the TSES subscale of classroom management were as follows: Canada-elem/middle (.36), Cyprus (.44), Korea (.36), United States (.19), and Canada-Secondary (.41). Finally, the correlation between job satisfaction and the total score of the TSES were as follows: Canada (.40), Cyprus (.48), Korea (.36), United States (.33), and Canada-secondary (.40). The results demonstrated that self-efficacy was significantly and positively related to job

satisfaction with similarities in the correlations among the groups studied. This showed evidence of construct validity of the TSES.

Another study conducted by Ruan et al. (2015) looked at the concurrent validity of the TSES across three Asian countries (Japan, China, and Korea). Correlations among the three subscales (classroom management, instructional strategies, and classroom management) range from .76 to .98 (Ruan et. al, 2015). The TSES takes approximately 5 to 10 minutes to complete. There is no fee to purchase this test, however, researchers do need to contact the publisher and corresponding author for permission to use this test (see Appendices G and H for permission to use the TSES).

Teacher Occupational Stress Factor Questionnaire

I used the teacher occupational stress factor questionnaire (TOSFQ) to assess the perceived areas of job-related stress in the classroom from the teachers' experience (Clark, 1980). I used the modified version that was revised by Foxworth, Karnes, and Leonard (1984). The modified version of the TOSFQ consists of 30 items and four subscales. I used all four subscales (relationship with teachers: Items: 4, 8, 11, 17, 18, 23, 27, and 30; work and compensation: Items: 2, 6, 13, 14, 16, 22, 28, and 29; working with students: Items: 1, 5, 12, 19, 25; and perceptions of respect from others: Items: 3, 7, 9, 10, 15, 20, 21, 24, and 26) and the total score.

The relationship with teachers' subscale (eight items) measures teachers' views on how they interact with each other. An example item on this subscale is "working in the school where there is an atmosphere or conflict among teacher." The work and compensation subscale (eight items) measures teachers' views on financial security. An

example item on this subscale is “Feeling my salary is not equal to my duties and responsibilities. The working with students’ subscale (five items) measures teachers’ feelings about themselves and interactions with students. An example item on this subscale is, “Feeling that a few difficult-to-discipline students take too much time away from other students. The perceptions of respect from others subscale (nine items) measures teachers’ perception of support from administration. An example item on this subscale is, “Feeling my principal is too aloof and detached from the classroom.”

A 5-point Likert scale is used to respond to each item (not stressful, somewhat stressful, decidedly stressful, extremely stressful). The Cronbach’s alpha for the total score was 0.93 (Foxworth et. al., 1984). Cronbach’s alpha values for relationship with teachers, work and compensation, working with students, and perceptions of respect from others were .87, .81, .79, and .92 (Foxworth et. al., 1984). Foxworth et al. (1984) evaluated the construct validity of the TOSFQ by administering the survey to 144 elementary school teachers who taught gifted students. A principal component factor analysis resulted in eigenvalues greater than unity which led to a solution with four factors. The procedure revealed that 50.6% of the total variance was explained by the four rotated factors (relationship with teachers, work and compensation, working with students, and perceptions of respect from others). The TOSFQ takes 10-15 minutes to complete, has no fee, and does not require permission to use this scale.

Maslach Burnout Inventory Scale-Educators Survey

The Maslach Burnout Inventory-Educators Survey (MBI-ES) was used to evaluate teachers’ job burnout across three dimensions: emotional exhaustion,

depersonalization, and personal accomplishment (Maslach & Jackson, 1981, 1986). There are three different versions of this inventory, but for the intention of this study, the educator survey was used. This survey has been used to identify burnout among teachers, education administrators, teaching assistants, counselors, and health professionals who work in school settings (Maslach & Jackson, 1981, 1986). The MBI-ES has modifications to the wording of some items. Specifically, the word “student” is used in place of the word “recipient” to ensure clarity and consistency in interpretation of the items (Maslach & Jackson, 1981, 1986).

Participants responded to each MBI-ES item using a 7-point scale that ranges from 0 ("Never") to 6 ("Every day") (Maslach & Jackson, 1981). Items are written in the form of statements about personal feelings or attitudes and using the general term students. There are three subscale scores. The emotional exhaustion subscale (nine items) refers to feelings of being emotionally overextended and exhausted by one’s work. An example item for this subscale is “I feel depressed at work”. The depersonalization subscale (five items) refers to cynical attitudes. An example item for this subscale is “I feel I treat some students as if they were impersonal objects”. The personal accomplishment subscale (eight items) refers to the feeling of competence and successful achievement in one’s work with people. An example item for this subscale is “I can easily understand how my students feel about things”. Items are ranked using both a frequency (how often one experiences it) and intensity (how much one experiences it) (Maslach & Jackson, 1981, 1986). Frequency and intensity rankings are combined to provide an overall score on each of the three subscales.

Higher scores on the emotional exhaustion scale and depersonalization scale, in accordance with lower scores on the personal accomplishment scale indicate job burnout (Maslach et al., 2001). I used all three subscales of the MBI-ES**.** The MBI has demonstrated high reliability as a measure of burnout (Maslach & Jackson, 1981). Internal consistency of the MBI is high, with Cronbach's alpha of 0.83 (frequency) and 0.74 (intensity) for the overall scale (Maslach & Jackson, 1981). The subscales had a Cronbach's alpha of 0.89 (frequency) and 0.86 (intensity) for emotional exhaustion, 0.77 (frequency) and 0.72 (intensity) for depersonalization, and 0.74 (frequency) and 0.74 (intensity) for personal accomplishment (Maslach & Jackson, 1981). Test-retest reliability for emotional exhaustion was 0.82 (frequency) and 0.53 (intensity), 0.80 (frequency) and 0.68 (intensity) for personal accomplishment, and 0.60 (frequency) and 0.69 (intensity) for depersonalization (Maslach & Jackson, 1981). The reliability coefficients were significant for internal consistency and test-retest reliability (Maslach & Jackson, 1981).

Evidence supporting the validity of the MBI-ES comes from studies that have examined the relationships between burnout scales and various aspects of work experience. Platsidou and Daniilidou (2016) conducted a study measuring burnout to Greek primary teachers comparing the psychometric properties of the MBI with two other scales, the Burnout Measure (BM) and Copenhagen Burnout Inventory (CBI). Their findings showed that the MBI-emotional exhaustion scale, the BM, and the CBI subscales were found to be have significant positive intercorrelations (Platisdou & Daniilidou, 2016). They also report that MBI is a more appropriate instrument for assessing teachers'

burnout compared to the BM and the CBI, which presented unclear inner structure and highly correlated subscales.

Steinhardt, Smith, Faulk, and Gloria (2011) looked at the relationship between stress, burnout, and depressive symptoms in teachers. The authors conducted a path analysis to determine the relationship between the Maslach MBI subscales with stress and depressive symptoms. Findings from this research study indicated that teachers who experienced high degrees of stress also had higher burnout scores on the emotional exhaustion subscale (b = 0.61), depersonalization subscale (b=0.38), and personal accomplishment subscale (b=0.28). Emotional exhaustion was moderately and positively related to depressive symptoms (b = 0.38) whereas depersonalization (b=0.13) and personal accomplishment (b=0.11) had a small positive relationship with depressive symptoms (Steinhardt, et. al, 2011). Their research supports their hypothesis that the relationship between work stress has a direct relationship with depressive symptoms for teachers.

Hoglund, Klingle, and Hosan (2015) looked at the subscales of MBI (emotional exhaustion, depersonalization, and personal accomplishments) as predictors of teacher-child relationships to demonstrate how teacher burnout and their relationship with children predicted how children's behaviors adjusted in their classroom. The findings from this study showed that children who had teachers that were less burned out, exhibited significantly fewer externalizing behaviors and had better quality teacher-child relationships. Whereas, children who had teachers that were burned out, exhibited significantly more externalizing behaviors and poor relationships with their teachers.

Hoglund et al (2015) reported a correlation between low levels of burnout when teachers demonstrated a learner centered pedagogy at the beginning of the school year as well as having the support of colleagues. Hoglund et al (2015) showed that classroom quality co-varied significantly and positively with personal accomplishment (*r*s = .09 to.15). Externalizing behaviors (i.e. symptoms of aggression towards other students, hyperactive behavior, and attention problems) co-varied significantly and positively with depersonalization (*rs* = .16 to .28) and negatively with personal accomplishment (*r* = −.14). The MBI-ES takes approximately 10-15 minutes to complete, does not require permission to use, is available for purchase, and costs $50 for a PDF of the test and $2 per each reproduction.

Parent-Teacher Relationship Scale

The Parent-Teacher Relationship Scale (PRTS) was used to assess the quality of relationships between parents and teachers (Vickers & Minke, 1995). The PRTS is a 24-item scale that has two factors: a nineteen-item joining factor (parent-teacher affiliation, support, dependability, availability, shared expectations, and beliefs) and a five-item communication-to-other factor (this will show the need to express oneself to the other). Items are rated on a five-point scale (1 = strongly disagree to 5 = strongly agree). Vickers and Minke (1995) found high internal consistency with Cronbach's alpha coefficients for the joining and communication factors at .97 and .86.

Deng, Zhou, Nie, Jin, Yang, and Fang (2018) used the PTRS scale to examine parent-teacher partnerships and high school students in China. They reported high Cronbach's alpha coefficients for the joining subscale (a=0.72) and communication

subscale (a=0.81). Their research was used with Chinese culture in mind and they reported the PRTS scale had similarities (i.e. contacting parents via phone call and emails) that replicated Western culture.

Dawson and Wymbs (2016) examined the concurrent validity of the PTRS by assessing the test-criterion relationship between the PTRS scale itself and a measure of student school-related outcomes that are linked with parent-teacher relations (i.e. student academics, behavior, and student-teacher relationships). They separated teachers into two groups (teachers who had "good" working relationships with parents and teachers who had "difficult" working relationships with parents) to look at the differences between the PRTS and relationship between parent-teacher relations (i.e. student academics, behavior, and student-teacher relationships). Dawson and Wymbs (2016) used a Fisher's r-to-z transformation (method used to transform the sampling distribution of Pearson's correlation coefficient) to compare differences for correlations across the rating groups. The findings indicated no significant differences (ps > .05) between the two groups (good and difficult parent relationships). Findings also indicated that when teachers had higher joining scores with a child's parent, they also reported significantly higher level of positive child outcomes (e.g., student–teacher relational closeness, student scholastic competence) and lower levels of negative child outcomes (e.g., student–teacher relational conflict, and student oppositional, hyperactive/impulsive, and inattentive behaviors). This survey takes 10-15 minutes to complete. There is no fee and no required permission to use this scale.

Data Analysis Plan

All of the data were analyzed using the SPSS 23.0 software package. Research questions were evaluated by looking at the relationship among job-related stress, job burnout, and the quality of parent-teacher relationships and teacher self-efficacy. Multiple regression analysis was used to determine the relative strength of job-related stress, teacher burnout, and quality of the parent-teacher relationship in predicting teachers' self-efficacy. Also included were tests to validate the assumptions of multiple regression. These assumptions include normally distributed scores, multicollinearity, assumption of a linear relationship between the independent variables (job-related stress, job burnout, and quality of parent-teacher relationships) and the dependent variable (teacher self-efficacy), and homoscedasticity (Green & Salkind, 2014). This screening was conducted prior to analysis and determined if the data met the assumptions for multiple regression.

I entered the survey data using the Statistical Package for the Social Sciences (SPSS) 23.0 version for statistical analysis. Internal consistency reliability using Cronbach's coefficient alpha for the five instruments was calculated. Multiple regression analyses were performed to determine the relative strength of each predictor variable in predicting each component of self-efficacy. The following statistical assumptions was tested prior to the multiple regression analyses: linearity, normality, multicollinearity, no autocorrelation, and homoscedasticity. Linearity was tested using a scatterplot in SPSS. Normality was determined by using Q-Q-Plots. Collinearity diagnostics was performed in SPSS to ensure that the independent variables are independent from one

another. A Durbin-Watson's *d* test was performed to determine no autocorrelation. Finally, a standardized residual plot was done to determine homoscedasticity.

Multiple regression analyses was utilized to determine the relative strength of each predictor variable: job-related stress (subscales: relationship with teachers, work and compensation, working with students, and perceptions of respect from others), teacher burnout (subscales: emotional exhaustion, depersonalization, and personal accomplishment), and quality of the parent-teacher relationship (subscales: joining and communication) in predicting each component of teacher self-efficacy (subscales include instructional strategies, classroom management, and student engagement). More specifically, I conducted multiple linear regressions using the standard entry method. In the standard entry method, all independent variables (predictors) enter into the regression equation at once; each one is assessed as if it had entered regression after all other predictors had entered. Each regression analysis reported any significant regression models and predictor variables and I reported the amount of variance which accounted for using R squared.

This quantitative study was designed to determine the relationship between job-related stress, job burnout, the quality of parent-teacher relationships and teacher self-efficacy. The research questions that addressed the specific hypotheses related to each variable included the following:

RQ1: To what extent is there a relationship between the job-related stress total score, as measured by the teacher occupational stress factor questionnaire (TOSFQ) and teacher self-efficacy (instructional strategies, classroom management, student

engagement and total self-efficacy score) as measured by the teacher sense of efficacy scale (TSES)?

$H_0$1: The total score of teacher stress, as measured by TOSFQ, is not a significant predictor of teacher self-efficacy, as measured by TSES.

$H_1$1: The total score of teacher stress, as measured by TOSFQ, is a significant predictor of teacher self-efficacy, as measured by TSES.

RQ2: To what extent is there a relationship between the job-related stress subscale of relationship with teachers, as measured by the TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement and total self-efficacy score), as measured by the TSES?

$H_0$2: Student relationship with teachers as measured by TOSFQ is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$2: Student relationship with teachers as measured by TOSFQ is a significant predictor of teacher self-efficacy as measured by TSES.

RQ3: To what extent is there a relationship between the job-related stress subscale of work and compensation, as measured by the TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score)**,** as measured by the TSES?

$H_0$3: Work and compensation, as measured by TOSFQ, is not a significant predictor of teacher self-efficacy, as measured by TSES.

$H_1$3: Work and compensation is a significant predictor of teacher self-efficacy.

RQ4: To what extent is there a relationship between the job-related stress subscale of working with students, as measured by TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$4: Working with students as measured by TOSFQ is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$4: Working with students as measured by TOSFQ is a significant predictor of teacher self-efficacy as measured by TSES.

RQ5: To what extent is there a relationship between the job-related stress subscale of perceptions of respect from others, as measured by TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score)**,** as measured by the TSES?

$H_0$5: Perceptions of respect from others as measured by TOSFQ is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$5: Perceptions of respect from others as measured by TOSFQ is a significant predictor of teacher self-efficacy as measured by TSES.

RQ6: To what extent is there a relationship between the job burnout subscale of emotional exhaustion, as measured by Maslach Burnout Inventory (MBI), and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$6: Emotional exhaustion as measured by MBI is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$6: Emotional exhaustion as measured by MBI is a significant predictor of teacher self-efficacy as measured by TSES.

RQ7: To what extent is there a relationship between the job burnout subscale of depersonalization, as measured by MBI, and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$7: Depersonalization as measured by MBI is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$7: Depersonalization as measured by MBI is a significant predictor of teacher self-efficacy as measured by TSES.

RQ8: To what extent is there a relationship between the job burnout subscale of personal accomplishment, as measured by MBI, and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$8: Personal accomplishment as measured by MBI is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$8: Personal accomplishment as measured by MBI is a significant predictor of teacher self-efficacy as measured by TSES.

RQ9: To what extent is there a relationship between the quality of parent-teacher relationship subscale of joining, as measured by the Parent-Teacher Relationship Scale

(PTRS), and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$9: Joining (described as parent-teacher affiliation, support, dependability, availability, shared experiences, and beliefs) as measured by PTRS is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$9: Joining described as parent-teacher affiliation, support, dependability, availability, shared experiences, and beliefs) as measured by PTRS is a significant predictor of teacher self-efficacy as measured by TSES.

RQ10: To what extent is the relationship between the quality of parent-teacher relationship subscale of communication, as measured by the PTRS, and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$10: Communication between parents and teachers, as measured by PTRS is not a significant predictor of teacher self-efficacy, as measured by TSES.

$H_1$10: Communication between parents and teachers, as measured by PTRS is a significant predictor of teacher self-efficacy, as measured by TSES.

Threats to Validity

One of the most important threats to validity to consider was the sampling of participants. Because I used a self-selected convenience sample, my participants were not obtained by random sampling. This is a threat to validity because non-random samples have lower external validity than random samples (Frankfort-Nachmias & Nachmias,

2008). I attempted to collect data from a diverse sample of teachers so that my data will be generalizable. Generalizability adds external validity to a study, which will help balance the threat to validity that the non-random sample will impose (Frankfort-Nachmias & Nachmias, 2008).

Another threat to validity was being able to draw accurate conclusions. It is sometimes difficult to draw causal relationships in quasi-experimental designs, such as correlational designs (Frankfort-Nachmias & Nachmias, 2008). I found that there were predictors of teacher self-efficacy, which showed causal variables. This is a known limitation to using correlational designs. Construct and statistical conclusion validity threats are also prominent in correlational designs. According to Creswell (2009), a threat to conclusion validity is a factor that can lead a researcher to reach an incorrect conclusion about a relationship in desired variables.

Another threat to validity was that the participants may experience stress from other aspects of their life that might impact their work. With this study using a self-selected sample of convenience, self-selected bias is a potential threat to validity. Self-selected bias is defined as participants being able to choose whether or not to participate in a study (Creswell, 2009). For example, it is possible that teachers who experience minimal burnout, have minimal stress, and have positive interactions with students who have a diagnosis of autism, may be more willing to participate in this study. This could result in fewer teachers volunteering to participate who experience stress, have low self-efficacy, are burnt out in their job, and are struggling with teaching students who have a

diagnosis of autism. Having a thorough explanation in the consent form helped to alleviate some of the concerns that have been identified.

Ethical Procedures

This study was initiated after permission was gained from Walden University's Institutional Review Board (IRB). The data were kept confidential. All assessments were kept in a locked file cabinet in which I was the only person to have access to. All participants were anonymous and assigned a number rather than any names so that confidentiality was met. All data, including electronic, protocols, and printed, were kept for a minimum of 5 years. If participants experienced any negative consequences, they could contact their Employee Assistance Program that is paid for by the school district they can utilize to address any negative consequences that may arise during this study. They can speak to a licensed mental health professional at no cost through their Employee Assistance Program. If participants wished to withdraw from this study at any time, they could do so without any penalty. I discussed participation in Chapter 4.

Summary

Chapter 3 provided the research design and methodology that was used in testing the hypotheses as well as a description of the measures utilized. A survey method design using surveymonkey.com was utilized for online survey administration to participants after consent was obtained. This was a quantitative study, with a non-experimental correlational design using survey methodology comprising ten independent variables of job-related stress, job burnout, and quality of parent-teacher relationships and their subscales. The dependent variable was teacher self-efficacy. Multiple regression

analyzed. Chapter 4 provided a description of the data collection and analysis and presented descriptive and inferential statistics from multiple regression after the data screening process.

Chapter 4: Results

In this quantitative study, I investigated the relationship between job-related stress, job burnout, the quality of parent-teacher relationships, and teacher self-efficacy. The theoretical framework used to guide this research was Bandura's social learning theory (Bandura, 1997). Within the context of social learning theory is self-efficacy. Self-efficacy is characterized as one's belief about their ability to perform specific actions or their behavior (Bandura, 1997). In an educational setting, social learning theory is looked at as whether a teacher is capable of performing a specific task.

The purpose of this study was to determine the relationship between job-related stress, job burnout, and the quality of parent-teacher relationships and teacher self-efficacy. I used multiple regression analyses to determine the relative strength of job-related stress, teacher burnout, and quality of the parent-teacher relationship in predicting teachers' self-efficacy. The following research questions and hypothesis guided this study:

RQ1: To what extent is there a relationship between the job-related stress total score, as measured by the teacher occupational stress factor questionnaire (TOSFQ) and teacher self-efficacy (instructional strategies, classroom management, student engagement and total self-efficacy score) as measured by the teacher sense of efficacy scale (TSES)?

$H_0$1: The total score of teacher stress, as measured by TOSFQ, is not a significant predictor of teacher self-efficacy, as measured by TSES.

$H_1$1: The total score of teacher stress, as measured by TOSFQ, is a significant predictor of teacher self-efficacy, as measured by TSES.

RQ2: To what extent is there a relationship between the job-related stress subscale of relationship with teachers, as measured by the TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement and total self-efficacy score), as measured by the TSES?

$H_0$2: Student relationship with teachers as measured by TOSFQ is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$2: Student relationship with teachers as measured by TOSFQ is a significant predictor of teacher self-efficacy as measured by TSES.

RQ3: To what extent is there a relationship between the job-related stress subscale of work and compensation, as measured by the TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score)**,** as measured by the TSES?

$H_0$3: Work and compensation, as measured by TOSFQ, is not a significant predictor of teacher self-efficacy, as measured by TSES.

$H_1$3: Work and compensation is a significant predictor of teacher self-efficacy.

RQ4: To what extent is there a relationship between the job-related stress subscale of working with students, as measured by TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$4: Working with students as measured by TOSFQ is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$4: Working with students as measured by TOSFQ is a significant predictor of teacher self-efficacy as measured by TSES.

RQ5: To what extent is there a relationship between the job-related stress subscale of perceptions of respect from others, as measured by TOSFQ and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score)**,** as measured by the TSES?

$H_0$5: Perceptions of respect from others as measured by TOSFQ is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$5: Perceptions of respect from others as measured by TOSFQ is a significant predictor of teacher self-efficacy as measured by TSES.

RQ6: To what extent is there a relationship between the job burnout subscale of emotional exhaustion, as measured by Maslach Burnout Inventory (MBI), and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$6: Emotional exhaustion as measured by MBI is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$6: Emotional exhaustion as measured by MBI is a significant predictor of teacher self-efficacy as measured by TSES.

RQ7: To what extent is there a relationship between the job burnout subscale of depersonalization, as measured by MBI, and teacher self-efficacy (instructional

strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$7: Depersonalization as measured by MBI is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$7: Depersonalization as measured by MBI is a significant predictor of teacher self-efficacy as measured by TSES.

RQ8: To what extent is there a relationship between the job burnout subscale of personal accomplishment, as measured by MBI, and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$8: Personal accomplishment as measured by MBI is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$8: Personal accomplishment as measured by MBI is a significant predictor of teacher self-efficacy as measured by TSES.

RQ9: To what extent is there a relationship between the quality of parent-teacher relationship subscale of joining, as measured by the Parent-Teacher Relationship Scale (PTRS), and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$9: Joining (described as parent-teacher affiliation, support, dependability, availability, shared experiences, and beliefs) as measured by PTRS is not a significant predictor of teacher self-efficacy as measured by TSES.

$H_1$9: Joining described as parent-teacher affiliation, support, dependability, availability, shared experiences, and beliefs) as measured by PTRS is a significant predictor of teacher self-efficacy as measured by TSES.

RQ10: To what extent is the relationship between the quality of parent-teacher relationship subscale of communication, as measured by the PTRS, and teacher self-efficacy (instructional strategies, classroom management, student engagement, and total self-efficacy score), as measured by the TSES?

$H_0$10: Communication between parents and teachers, as measured by PTRS is not a significant predictor of teacher self-efficacy, as measured by TSES.

$H_1$10: Communication between parents and teachers, as measured by PTRS is a significant predictor of teacher self-efficacy, as measured by TSES.

In this chapter, I describe the data collection procedure in detail including time frames, procedure changes, response rates, and other relevant information pertaining to the data collection. I present basis demographic data of the sample, and finally, detailed statistical results.

Data Collection

As mentioned in Chapter 3, data collection was going to be collected from male and female secondary education teachers from Wichita, Kansas, who worked for the Wichita Public School- USD 259 district. I submitted a research request form to the research and assessment department with the district who oversees research conducted on 07/11/2019 after my proposal was approved by Walden University. They denied my original request on 07/31/2019 citing that my “surveys were too broad, the number of

questions would be burden to teachers, and gift cards are not allowed." I decided to use an online method, such as Facebook, to obtain my participants. After my proposal was approved, I submitted my IRB application and was approved to start conducting my research on 10/28/2019. While I worked on developing my survey to send out to teachers, I reached out to eight different Facebook teacher group administrators to obtain approval to post my survey to their groups. Out of the eight with whom I spoke, five replied, allowing me to post on their Facebook group page. Once approved, I was able to post my invitation to recruit teachers on the five Facebook groups' pages. Once teachers met the following requirements: teachers who are certified to teach Grades 6 to 12, have been on the job for at least 3 years, and have at least one student who has a diagnosis of autism in their current classroom, they clicked on the SurveyMonkey link and completed the survey. Data collection began on 12/01/2019 and concluded on 01/02/2020. A total of 221 individuals met these criteria and participated in this research study. I was unable to calculate response rate because I did not know how many of the teachers who belonged to the Facebook groups met the criteria.

Results

I present descriptive statistics for the samples and results of the regression analyses in this section. I calculated the standard deviations, frequencies, means, and percentages for the variables. I conducted four multiple linear regressions with the independent variables of job-related stress (subscales: relationship with teachers, work and compensation, working with students, perceptions of respect from others, and total score), teacher burnout (subscales: emotional exhaustion, depersonalization, and personal

accomplishment), and quality of the parent-teacher relationship (subscales: joining and communication). The dependent variables included components of teacher self-efficacy (instructional strategies, classroom management, student engagement, and the total self-efficacy score).

Descriptive Statistics

All participants (n=221) reported that they were certified to teach grades 6-12, had been on the job for at least 3 years, and had at least 1 student who has a diagnosis of autism in their current classroom. Teachers were asked to report demographic information regarding their gender, age, highest level of school completed, or degree received, and race/ethnic group. There was an overwhelming number of female teachers in the sample (female n=216, 97.74%; male n=5, 2.26%). There was a wide range of teachers in different age categories (21-29 n=30, 13.57%; 30-39 n=62, 28.05%; 40-49 n=74, 33.48%; 50-59 n=42, 19%; and 60 or older n=13, 5.88%). In regard to college degrees, most of the teachers had a graduate degree (n=160, 72.4%), next was a bachelor's degree (n=60, 27.15%), and finally, a small percentage of teachers had an associate degree (n=1, 0.45%). Most of the participants were either White (n=189, 85.91%) or Black or African American (n=14, 6.36%). Demographic characteristics for participants are presented in Table 1.

Table 1

Frequencies for Teacher Demographic Characteristics

Variable	*n*	%
Gender		
Female	216	97.74
Male	5	2.26

Age (years)		
21-29	30	13.57
30-39	62	28.05
40-49	74	33.48
50-59	42	19.00
60 or older	13	5.88
Highest level of education		
Associate degree	1	0.45
Bachelor's degree	60	27.15
Graduate degree	160	72.40
Ethnicity		
White	189	85.91
Black	14	6.36
American Indian	5	2.27
Asian	1	0.45
Native Hawaiian	1	0.45
Multiple races	8	3.64

The sample for this research study closely represented the national statistics for teacher gender and race. According to the National Center for Education Statistics (2020), in the 2017-2018 school year, 76 percent of teachers were female while 24 percent were male and 70 percent of teachers were White while 7 percent were black, 2 percent were Asian, 2 percent were Biracial, and 1 percent were of American/Indian/Alaska Native.

The means and standard deviation for the teacher occupational stress factor questionnaire (TOSFQ) (subscales: relationship with teachers, work and compensation, working with students, and perceptions of respect from others), Maslach Burnout

Inventory (MBI) (subscales: emotional exhaustion, depersonalization, and personal accomplishment), Parent-Teacher Relationship Scale (PRTS) (subscales: joining and communication), and Teacher self-efficacy scale (TSES) (subscales: instructional strategies, classroom management, and student engagement) are shown in Table 2.

The MBI survey (subscales: emotional exhaustion, depersonalization, and personal accomplishment) was used to evaluate teachers' job burnout across three different dimensions. The emotional exhaustion subscale scores ranged from 28 to 62, with an average of 46.33 (SD= 5.569). The personal accomplishment subscale scores ranged from 21 to 48, with an average of 40.10 (SD=5.154). The depersonalization subscale scores ranged from 40 to 99, with an average of 69.87 (SD=11.603). The TOSFQ survey (subscales: relationship with teachers, work and compensation, working with students, and perceptions of respect from others) was used to assess the perceived areas of job-related stress in the classroom from a teachers' experience. The relationship with teacher subscale scores ranged from 8 to 40, with an average of 23.68 (SD= 8.302). The work and compensation subscale ranged from 10 to 40, with an average of 28.89 (SD= 7.401). The working with student's subscale ranged from 5 to 25, with an average of 15.55 (SD=4.146). The perceptions of respect subscale ranged from 9 to 44, with an average of 25.68 (SD=7.401). The PTRS (subscales: joining and communication) was used to assess the quality of relationships between parents and teachers. The joining subscale scores ranged from 39 to 65, with an average of 54.19 (SD=4.337). The communication subscale scores ranged from 10 to 37, with an average of 27.34 (SD= 4.312).

Self-efficacy was the dependent variable and the teacher sense of self-efficacy scale had three subscales. The student engagement subscale scores ranged from 17 to 40, with an average of 30.41 (SD=4.734). The instructional strategies subscale ranged from 21 to 40, with an average of 33.69 (SD=4.088). The classroom management subscale ranged from 18 to 40, with an average of 33.13 (SD=4.808). The total score of teacher self-efficacy ranged from 68 to 120, with an average of 97.24 (SD=11.743).

Table 2

Descriptive Statistics for Surveys

Variable	M	SD	Min	Max
MBI personal accomplishment subscale	40.10	5.15	21.00	48.00
MBI-emotional exhaustion subscale	46.33	5.57	28.00	62.00
MBI-depersonalization subscale	69.88	11.60	40.00	99.00
TOSFQ-relationship with teacher subscale	23.69	8.30	8.00	40.00
TOSFQ-work and compensation subscale	28.89	7.40	10.00	40.00
TOSFQ-working with students' subscale	15.56	4.14	5.00	25.00
TOSFQ-perceptions of respect	25.69	8.35	9.00	44.00
TOSFQ-total score	93.82	22.65	35.00	146.00
TSES-student engagement subscale	30.41	4.73	17.00	40.00
TSES-instructional strategies subscale	33.70	4.09	21.00	40.00
TSES-classroom management subscale	33.14	4.81	18.00	40.00
TSES-total score	97.24	11.74	68.00	120.00
PTRS-joining subscale	54.20	4.34	39.00	65.00
PTRS-communication subscale	27.34	4.31	10.00	37.00

Evaluation of Statistical Assumptions

Before I conducted the multiple linear regression analyses, I assessed the assumptions of normality, multicollinearity, and homoscedasticity. I examined the values for skewness and kurtosis to determine whether the data distribution differed from a normal distribution found in Table 3. When the values of the skew and kurtosis are 0, this indicates a normal distribution (Field, 2013). Likewise, if a distribution has values of skew or kurtosis above or below 0, then this indicates a deviation from normal (Field, 2013). I conducted a Shapiro-Wilk test to test for normality. All scores for each instrument were within the value of the guidelines for kurtosis; therefore, there was a normality found. Table 3 presents the results from the Shapiro-Wilk test conducted for normality, skewness, and kurtosis. The Q-Q plots analysis was conducted to test for normality. The results of the Q-Q plots indicated that the data distribution did not differ from a normal data distribution and a standardized residual plot was done to determine homoscedasticity; therefore, the assumption of normality was met. Figures 1-10

Table 3

Results of the Normality Testing for Surveys

	Statistic	*df*	*p*	Skewness	Kurtosis
MBI-PA subscale	.948	221	.000	-.847	.906
MBI-EE subscale	.993	221	.395	.023	.333
MBI-DP subscale	.987	221	.044	-.184	-.587
TOSFQ-relationship with teacher subscale	.972	221	.000	.220	-.791
TOSFQ-work and compensation subscale	.958	221	.000	-.544	-.359
TOSFQ-working with student subscale	.988	221	.062	.061	-.502
TOSFQ-perception of respect subscale	.972	221	.000	.157	-.966
TOSFQ-total score	.993	221	.365	-.035	-.501
TSES-student engagement subscale	.988	221	.053	-.142	-.128
TSES-instructional strategies subscale	.967	221	.000	-.491	-.057
TSES-classroom management subscale	.957	221	.000	-.570	-.203
TSES-total score	.985	221	.022	-.263	-.347
PRTS-joining subscale	.986	221	.030	-.189	.622
PRTS-communication	.973	221	.000	-.617	.848

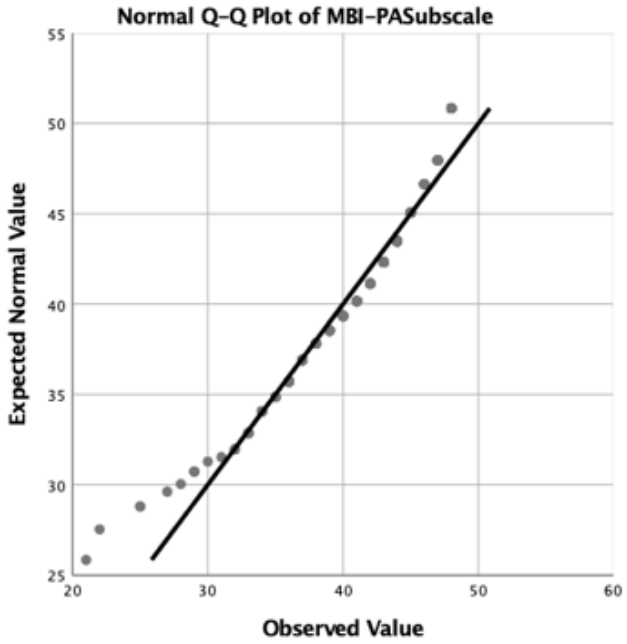

Figure 1. Normal Q-Q plot of MBI PA subscale.

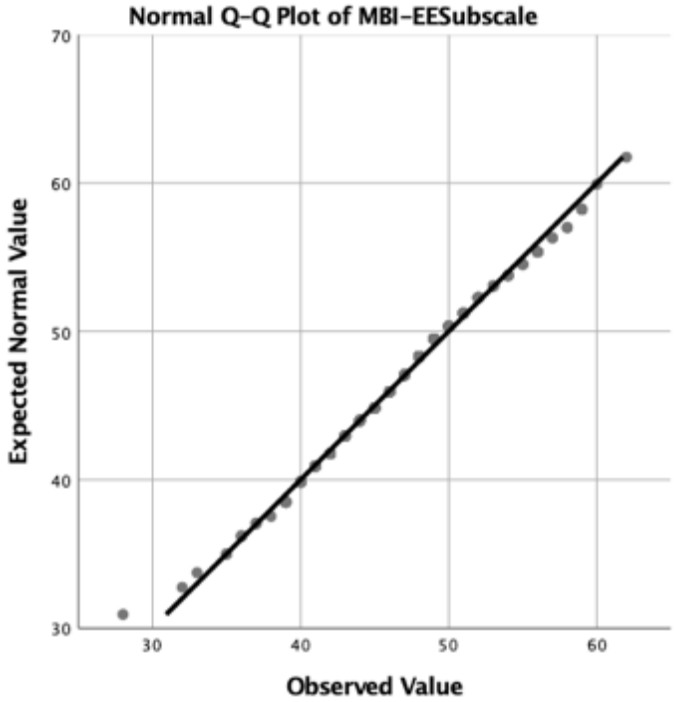

Figure 2. Normal Q-Q plot of EE subscale.

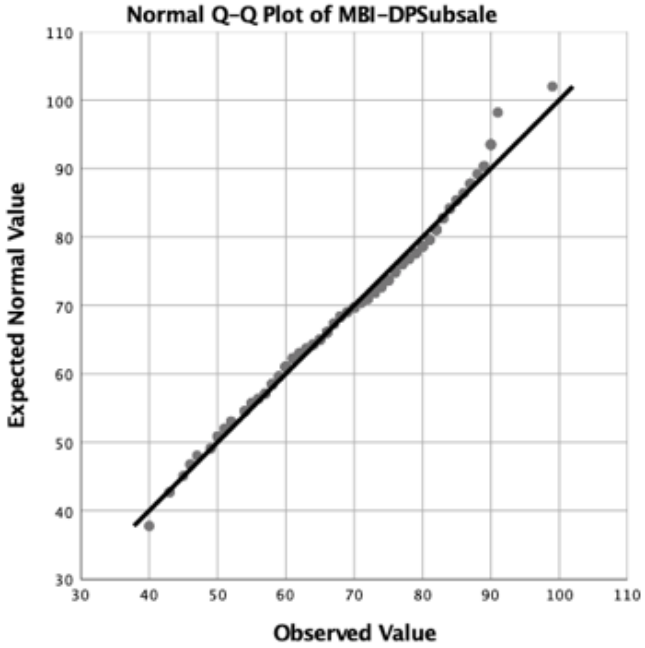

Figure 3. Normal Q-Q plot of MBI-DP scale.

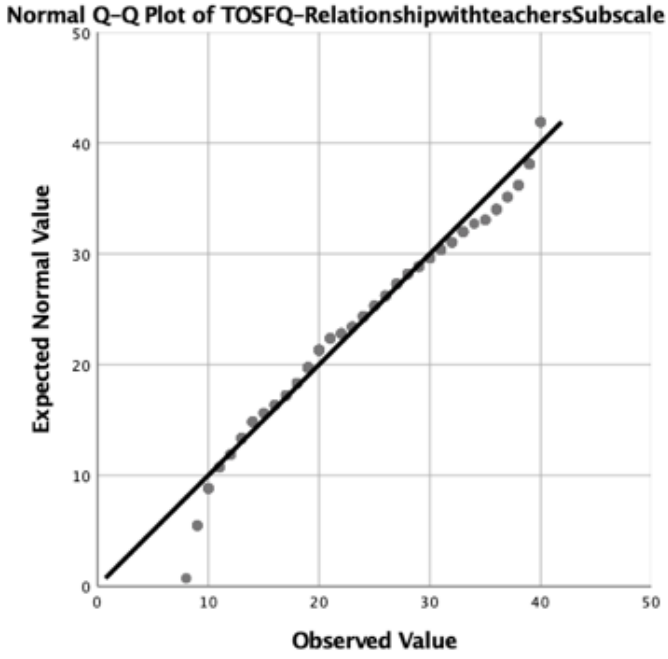

Figure 4. Normal Q-Q plot of TOSFQ-relationship with teacher subscale.

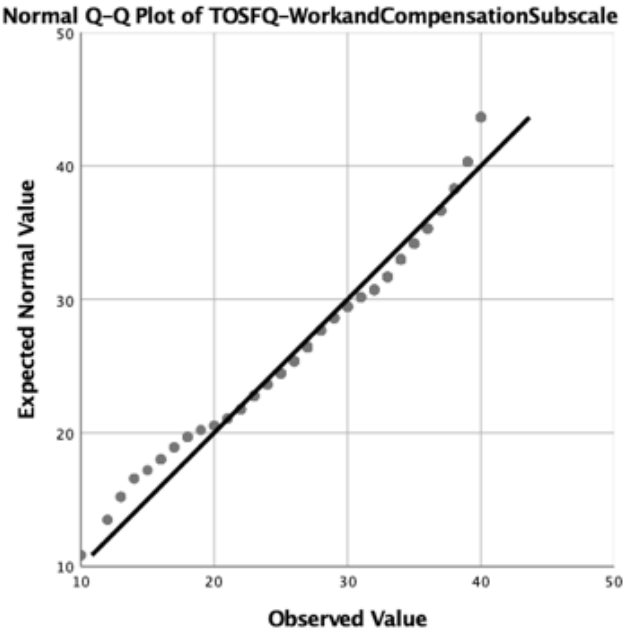

Figure 5. Normal Q-Q plot of TOSFQ-work and compensation subscale.

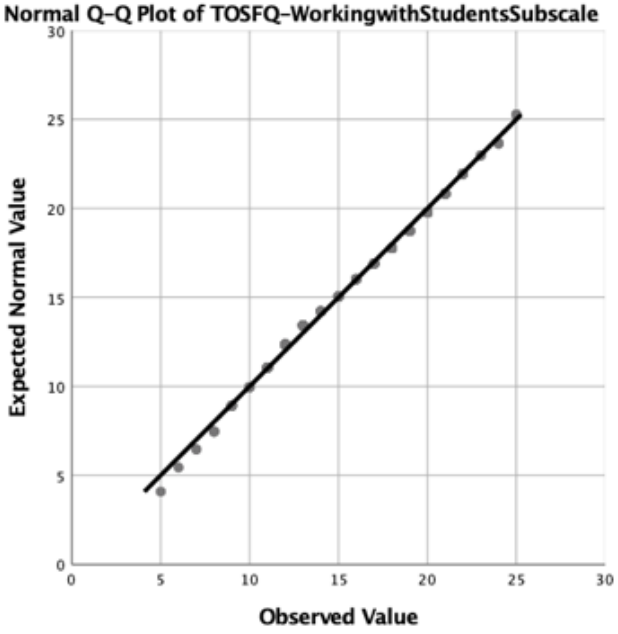

Figure 6. Normal Q-Q plot of TOSFQ-working with student subscale.

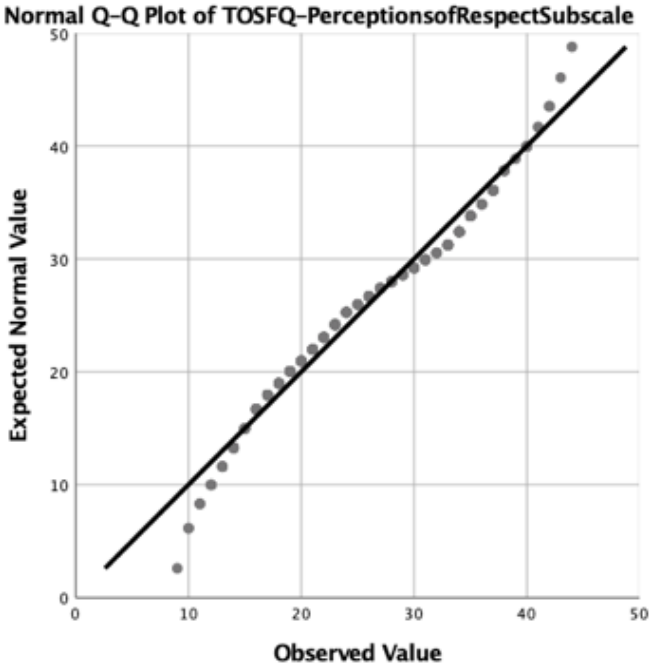

Figure 7. Normal Q-Q plot of TOSFQ-perception of respect subscale.

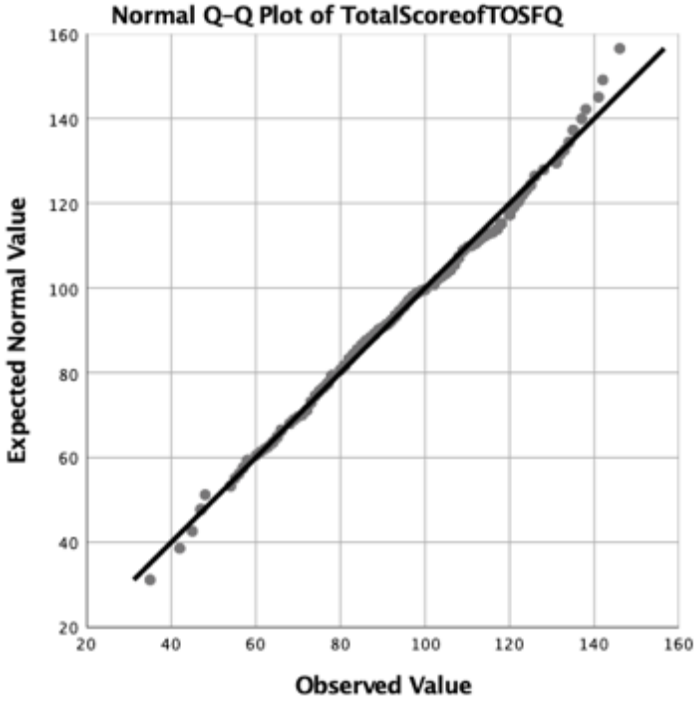

Figure 8. Normal Q-Q plot of TOSFQ-total score.

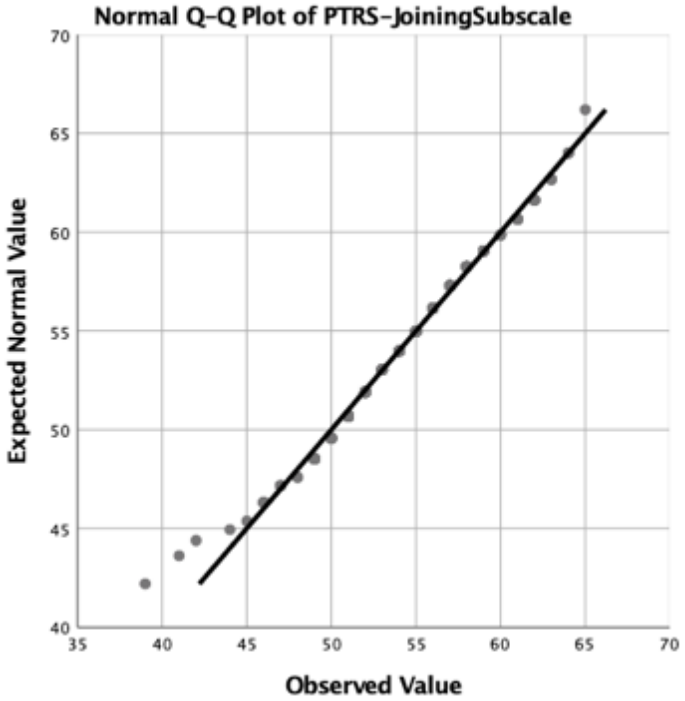

Figure 9. Normal Q-Q plot of PTRS-joining subscale.

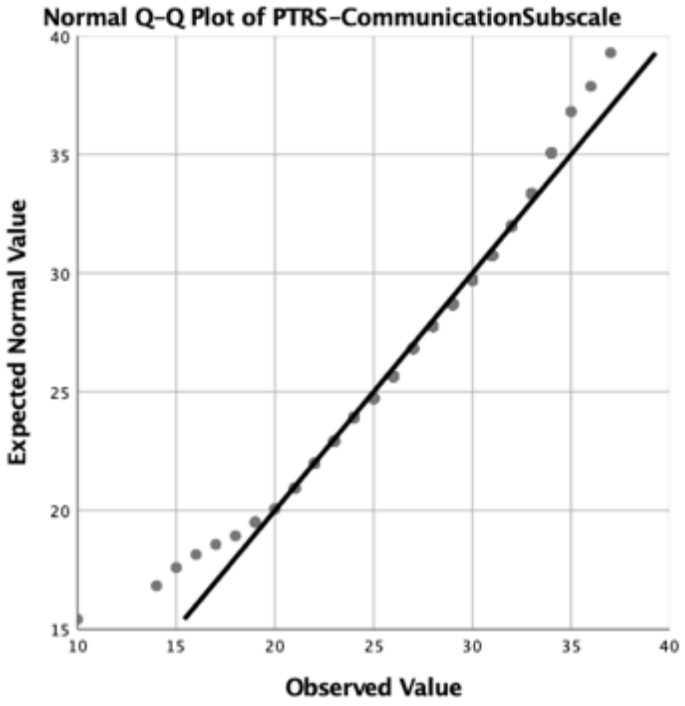

Figure 10. Normal Q-Q plot of PTRS-communication subscale.

To determine homoscedasticity, I looked at residual scatterplots for the predicted data of each of the subscales of the instruments used alongside with the dependent variable (teacher self-efficacy with subscales-total self-efficacy, student engagement subscale, instructional strategies subscale, and classroom management subscale). The points appeared to be distributed about a mean value of zero with no curvature in the plot. The results showed that homoscedasticity was met. The following graphs (Figures 11-14) presented the residual scatterplot for homoscedasticity for each independent variable.

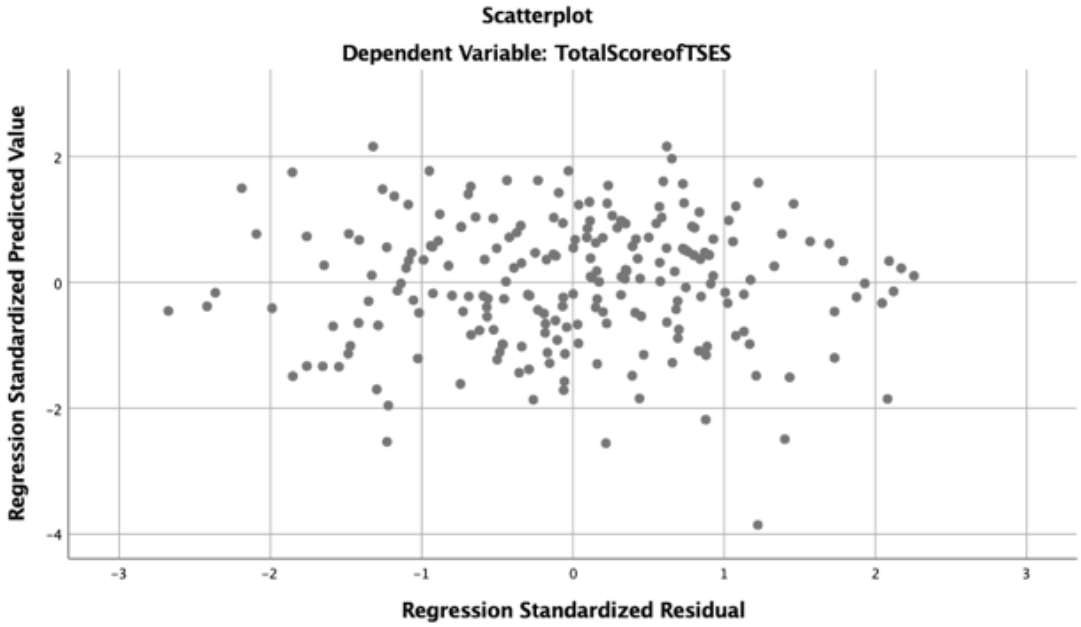

Figure 11. Residual scatterplot for homoscedasticity for total score of TSES.

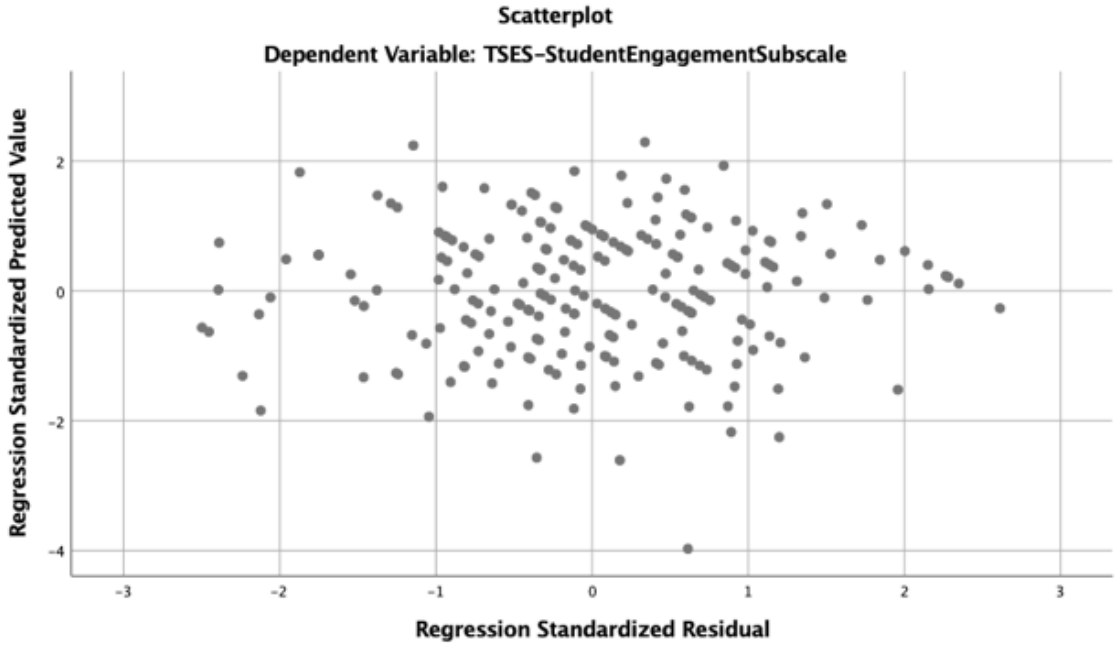

Figure 12. Residual scatterplot for homoscedasticity for TSES-student engagement subscale.

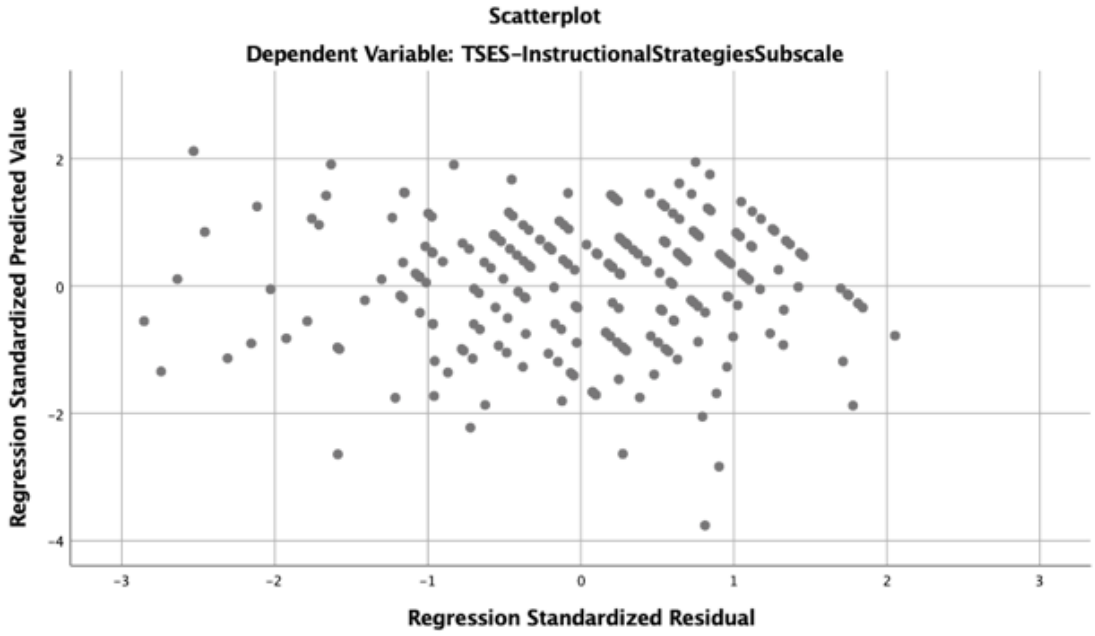

Figure 13. Residual scatterplot for homoscedasticity for TSES-instructional strategies subscale.

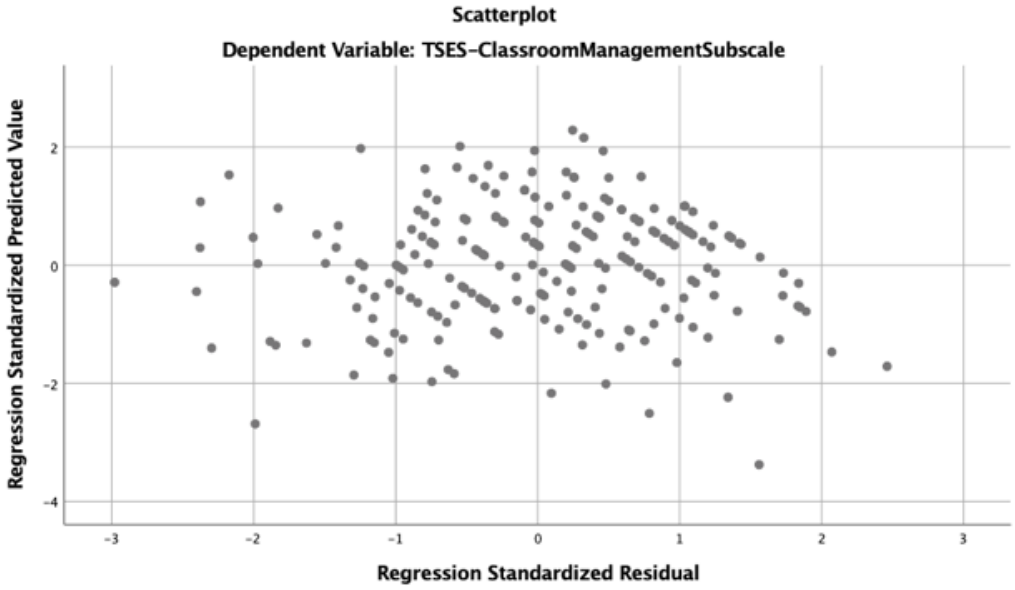

Figure 14. Residual scatterplot for homoscedasticity for TSES-classroom management subscale.

Cronbach's alpha was calculated to measure internal consistency for each survey. When interpreting Cronbach alpha scores, a reliability co-efficient of .7 or higher is considered acceptable (Field, 2013). Cronbach alpha scores for the subscales of the MBI were personal accomplishment (.70), emotional subscale (.92), and depersonalization (.61) showing that this survey measured accurately teacher burnout. Cronbach alpha scores for the subscale of the TOSFQ scale were relationship with teachers (.92), work and compensation (.87), working with students (.81), perceptions of respect (.86), and total score of TOSFQ (.94). Cronbach alpha scores for the subscale of the TSES were student engagement (.86), instructional strategies (.83), classroom management (.88), and total score of TSES (.93). Cronbach alpha scores for the subscale of PTRS were joining (.97) and communication (.84). The Cronbach's alpha scores for all of the surveys/subscales demonstrated satisfactory levels of internal consistency.

I then calculated the Variance Inflation Factors (VIFs) for the predictor variables. VIFs indicate whether a predictor variable has a strong linear relationship with the other predictor variables (Field, 2013). To interpret the VIFs in the predictor variables I looked at each coefficient output to see if the VIF values were greater than 5 and less than 10 to show that there was a high degree of multicollinearity (Menard, 2009). For the subscales of the Teacher Occupational Stress Factor Questionnaire- Relationship with teachers and Work and compensation had a high degree of multicollinearity compared to the other predictor variables Table 4 presented the VIF values for the predictor variables.

Table 4

VIF Values for the Predictor Variables

Variable	VIF
MBI-PA subscale	2.288
MBI-EE subscale	2.050
MBI-DP subscale	1.912
TOSFQ-relationship with teacher subscale	8.497
TOSFQ-work and compensation subscale	4.765
TOSFQ-working with student subscale	2.456
TOSFQ-total score	21.832
PRTS-joining subscale	1.156
PRTS-communication	1.157

Multiple Regression Analyses

To address the research questions for this study, I conducted a multiple linear regression analyses using a standard entry method. (Tabachnick and Fidell, 2013). The standard method allowed the addition of the predictor variables into the regression model one at a time. The predictor variables from the research questions were job-related stress (subscales: relationship with teachers, work and compensation, working with students, and perceptions of respect from others), teacher burnout (subscales: emotional exhaustion, depersonalization, and personal accomplishment), and quality of the parent-

teacher relationship (subscales: joining and communication). The dependent variable included components of teacher self-efficacy (instructional strategies, classroom management, and student engagement). I conducted a total of 4 standard multiple linear regression analyses, one for each component of teacher self-efficacy.

Multiple Regression: Predictors of Teacher Self-Efficacy (Student Engagement Subscale)

I conducted a multiple linear regression analysis to assess the relationship between the predictor variables and the student engagement subscale of teacher self-efficacy. The predictor variables for the multiple linear regression were job-related stress (subscales: relationship with teachers, work and compensation, working with students, perceptions of respect from others, and the total score), teacher burnout (subscales: emotional exhaustion, depersonalization, and personal accomplishment), and quality of the parent-teacher relationship (subscales: joining and communication). The result of this multiple linear regression was statistically significant, F (9, 211) =11.646, $p < .000$, R^2 =.332. This finding shows that the overall model was statistically significant. This model explains 33% of the variation in teacher self-efficacy (student engagement subscale). The results are shown in Table 5.

There were three significant predictors of teacher self-efficacy (student engagement subscale). The personal accomplishment subscale score of the Maslach Burnout Inventory score was a statistically significant predictor of teacher self-efficacy (student engagement subscale), $B = .454$, $p <.000$. On average, for every one-unit

increase in personal accomplishment (the tendency to evaluate oneself in respect to their job), there was a 0.454 unit increase in teacher self-efficacy (student engagement).

The emotional exhaustion subscale score of the Maslach Burnout Inventory score was a statistically significant predictor of teacher self-efficacy (student engagement subscale), $B = -.167$, $p < .016$. On average, for every one-unit increase in emotional exhaustion (feelings of being emotionally overextended and exhausted by one's work), there was a -0.167 unit decrease in teacher self-efficacy (student engagement).

The working with student's subscale score of the Teacher Occupational Stress Factor Questionnaire was a statistically significant predictor of teacher self-efficacy (student engagement subscale), $B = -.202$, $p < .046$. On average, for every one-unit increase in how teachers worked with their students, there was a -0.202 unit decrease in teacher self-efficacy (student engagement).

Table 5

Results of the Multiple Linear Regression Predicting Student Engagement Subscale of Teacher Self-Efficacy With Surveys

Variable	B	SE	β	*t*	*p*
MBI-PA subscale	.454	.078	.494	5.810	.000
MBI-EE subscale	-.167	.068	-.196	-2.432	.016
MBI-DP subscale	.006	.032	0.16	.200	.842
TOSFQ-relationship with teacher subscale	.169	.094	.297	1.808	.072
TOSFQ-work and compensation subscale	-.020	.079	-.031	-.255	.799
TOSFQ- respect from others	-.030	.078	-.045	2.345	.641

TOSFQ-working with students subscale	-.202	.101	-.177	-2.005	.046
TOSFQ-total score	-.030	.055	-.141	-.537	.592
PTRS-joining subscale	.074	.066	.089	1.467	.144
PTRS-communication subscale	.097	.066	.089	1.467	.144

Multiple Regression: Predictors of Teacher Self-Efficacy (Instructional Strategies Subscale)

I conducted a multiple linear regression analysis to assess the relationship between the predictor variables and the instructional strategies subscale of teacher self-efficacy. The predictor variables for the multiple linear regression were job-related stress (subscales: relationship with teachers, work and compensation, working with students, perceptions of respect from others, and the total score), teacher burnout (subscales: emotional exhaustion, depersonalization, and personal accomplishment), and quality of the parent-teacher relationship (subscales: joining and communication). The result of this multiple linear regression was statistically significant, F (9, 211) =5.581, $p < .000$, R^2 =.192. This finding showed that the overall model was statistically significant. This model accounted for 19% of the variation in teacher self-efficacy (instructional strategy subscale). The results are shown in Table 6.

The only significant predictor of teacher self-efficacy (instructional strategies subscale) was the personal accomplishment subscale score of the Maslach Burnout Inventory, $B = .290$, $p <.000$. On average, for every one-unit increase in view their sense

of personal accomplishment, there was a 0.290 unit increase in teacher self-efficacy (instructional strategies).

Table 6

Results of the Multiple Linear Regression Predicting Instructional Strategy Subscale of Teacher Self-Efficacy With Surveys

Variable	B	SE	β	*t*	*p*
MBI-PA subscale	.290	.074	.365	3.902	.000
MBI-EE subscale	.024	.065	.033	.372	.711
MBI-DP subscale	-.029	.030	-.083	-.965	.336
TOSFQ-relationship with teacher subscale	.006	.089	.012	.068	.946
TOSFQ-work and compensation subscale	-.028	.075	-.050	-.371	.711
TOSFQ- respect from others	.012	.846	-.342	2.234	.954
TOSFQ-working with students subscale	-.113	.096	-.114	-.1.179	.240
TOSFQ-total score	.030	.052	.168	.581	.562
PTRS-joining subscale	.055	.063	.059	.881	.379
PTRS-communication subscale	.104	.063	.110	1.653	.100

Multiple Regression: Predictors of Teacher Self-Efficacy (Classroom Management Subscale)

I conducted a multiple linear regression analysis to assess the relationship between the predictor variables and the classroom management subscale of teacher self-efficacy. The predictor variables for the multiple linear regression were job-related stress (subscales: relationship with teachers, work and compensation, working with students, perceptions of respect from others, and the total score), teacher burnout (subscales: emotional exhaustion, depersonalization, and personal accomplishment), and quality of the parent-teacher relationship (subscales: joining and communication). The result of this multiple linear regression was statistically significant, F (9, 211) =9.209, $p < .000$, R^2 =

.282. This finding showed that the overall model was statistically significant. This model accounted for 28% of the variation in teacher self-efficacy (classroom management subscale). The results are shown in Table 7.

The personal accomplishment subscale of the Maslach Burnout Inventory was a statistically significant predictor of teacher self-efficacy (classroom management subscale), $B = .309$, $p < .000$. On average, for every one-unit increase in personal accomplishment, there was a 0.309 unit increase in teacher self-efficacy (classroom management).

The working with student's subscale score of the Teacher Occupational Stress Factor Questionnaire was a statistically significant predictor of teacher self-efficacy (classroom management subscale), $B = -.312$, $p < .003$. On average, for every one-unit increase in working with students, there was a -0.312 unit decrease in teacher self-efficacy (classroom management).

Table 7

Results of the Multiple Linear Regression Predicting Classroom Management Subscale of Teacher Self-Efficacy with Surveys

Variable	B	SE	β	*t*	*p*
MBI-PA subscale	.309	.082	.332	3.759	.000
MBI-EE subscale	-.079	.072	-.092	-1.096	.274
MBI-DP subscale	.021	.033	.050	.614	.540
TOSFQ-relationship with teacher subscale	.123	.098	.213	1.250	.213
TOSFQ-work and compensation subscale	-.009	.083	-.014	-.108	.914
TOSFQ- respect for others	.123	-.845	.234	-.110	.384
TOSFQ-working with students subscale	-.312	.106	-.227	-3.032	.003
TOSFQ-total score	-.038	.058	-.177	-.651	.516
PTRS-joining subscale	.061	.070	.055	.870	.385
PTRS-communication subscale	-.038	.058	-.177	-.651	.516

Multiple Regression: Predictors of Teacher Self-Efficacy (Total Score)

I conducted a multiple linear regression analysis to assess the relationship between the predictor variables and the total score of teacher self-efficacy. The predictor variables for the multiple linear regression were job-related stress (subscales: relationship with teachers, work and compensation, working with students, perceptions of respect from others, and the total score), teacher burnout (subscales: emotional exhaustion, depersonalization, and personal accomplishment), and quality of the parent-teacher relationship (subscales: joining and communication). The result of this multiple linear regression was statistically significant, F (9, 211) =11.794, $p < .000$, $R^2 = .335$. This finding showed that the overall model was statistically significant. This model accounted for 34% of the variation in teacher self-efficacy (total score). The results are shown in Table 8.

The personal accomplishment subscale of the Maslach Burnout Inventory was a statistically significant predictor of teacher self-efficacy (total score), $B = 1.053$, $p < .000$. On average, for every one-unit increase in personal accomplishment, there was a 1.053 unit increase in total self-efficacy.

The working with student's subscale of the Teacher Occupational Stress Factor Questionnaire was a statistically significant predictor of teacher self-efficacy (total score), $B = -.636$, $p < .011$. On average, for every one-unit increase in working with students, there was a -0.636 unit decrease in total self-efficacy.

Table 8

Results of the Multiple Linear Regression Predicting Total Teacher Self-Efficacy Score with Surveys

Variable	B	SE	β	*t*	*p*
MBI-PA subscale	1.053	.194	.462	5.443	.000
MBI-EE subscale	-.221	.169	-.105	-1.306	.193
MBI-DP subscale	-.002	.079	-.002	1.288	.199
TOSFQ-relationship with teacher subscale	.298	.232	.211	1.288	.199
TOSFQ-work and compensation subscale	-.057	.194	-.036	-.291	.771
TOSFQ- Respect for others	-.223	.167	-.069	1.123	.775
TOSFQ-working with students subscale	-.636	.249	-.225	-2.552	.011
TOSFQ-total score	-.037	.136	-.071	-.271	.787
PTRS-joining subscale	.189	.163	.070	1.158	.248
PTRS-communication subscale	.196	.164	.072	1.193	.234

Summary

I used multiple linear regression analyses to examine the relationship between job-related stress, job burnout, the quality of parent-teacher relationships, and teacher self-efficacy. I conducted a multiple linear regression between predictor variables (job-related stress (subscales: relationship with teachers, work and compensation, working with students, and perceptions of respect from others), teacher burnout (subscales: emotional exhaustion, depersonalization, and personal accomplishment), and quality of the parent-teacher relationship (subscales: joining and communication) and criterion variables (components of teacher self-efficacy (instructional strategies, classroom management, and student engagement). The personal accomplishment subscale of the Maslach Burnout Inventory was a significant predictor of all components of teacher self-efficacy (student engagement, instructional strategies, classroom management, and total score). The emotional exhaustion subscale of the Maslach Burnout Inventory and

working with student's subscale of teacher occupational stress factor questionnaire were significant predictors of classroom management and the total score components of teacher self-efficacy. In Chapter 5, an interpretation of the findings, limitations of the study, recommendations for future research, and implications of this study will be discussed.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this research study was to determine whether there was a relationship among teacher job-related stress, burnout, quality of parent-teacher relationships, and teacher self-efficacy. In this quantitative study, I collected data from general education teachers (Grades 6-12) who had students diagnosed with autism in their classrooms, because students who have a diagnosis of autism often struggle with socially appropriate interactions with their peers and teachers and adolescence is the prime age where social/emotional development blossoms (Link, 2019). Previous research has demonstrated that healthy parent-teacher relationships are vital to student academic success (Miller et al., 2017). Teachers may also experience burnout and stress in their profession and self-efficacy appears to be an important factor that determines the quality of instruction and student academic outcomes (Miller et al, 2017). However, research was needed to examine job burnout, job-related stress, parent-teacher relationships, and self-efficacy among teacher's who have students diagnosed with autism in their classrooms.

I analyzed the quantitative data in this study using standard multiple regression analyses. The results showed that the personal accomplishment subscale of the MBI was a significant predictor of all components of teacher self-efficacy (student engagement, instructional strategies, classroom management, and total score). That is, higher levels of personal accomplishment predict higher levels of teacher self-efficacy. In addition, the emotional exhaustion subscale of the MBI and working with student's subscale of TOSFQ were significant predictors of the student engagement component of teacher self-

efficacy. This showed that higher levels of emotional exhaustion and higher levels of negative interactions with students predicted lower levels of teacher self-efficacy (student engagement subscale). Higher levels of negative interactions with students also predicted lower scores on perceived effective classroom management subscale and total teacher self-efficacy. In this chapter, I discuss the findings of this study in the interpretation of findings section. I also discuss the limitations of this study, followed by recommendations for future research and implications for social change. The chapter ends with conclusions for this study.

Interpretation of the Findings

Predictors of Teacher Self-Efficacy (Student Engagement Subscale)

Teaching is described as one of the most stressful professions (Hamama et al., 2013; Kokkinos, 2007). According to Brinson (2010), teaching ranks as one of the top five most stressful job professions. More recently, Hoon (2018) also reported that teaching is a stressful job identifying this profession as one of the top 10 most stressful job professions. Teachers deal with a number of stressors that contribute to leaving the teaching profession. *Teacher self-efficacy* is defined as the belief that teachers hold regarding their own ability to bring about effective instruction (McLeskey et al., 2004; Singh & Billingsley, 1996). Chestnut (2017) expanded on the definition of teacher self-efficacy as the manifestation of confidence to provide alternative instructional strategies for children from linguistically and culturally diverse backgrounds, provide appropriate instructional adaptations for students with special needs, and engage in disciplinary schedules. Teacher self-efficacy has a long history in the education literature, with

evidence documenting its effects on both teacher behavior and student outcomes (Corona et al., 2017). Students with diagnosed disabilities are being mainstreamed into general education classrooms, which presents challenges for general education teachers to ensure that these students' academic needs are being met. This can negatively affect teacher job performance and quality of instruction (Miller et al., 2017). Specifically, general education teachers educating students diagnosed with autism presents significant instructional challenges that can also lead to job-related stress and burnout (Ruble et al., 2011). Teachers may also experience burnout and stress in their profession and self-efficacy appears to be an important factor that determines the quality of instruction and student academic outcomes (Miller et al, 2017).

In this study, I found that there were three significant predictors of teacher self-efficacy (student engagement subscale). The student engagement subscale of teacher self-efficacy measured positive involvement with their students. An example item was, "How much can you do to get through to the most difficult students?" The personal accomplishment subscale of the MBI (which refers to the feeling of competence and successful achievement in one's work with people) was a significant predictor of teacher self-efficacy (student engagement subscale). As personal accomplishment scores increased, levels of positive interactions with their students (student engagement) increased. This finding is consistent with the results reported by Ross (1998) who found that higher teacher self-efficacy was associated with a range of beneficial teaching practices, which included setting more ambitious goals for oneself (a form of personal accomplishment) and one's students, selecting instructional strategies likely to improve

student development, experimenting with new instructional programs in the classroom, and involving parents in student activities. In another study by Corona et al. (2017), teacher self-efficacy was significantly associated with teacher behaviors and positive student outcomes.

Another significant predictor of teacher self-efficacy (student engagement subscale) was the emotional exhaustion subscale of the BMI. At any given time, between 5% and 20% of teachers in the United States experience burnout (Hakanen et al., 2006). This percentage has actually increased in recent years to between 40% and 50% of new teachers becoming burnt out and leaving the profession within the first 5 years of teaching (Ryan et al., 2017). Some studies reported higher global levels of burnout among females (e.g., Maslach 1982; Poulin & Walter 1993). Sari (2004) found that higher levels of emotional exhaustion and personal accomplishment among female teachers, and lower levels of depersonalization among male teachers. In a more recent study, Bermejo-Toro and Prieto-Ursua (2014) examined gender differences in relation to teacher burnout. They found that females exhibited higher levels of psychiatric symptoms (i.e., depression, anxiety) than males in relation to teacher stress and/or burnout. These results are also consistent with the findings in my study. I had 216 female participants and only five male participants. I found that higher levels of emotional exhaustion with their job (feeling overwhelmed and overworked) predicted lower levels of positive interactions (student engagement) with students. This finding implies that female teachers tend to exhibit higher levels of emotional exhaustion than male teachers. Female teachers often assume multiple roles and responsibilities outside of their teaching career (i.e.,

mothers and spouses). This could explain why there may be a tendency for female teachers to report higher levels of psychiatric symptoms as described by Bermejo-Toro and Prieto-Ursua (2014). When teachers experience emotional exhaustion from their job (burnout), this becomes a breakdown of the occupational domain of their sense of their own efficacy (Friedman, 2003). Literature shows that burnout is extensively experienced among professionals who provide social and human services, including teachers from various grade levels and disciplines (Jennett et al., 2003; Skaalvik & Skaalvik, 2010). Recent literature has also shown that teacher burnout is conceptualized as a result from long term occupational stress and unpleasant, negative emotions resulting from aspects of work as a teacher (Szigeti et al., 2017). Thus, the components of burnout contribute to low levels of self-efficacy.

I also found that the working with students' subscale was a significant predictor of teacher self-efficacy (student engagement subscale). The working with student subscale measured teachers' perceived level of negative interactions with students. The results showed that higher levels of negative interactions with students was associated with lower levels of teacher self-efficacy (student engagement subscale). This result is consistent with previous literature. For example, teachers' occupational stress has been associated with several contextual factors such as time pressure, discipline problems, lack of resources, lack of professional recognition, lack of support, and the diversity of tasks required (Kokkinos, 2007). More recently, Ryan et al. (2017) reported that teacher stress correlated with adverse professional outcomes, including burnout, absenteeism, and attrition.

In addition, Greenglass and Burke (2003) found that the most frequently mentioned stressors by teachers were students' emotional and behavioral problems, conflicting demands from parents and school administration, doubts about competence, and high workloads. In a more recent study, Lamber et al. (2019) looked at teacher stress in response to the classroom environment. They found that teachers' perception of balance between classroom demands and resources contributed to higher levels of occupational stress. Teachers may experience stress if the job demands do not fit their perceived capacity to meet the demands or their educational values. If teachers spend a significant amount of their time addressing negative behaviors from their students, it can result in feelings of resentment and a negative attitude towards their students. In the case of this study, these negative interactions with students also appear to affect teachers' self-efficacy as it relates to positive engagement with students.

Predictors of Teacher Self-Efficacy (Instructional Strategies Subscale)

Teacher self-efficacy is a critical component to successful classrooms and ranks as a significant teacher characteristic associated with instructional quality and student achievement (Miller et al., 2017). Teacher self-efficacy has been associated with quality of instruction and the use of innovative teaching methods (Tschannen-Moran & Woolfolk-Hoy, 2001; Wolters & Daugherty, 2007). Kuronja et al. (2019) noted that teachers' self-efficacy was associated with teachers' readiness to work with children who have both academic and behavioral challenges.

Teacher's self-efficacy can alter how much effort they put forth in instruction, how long they will persevere when confronting problematic behaviors, and how resilient

they are in the face of changes in the education system (Miller et al., 2017). Deemer (2004) found a significant positive influence of teacher self-efficacy on mastery of instructional practices. He suggested that teachers with more confidence in their teaching create classrooms that focus on student learning and effort. Guo et al. (2012) also suggested that teachers with high self-efficacy provide more support to students and create a more positive classroom environment.

The instructional strategies subscale of teacher self-efficacy measured teachers' ability to present information to a student in an effective manner. An example question from this survey was "how well can you establish routines to keep activities running smoothly?" In this study, personal accomplishment was a significant predictor of teacher self-efficacy (instructional strategies subscale). This result demonstrated that higher levels of personal accomplishment was associated with higher perceived levels of effective instructional strategies. Thus, it appears that higher levels of personal accomplishment result in more effort teachers put forth in instruction. Previous literature also supports this finding. For example, general teacher self-efficacy has been linked to efforts in the classroom, longevity and perseverance when confronting problematic behaviors, and resilience in the face of changes in the education system (Miller et. al, 2017).

Lindsay, Proulx, Thomson, and Scott (2013) looked at specific challenges that regular education teachers encountered when they have a student diagnosed with autism in their classroom. Teachers reported that they felt they lacked adequate information about autism spectrum disorders and ways to work with a child in the classroom who is

having a behavior outburst. This often requires teachers to utilize different teaching methods to work with students diagnosed with autism which include the use of a picture exchange communication system (pecs) board, electronic devices, paraeducators in the classroom, and visual aids to help with smooth transitioning to different subjects in the classroom (Tschannen-Moran & Woolfolk-Hoy, 2001). Thus, teachers with autistic students in their classrooms need to be flexible and creative in developing instructional strategies and tools for effective teaching. If teachers can adapt and acquire those skills it will have a positive impact on teachers' self-efficacy as it relates to effective teaching.

Predictors of Teacher Self-Efficacy (Classroom Management Subscale)

Chao, Chow, Forlin, and Ho (2017) reported that teachers with a high sense of self-efficacy are more willing to use a range of teaching approaches to support students in inclusive classrooms. Deemer (2004) suggested that teachers with more confidence in their teaching create classrooms that focus on student learning and effort. This relationship between teacher self-efficacy and classroom behaviors suggests that teachers with higher sense of efficacy provide more effective classroom instruction resulting in higher student motivation and achievement. Lamber et al. (2019) also looked at teacher stress in response to the classroom environment. They found that teachers' perception of balance between classroom demands and having adequate resources to meet the needs of all students played a role in reducing their occupational stress.

In the present study, the classroom management subscale of teacher self-efficacy measured teachers' perception of their ability to manage behaviors in their classroom. An example item on this subscale is "How much can you do to control disruptive behavior in

the classroom?" In this study, I found that there were two predictors of the classroom management subscale of teacher self-efficacy: the personal accomplishment subscale score of the Maslach Burnout Inventory and working with student's subscale score of the Teacher Occupational Stress Factor Questionnaire. The results from this study indicated that higher levels of personal accomplishment were associated with higher levels of perceived ability to manage student behaviors in the classroom. This aligns with previous research that found teachers with higher self-efficacy provided more support to students and created a more positive classroom environment (Guo et al., 2012).

The working with student's subscale score of the Teacher Occupational Stress Factor Questionnaire was also a significant predictor of teacher self-efficacy (classroom management subscale). The results showed that higher levels of perceived negative interactions with students was associated with lower levels of perceived ability to manage student behaviors in the classroom. Some teacher-student interaction can have positive impacts on students and on the classroom environment. However, this result demonstrated that when teacher perceive the interaction negatively, it can hinder the teacher's ability to address or deal with disruptive behaviors in their classroom. My findings are similar in that negative interactions with students was associated with lower self-efficacy. As Lamber et. at (2019) reported, factors such as increased classroom demands can have a negative impact on self-efficacy and increase stress. With teaching ranking as one of the top 5 stressful job professions (Brinson, 2010), teachers may experience stress if their job demands (negative interactions with students) do not align

with their perceived capacity to meet the demands of their educational values (teacher self-efficacy).

Predictors of Teacher Self-Efficacy (Total Score)

There have been associations between teacher self-efficacy and both positive and negative outcomes. Pfitzner-Eden (2016) identified these outcomes such as resilience, instructional quality, occupational commitment, job satisfaction, teaching performance, and even burnout. Teacher's self-efficacy can alter how much effort they put forth in instruction, how long they will persevere when confronting problematic behaviors, and how resilient they are in the face of changes in the education system (Miller et. al, 2017). In examining teacher self-efficacy as a whole, previous research has identified self-efficacy as a critical component to successful classrooms and ranks as a significant teacher characteristic associated with instructional quality and student achievement (Miller et al, 2017).

I conducted a multiple linear regression analysis to assess the relationship between the predictor variables and the total score of teacher self-efficacy. There were two significant predictors of teacher self-efficacy (total score): the personal accomplishment subscale score of the Maslach Burnout inventory and working with students' subscale (perceived negative interactions with students) of the Teacher Occupational Stress Factor questionnaire. The results showed that higher levels of personal accomplishment predicted higher levels of total self-efficacy. In addition, higher levels of perceived negative interactions with students was associated with lower levels of total self-efficacy. These results suggest that when teachers experience feelings of

competence and successful achievement in one's work their overall belief in their ability to guide their students to success is positive.

There has been literature that has discussed the relationship between self-efficacy and personal accomplishment. Friedman (2003) reported that teachers who experienced burnout also had lower personal accomplishment and their own efficacy was negatively affected. My findings confirmed this, in that low levels of personal accomplishment were associated with low levels of self-efficacy. These findings and Friedman's study align with the notion that burnout can negatively impact self-efficacy. Szigeti et al. (2017) conducted a study that focused burnout with teachers. Their results also demonstrated that decreases in personal accomplishment resulted from long term work stress and unpleasant, negative emotions. In addition, Koksal, Ozdemir, Tercan, Gun, and Builgin (2018) found that teachers with reduced personal accomplishment also had greater difficulty in accepting supervisor feedback during performance reviews. In another recent review of the literature on teacher self-efficacy, Kuronja et al. (2019) found that self-efficacy was a vital component for teachers who work with students who have a diagnosed disability who are put into general classrooms. They noted that teachers' self-efficacy was associated with teachers' readiness to work with children who have both academic and behavioral challenges.

The working with student's subscale of the Teacher Occupational Stress Factor Questionnaire was also a statistically significant predictor of teacher total self-efficacy. This subscale measures teachers' feelings about themselves and negative interactions with students. The results indicated that as teachers' feelings about themselves and

negative interactions with students' scores increased (working with students' subscale), their self-efficacy scores. This finding supports previous research that has demonstrated that teacher self-efficacy predicts teachers' teaching practices which also correlates with student's academic achievement (Ying Guo et al., 2012).

Theoretical Framework and Research Findings

The theoretical framework for this study was Bandura's (1997) social learning theory. Developed in the 1960s, this theory identifies learning as the primary factor in a theory of human functioning and personality development (Salkind, 2008). The foundation for this theory is based on cognitive, social interactive, self-regulatory, and self-reflective capabilities and processes (Salkind, 2008). Bandura focused on individuals' beliefs, suggesting that the belief of successfully performing a task will give a desired outcome and increase one's self-belief (Bandura, 1977). The emphasis Bandura placed on self-efficacy beliefs and outcome expectations in his social learning theory were congruent with an increasing interest in cognitive processes among American psychologists (Salkind, 2008).

Self-efficacy represents the most important predictor of human motivation and is defined as individual's views about their capacities to produce designated levels of performance and exercise influence over events that affect their lives (Bandura, 1997). According to Bandura (1997), individuals form self-efficacy beliefs by interpreting information regarding their own capabilities. Generally, successful experiences increase self-efficacy beliefs, while experiences of failure lower them. Vicarious experiences as described by Bandura (1997) provide information about modeled attainments of others,

which influence one's self-efficacy beliefs by demonstrating and transferring competencies (model learning) and by providing a point of reference for social comparison.

There has been previous research that has utilized this theory to explore both general education and special education teacher self-efficacy. For example, García-Ros et al. (2015) assessed the predictive power of teacher interpersonal self-efficacy on the components of job burnout (emotional exhaustion, depersonalization, and personal accomplishment). Using self-efficacy theory, they predicted and found higher levels of self-efficacy significantly predicted higher levels of personal accom0plishment, and lover levels of emotional exhaustion and depersonalization. Ruble et al. (2011) looked at special education teachers' self-efficacy as they worked with elementary students who were diagnosed with autism. Their results showed that higher levels of teacher self-efficacy were correlated positively with the ability to manage and record data on children's behavior in the classroom. The studies illustrate the importance of self-efficacy in classroom management and job-related stress. Thus, self-efficacy theory was able to predict teacher behavior and job-related stress.

Montgomery and Miranda (2014) examined relationships between three factors related to general education teacher self-efficacy (collaboration with others, managing disruptive behavior, and the use of inclusive instruction) along with their teachers' attitudes, concerns, and sentiments about students with developmental disabilities. They found that teachers who were confident in their ability to teach students (personal accomplishment) had more positive feelings about their ability to manage disruptive

behavior, use inclusive instruction and collaborate more with others. This aligns with the findings in this study that higher levels of personal accomplishment predicted higher levels of teacher self-efficacy. Also, Klassen and Chiu (2010) reported a significant positive relationship between general education teacher self-efficacy and job satisfaction.

Bandura's self-efficacy theory was the basis for this study with the assumption that the belief of successfully performing specific functions related to teaching would give a desired outcome and increase one's self-belief (Bandura, 1977). The research questions in this study focused on job-related stress, job burnout, and parent-teacher relationships as predictors of teacher self-efficacy. The results of this study support Bandura's self-efficacy theory that higher (positive) levels of self-efficacy are associated with higher levels of personal accomplishment. Bandura (1997) identifies self-efficacy as the most important predictor of human motivation and is defined as individual's views about their capacities to produce designated levels of performance and exercise influence over events that affect their lives. In addition, higher levels of perceived negative interactions with students were associated with lower levels of teacher self-efficacy which also align with Bandura's mastery experiences. That is, information about one's successes, but also their failures, are associated with self-efficacy.

Limitations of the Study

I planned on surveying participants face-to-face, but had difficulty with obtaining approval from the school district. I therefore collected data completely online. My participants were recruited from online Facebook groups organized by teachers from different states. Thus, a convenience sample (rather than a random sample) may limit the

generalizability of the results. The majority of the participants were female (97%) and mostly of Caucasian (white) descent (85%) with almost no representation from other ethnic groups. Self-selection bias could also be a potential limitation in this study. It is possible that teachers who have higher levels of stress, lower self-efficacy, and poorer teaching skills may be been less likely to participate.

This study was a self-reported survey due to my chosen methodology of a survey design. All of my participants were given an electronic consent form with specific inclusion criteria in order to complete the survey. However, I had to assume they were honest regarding whether they met the criteria to participate in this study. Self-reported bias is always a concern with a self-administered survey. In this case, some teachers may have responded in more socially desirable ways to appear as providing quality instruction. I obtained my sample size during the months of December and January which is the timeframe that many teachers are on Christmas break and not in school which can be stressful for teachers who are dealing with other stressors (e.g., holidays, travel, family, and flu season).

In addition, I did not have any objective data on teachers' performance or evaluations which could have an impact on teachers' stress which may also alter how they respond in answering their questions related to teacher self-efficacy. Finally, there were no questions about the number of students with autism in teachers current or previous classrooms, or their current class sizes, which could have impacted the results. Because I did a cross sectional study and only measured burnout and self-efficacy in a single point in time, I cannot determine whether those levels of burnout and self-efficacy

that were measured changed over time as teachers were teaching. As teachers continue to teach, things can change. Researcher bias was unlikely to occur because I did not know any of the participants. In addition, at the time of the study I was not employed as a middle school teacher.

A possible confounding variable in this study is that I did not assess whether any of the teachers had received any in-service training on inclusive education and/or had a teaching mentor during the term prior to data collection. This type of training and/or mentoring could have resulted in changes in the variables of interest in this study (i.e., self-efficacy, job-related stress, and components of burnout).

Recommendations

There were 221 participants who completed the seven-page online survey that contained 106 questions. Thus, the length of the survey was a possible hinderance to completion. In this study, 17% of participants who began this survey eventually withdrew. For future research, measuring teacher self-efficacy using a shorter survey may lead to a higher completion rate. It may be more convenient and/or less stressful on participants to complete a shorter survey.

This study used a quantitative method to obtain data from general education teachers and results were based on the responses from the assessments. Further research using a qualitative study should be considered to examine the lived experiences of general education teachers to provide insight into issues they face when working with students who have a diagnosis in their classrooms. A quantitative, longitudinal study could also be done to assess the cumulative effects of job-related stress on self-efficacy.

Future studies might also consider other variables that could impact self-efficacy of teachers who have students diagnosed with autism in their classrooms (e.g., number of students with autism in the class, teacher professional development and training, classroom size, etc.).

This study had limited generalizability due to the lack of equal representation from ethnic groups, male respondents, and international respondents. Future research may consider looking at international teacher populations which were not well-represented in this study to determine if there may be a difference in the findings among teachers. Further, this study only included general education teachers who were certified to teach grades 6-12, further research could examine special education teachers who are certified to teach grades 6-12 to assess whether there are similarities or differences in the variables that contribute to their self-efficacy.

Implications

The findings from this research study have several implications for positive social change at the educator level. Some of these implications include improving teacher self-efficacy, developing strategies in the classroom to increase positive interactions between teachers and students who have a diagnosis of autism, improving parent-teacher relationships in schools, and improving the quality of teacher led instruction in general education classrooms. This research has expanded on previous research indicating that there is a relationship between job burnout, job stress, and teacher self-efficacy. Findings demonstrated that low self-efficacy leads to high work stress, and high stress leads to job burnout (Antoniou et al., 2013; Yu et al., 2014).

Stakeholders and administrators can use this information to provide resources to teachers that can help with increasing their personal accomplishment to help maintain a sense of high self-efficacy. When teachers' self-efficacy improves, it results in better instructional quality which can improve student achievement (Miller et al, 2017). Bandura (1997) found that students perform better academically when they have teachers who have high self-efficacy. Bandura (1997) also found that teachers who displayed high self-efficacy were able to solve problems in their classrooms easily, believed they could reach slow learners by encouragement, and used correct redirection methods. Teachers with low self-efficacy ignored problematic behaviors, blamed students' academic performance on students' abilities in the classroom and used rigid disciplinary rules in their classrooms. Based on this study, administrators should provide professional development that is designed to improve teachers' self-efficacy. This could include self-care resources to help decrease burnout in the classroom and engaging in healthy dialogue with teachers to determine the types of support they need to work with students diagnosed with autism.

Factors that contribute to teacher self-efficacy will ultimately impact their overall job satisfaction and belief in their ability to provide quality instruction. Creating a more positive teaching experience for teachers could also decrease teacher burnout. When teachers feel competent in their work, they are going to develop effective strategies for working with challenging behaviors in the classroom. Given that 40% of students diagnosed with autism are placed in general education classrooms for a majority of the

school day (NCES National Center for Education Statistics, 2015), this can have a significant impact on teachers' self-efficacy.

Buell, Hallam, Gamel-McCormic, and Scheer (1999) identified three key elements that affect educating children with disabilities: teacher attitudes towards and confidence in inclusive education, in-service training on inclusive education, and teachers' perceptions of the need for resources to promote inclusive education. The overall goal of the study was to explore relationships between teachers' self-efficacy and students with special needs. As mentioned earlier, professional development, which is required for teachers, can include specific trainings designed to increase self-efficacy. In recent years, general education teachers have encountered challenges accommodating students with diagnosed disabilities in general education classrooms (Mader, 2017). This has a direct impact on their self-efficacy and quality of teaching (Corona et al., 2017). One way to provide social change can be in the form of mentoring. It is estimated that due to a combination of teacher stress and/or burnout, one third of new teachers quit the teaching profession within their first three years, half leaving within five years, and 10% quitting every year after that (Yu et al., 2014). Districts can have master teachers mentor first year general education teachers or teachers who work with students who have diagnosed disabilities.

This research study did not have observational data on teacher interactions with students who have a diagnosis of autism. Also, there was not a valid measure to gather teacher attitudes when interacting with students with a diagnosis of autism. A methodological implication with this research study could include the development of an

assessment tool to measure teacher attitudes about working with students with disabilities, or include observational data to determine how teachers interact with those students in their classroom.

Conclusion

This study was conducted to fill in the gap in the literature by examining the extent to which job-related stress, job burnout, and the quality of parent-teacher relationships are predictors of teacher self-efficacy. Teachers are viewed as pillars of support for students who determine the processes of learning and teaching students, however, teachers are leaving this profession at an alarming rate. One third of new teachers quit the teaching profession within their first three years, half leaving within five years, and 10% quitting every year after that. Teachers' self-efficacy (a teacher's belief in their own ability to guide their students to success) plays an important role in teacher stress and burnout. In this study, the regression analyses indicated that personal accomplishment subscale of burnout was related to all of the components of teacher self-efficacy. This study provided insights into components of occupational stress impacting teacher self-efficacy, noting that higher levels of personal accomplishment predicted higher levels of teacher self-efficacy. Findings from this study may be used by educators, administrators, and researchers identify resources and interventions that will help to enhance teacher self-efficacy.

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Appendix A: Sample Facebook Recruitment Facebook Post

My name is Sohna Shook and I am a doctoral student in the School of Psychology at Walden University. I am currently conducting my dissertation research and am seeking research participants. I am examining teacher relationships with parents of students diagnosed with autism, stress teachers experience on the job, and how capable teachers believe they are in their ability as a teacher.

If you volunteer to participate, you will complete a survey asking you about your relationship with parents of students diagnosed with autism, stressors you experience at work, and how competent you feel as a teacher. If you choose to participate, you can expect to spend approximately 30-45 minutes completing the survey. Your participation in this study is voluntary, and you can withdraw at any time. All information gained as part of this study will be held strictly confidential. To protect your identity, this study will be completely anonymous.

Thank you for taking the time to consider this invitation. If you would like to be part of this study, please click on the informed consent link to review criteria to be part of this study and e-sign your consent to participate.

Respectfully Yours,

Sohna Shook

CLICK ON THIS LINK TO PARTICIPATE: (LINK)

https://www.surveymonkey.com/r/H69WMW8

Confidential and Your participation in the survey is completely voluntary and all of your Voluntary responses will be kept confidential. The access code is to remove you from the list once you have completed the survey. No personally identifiable information will be associated with your responses to any reports of these data. Walden University's Institutional Review Board has approved this survey. Should you have any comments or questions, please feel free to contact me xxx-xxx-xxxx

Thank you very much for your time and cooperation.

Sohna Njie Shook

Walden University PhD Student

Appendix B: Informed Consent Form

You are invited to take part in a research investigate the relationship between job related stress, job burnout, the quality of parent-teacher relationships, and teacher self-efficacy The researcher is inviting participants (a) that are secondary education teachers, (b) who have been on the job for at least 3 years, and (c) who have students diagnosed with autism in your current classroom (if so, how many), and (d) have a minimum of 3 years teaching experience. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Sohna Shook, who is a doctoral student at Walden University. You might know the researcher as a behavioral intervention specialist, but this study is separate from that role.

Background Information:
The purpose of this study is to better understand the relationship between job related stress, job burnout, the quality of parent-teacher relationships, and teacher self-efficacy.

Procedures:
If you agree to be in this study, you will be asked to complete four surveys consisting of 100 close-ended statements in which you are to respond how much you agree with each statement (4, 8, and 30 respectively).

Here are some sample questions (you will select answers from "never" to "everyday"):

- I feel depressed at work.
- I feel I treat some students as if they were impersonal objects.
- I can easily understand how my students feel about things.
- I feel students blame me for some of their problems.

Voluntary Nature of the Survey:
Participation in this survey is voluntary. If you decide to not complete the survey for any reason, you may write VOID on the front of your questionnaire and turn it into the researcher or the drop box (if provided).

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can occur when assessing your stress level when thinking about your stress level while teaching students and interacting with parents. The results of this study can potentially help educational psychologists by providing insights on how to improve teacher self-efficacy in highly stressful occupations.

Privacy:
Any information you provide will be kept anonymous. You will not be asked for your name or any contact information. Data will be kept secure by the researcher in locked filing cabinet. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via e-mail at xxx@xxx.xxx If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Director of the Research Ethics and Compliance. Her email address is xxx@xxx.xxx. Walden University's approval number for this study is # 10-28-19-0359516 and it expires on 10/27/2020.

The researcher will give you a copy of this form to keep.

Statement of Consent:
I have read the above information and I feel I understand the study well enough to make a decision about my involvement.

Appendix C: Teacher Sense of Self-Efficacy Scale (Long Form)

Teachers' Sense of Efficacy Scale[1] (long form)

Teacher Beliefs Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	How much can you do? Nothing		Very Little		Some Influence		Quite A Bit		A Great Deal
1. How much can you do to get through to the most difficult students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2. How much can you do to help your students think critically?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3. How much can you do to control disruptive behavior in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4. How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5. To what extent can you make your expectations clear about student behavior?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6. How much can you do to get students to believe they can do well in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7. How well can you respond to difficult questions from your students ?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8. How well can you establish routines to keep activities running smoothly?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9. How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10. How much can you gauge student comprehension of what you have taught?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11. To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12. How much can you do to foster student creativity?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
13. How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
14. How much can you do to improve the understanding of a student who is failing?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
15. How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
16. How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
17. How much can you do to adjust your lessons to the proper level for individual students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
18. How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
19. How well can you keep a few problem students form ruining an entire lesson?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
20. To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
21. How well can you respond to defiant students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
22. How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
23. How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
24. How well can you provide appropriate challenges for very capable students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

Appendix D: Teacher Occupational Stress Factor Questionnaire

Teacher Occupational Stress Factor Questionnaire--Revised
TOSFQ

Items

Factor 1: Relationship with Teachers

Item 4 Working in the school where there is an atmosphere of conflict among teachers.
Item 8 Feeling some teachers in school are incompetent.
Item 11 Feeling there is competition among teachers in my school rather than a team spirit of cooperation.
Item 17 Feeling there is a lack of recognition for good teaching in my school.
Item 18 Feeling poor teacher/teacher relationships exist in my school.
Item 23 Having a few teachers in my school who do not carry their share of the load.
Item 27 Feeling that cliques exist among teachers in my school.
Item 30 Feeling that poor communication exists, among teachers in my school.

Factor II: Work and Compensation

Item 2 Feeling my salary is not equal to my duties and responsibilities.
Item 6 Having to do school work at home to meet what is expected of me.
Item 13 Having insufficient opportunities for rest and preparation during the school day.
Item 14 Working for an adequate salary.
Item 16 Planning and organizing learning activities for wide ability ranges.
Item 22 Having too little clerical help.
Item 28 Feeling my job does not provide the financial security I need.
Item 29 Feeling I never catch up with my work.

Factor III: Working with Students

Item 1 Trying to motivate students who do not want to learn.
Item 5 Having students in my class/classes who talk constantly.
Item 12 Having to tell my students the same things over and over.
Item 19 Feeling that a few difficult-to-discipline students take too much time away from other students.
Item 25 Feeling there is a lack of parental involvement in solving discipline problems.

Factor IV: Perceptions of Respect from Others

Item 3 Feeling there is a lack of administrative support in my school.
Item 7 Feeling my principal lacks insight into classroom problems.
Item 9 Feeling too many parents are indifferent about school problems.
Item 10 Feeling my opinions are not valued by my principal.
Item 15 Feeling my principal gives me too little authority to carry out responsibilities assigned to me.
Item 20 Feeling I cannot tell my principal in an open way how I feel about many school related matters.
Item 21 Feeling my students do not adequately respond to my teaching.
Item 24 Feeling I do not have adequate control of my students.
Item 26 Feeling my principal is too aloof and detached from the classroom.

Appendix E: Maslach Burnout Inventory Scale-Educator Survey

Appendix 3: Review Copy: MBI for Educators Survey

MBI for Educators Survey

Christina Maslach, Susan E. Jackson & Richard L. Schwab

The purpose of this survey is to discover how educators view their job and the people with whom they work closely.

Instructions: On the following pages are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about *your* job. If you have *never* had this feeling, write the number "0" (zero) in the space before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

How often:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

Example:

How often 0-6	Statement:
1. _____	I feel depressed at work.

If you never feel depressed at work, you would write the number "0" (zero) under the heading "How often." If you rarely feel depressed at work (a few times a year or less), you would write the number "1." If your feelings of depression are fairly frequent (a few times a week but not daily), you would write the number "5."

How often:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

How often 0-6	Statements:
1. _____	I feel emotionally drained from my work.
2. _____	I feel used up at the end of the workday.
3. _____	I feel fatigued when I get up in the morning and have to face another day on the job.
4. _____	I can easily understand how my students feel about things.
5. _____	I feel I treat some students as if they were impersonal objects.
6. _____	Working with people all day is really a strain for me.
7. _____	I deal very effectively with the problems of my students.
8. _____	I feel burned out from my work.
9. _____	I feel I'm positively influencing other people's lives through my work.
10. _____	I've become more callous toward people since I took this job.
11. _____	I worry that this job is hardening me emotionally.
12. _____	I feel very energetic.
13. _____	I feel frustrated by my job.
14. _____	I feel I'm working too hard on my job.
15. _____	I don't really care what happens to some students.
16. _____	Working with people directly puts too much stress on me.
17. _____	I can easily create a relaxed atmosphere with my students.
18. _____	I feel exhilarated after working closely with my students.
19. _____	I have accomplished many worthwhile things in this job.
20. _____	I feel like I'm at the end of my rope.
21. _____	In my work, I deal with emotional problems very calmly.
22. _____	I feel students blame me for some of their problems.

(Administrative use only)

EE Total score: _____ DP Total score: _____ PA Total score: _____

EE Average score: _____ DP Average score: _____ PA Average score: _____

65

Appendix F: Parent-Teacher Relationship Scale

PsycTESTS®
doi: 10.1037/t01341-000

Parent-Teacher Relationship Scale-II PTRS-II

Items

Feelings of affiliation and support:
We trust each other.
It is difficult for us to work together.
We cooperate with each other. Communication is difficult between us.
I respect this parent/teacher.
This parent/teacher respects me.
We are sensitive to each other's feelings. We have different views of right and wrong.
Dependability and availability of both parties:
When there is a problem with this child, this parent/teacher is all talk and no action.
This parent/teacher keeps his/her promises to me.
When there is a behavior problem, I have to solve it without help from this parent/teacher.
When things aren't going well, it takes too long to work them out.
Shared expectations/beliefs about child and each other: We understand each other.
We see this child differently.
We agree about who should do what regarding this child. I expect more from this parent/teacher than I get.
We have similar expectations of this child. Communication-from-other:
This parent/teacher tells me when s/he is pleased.
I don't like the way this teacher talks to me. Sharing of emotions:
I tell this parent/teacher when I am pleased.
I tell this parent/teacher when I am concerned. I tell this parent/teacher when I am worried.
Sharing of information:
I ask this parent/teacher's opinion about my child's progress. I ask this parent/teacher for suggestions.

Appendix G: Permission Letter To Use Teacher Sense of Efficacy Scale

Anita Woolfolk Hoy, Ph.D. Professor
Psychological Studies in Education

Dear Sohna Shook,

You have my permission to use the Teachers' Sense of Efficacy Scale in your research. A copy the scoring instructions can be found at:

http://u.osu.edu/hoy.17/research/instruments/

Best wishes in your work,

Anita Woolfolk Hoy, Ph.D.

Professor Emeritus

xxx-xxx-xxxx

Appendix H: Permission Letter To use Teacher Sense of Efficacy Scale

William & Mary
School of Education

July 3, 2018

Sohna,

You have my permission to use and reproduce the Teacher Sense of Efficacy Scale (formerly called the Ohio
State Teacher Sense of Efficacy Scale), which I developed with Anita Woolfolk Hoy, in your research. You can find a copy of the measure and scoring directions on my web site at http://wmpeople.wm.edu/site/page/mxtsch. Please use the following as the proper citation:

Tschannen-Moran, M & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. Teaching and Teacher Education, 17, 783-805.

I will also attach directions you can follow to access my password protected web site, where you can find the supporting references for this measure as well as other articles, I have written on this and related topics.

I would love to receive a brief summary of your results.

All the best,

Megan Moran-Tschannen
xxx-xxx-xxxx