A PREDICTIVE AND CAUSAL-COMPARATIVE ANALYSIS OF TEACHER BURNOUT

AND EMOTIONAL EMPATHY AMONG K-12 PUBLIC SCHOOL TEACHERS

By

By Lori Jean Rosensteel

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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APPROVED BY:

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ABSTRACT

Recent research has shown that teacher burnout is a contributing factor to many teachers leaving the field of education early on in their careers. Many teachers of all levels and subjects leave before ever reaching their full potential due to decreased job-satisfaction and the overwhelming symptoms of burnout crippling other areas of their life. Emotional exhaustion is a major component of burnout. Thus, emotional empathy may be related to teacher burnout. In this quantitative, correlational and causal-comparative study, the researcher examined the relationship between emotional empathy and teacher burnout among K-12 teachers. Further, the researcher investigated whether the relationship between emotional empathy and burnout was more significant among teachers of different instructional assignments. The researcher drew from a sample of 50 regular education and 50 special education teachers from five, rural school districts. Teachers completed a set of instruments: the Maslach Burnout MBI-Educators Survey (MBI-ES) and The Questionnaire Measure of Emotional Empathy (QMEE), via an online survey. Using a linear regression, the researcher examined the relationship between the participant scores on the Questionnaire Measure of Emotional Empathy and the participant scores on Maslach Burnout Inventory-Educator's Survey scores. Using an independent samples *t*-test, the researcher also compared the levels of burnout and empathy among regular education teachers and special education teachers. A significant relationship was found between emotional empathy and burnout among both regular education and special education teachers. There was no significant difference between emotional empathy or burnout scores of regular and special education teachers.

Keywords: correlational study, emotional empathy, job satisfaction, teacher burnout

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Dedication

I have been so blessed to have been afforded the opportunity to catch a dream. This paper would never had been possible if not for my family. I truly stand on the shoulders of giants. Their sacrifices, support and guidance have enabled me to soar beyond my wildest expectations. This paper is dedicated to them.

My grandparents who all had modest educations, only one having the opportunity to graduate high school, were some of the most intelligent people I know, but without educational opportunities. They worked so hard and unitedly helped sculpt me into the person I am today. My dad, the first in my family to graduate college, always in my corner and my mom who gave up nursing to stay at home to help cultivate and instill a sense of security and support to me and my siblings, are supports I can always count on. My kids, Bailey and Danny who I know had to deal with take out pizza from time to time and a stressed out mom, never complained. They made this so easy for me.

And most of all, I dedicate this paper to my husband, Danny, who was so supportive throughout this journey. From making me a cup of coffee, to grabbing my forgotten computer out of the car, to encouraging me when I felt for sure this process was impossible. He never waivered in his belief in me. Danny, because of you, I am better. I never, ever could have done this without you.

And to to all the kids sitting in pre-algebra, holding back tears thinking they will never understand math, just keep swimming. God has your back. I know first hand. Without Him, I am nothing. With Him, I can do anything. This paper is for His glory.

Although, my name will be on this paper and my diploma, I share it with so many who were so important to me. You all have helped me stand a little taller, reach a little higher, and push a little harder. I can only hope, one day I can pay it forward. I love you all beyond measure.

"With God all things are possible." Matthew 19:26

"God is within her. She will not fail." Psalm 46:5

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List of Abbreviations

Center for American Progress (CAP)

Maslach Burnout Inventory (MBI)

Maslach Burnout Inventory-Educator Survey (MBI-ES)

Self-determination Theory (SDT)

Questionnaire of Emotional Empathy (QUEE)

CHAPTER ONE: INTRODUCTION

Overview

Burnout is defined as physical, mental, and behavioral tiredness (Koruklu, Özenoglu-Kiremit, Feyziogl, & Aladag, 2012). It can present itself in symptoms of depression, anxiety, headache, and fatigue/insomnia, cardiac issues, focusing problems, confusion, tension, nausea, weight loss, mental exhaustion, emotional exhaustion and more. Those in helping professions are at the greatest risk for burnout.

Background

The term "burnout" was first coined by Herbert Freudenberger in 1974 to describe persons who appear to be depressed with their jobs. Freudenberger (1974) spent a great deal of time in health clinics and observed that health care professionals working with drug addicts began to become depressed, withdrawn, and display low levels of energy. Perhaps, most powerful, Freudenberger experienced burnout himself (as cited in Edmonson & Thomson, 2000). His experience and observations of professional burnout broke new ground in research and gave a name to a phenomenon affecting people around the world.

Christine Maslach, further building upon Freudenberger's work, became a pioneer in research on burnout. Schaufeli, Leiter, and Maslach (2009) developed a method for assessing burnout as a multidimensional construct that went beyond mere exhaustion. They believed that burnout was much more complicated stemming from afflictions of three theoretical components: depersonalization, emotional exhaustion, and personal accomplishment (Maslach & Leiter, 1997). In a thorough process of interviews, observation, and psychometric development, Schaufeli, et al. (2009) developed a method for assessing burnout, The Maslach Burnout Inventory (MBI).

Since the time of Freudenberger and Maslach, many studies have been done on the phenomenon of burnout. Both then and now, burnout has been a concept that seems to be a common experience among people (Schaufeli, et al., 2009). Of special interest is the burnout experienced by those in helping professions, namely, teaching. Teacher burnout is a serious problem affecting teachers across the country (Gupta & Rani, 2014). It has become a costly and damaging phenomenon for school districts across the nation (Williams, 2015). Teacher burnout is a crucial construct in understanding job-related stress processes and has been identified as an important predictor of employee turnover (Van Maele & Van Houtte, 2015). Recent research has shown that teacher burnout is a contributing factor to many teachers leaving the field of regular education and special education early on in their careers (Boe, Sunderland & Cook, 2008; Gavish, & Friedman, 2010; Gupta & Rani, 2014; Rumschlag, 2017). Special educators are of especially high risk for teacher burnout as their working conditions align with many factors associated with burnout (Brunsting, Sreckovic, & Lane, 2014). Within the first five years of novice teachers starting their professional paths in education, 50% or approximately half a million educators move to another school district or leave the education profession all together (Rumschlag, 2017).

Consequences associated with professional burnout include impaired job dissatisfaction, absenteeism, decreased productivity, reduced organizational commitment, impaired physical health, reduced quality of life, loss of purpose, emotional problems, loneliness, lowered self-esteem, marital conflict, and a substantial loss of closeness and enjoyment in relationships both personally and professionally (Adams, Hough, Proeschold-Bell, 2017; Armón, Melamed, Shirom, & Shapira, 2010). Teacher burnout can negatively impact both personal and professional life and extinguish the passion for teaching.

Over time, employees experiencing burnout lose the capacity to provide the intense contributions that make an impact (Schaufeli, et al., 2008). Students suffer when teachers burnout. Specifically, the level of burnout among teachers in the field of education has a negative impact on student success (Mukundan, 2012). Mukundun (2012) reports that students who have teachers suffering from job burnout are less likely to progress in the classroom than students who have a teacher without the ailment. Thus, teachers with burnout influence those in their surroundings and social circles.

Problem Statement

Teacher attrition and turnover continue to be a problem for education systems around the globe. Every year, thousands of teachers leave the field of education, stressed and disillusioned as a result of teacher burnout (Ingersoll, 2012). Research has shown that teacher burnout is a contributing factor to many teachers leaving the field of education and special education early on in their careers (Billingsley, 2004; Kelchtermans, 2017; Langher, Caputo & Ricci, 2017). Many leave before reaching their full potential due to overwhelming symptoms of burnout and issues with stress affecting and crippling other areas of their life.

Teacher burnout not only negatively affects teacher wellness, but the educational environment as a whole. Existing findings suggest that teacher turnover and attrition due to burnout contributes to negative student outcomes, such as lower academic achievement (Ronfeldt, Loeb, & Wyckoff, 2013), adds additional stress and responsibilities for veteran teachers and school administrators (Guin, 2004) and disrupts the school community (Hanselman, Grigg, Bruch, Gamoran, 2011). Further, teacher burnout costs American school districts billions of dollars each year (Nash, 2010). It is prudent to investigate and understand teacher burnout and the growing dilemma of attrition among special and regular education teachers (Amos, 2014).

The shortage of special education teachers, in particular, has been an ever-increasing issue in the United States and other countries as compared to teachers in regular education (Conley & You, 2017). The main problem is not retirement, but it is that almost one third of new special education teachers leave the profession after three years in the field (Cancio, Albrecht, & Johns, 2013). Further, there is evidence in current bodies of research that some teachers are leaving special education classrooms and choosing to teach in regular education classrooms, while there is no evidence of the reverse phenomenon, teachers leaving positions in regular education in order to teach special education students (Fore, Martin, & Bender, 2002). Along with teacher attrition and teacher turnover, this shortage is causing strain on American school systems. With these data on turnover and burnout in special education, one may well inquire as to the reasons for the higher attrition rates among special educators (Fore, et al, 2002). Emotional empathy may be to blame.

Emotional empathy is a professional asset for teachers, physicians and social workers and others who work with people (Goroshit & Hen, 2016). Empathetic teachers have been shown to strengthen their pupils' sense of belonging to their schools, enhance their relationships with teachers and peers and boost their confidence in the school climate (Schutz & DeCuir, 2002). However, a study completed by Williams (1989) of teachers', nurses' and social workers showed that high emotional empathy may predispose individuals to emotional exhaustion, suggesting that individuals with high emotional empathetic capacities are vulnerable to burnout.

While exercising emotional empathy can help teachers better relate to students and foster a positive learning environment, over time, it can emotionally exhaust the teacher. Frequent exposure to emotionally demanding situations may put teachers at risk for burnout (Tei, et al., 2014). On a day-to-day basis, most teachers exercise emotional empathy. It is possible that

teachers who are very responsive to their students' emotions will suffer from emotional

exhaustion, a predictor for burnout (Wrobel, 2013). This potentially higher level of emotional

empathy could, in turn, put teachers at higher risk for teacher burnout than those with limited

emotional empathy. However, little research exists on the relationship between emotional

empathy and burnout differences among the regular education and special education subgroups.

Emotional empathy is an important part of teaching. How it might affect teacher burnout

is an area that should be fully understood. While there is a large body of research on burnout

across occupations, no studies were found that examined the relationship between emotional

empathy and teacher burnout among regular education teachers and special education teachers.

Thus, the data on emotional empathy and teacher burnout among special education and regular

education teachers is needed to fill the gap in the literature.

Purpose Statement

The purpose of this predictive and causal comparative, quantitative study is to examine

the relationship between emotional empathy and teacher burnout. Mehrabian and Epstein (1972)

defined emotional empathy, the predictor variable, as the vicarious emotional response to the

perceived emotional experiences of others. Maslach and Jackson (1981) defined teacher burnout,

the criterion variable as, an increase in emotional exhaustion and depersonalization along with a

decrease in personal accomplishment among teachers. The researcher will use two instruments to

determine the correlation between emotion empathy and teacher burnout: *The Maslach Burnout*

Inventory and the *Questionnaire of Emotional Empathy.*

This study will investigate the predictive relationship between an individual's level of

emotional empathy (predictor variable) and teacher burnout (criterion variable) among a

population of regular and special education teachers of a rural, economically disadvantaged

county. Further, the study will analyze and compare the levels of job burnout and levels of emotional empathy between regular education and special education teachers.

Significance of the Study

This study is significant to the field of education for several reasons. Although there have been previous studies on the causes and predictors of teacher burnout and its negative impact on the educational systems of the world (Amos, 2014; Garwood, Werts, Varghese & Gosey, 2018; Hanselman, et al, 2011; Ronfeldt et al., 2013; Sarıçam, 2014), there is currently little research on the relationship among teacher burnout and teacher emotional empathy. The findings of this study will help close the gap in educational literature by providing empirical research on the relationship between emotional empathy and burnout among special and regular education teachers.

Awareness of the relationship between emotional empathy and teacher burnout could result in decreased occurrences of burnout and, in turn, decrease the teacher attrition and turnover that is currently plaguing the American education system. Further, monies lost due to absenteeism, attrition, and turnover can be recovered and allow for the addition of teacher wellness programs that can help prevent and target teacher burnout.

Targeting burnout may require closer examination of job assignment stressors and personal variables such as emotional empathy. Burnout is the accumulation of responses to stressors caused by one's job (Herman, Hickmon-Rosa & Reinke, 2017). It is feasible that the phenomenon of burnout may be more prevalent among a certain type of teacher. While the job assignments of regular and special education teachers are similar in many ways, each job assignment also has its own distinct stressors. Responses to these stressors vary and may evoke or draw upon emotional empathy. A teacher's level of emotional empathy may be related to the

likelihood of experiencing burnout. This study could imply that there are significant differences in the level of empathy and level of burnout between teachers who serve in regular education and teachers who serve in special education. Identifying these differences will allow for appropriate forms of prevention to be put into place for the specific subgroup of teachers that is most in need as indicated by this study.

Moreover, findings of this study can aide administrators with creating the best working conditions possible to eliminate the loss of valuable, talented regular and special education teachers and, in turn, maintain a motivated staff to drive positive student outcomes. Wellness of both teachers and American school systems may be positively impacted by the results of this study.

Research Questions

This study attempts to answer the following essential questions:

RQ1: Is there a relationship between emotional empathy and burnout among regular education teachers?

RQ2: Is the relationship between emotional empathy and burnout among special education teachers?

RQ3: Is emotional empathy stronger among special education teachers or regular education teachers?

RQ4: Is burnout stronger among special education teachers or regular education teachers?

Definitions

1. *Attrition* - The act of voluntarily and prematurely leaving a profession (MacDonald, 1999).

2. *Depersonalization* - Occurs when one doubts the importance of his or her work or its contribution to anything of value (Wu et al., 2013)

3. *Emotional empathy* - A vicarious emotional response to the perceived emotional experiences of others (Mehrabian & Epstein, 1972).

4. *Emotional exhaustion* – Feeling emotionally overwhelmed by work conditions (Wu et al., 2013).

5. *Personal accomplishment* - The feeling of achievement in one's work with others (Wu et al., 2013).

6. *Teacher turnover* - The act of leaving teaching employment, moving to a different school or a teaching area transfer, such as the transfer of a teacher from an assignment in special education to one in general education (Boe, et al., 2008).

7. *Teacher burnout* - Phenomenon composed of the following the components: emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who work with people in some capacity (Meshach & Leiter, 1997).

8. *Eudaimonic well-being* - Refers to psychological well-being (Ryan & Deci, 2001).

CHAPTER 2: LITERATURE REVIEW

Overview

Job burnout is defined as physical, emotional, and mental exhaustion. It is a multidimensional construct, comprised of the following components: emotional exhaustion, depersonalization, and lack of personal accomplishment (Aloe, Shisler, Norris, Nickerson, & Rinker, 2014). Emotional exhaustion, the core element of burnout, is characterized by a loss of energy, debilitation, chronic fatigue and the feeling of being worn out (Skaalvik & Skaalvik, 2017). Depersonalization, the second component of burnout, takes place when an unfeeling and impersonal response is directed toward recipients of one's service, care treatment, or instruction (Maslach Jackson, Leiter, Schaufeli, & Schwab, 1984). Lack of or reduced personal accomplishment, the third component of burnout, refers to negative self-evaluation and feeling that one is no longer doing a good and meaningful job (Skaalvik & Skaalvik, 2017).

Theoretical Framework

Therefore, the theoretical framework of this research is based upon the Self-determination Theory (SDT). Research guided by SDT has focused on the social–contextual conditions that facilitate versus forestall the natural processes of self-motivation and healthy psychological development (Ryan & Dici, 2001). The SDT, states that humans have three innate needs: autonomy, relatedness, and competence. If these needs are met, it is believed that human beings will behave optimally within their environment. SDT not only takes into account optimal functioning (eudaimonic well-being) but also examines malfunctioning (the dark side of personality and behavior) and studies the conditions which stimulate the former or elicit the latter (Roche & Harr, 2013).

Teacher burnout can cause individuals to withdraw from things they once enjoyed. The passion for teaching becomes replaced with exhaustion and loss of interest and possibly depression. It is important that regular and special education teachers alike maintain eudaimonic well-being according to SDT in order to have personal and professional success.

Related Literature

Burnout is conceptualized as resulting from long term occupational stress, particularly among human service workers (Skaalvik & Skaalvik, 2010). Prolonged stress associated with the gradual erosion of important technical, psychological and social resources can result in job burnout (Coulter & Abbey, 2009). Burnout manifests once an individual's emotional resources are depleted; workers feel they are no longer able to give of themselves at a psychological level (Maslach, Jackson, & Leiter, 1996). This condition is developed primarily in individuals who work in human services; or occupations such as education, social work, police, and emergency services (Farshi & Omranzadeh, 2014). Recent research in different countries around the world indicates that teaching is a particularly stressful occupation and that teacher stress and burnout are an international phenomenon (Skaalvik & Skaalvik, 2017).

Teacher Burnout

Job burnout among teachers has been an issue of concern in the United States for decades. While it is common for teachers to experience job related stresses, frustrations, and exhaustion from time to time, some experience these constituents in much higher frequency over longer periods of time. A percentage are unable to overcome and/or recover from the resulting burnout.

When a teacher experiences burnout, the teacher's sense of wellness is compromised which may lead to a diminished quality of life. Teacher burnout can be crippling. Burnout

develops gradually, and in reference to the workplace environment, particularly in relation to job demands and available resources *(*Maslach, Schaufeli, & Leiter, 2001). Burnout is the product of long-term stresses and tension that wear away at a teachers natural defenses. Research shows that teachers who experience burnout are at an increased risk for developing a plethora of debilitating mental, emotional, behavioral, and physical symptoms (Armón, et al., 2010; Brunsting, et al., 2014; Gupta & Rani, 2014; Hennick, 2015; Rumschlag, 2017). Symptoms can include one or more of the following: depression, tension, focusing problems, chronic fatigue, irritation, racing thoughts, headaches, migraines, panic attacks, fatigue/insomnia, muscular-skeletal pain, cardiac issues, digestion issues, confusion, nausea, loss of appetite, weight loss, weight-gain, mental exhaustion, emotional exhaustion, and physical exhaustion (Armón, et al., 2010; Brunsting et al., 2014). Anxiety and frustration, impaired performance, and ruptured interpersonal relationships at work and home can also be symptoms of teacher burnout (Kyriacou, 2001). Those suffering from burnout struggle to meet day-to-day challenges. Merely getting ready for work can be overwhelming when in the throes of burnout. Teacher burnout may be the endpoint of coping unsuccessfully with chronic stress over time (Skaalvik & Skaalvik, 2010).

Early stages of burnout often lead to absenteeism, leaves of absence, and counter productivity. Overtime, teacher burnout can become so debilitating to a teacher's sense of well-being that he/she leaves the field of education for the sake of his/her mental, emotional and physical health. Teacher burnout is a chronic phenomenon that continues to be a main cause of teacher exodus and attrition in the 21st century (Rumschlag, 2017). After repeated long-term exposure to job stressors, teachers who cannot deal with stress properly might get into a state of

burnout which could cause educational malfunctions or even a collapse of the whole educational community (Zhu, Liu, Fu, Yang, Zhang & Shi, 2018).

Impact of Burnout

The pressures of the teaching profession manifest themselves early (Fives, Hammon, & Olivarez, 2017). A study done by Fives et al. (2017) suggests that burnout starts as early as the pre-service, student-teaching phase of a teacher's career. According to Riggs (2013), forty percent of undergraduate students who were once education majors change their majors before graduating. Many of those who do graduate do not stay within the education field.

Many teachers leave the profession for non-retirement reasons especially during their first years of teaching (Skaalvik & Skaalvik, 2016). Young teachers leave the profession at a rate 51% higher than older teachers and transfer to a different school at a rate of 91% higher than their older colleagues (Williams, 2015). According to a January 2015 report from the Center for American Progress (CAP), about 30% of beginning teachers leave the profession within the first five years (Hennick, 2015). Of them, 9.5% left the classroom before the end of the first school year (Riggs, 2013). While an exact percentage is not known, it is estimated that over half of the thirty percent of young teachers leaving the profession leave due to burnout.

Teacher attrition due to burnout is not just an issue among young teachers. Reglin and Reitzammer found that four out of 10 teachers leave the profession before reaching retirement age (Coulter & Abbey, 2009). Rinke (2007) refers to a U-shaped curve of teacher attrition, with those under 30 and those over 50 being the most likely to leave. More disconcertingly, Rinke (2007) reports that teachers with higher qualifications are more likely to leave the profession. The shortage of qualified teachers can result in practices that perpetuate further attrition (Berry, Petrin, Gavelle, & Farmer, 2011).

Many leave in search of a completely new career. It has been determined that 52.2% of teachers who took another career path said by doing so they found higher professional prestige (Rumschlag, 2017). Further, teachers who left the education profession reportedly found more of a balance between their professional and personal life within their new career which suggests that other occupations do not have the same demanding job requirements outside of the work setting.

Teacher attrition (30%) is higher than for other professionals, such as pharmacist (14%), engineers (16%), nurses (19%), lawyers (19%), architects (23%), and police (28%) (Rumschlag, 2017). Attrition can cost schools a substantial amount of their budget. Roughly half a million U.S. teachers either move or leave the profession each year, attrition that can cost a school district up to $2.2 billion annually, according to a new report from the Alliance for Excellent Education (Amos, 2014). The estimated cost of teacher attrition nationwide has been as high as $7.3 billion a year (Rumschlag, 2017). These numbers are staggering. And, in the next decade, they are expected to climb. Such an exodus of teachers from the profession can lead to an insufficient number of trained and experienced teachers being available to staff schools (Coulter & Abbey, 2009). Thus, it is no surprise that teacher turnover has been a concerning issue in schools across the country.

Like attrition, teacher turnover is also a concerning issue within the education system. Teacher turnover occurs when individuals leave teaching employment, moving to a different school or a teaching area transfer, such as the transfer of a teacher from an assignment in special education to one in general education (Boe, et al., 2008). Guin (2004) discovered teacher turnover has been found to negatively affect professional development, class size, scheduling, curriculum planning, collegiality, and a variety of other factors, adding a significant degree of

chaos and complexity to schoolwide operations. Ronfeldt, Loeb, and Wyckoff (2013) found that teacher turnover is especially deleterious in lower-achieving schools. Moreover, teacher turnover is particularly harmful to the achievement of students in schools with large populations of low-performing and Black students (Ronfeldt, et al., 2013).

Attrition and turnover due to burnout can also cause increased work volume for the entire education system. Co-workers may be requested to cover duties and responsibilities of teachers who have left the field until replacements are found. The administrative hassle that teacher attrition and teacher turnover provoke creates an additional cost of increased workload, managing the paper work, and having to invest again in introducing and socializing teachers in a new work environment (Kelchtermans, 2017).

Burnout not only leads to attrition and turnover, but also negatively impacts the work quality, job commitment, and health of those who suffer from it, and can result in poorer outcomes for those with whom they work (Andrechik, 2019). Burnout does not simply impact the sufferer. It can pass from one worker to another, moving through an organization like a contagion (Andrechik, 2019). Thus, the victim's burnout can also affect others in their life. Studies also suggest that burnout not only impacts the employees' health, but also other people's health as it can transfer between coworkers and partners affecting their psychological health as well (Mojsa-Kaja, Golonka, & Marek, 2015).

Teacher burnout can also result in negative student outcomes (Brunsting, et al., 2014). The decline of the mental health of teachers is of crucial importance, which can affect both process of education and student's psychological well-being (Zhang et al., 2014). Students with teachers suffering from burnout have been shown to score significantly less on standardized tests and benchmark tests than students who do not have a teacher suffering from burnout. Further,

Mukundan (2012) found that students who have teachers that are experiencing teacher burnout or teacher burnout symptoms are likely to progress at a much slower rate than students who do not have a teacher experiencing the condition. Students depend on teachers for a quality education. When a teacher is experiencing a decreased quality of life, all facets of his/her life are affected. When burnout occurs, job performance is likely to suffer.

While the level of burnout among teachers in the field of education has a negative impact on student academic success (Mukundan, 2012), it also has an impact on student behavior. Challenging student behavior correlates with burnout (Hastings & Brown, 2002). Similar to a domino effect, students of disengaged, detached, and exhausted teachers are frequently disruptive, struggle socially and emotionally, and attain their Individualized Education Plan (IEP) goals less frequently-all of which impact academic development (Brunsting, et al., 2014). Furthermore, staff perceptions of the demands associated with challenging behavior have been shown to be significant predictors of stress and burnout (Hastings & Brown, 2002). Controlling student behavior takes time, effort and energy (Skaalvik & Skaalvik, 2017). All of which, a teacher experiencing burnout does not readily have.

In cases where burnout ultimately leads to a teacher leaving their career all together, many relationships are damaged. Teachers leaving the field not only take valuable experience with them, but also leave many associations behind. Teacher bonds that were created with peers, students, and parents are broken (Rumschlag, 2017). Building relationships and trust takes time. It is difficult for a new hire to quickly and effectively replace a lost one.

Contributing Factors of Burnout

From the time of the pioneer research studies and papers on burnout (Freudenberger, 1974; Maslach & Jackson, 1981) up to now, research on the subject of teacher burnout has gotten

more robust and more purposeful. Based on decades of research, both situational and personal variables have emerged as leading contributors to the teacher burnout epidemic. Situational factors are those variables that are situation-based and external to the individual. Personal factors are those variables that are focused on the intrinsic characteristics of the individual teacher.

With teacher attrition and turnover impacting the quality of the teaching profession from so many perspectives, investigating teacher burnout, the leading cause of teacher attrition and turnover, may provide new venues to stabilize the growing attrition rate (Rumschlag, 2017). Knowing the personal and situational factors that make an individual susceptible to teacher burnout can help alleviate the impact that this phenomenon is having on the United States education system.

Personal Variables

Teachers' personal qualities play an essential role in causing or ameliorating burnout (Zhu, Liu, Fu, Yang, Zhang & Shi, 2018). Certain personal variables have been found to be associated with burnout. Studies on teachers' gender and burnout levels have indicated mixed results. In many empirical studies, female teachers reported significantly higher levels of burnout considering their emotional exhaustion, depersonalization, and personal accomplishment than their male counterparts. Greenglass, Pantony, and Burke (1988) in a vast research on gender-related burnout of the teachers, reported a higher rate of burnout among women than men. The findings of Maslach, Jackson, and Leiter (1996) on service professionals, including teachers, indicated that females had higher emotional exhaustion than their male counterparts. While a study conducted by Farshi and Omranzadeh (2014) found no significant difference between the male and female teachers in terms of burnout level.

Age has been found to be negatively correlated with teacher burnout. Younger teachers are much more likely to experience burnout than older teachers. A study conducted by Lau, Yuen and Chau (2005) found that teachers at the age of 30 or younger were more burned out than those at the age of more than 31 and teachers at the age of 31–40 also showed greater burnout syndrome than those at the age of more than 41. This is in concurrence with current literature that describes the initial period of teaching as the most difficult time in a teacher's career (Gavish & Friendman, 2010). Five studies reported teacher age as negatively correlated with burnout, meaning older teachers experienced less emotional exhaustion and depersonalization while having greater personal accomplishment (Banks & Necco, 1990; Carlson & Thompson, 1995; Crane & Iwanicki, 1986; Weber & Toffler, 1989, Zabel & Zabel, 1983). Inversely, Maslach et al. (1996) found that younger human service professionals were more dehumanized and showed significantly lower levels of personal accomplishment than their older colleagues. Lau, et al. (2005) also reveal that younger teachers experience more emotional exhaustion and depersonalization while having less feelings of personal accomplishment. Gold (1985) reports that younger teachers have not yet grasped the reality of the profession. The realization that the profession is not what is expected may become a source of frustration (Mousavy & Nimehchisalem, 2014). This frustration felt by the teachers could elicit elevated levels of depersonalization and emotional empathy (Gold, 1985). Both of which contribute to burnout.

Marital status has also been investigated as another demographic variable related to burnout in several studies, resulting in inconsistent findings (Mousavy & Nimehchisalem, 2014). In a number of studies, it was reported that single teachers have higher levels of burnout than married individuals regarding their emotional exhaustion and depersonalization (De Heus &

Diekstra, 1999; Ozdemir, 2007; Yongxin et al, 2007). However, many studies have found just the opposite. Ross, Altmaier, and Russell (1989) found that married workers experience greater emotional exhaustion than those who are not married. Relatedly, Mousavy and Nimehchisalem (2014) found that married teachers indicated significantly higher levels of burnout compared with those who were not married. Maslach et al. (2001) found that married individuals with fewer children are more prone to burnout, while single individuals are in the group of greater burnout risk than divorced employees. Relatedly, Bauer et al. (2006) provided empirical evidence that burnout is significantly higher among employees with marital problems such as divorcees and widowers.

The level of education that a teacher receives may also impact burnout. However, studies on the correlation between the level of education and burnout have had mixed results. Sezer (2012) reported that burnout level is higher among high-educated teachers compared to low-educated teachers. The results of a study completed by Farshi and Omranzadeh (2014) also found that burnout in more likely among higher educated teachers. In contrast, the evidence supporting the relationship between level of education of teachers and burnout was found to be relatively strong in several similar studies, with higher levels of education associated with lower emotional exhaustion (Embich, 2001), depersonalization (Weber & Toffler, 1989; Zabel & Zabel, 1983), and higher personal accomplishment (Zabel & Zabel, 1983; 2001)

Unlike level of education, the relationship between self-efficacy and teacher burnout is robust. A number of studies among different cultures reveal that teacher burnout is negatively related to self-efficacy and job satisfaction (Skaalvik & Skaalvik, 2017). Pishghadam, Zabihi, and Shayesteh (2013) studied the role of teachers' perceptions of their profession in the formation and alleviation of burnout syndrome. In the study, 92 teacher burnout scales and belief

scales were analyzed. The researchers discovered a significant relationship between the subscales of the teacher's perceptions and beliefs about their own efficacy in the classroom. Teachers who view themselves as ineffective are much more likely to suffer from teacher burnout at some point in their career.

Further, related studies indicate that the relation between teacher self-efficacy and teacher burnout is likely reciprocal (Skaalvik, 2010). Teacher burnout can lead to low self-efficacy and vice versa. This creates a cycle that teachers may feel unable to escape. Feeling trapped in emotional, mental and physical exhaustion can perpetuate the ailment leading some teachers to believe the only way out is to leave their teaching position all together.

Poor self-efficacy can also be prolonged by negative personality traits. In a recent study, Mojsa-Kaja, Golonka, and Marek (2015) discovered that the personality traits of negative affectivity, temperament, and lower novelty seeking and lower persistence constitute a personality profile that may contribute to the development of exhaustion and cynicism. These traits may also make a teacher more susceptible to burnout in the first place.

A teacher's self-concept may also be related to burnout. Zhu, Liu, Fu, Yang, Zhang and Shi (2018) completed a study on a sample of 1,892 teachers across seven Chinese geographical regions who completed self-reported questionnaires addressing self-concept and discovered that teacher self-concept influenced the burnout dimensions of emotional exhaustion, depersonalization, and reduced personal accomplishment via teacher efficacy. Teachers with a low or negative self-concept might suffer stress or emotional problems and such dysfunctional cognitive evaluation may cause a psychological disorder or burnout (Zhu, Liu, Fu, Yang, Zhang & Shi, 2018).

Job satisfaction, expressed as an emotional reaction to work experiences, arises from employee attitudes about their work (Avsaroglu, Deniz, & Kahraman, 2005). Job satisfaction has been explored in many studies. In the majority of studies, job satisfaction has a significantly negative correlation relationship with burnout (Brunsting, et al., 2014). In a study by Skaalvik and Skaavik (2009) teachers' job satisfaction was directly related to two of the dimensions of burnout (emotional exhaustion and reduced personal accomplishment) and indirectly related to all aspects of the school context, through emotional exhaustion and reduced personal accomplishment. Moreover, Leung and Lee (2006) found, in a study of teachers in Hong Kong, that the exhaustion dimension of burnout, which was found to be related to job satisfaction, predicted teachers' intentions of leaving the profession.

Personality type may also predispose a person to burnout. Perara, Granziera, and McIllvan (2018) examined four identity profiles of personality: rigid, ordinary, well-adjusted and excitable. They examined the associations of profile membership with dimensions of teachers' self-efficacy for teaching, work engagement, and job satisfaction (Perara, et al., 2018). Excitable teachers had the lowest job satisfaction. Perara, et al. (2018) suggest they have greater emotional reactivity to workplace events (both emotional highs and lows) resulting in heightened volatility and impulsivity that may undermine job satisfaction thus putting them at increased risk for burnout. Rigid and ordinary teachers did not significantly differ (Perara, et al., 2018). The well-adjusted personality type reported the highest levels of job satisfaction, self-efficacy and work engagement, likely protecting them from burnout.

In a related study, Cano-Garcia, Padillia-Munoz, and Carrasco-Ortiz (2005) discovered that the highest scores in burnout (greater emotional exhaustion, greater depersonalization and less personal accomplishment) were obtained by teachers with a high degree of neuroticism and

introversion. Neurot**ic** individuals convey more negative emotions, stress reaction, and overall emotional instability. Therefore, neurotic teachers are much more vulnerable to burnout and, also, the majority of psychopathological disorders. Introversion, referring to passivity, limited interest in social exchanges and a lesser amount of disposition towards emotionality of a positive nature. All of these are characteristics that heighten emotional exhaustion and depersonalization as they diminish the sense of personal accomplishment. A low sense of personal accomplishment can lead to a belief of decreased self-worth.

Another personal characteristic, morningness-eveningness correlates with teacher burnout. Morning-eveningness is a personality construct that is based on an innate biological rhythm where morning people reach their nadir of body temperature earlier at night than evening people, show higher cortisol levels after awakening, and have earlier melatonin onset Randler, Luffer and Muller (2015) assessed morningness–eveningness in teachers and its relationship with burnout. Morningness-Eveningness correlated with burnout and evening-oriented teachers scored higher on emotional exhaustion, a hallmark of burnout (Randler, Luffer, & Muller, 2015). Morning oriented teachers were found to have a higher sense of personal accomplishment, lower emotional exhaustion and lower rates of burnout. Overall, this study suggested that morningness is an influential predictor of well-being in teachers.

Hallmon (2015) explored if a significant relationship existed between the four subscales of cultural intelligence (CQ) and teacher burnout, while controlling for the effects of demographic variables (gender, race, and years of experience), teacher efficacy and teacher recruitment programs using a hierarchical multiple regression analysis (Hallmon, 2015). Thus, those high in cultural intelligence have lower levels of burnout and vice versa (Hallmon, 2015).

Although several papers have shown the importance of personality structure in the disposition to burnout, its role remains controversial, especially in relation to variables of an organizational and environmental type (Cano-Garcia, Padillia-Munoz, & Carrasco-Ortiz, 2005). Some authors have found that situational variables have more predictive value than those of personality; however, other research on personality has shown that personality variables indicate a higher percentage of variance than situational aspects (Mojsa-Kaja, et al., 2015).

Situational Variables

Situational variables can make teachers just as susceptible to teacher burnout as personal variables. Teachers experience intense, emotion-laden interactions on a daily basis and have a great number of emotional demands placed on them during their professional careers (Fiorilli, 2016). The daily situations that a teacher experiences or is exposed to can play an important role in the development of burnout.

Teaching is one of the most emotionally loaded occupations (Lavi & Eshet, 2018). Throughout any given workday, teachers experience a myriad of emotions via social interactions with students, parents, and coworkers. Teachers often feel isolated, frustrated, and depleted (Chang, 2008). Balancing the tasks associated with teaching can be overwhelming. Teachers often feel drained intellectually and emotionally as they deal with classroom behaviors (Chang, 2008). High emotional control is needed to maintain positive relationships between the teacher and the public. Thus, teachers experience higher than average levels of emotional labor (Johnson, Cooper, Taylor & Millet, 2005). This emotional load is one of the most important predictors of job burnout (Brotheridge & Grandey, 2002).

Koruklu, Özenoglu-Kiremit, Feyzioglu, and Aladag (2012) found some common situational factors that lead to burnout are misbehavior observed in students, tension in school

atmosphere, and inadequate support and respect for work, lack of material support to perform their profession. Dealing with these issues for long periods of time can break down a teacher's ability to fight off burnout.

Class size and makeup have been showed to affect burnout. In a study conducted by Brunsting, et al. (2014), the number of typically developing students was inversely correlated with teacher burnout. Large classrooms of students with specific, demanding needs can make a teacher feel overwhelmed and taxed. A teacher gives a great deal of himself/herself to meet the needs of all students; however, over time, this demanding and challenging job can cause mental, emotional, and physical exhaustion.

Value dissonance also affects teacher burnout. Value dissonance, as defined by Skaalvik and Skaalvik (2017), is the degree to which teachers feel that they share the prevailing norms and values at the school where they are teaching. Value dissonance may be particularly important in the teaching profession because teaching is typically driven by values, ethical motives, and intrinsic motivation (Skaalvik & Skaalvik, 2017). Teachers within the same teaching environment can differ in beliefs and value systems on a myriad of areas including but not limited to goals, curriculum, communication methods and the discipline.

Discipline problems or disruptive student behavior is recognized as a serious work-related stressor among teachers (Skaalvik & Skaalvik, 2017). Managing student behavior can draw on teacher energy and resolve. Not being able to control student behavior may lead to a feeling of defeat and lack of authority, which may result in serious stress responses (Skaalvik & Skaalvik, 2012). Moreover, controlling the behavior of students takes time, energy, effort and resources which most teachers are in low supply of due to daily demands.

While several studies of stressful working environments in schools have focused on discipline problems or disruptive student behavior, there is a lack of research examining low student motivation (Skaalvik & Skaalvik, 2017). Resistance to learning is emerging as a demoralizing and wearying element of the job for many teachers, who presumably saw value both in learning and in the subjects they taught (Buchanan, 2009). Experiencing students to be unmotivated may be interpreted as a personal failure to motivate students for schoolwork, which may lead to a lack of self-efficacy and burnout (Skaalvik & Skaalvik, 2017).

Inversely, a teachers' status of burnout is an important environmental factor associated with students' quality of motivation (Shen, McCaughtry, Martin, Garn & Fahlman, 2015). As one of the few studies that have explored the direct link between teacher burnout and student autonomous motivation, a recent study by Shen, et al. (2015) enriched understanding of teachers' burnout and its relationship with students' motivation as it confirms an important issue in education: teacher burnout will lead to the undermining of student motivation.

During the last two decades educational researchers in different countries have reported an increasing number of work assignments in the teaching profession and an acceleration of working speed among teachers (Skaalvik & Skaalvik, 2017). The overwhelming weight of obligation and the unrelenting pace of the teaching profession can be exhausting to some. Specifically, previous research shows that time pressure and work load are associated with emotional exhaustion dimension of burnout (Skaalvik & Skaalvik, 2017). A study by Skaalvik and Skaalvik (2011) indicated that time and pressure were significant predictors of emotional exhaustion. Likewise, teachers with lesser degrees of time pressure seemed to experience lower amount of workload and enjoy better working relations (Skaalvik & Skaalvik, 2011). .

Relatedly, the work-life area control has an impact on burnout. The work-life area control reflects the extent of authority, autonomy, and decision-scope an employee has to pursue at work according to her or his own ideas and wishes (Maslach & Leiter, 2003). Blochliger and Bauer (2018) found that work-life area control was significantly related to burnout among child care teachers. The results suggest that interventions tackling burnout should target the organizational level, as well as the individual level (Blochliger & Bauer, 2018).

Teacher burnout is especially problematic in rural areas where teachers are often working in understaffed schools (Garwood, et al., 2018). Historically, administrators in rural districts (43% of the nation's school districts) have struggled with the supply of special education personnel (Berry, et al., 2011). In many rural areas, the teachers' jobs are defined as they are performing them (Reetz, 1988). Teachers may be providing services to students outside of their areas of training and certification (Schwartzbeck, Prince, Redfield, Morris, & Hammer, 2003). This dynamic can lead to added stressors and job overload. Rural teachers are often working in isolation from one another and, therefore, cannot always benefit from collaboration and collegiality among peers (Garwood, et al., 2018). This may lead to feelings of isolation and lack of support.

Further, teaching in high poverty areas, which often have limited resources and poor parental support, places educators at high risk for stress and emotional exhaustion (Hallmon, 2015). The rate of U.S. teachers leaving the profession every year is 20% at high-poverty schools, which is significantly higher than at schools in financially secure areas (Seidel, 2014). The extra effort that is required to make up for the lack of provisions and support may be to blame. The job dynamics of working in economically disadvantaged areas can quickly weaken a teacher's resolve.

Previous research has repeatedly identified inadequate financial reward in terms of low pay as a major stressor in child care work, and the findings of a recent study by Blochlinger and Bauer (2018) lend support to the notion that pay satisfaction also matters. Research by Royer and Moreau (2015) and Viernickel, Voss, Mauz, Gerstenberg, and Schumann (2014) also found a correlation between burnout and pay satisfaction. A possible explanation for this correlation is that insufficient financial resources increase stress levels in general and hence foster the development of burnout symptoms (Blochlinger & Bauer, 2018).

Irvin, Hume, Boyd, McBee, and Odom (2013) reported the ratio of adults in a classroom to students with autism spectrum disorder correlated with an increase in burnout. The more teachers, support staff, personal aides, classroom aides that are present in a special education classroom, the likelier that the teacher is to experience burnout. This could be due to multiple relationships the teacher must manage while still carrying out job responsibilities.

Brunsting, et al. (2014) also found factors associated with the onset of teacher burnout, include: lack of administrative support, paperwork, challenging student behaviors), role overload (i.e., the experience of too many unique demands on one's time and resources, and expectation-reality mismatch, which occurs when the pre-service expectation of teaching does not align with the reality of what the teacher experiences in the classroom.

Poor relationships with administration can also be an indicator of teacher burnout. Teachers who stated a problem with administration have been found to have higher emotional exhaustion than teachers who stated no problem (Koruklu, et al., 2012). Strained communication and perceived lack (or loss) of support by administrators may result in added stress. Principals' support is specifically said to mitigate negative emotions that teachers have about themselves and their work and to reduce their stress (Dworkin, 1987). Tatar (2009) surveyed schoolteachers

and found that the second-most-used source of support was the principal, right after the teachers'

colleagues and before the school counselor, coordinator, and school psychologist. It is important

to note that lack of support has emerged as the single strongest predictor of a teacher's decision

to leave the profession (Buchanan, 2009).

A lack of social support networks can also be a predictor of teacher burnout. Studies

show that the feeling of being exhausted or oppressed by the demands of the job is markedly less

when a social support network of colleagues, superiors, and tutors is available; while teachers

with a strong sense of depersonalization, given how this trait has conventionally been measured

in the main studies on the topic, tend to completely detach from their work context without

applying for help (Fiorilli, 2016).

In relation, some causes of burnout are due to teachers lowered sense of belonging. It

appears that the participants experiencing burnout perceive a higher level of mismatch between

themselves and the workplace in the areas of workload, control, rewards, community and

fairness (Mojsa-Kaja, et al., 2015). For teachers, involvement in the social system of the school

is an inherent aspect of the job because they are dependent on their interactions with other school

members to be successful in accomplishing their teaching goals (Van Maele & Van Houtte,

2015). If a teacher perceives a social disconnect between herself and coworkers, the teacher will

be more susceptible to developing teacher burnout. In contrast, if a teacher feels like a valuable

part of the working environment, she will not be as susceptible to developing teacher burnout. It

is important that each teacher feels like a valuable part of the team.

In the eyes of society being a teacher is a mission rather than just a regular occupation

(Wrobel, 2013). Despite all the challenges and dynamics of teaching, teachers are expected by

society to maintain composure, kindness, empathy, helpfulness and never show signs of

irritability. The necessity of maintaining this image may strongly predispose teachers to emotional labor, and consequently, lead to psychological costs (Wrobel, 2013).

Differences in Burnout among Regular and Special Education Teachers

There is limited research on the differences in teacher burnout between regular and special education teachers. However, there are many more dynamics of the special education teachers' job that have been proven to lead to teacher burnout. Stempien and Loeb (2002), observing teachers of regular and special education, identified the presence of higher indicators of dissatisfaction in the latter. Empirical studies show that special education teachers experience higher levels of stress (due to stressors resulting from teaching children with multiple disabilities, emotional and behavioral disorders and poor motivation) compared to regular education teachers (Fore, Martin, & Bender, 2002; Garwood, et al., 2018; Platsidou & Agaliotis, 2016; Wisniewski & Gargiulo, 1997). Overload and fatigue are more intense in teachers who work with students with special educational needs (Silva & Almeida, 2011).

Teacher burnout is especially conceived as a general concern in special education because of the emotionally demanding work content (Langher, et al., 2017). Special education teachers are more likely to report stress due to challenging student behaviors because they have more frequent encounters with students who have emotional and behavioral difficulties. Special education teachers also tend to experience different challenging students' behaviors, such as being more active and easily distractible than other students, requesting greater attention to achieve educational goals, and expressing in an aggressive/hostile conduct (Pepe & Addimando, 2013). Attrition rates are alarmingly high in teachers working with students who show high levels of challenging behaviors (Hopman, et al., 2018).

Misbehaviors and challenging behaviors are noted more often in special education classrooms (Cavendish, Nielsen, & Montague, 2012). The moderate to large correlation between students' misbehavior and teacher emotional exhaustion is particularly important as this is a primary element of burnout that indicates a teacher not having the emotional resources to give of himself or herself psychologically (Aloe et al., 2014).

Aloe, et al. (2014) discovered that that there is a statistically significant relationship between misbehavior and the three dimensions of burnout (i.e., emotional exhaustion, personal accomplishment, and depersonalization). Furthermore, a significant relationship has been found between teachers' expression of disgust to aggressive pupils and high levels of emotional exhaustion and depersonalization (Fiorilli, 2016). Inversely, teachers may then create a negative climate in the classroom that leads to more behavior problems from the students (Garwood, et al., 2018). Further, when teachers experiencing burnout deal with students' challenging behaviors, they are more likely to overreact and exacerbate the situation by responding erratically (Maag, 2008).

Special education teachers are not only exposed to population specific stressors, such as the daily exposure to high levels of disruptive behaviors that are displayed by special education students, but also encounter stressors that are generally known to put strain on all teachers, including high demands and lack of resources (Hopman et al., 2018). Many special education teachers have to provide content instruction, teach social and/or vocational skills, assess students, write IEPs, teach in inclusive settings, provide consultation to general education teachers and parents, manage challenging student behavior, and deliver accommodations and modifications for standardized tests (Garwood, et al., 2018). Some special education teachers may thrive under the pressures of the job, but many are at risk for burnout (Brunsting, et al., 2014).

Despite the limited research on comparisons between regular and special education teachers, regular education teachers are conceived as a key-factor which allows special education teachers to feel as though they are a part of the school environment and to experience greater personal accomplishment (Langher, et al., 2017). Special education teachers with responsibility to many disabled and emotionally needy students can increase burnout levels. This is understandable with consideration to the controlled responses required of the teacher.

In a study conducted by Langher, et al. (2017), it was discovered that the support, or lack thereof, that special education teachers perceive to receive from their regular education counterparts can affect whether they feel accepted in the school environment or isolated and lonely. Lack of professional support puts special education teachers at risk for higher levels of burnout.

Moreover, pressure from parents can be meaningfully intense, due to the complex and confusing emotional states parents may go through when dealing with physical and psychological health of their children (Langher, et al., 2017). A Ministry of National Education dictated that special education teachers were dissatisfied with their jobs and stressed under constant pressure from the children's parents' (Conley & You, 2017). Teachers are often considered as responsible, whether right or wrong, for the failure of dysfunctional inclusive processes (Langher, et al., 2017). This may lead to feelings of low accomplishment and self-efficacy which are related to teacher burnout.

Empathy

Empathy refers to the ability of an individual to understand another person's mental state in terms of emotions, feelings and thoughts, which is important for effective interpersonal interaction (Shamay-Tsoory, 2011). It is what makes us human and distinguishes us from other

species (Trimmer, McDonald & Rushby, 2016).

There is a general consensus that empathy itself is a good thing in terms of its empirical relation to other desired states of being, such as mental health and wellbeing (Ghasemian & Kumar, 2017). It is often related to pro-social behavior and is essential to human life (Tei et al, 2014). It may be fragile but it has, arguably, endured throughout evolutionary times and may continue as long as humans exist (Hoffman, 2000). It allows human beings to understand and relate to one another. Empathy facilitates the group interconnection that is essential for survival. It leads to altruistic action of a compassionate nature. Empathy is the social glue that enables humans to form and maintain lasting interpersonal bonds (Sze, Gyurak, Goodkind, & Levenson 2012). The capacity to respond to others in need is an important aspect of the human condition, facilitates harmonious group relations, and enhances the "greater good" (Sze, et al., 2012).

Empathy differentiates into an emotional and a cognitive subcomponent (Dueter, et al., 2018). Cognitive empathy refers to the individual's ability to understand another person's perspective, feelings and state of mind (Shamay-Tsoory, 2011). Emotional empathy, sometimes referred to as affective empathy, however, is a vicarious emotional response to the perceived emotional experiences of others (Mehrabian & Epstein, 1972). In other words, the empathizer actually feels and experiences the emotions of another.

Cognitive Empathy

Cognitive empathy is an executive function that allows one to understand other individuals' thoughts and feelings from their perspective; however, the empathizer is mindful of the difference between one's own and others' emotional state (Parvaneh, et al., 2018). Cognitive empathy is related to the concepts of Theory of Mind and Perspective Taking, and is usually measured by tasks that require the correct identification of socially relevant emotional scenes or

expressions (Dueter et al., 2018).

Emotional Empathy

Emotional empathy is a primitive function (Shamay-Tsoory, 2011). Infants as young as one day old appear to have emotional empathy sensitivity (Sagi & Huffman, 1976). It can be considered crucial for the social and cultural evolution of the human species (Dueter et al., 2018). Thus, the idea that empathy is a major determinant of prosocial orientation, and plays a critical role in human bonding has been widely empirically accepted among psychologists (Ashraf, Khalid, & Ahmed, 2014).

Emotional empathy responsiveness may have evolved among humans for the survival of all. If we know that another, especially a close relative or friend, is suffering, then we ourselves become emotionally disturbed, sometimes to the point of anguish and only by helping (or trying to help) can we hope to alleviate our own distress (Smith, 2006). It is also assumed that the emotional characteristic of empathy plays an important function in reducing harmful behavior towards others (Ashraf, et al., 2014). Emotional empathy motivates humans to behave altruistically towards kin, mates, and allies (Smith, 2006). Emotional empathy has been found to be underlying mechanism that engenders moral behavior (Ashraf, et al., 2014). .

 In empirical studies, emotional empathy has been assessed by presenting participants with emotional scenes and having them rate the degree to which they feel affected by the displayed emotional states (Dueter et al., 2018). Emotional empathy is also assessed by self-report of participants.

Emotional empathy levels have been found to be significantly different among genders. From a developmental perspective, empathy research has consistently suggested that women are more inclined to be emotional and empathic, while men are more logical and cognitive-oriented

(Damon, Lerner, Kuhn, Siegler & Eisenberge, 2008). Empirical studies mostly relying on self-report data consistently report higher scores for females, especially on the components involving emotional processes, such as empathic concern and personal distress (Platsidou & Agaliotis, 2016). While examining the relationship between gender and emotional empathy, Gleichgerrcht and Decety (2013) also found that gender had a highly selective effect on empathic concern, with women displaying higher values, which led to a wide array of negative and devalued feelings. Further, a study completed by Loyola (2016) on empathy among the helping professions implied that the females with more experience, married, in the field of teaching, and have more training had higher levels of empathy. Rueckert, Branch, and Doan (2011) report that higher levels of empathy among females may be attributed to differences in general emotional responsiveness.

Age also has a significant relationship with emotional empathy levels. As individuals age, emotional empathy seems to increase. Sze et al. (2012) assessed emotional empathy and prosocial behavior among older, middle-aged, and young adults. Older participants reported the greatest empathic concern, middle-aged participants reported intermediate levels, and young participants reported lowest levels (Sze et al., 2012). Based on their study, Sze et al. (2012) found that: (a) emotional empathy increased with age, (b) prosocial behavior increased with age, and (c) aspects of emotional empathy (empathic concern) partially account for age-related increases in prosocial behavior.

In a study conducted by Parvaneh et al. (2018), age significantly predicted scores on emotional empathy, as well as personal distress, empathic concern, and empathy quotient. Younger participants had higher scores for personal distress, whereas older participants' scores on empathic concern, emotional empathy, and empathy quotient were higher (Parvaneh, et al., 2018). It is important to note the researchers also discovered that cognitive empathy did not vary

between older and younger adults suggesting that only emotional empathy can be predicted by age. The study concluded that as people get older they are motivated to bring emotional meaning into their life, which leads them to experience a wide variety of emotional states; thus, they are able to draw upon these diverse emotional experiences and make it easier to relate to different emotional states of others (Parvaneh, et al., 2018).

In the same study by Parvaneh et al. (2018), years of education also was revealed to relate to emotional empathy, but as with age, it did not correspond with cognitive empathy. Participants with degrees of higher education significantly reported higher scores compared to participants without college education (Parvaneh, et al., 2018).

Sleep loss has a detrimental effect on the ability of individuals to process emotional information (Guadagni, Ferrara, & Iaria, 2014). Guadagni et al. (2014) examined the relationship between lack of sleep and emotional empathy among healthy volunteers. They discovered that the participants in the sleep deprivation group had lower levels of emotional empathy than their counterparts in the control group.

Tamayo, Rizkella and Henderson (2016) parsed the underlying components of empathy and correlated them to psychosocial attributes, with the overall goal of identifying curriculum modifications to enhance levels of empathy in pharmacy students. Within the study, the researchers discovered that students who felt coerced to enter a health professional field demonstrated lower emotional empathy (Tamayo, et al., 2016).

Stress and emotional empathy have also shown significant relationships. In a study by Wolf et al. (2015), male participants exposed to stress reported more emotional empathy in response to pictures displaying both positive and negative emotional social scene.

Research has shown that different empathy components hold specific links with a range of

psychosocial processes which affect one's function at the workplace; for example, perspective taking, empathic concern and fantasizing are linked with prosocial tendencies, including more helping behavior and less aggression and antisocial behavior (Platsidou & Agaliotis, 2016). Further, emotional empathy and prosocial behavior are linked conceptually and empirically, in that emotional empathy is thought to be a motivating factor for subsequent helping behavior (Sze et al., 2012).

Emotional Empathy and Helping Professions

Helping professions are considered relationship-intensive careers (Loyola, 2006). Helping others costs mental resources (DeWall, Baumeister, Gaillot, & Maner, 2008). A great deal of mental and emotional energy is required on a daily basis. Helping professions, in general, are potentially high-effort, low reward occupations (Adams et al., 2017). Thus, helping is an exhausting business, that's likely why we have so much burnout (Keith-Lucas, 2010).

Helping professions require emotion work. Emotion work requires staff to display organizationally expected emotions; thus, when conflict arises between one's inner emotions and the emotions that are required from them, feelings are suppressed and emotional dissonance occurs (Fitzgerald, 2018). This phenomenon can potentially cause a great deal of anxiety within the helping profession. For instance, it appears that nurses may be experiencing anxiety because of a conflict between their own empathy and the organization's required emotions and so use defense styles to cope; this may explain why empathetic processes are altered (Fitzgerald, 2018).

Research by Williams (1989) of teachers', nurses' and social workers' empathy revealed that high levels of empathy may predispose them to emotional exhaustion suggesting that individuals with high emotional empathetic capacities are vulnerable to burnout (Platsidou & Agaliotis, 2016). Emotional exhaustion that may result from exposure to others' negative

emotions.

Empathy for others' negative emotions, whether measured as a dispositional tendency to connect with others' negative emotions or situationally induced by instructing participants to empathize with others' negative emotions, motivates helping behavior (Andreychik, 2019). Empathy allows others to relate to those in pain or distress cuing them to take action. However, empathy for others' negative emotions suggests some less positive consequences of empathizing with others' negative emotions, consequences that are quite relevant to the experience of burnout; in particular, because empathizing with others' negative emotions necessarily involves the vicarious experience of negative emotionality, such negative empathizing is likely to be an (at least somewhat) aversive experience (Andreychik, 2019).

A considerable amount of research has been done on the relationship between emotional empathy levels and burnout among those in the medical profession, especially nurses. According to a study by Martínez et al. (2015) there is a significant relationship between the dimensions of burnout and the empathy construct. This relationship occurs between emotional exhaustion and empathetic stress. In many of these studies, high levels of emotional empathy were found to be predictors of job burnout (Molaro, Perez-Fuentes, Linares, & Martin 2018).

Researchers have examined the relationship between emotional/ empathy and cognitive empathy on burnout (Fitzgerald, 2018). Omdahl and O'Donnell (1999) found that nurses with greater cognitive empathy were less likely to depersonalize their patients, whereas the opposite pattern was found for nurses with higher levels of emotion. Similarly, Lee, Song and Cho, (2003) found that cognitive empathy was the most important predictor of low levels of depersonalization and a greater sense of personal accomplishment. This may suggest that emotional empathy has a more significant relationship with burnout than cognitive empathy.

In a study of nurses conducted by Duarte & Pinto-Gouveia (2017), a correlation analysis showed that empathy-based guilt was positively associated with empathy, and with burnout and compassion fatigue. Guilt feelings caused by empathy led to higher levels of burnout.

Omdahl and O'Donnell (1999) indicated that nurses who absorb the emotional distress of patients may be at higher risk of burnout. Similarly, emotional work, such as nursing has been identified as being demanding on personal resources, and if not supported by an increase in resources may have negative consequences on burnout.

Several studies showed a negative relationship between emotional empathy and burnout suggesting that empathy may decrease as burnout rises. Tei et al (2014) discovered that nursing medical professionals with reduced empathy-related brain activity exhibited higher burnout severity scores and greater dispositional empathy scores. Thus, the results of the study point to the possibility that medical professionals who are unable to self-regulate their emotions during empathic engagement may be at higher risk of burnout (Hunt, Denieffe, & Gooney (2017).

Tei et al. (2014) also found that higher levels of empathy were associated with greater emotional exhaustion in a sample of medical professionals, both when empathy was measured in terms of respondents' self-reports and in terms of empathic-related neural activity in response to witnessing others' pain. Excessive empathy might be problematic because frequent exposure to emotionally-demanding situations may put individuals at risk of burnout (Tei et al., 2014).

Burnout has been shown to have a negative impact on one's ability to preserve and maintain empathy in a health care environment (Fitzgerald, 2018). While a great deal of research has been conducted on the relationship between emotional empathy and burnout among helping professionals in the medical field, there are few studies reported on the relationship between the emotional empathy and burnout among educators.

Emotional empathy is a required teaching skill which promotes a positive learning environment (Cooper, 2004). Day after day teachers work with students of all different abilities, dispositions, cultures, and religions. Empathy is believed to be one factor among others that separate excellent teachers from their less-effective peers (Chezare, 2005). Empathetic teachers have been shown to strengthen their pupils' sense of belonging to their schools, enhance their relationships with teachers and peers and boost their confidence in the school climate (Goroshit & Hen, 2016). Teachers with high levels of emotional empathy create and foster healthy, productive learning environments that are conducive to personal and academic growth. Hence, teaching requires a great deal of emotional work.

Empathetic teachers are thought to create more nurturing classroom environments where all students, regardless of race, culture, or ethnic identity feel understood and cared for (Chezare, 2015). Thus, students of all demographics benefit from empathetic teachers. Scholars conclude empathy is essential for raising academic outcomes and establishing productive student-teacher relationships (Chezare, 2015). Teachers who do not value and cannot develop proper teacher–student relationships experience more emotional exhaustion and depersonalization (Garcia-Cano et al., 2005).

A teacher's empathy is a very important attribute enabling teachers to meet the growing diversity in most educational milieus (Goroshit & Hen, 2016). Culturally sensitive emotional empathy is very important when working with a diverse cultural group as found in all schools (Prakish & Mandela, 2014). One may conclude that English-second language (ESL) teachers who work with children of a myriad of backgrounds may need to possess and employ higher levels of emotional empathy in order to relate to students struggling with the English language and culture.

Teaching special education may require even higher levels of empathy than teaching regular education. It is vital that special educators empathize with their students in order to become highly committed to the implementation of a creative and flexible instruction which attends the specific psycho-pedagogical and socio-emotional needs of these students (Pearce, Gray, & Campbell-Evans, 2009). Students with special needs require added attention and support. This constitutes increased emotional work for teachers which, over time, may lead to emotional exhaustion, a component of burnout.

Emotional empathy has been shown to affect the attitudes of teachers towards students. Attitudes towards students with disabilities may be different among special education and regular education teachers. Parchomiuk (2018) investigated the extent to which the empathy of special education teachers and general teachers accounts for the variance of their attitudes towards persons with disabilities. The sample consisted of 300 special education teachers working with persons with intellectual disabilities in primary and secondary schools and institutions of rehabilitation, and 280 general education teachers working with able-bodied students in primary and secondary schools (Parchomiuk, 2018). The researcher wanted to examine whether higher levels of empathy coexist with positive attitudes towards students with disabilities. The results show a greater ability in special education teachers to empathetically share pleasant and unpleasant experiences with other people, which makes them show more positive attitudes towards persons with disabilities (Parchomiuk, 2018).

The role of empathy in the teaching profession has been vastly investigated in relation to its effect on students, but research on how teachers' empathy affects their own well-being at work is limited (Platsidou & Agaliotis, 2016). Emotional empathy, like burnout, is closely

related to self-efficacy (Goroshit, 2014; Goroshit & Hen, 2016; Wagh, 2016;), job satisfaction (Wagh, 2016), and emotional exhaustion (Wrobel, 2013).

While emotional empathy is a positive trait for a teacher to exemplify in the classroom, it may not come without a price. The literature indicates that burnout is extensively experienced among professionals providing social and human services, including teachers at all levels of education (De Stasio, Fiorilli, Benevene, Uusitalo-Malmivaara, & Chiacchio, 2017).

Emotional Empathy Deficits

While emotional empathy is a basic human characteristic, it is easier and more natural for some people than it is for others (Trimmer, et al., 2016). Levels of emotional empathy vary from human being to human being. Individuals are not all born with equal amounts of emotional empathy. Empathy is not a static trait; it can be modified during one's lifetime, both as a global disposition and as a situational variable (Parchomiuk, 2018). People can have excess or deficits of emotional empathy. In fact, deficits in the ability to empathize or in empathetic concern for others are associated with severe mental disorders (Dueter, et al., 2018)

Deficits in empathy, an important part of social cognition, have been described in patients with several types of mental disorders especially borderline personality disorder (BPD) (Wingenfeld, et al., 2018). Many individuals experience a significant impairment of empathy due to acquired brain damage or developmental disorders such as autism (Trimmer, et al., 2016).

Individuals who lack in the capacity for feeling another's emotional states might engage in disruptive acts that depict failure of socio-moral development, such as antisocial behaviors and other forms of externalizing problems (Ashraf, et al., 2014). Deficits in empathy may cause one to act out in frustration or become anti-social. Neither of which are conducive to positivity within an organization.

In a burnout study, Cano-Gracia et al. (2005) discovered that introvert and neurotic teachers seemed to experience higher levels of emotional exhaustion and depersonalization and lower degrees of personal accomplishment. Further, teachers who could not relate or empathize with students and saw them as objects, had higher levels of depersonalization, a component of burnout. This may suggest a relationship of extremes. Both high and low levels of empathy may contribute to burnout.

Summary

Teacher turnover due to teacher burnout is a major concern. There is evidence in current bodies of research that some teachers are leaving special education classrooms and choosing to teach in general education classes, while there is no evidence of the reverse phenomenon-i.e. teachers leaving the general education class in order to teach special education students (Fore, Martin, & Bender, 2002). Some teachers are willing to leave their school, their district, and even their home state to move into a regular education position and escape a special education altogether. This may suggest that during a national teacher shortage, the shortage in special education teachers may become more critical than the shortage in teachers overall (Fore, et al., 2002).

With these data on turnover and burnout in special education, one may well inquire as to the reasons for the higher attrition rates among special educators (Fore, et al., 2002). Perhaps, their likelihood of experiencing job burnout is much higher than their regular education counterparts due to higher levels of emotional empathy. With the expected rise in attrition and teacher turnover across the next decade, it is well worth exploring.

CHAPTER 3: METHODOLOGY

Overview

Since the term "burnout" was coined by Freudenberger (1974), a great body of research has been conducted on the phenomenon. However, despite the many empirical studies on burnout, it still continues to plague the teaching profession. One of the most important considerations in education today is that despite much research on the topic of burnout, we still don't know why teachers continue to experience it. The literature indicates that burnout is extensively experienced among professionals providing social and human services, including teachers at all levels of education (De Stasio et al., 2017). Although there have been studies completed on job burnout and emotional empathy among those in the medical field (Park, et al., 2016; Tei et al., 2014; Wilkinson, et al., 2017), there is relatively no research among teachers. It is possible that empathy may also be a predictor of job-related stress but, to date, the association has not been extensively studied (Platsidou & Agaliotis, 2016). Therefore, in the present study, the researcher will examine the relationship between emotional empathy and burnout among teachers.

Design

This quantitative study utilizes a combination of predictive correlational and causal-comparative methodologies to examine the relationship between the predictor, or independent variable (emotional empathy) and the criterion, or dependent variable (teacher burnout) among teachers. The researcher chose a predictive correlational design because it enables the ability to explore the linear relationship between the continuous scores of one predictor variable and one criterion variable, which is fitting for the goal of this study. Relationships will be examined to determine if there is a positive, negative or no correlation among the variables of interest (Ary,

Jacobs, Razavieh & Sorensen, 2006). Correlational designs are highly useful for studying

problems in education and other social settings (Gall, Gall, & Borg, 2007).

Past researchers have used predictive correlational designs to test the relationship

between empathy and other variables including the relationship of emotional empathy and

burnout among health professionals (Gleichgerrcht, & Decety, 2014; Omdahl and O'Donnell,

1999; Palsson et al., 1996;), empathy and job stress (Lee et al., 2003); empathy and emotional

exhaustion (Wrobel, 2013) and predicting burnout from empathy related brain activity (Tei et al.,

2014).

The researcher sought to further this study by also using a causal-comparative design.

Causal-comparative designs allow the researcher to form groups of individuals in whom the

independent variable is present then determine whether the groups differ on the dependent

variable (Gall, Gall & Borg, 2007). This design is appropriate for the goals of this study, because

it enables the researcher to explore the differences between regular education and special

education teachers' levels of burnout and emotional empathy.

Special education teachers experience higher levels of burnout, reported additional stress,

and feel more exhausted and depersonalized than their counterparts working in mainstream

classrooms (Sarıçam, 2014). Thus, the researcher will compare the mean scores of regular and

special education teachers on the Maslach Burnout Inventory-Educators Survey since job

dynamics of special education teachers have been found to put them at higher risk for teacher

burnout. The researcher will also compare the mean scores of regular and special education

teachers on Questionnaire of Emotional Empathy (QUEE) to examine whether there is a statiscal

difference in emotional empathy between the two populations.

The current study was designed to advance understanding of the protective factors for burnout syndrome with a view to informing training programs designed to enhance teachers' resiliency and prevent professional attrition (De Stasio, Fiorilli, & Di Chiacchio, 2014).

Research Questions

RQ1: Is there a relationship between emotional empathy and burnout among regular education teachers?

RQ2: Is there a relationship between emotional empathy and burnout among special education teachers?

RQ3: Is emotional empathy stronger among special education teachers or regular education teachers?

RQ4: Is burnout stronger among special education teachers or regular education teachers?

Hypotheses

$H_0$1: There is no statistically significant correlation between emotional empathy, as measured by the Questionnaire of Emotional Empathy (QUEE), and teacher burnout, as measured by the Maslach Burnout Inventory- Educator Survey (MBI-ES), among regular education teachers.

$H_0$2: There is no statistically significant correlation between emotional empathy as measured by the Questionnaire of Emotional Empathy (QUEE), and teacher burnout, as measured by the Maslach Burnout Inventory- Educator Survey (MBI-ES), among special education teachers.

$H_0$3: There is no statistically significant difference in the level of emotional empathy, as measured by QUEE, between regular education and special education teachers.

H$_0$4: There is no statistically significant difference in the level of teacher burnout, as measured by MBI-ES, between regular education and special education teachers.

<h3 style="text-align:center">Participants and Setting</h3>

A convenience population sample of regular education and special education K-12 teachers will be drawn from the largest five, rural, school districts located in the same county of Pennsylvania. The participants will be a convenience group of teachers, chosen because of availability and close proximity to one another, from school districts within a regional geographic area (Warner, 2013). The participants make up a naturally occurring group of teachers.

The researcher will elicit 100 volunteer participants. Statistical power increases with sample size. Based on the values provided by Gall, et al. (2007), the minimum sample for a medium effect size with statistical power of .7 and a .05 alpha level is 100. The goal sample size of 100 is the minimum provided by Gall, et al., and (2007) and thus suitable to sanction a generalization of the study's findings to the entire teacher population of this county. This sample size ($n=100$) should also be satisfactory to allow for lack of response from the pre-selected teachers. Teachers who have agree to the online consent to participate will comprise the finalized participant group.

Though differences exist in subject taught, grade level taught, gender, racial ethnicity, and socioeconomic status among teachers, all teachers will hold a state teaching certificate and all will be currently employed, full-time teachers. All will have a bachelor's degree or higher. Each teacher will be classified as highly qualified and will have between 1 to 30 years in the classroom.

Overall, within the school districts of interest, the population of teachers is mainly female. Due to a 99% participation rate in unions among the districts, it is expected that all teachers will be union members as well.

The participants for this study are employed as full time employees within one of the five largest, rural public-school districts in the same county. The five, rural school districts accessible for this study will be labeled as school district 1, school district 2, school district 3, school district 4 and school district 5 to protect the privacy of participants. The county is among the poorest in the state. The median income is $39,363. The five school districts are all Title I eligible. The school districts of the participants range in size from 2,522 students to 4,321 students. The school districts selected are located within economically disadvantaged areas. More than half of the student body within each district lives in poverty as indicated by the students in the county that receive free and/or reduced lunch and are indicators of the county as a whole. (Table 1).

Table 1

Demographic Data on Free/Reduced Lunch

School District	Percentage of Free and/or Reduced Lunch
1	61.4
2	64.7
3	55.7
4	59.9
5	55.1

Note. School Poverty Data, (2012)

According to 2010 Census reported demographics for the county, the population of the county is 132,733 with 92.8% Caucasian, 4.7% African American, 1.7 % Two or More Races, <1% Asian, <1% Hispanic, and <1% Native American/Alaskan Native and Native Hawaiian/Pacific Islander with 49% of the population identified as female and 51% male. The demographics of the population of each of the five school districts is reflective of the overall population of the county.

Table 2

Demographic Data of the Population of Targeted School Districts in Western PA

School District	Caucasian % Population	Black % Population	Hispanic % Population	Multiracial % Population	Other % Population
1	92.2	4.0	0.7	2.6	0.6
2	91.2	2.5	1.8	3.3	1.2
3	95.1	1.3	0.6	2.6	0.4
4	88.4	7.0	1.1	2.7	0.9
5	76.1	17.5	1.0	4.6	0.8

Note. 2010 U.S. Census demographic data taken from United States Census Bureau, (2012)

Instrumentation

The Questionnaire Measure of Emotional Empathy (QMEE) and Maslach's Burnout Inventory-Educator Survey will be completed by the participants as the online survey of this study. (See Appendix E). The participants will complete the survey via SurveyMonkey. The researcher will collect data through SurveyMonkey.com and score results accordingly.

Questionnaire Measure of Emotional Empathy

The Questionnaire Measure of Emotional Empathy (QMEE), created by Mehrabian and Epstein (1972) was designed in order to measure the emotional, rather than cognitive aspects of

empathy (Mehrabian & Epstein, 1972). Prior to its creation, an adequate measure of emotional empathy did not exist. Since its development the QMEE has been used in a myriad of studies (Andre´asson & Dimburg, 2008; Marshal & Maric, 1996; Platsidou & Agaliotis, 2016). The QMEE scale measures empathy as the ability (a) to become emotionally aroused to the distress of another and (b) to take the other person's point of view, in order to have true empathy (Choplan, McCain, Carbonell and Hagen, 1985). The QMEE is divided into intercorrelated subscales, which were labeled by Mehrabian and Epstein (1972) as Appreciation of the Feelings of Unfamiliar and Distant Others, Extreme Emotional Responsiveness, Tendency To Be Moved by Others' Negative Emotional Experiences, Tendency to Be Moved by Others' Positive Emotional Experiences, Susceptibility to Emotional Contagion, Sympathetic Tendency, and Willingness to Be in Contact with Others Who Have Problems. The QMEE is a 33-item scale. The scoring scale ranges from minus four to plus four. Response to each item is +4 (very strong agreement), to -4 (very strong disagreement). Thus, the range of possible scores is minus 132 to plus 132 (Marshal & Maric, 1996). The higher the participant scores on the QMEE the higher his/her emotional empathy level. The ability to empathize varies between individuals, that is, some people are generally more successful in empathizing than others (Platsidou & Agaliotis, 2016). The purpose of this instrument is to measure the level of empathy (predictor variable) of each individual teacher in this study.

Reliability and validity. Experiments by Mehrabian and Epstein (1972) were designed to explore the validity of the Questionnaire Measure of Emotional Empathy in two distinctively different social situations involving aggression and helping behavior. Mehrabian and Epstein (1972) report a split half reliability of $r = .84$, and they demonstrated its validity by showing that scores on the measure predicted both aggression (low empathy subjects showed greater

aggression than high empathy subjects) and helping behavior (Marshal & Maric, 1996). The

measure was highly reliable and showed distinct validity in quite distinct settings (Mehrabian &

Epstein, 1972).

Further, in a very thorough review of empathy measures, Choplan, et al. (1985)

concluded that the Mehrabian and Epstein measure was one of the two empathy measures (the

other was the Hogan scale) having the most extensive support in terms of reliability and validity

(Marshal & Maric, 1996). Wilson et al. (2015) found that the QMEE scale had very good

internal reliability, Cronbach's $\alpha = 0.82$.

The Maslach Burnout Inventory - Educator Survey

Although researchers have developed several instruments to measure burnout, the

Maslach Burnout Inventory (MBI) is the most widely used tool (Szigeti, Balázs, Bikfalvi, &

Urbán, 2017). It has been adapted into many different languages (Kokkinos, 2006). Schaufeli

and Enzman (1998) estimated that as many as 90% of all studies examining occupational burnout

have used the MBI (Worley, Vasser, Wheeler, & Barnes, 2008). The MBI is a self-reporting

questionnaire that measures an individual's burnout on three subscales: emotional exhaustion,

which measures feelings of being emotionally exhausted by one's work; depersonalization,

which measures the person's removed feelings of their work; and personal accomplishment,

which measures the individual's level of self-confidence within their work. Some alternative

versions of the MBI for different sectors. There are three versions of the instrument: The General

Survey (MBI-GS), the Human Services Survey (MBI-HS), and the Educator Survey (MBI-ES)

(Maslach et al., 2010). The MBI-Educators' Survey (MBI-ES) was adapted for use among

educators. The MBI–ES is basically the same as the MBI-HS, with some minor changes in

wording, for example "recipient" was replaced with "student" (Szigeti et al., 2017).

The MBI-ES will be used to measure the criterion variable of burnout. The survey consists of 22 Likert Scale items ranging from 0 to 6. The scoring for the scale consists of zero equals never, one equals a few times a year or less, two equals once a month or less, three equals a few times a month, four equals once a week, five equals a few times a week, and six equals every day (Hallmon, 2015). The measure is comprised of three subscales: (a) emotional exhaustion (nine items), (b) depersonalization (five items), and (c) personal accomplishment (eight items) (Maslach & Jackson, 1981). The MBI-ES provides a sub-score based for each of the three subscales. A combination of high scores on emotional exhaustion and depersonalization, and a low score on personal exhaustion, correspond to a high level of burnout (Hallmon, 2015).

Before any descriptive analysis is completed, various responses will be recorded to reflect accuracy in reporting high or low indications of burnout. Because the subscale of personal accomplishment has an inverted scoring scale in comparison to the other subscales of emotional exhaustion and depersonalization, the researcher will reverse code the questions that are aligned with this subscale. Questions 6, 9, 11, 14, 19, 20, 21 and 23 of the MBI-ES will be reverse coded so that score zero transposed to six indicating a high level of burnout (Cooper, 2004). In turn, score one will be transposed to five, score two will be transposed to four, score three will remain a three, score four will be transposed to two, and score five will be transposed to one. This will ensure consistency with the low/high burnout classifications so that high scores on all subscales are reflected as high burnout and low scores on all subscales are reflected as low burnout. See Table 3.

Table 3

Reverse Coding of Personal Accomplishment MBI-ES

Original Score on MBI-ES	Recoded Score
0	6
1	5
2	4
3	3
4	2
5	1
6	0

Reliability and validity. Extensive research has been conducted on the use of the MBI for over 25 years (Maslach et al., 2013). Worley et al. (2008) provided a summary of 45 exploratory and confirmatory factor-analytic studies that examined the internal structure of scores obtained from the Maslach Burnout Inventory (MBI). The researchers summarized from years of validity studies that, while there is debate for alternative models of the original scale, there is substantial support for the original three-factor model.

Since the publication of the questionnaire, a level of alpha values has been found that oscillates between .81 and .92 (.89 in the original validation) in the emotional exhaustion dimension; the internal consistency level in personal accomplishment between .50 and .86, and in depersonalization between .57 and .82, the values proposed initially by the authors of the MBI in these two dimensions being .74 and .77 (Aguayo et al., 2011).

Fifty-one Cronbach's alpha coefficients from 45 empirical studies were analyzed, showing an average reliability of .88, .71, and .78, respectively for each dimension (Aguayo et al., 2011).

Byrne (1993) examined the validity of the Maslach Burnout Inventory among elementary ($N = 1159$), intermediate ($N = 388$), and secondary ($N = 1384$) educators and concluded that the MBI is a valid and reliable measure of burnout among educators.

Researchers tested each subscale for the Maslach Burnout MBI Educators Survey (MBI-ES) for burnout for reliability (Maslach et al., 1981). The survey was found to be valid and reliable. Internal consistency was estimated for the MBI-ES with Cronbach's coefficient alpha (N = 1,316) (Maslach et al., 1981). The reliability coefficients for the subscales are ―.79 for Emotional Exhaustion, .79 for Depersonalization, and .71 for Personal Accomplishment‖ (Maslach et al., 1996). See Table 4.

Table 4

Maslach Burnout Inventory- Educators Survey Internal Consistency

Variables	Cronbach's alpha
Emotional Exhaustion	0.79
Depersonalization	0.71
Personal Achievement	0.82

Adapted from Hallmon, 2015

Special qualifications are not needed for MBI except the perception that there should be no perceived authority over respondents such as those in supervisory roles (Maslach et al., 2011). The researcher does not have an authority or supervisory relationship with any of the participants. Permission to use the instrument was granted through Research Gate (see appendix A).

MBI-ES is an instrument that can validly measure the prevalence of the syndrome among teachers; moreover, the measure can both serve as a preventive, in the sense that it will assist in the identification for those teachers at risk, as well as a diagnostic one including implications for for interventions (Kokkinos, 2006).

Demographic Questionnaire

This study will include a Demographic Questionnaire containing one question. The participants will be asked to indicate job title. The survey item is phrased as: Please indicate your current job title (Regular Education Teacher, Special-Education Teacher). To indicate the ordinal data, dummy coding will be used (Warner, 2013). The following numerical values will be assigned to responses: 0= Regular Education Teacher and 1= Special Education Teacher. If a participant is neither a regular education teacher nor a special education, the survey will conclude and thank the user for their time.

<div align="center">

Procedures

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Human participants will be used in this study. Thus, the researcher will take great care to protect the participants' right to respect, privacy, confidentiality and safety measures. Since this study is non-experiment, no treatment will be given to any participants.

Human subjects research is governed by numerous guidelines, regulations, and policies (IRB, 2018). Prior to collecting data, paperwork will be filed with the Liberty University Institutional Review Board (IRB). The IRB will review the paperwork to ensure that all research conducted by researcher is done in accordance with federal regulations and university policy (IRB, 2018). Once approval is granted by the IRB committee, the researcher will seek approval from the five accessible school districts.

The researcher will initiate contact with each superintendent by sending a letter requesting permission to solicit teacher participants (see Appendix C). In addition, each superintendent will also receive an example of the letter of informed consent that teachers will receive (See Appendix D) which will provide him/her with an overview and purpose of the study, the risks/benefits, and data collection. Also included, will be a copy of the IRB approval (see Appendix B) with a request permission to contact teachers via school email.

Upon approval, the researcher will then contact superintendents of the districts via email. The superintendents will mass email staff. Within the email, each teacher will be directed to a secured survey link. The participants inducted for this study will complete an online survey. The survey will be generated using SurveyMonkey.com. Thus, each participant needs to have access to a web browser and the ability to use it (Gall, Gall & Borg, 2007).

The teachers will be informed that they must agree to consent before the survey begins. The consent (see Appendix D) includes an overview of the study along with risk and benefits of participating. If the teacher does not agree with the terms of consent, the survey will end. With consent indicated by clicking "I agree", the teacher will be prompted to answer 1 demographic question and 55 Likert scale items for a total of 56 items. The items are taken directly from the Maslach Burnout Inventory-Educator Survey (MBI-ES) and the Questionnaire Measure of Emotional Empathy (QMEE). The teachers will complete the MBI-ES and the QMEE online. The survey will take approximately 15 minutes. All questions must be answered before the participant will be able submit his/her survey. The participant will be unable to submit a survey that is only partially completed. Upon conclusion of the survey, a thank you for participation screen will emerge that will also provide the participant with the researchers contact information.

The participants of this study will have the option of completing the online survey in an environment of their choosing. Researchers are finding that through the use of the Internet they can survey types of respondents who would be otherwise difficult to reach (Gall, Gall & Borg, 2007). Permitting the participants to complete the survey online will likely increase participation among both the regular education and special education teachers. All data will be imported directly from SurveyMonkey to SPSS for analysis.

The participants will be given a window of two weeks to complete the survey. Teachers who give consent and complete the online survey in totality will become official participants in the study. SurveyMonkey will record all the scores. The researcher will score and analyze all the inventories that are voluntarily returned. Data will be securely kept for three years and then permanently deleted.

Data Analysis

This quantitative study utilizes a combination of predictive and causal-comparative methodologies. Predictive research design is used to predict scores on one variable from research participant's scores on another variable (Gall, Gall & Borg, 2007). Causal-comparative designs are used to determine whether the groups differ on the independent variable (Gall, Gall Borg, 2007).

Various correlational techniques can be used to analyze the degree of relationship between variables (Gall, Gall & Borg, 2007). Because two variables, burnout (criterion) and emotional empathy (predictor) are involved, a simple linear regression will be used to examine and predict the relationship between the two. This technique is appropriate because the MBI-ES and the QMEE are being administered to the same group of teachers and will result in two sets of continuous scores. According to Allen (2010), regression models expand on correlational

assumptions by allowing the researcher to determine the how, and to what extent, the criterion variable (burnout) changes as a function of changes in the predictor variable (emotional empathy). In this case, a simple linear regression is the most stable technique.

Further, the researcher will compare the difference between the mean scores of regular education teachers and special education teachers on The Maslach Burnout MBI-Educators Survey (MBI-ES) and The Questionnaire Measure of Emotional Empathy (QMEE). In comparative-causal research, the most common test to find the difference between means is the *t*-test (Gall et. al, 2007). The independent samples *t* -test will be used to examine the mean scores (on each survey) of regular education and special education teacher for statistical significance. The *t*-test is appropriate as it tests the significance between two samples (regular and special education teachers) to determine whether they are significantly different from each other on an independent variable (mean score) (Gall et. al, 2007).

Assumption Testing

The validity of the linear regression requires that the data pass five assumptions. First, both the predictor and criterion variables will be confirmed to be two continuous scores on a continuous scale. Secondly, the variables must have a linear relationship which the research will determine by inspecting a scattergram. The assumption of linearity will be met if a linear relationship emerges between the criterion and predictor variables. If the scattergrams for research data indicate that the relationship between the two variables is markedly non-linear, the researcher will compute the correlation ratio (eta) (Gall, Gall & Borg, 2007). If no linear line can be formed, no correlation exists. Thirdly, the assumption of homoscedasticity must be met. To ensure this assumption, the scatterplot of standardized residuals and standardized predicted values must show no pattern. Fourthly, the data must normally distributed. To ensure this

assumption, the researcher will run descriptive statistics to examine distribution and variance of the participant's scores. This will be completed using the Shapiro-Wilk test of normality. Lastly, the researcher will look for outliers. Scattergrams will be used to diagram correlations to see underlying trends in the data. Prior to the analysis, the researcher will remove extreme scores as identified at the upper or lower ends of the distribution (Warner, 2013).

Null Hypotheses One and Two

Null Hypotheses One and Two will both be tested using a simple linear regression. Simple linear regression is the appropriate statistical technique because it examines the relationship between two continuous variables and predicts the value of the predictor variable based upon the values of the criterion variable which aligns with the goals of this study.

Provided that the data has met the assumptions of linearity, normal distribution, homoscedasticity, and have no outliers, the researcher will calculate the correlation coefficient (Pearson's *r)* using SPSS. This coefficient signifies the degree that low or high scores on one variable (burnout) correlate with low or high scores on another variable (emotional empathy). The *r* value will be considered to determine the relationship between the variables (Warner, 2013). Pearson's *r* has values that range from -1.00 (perfect negative relationship) to +1.00 (perfect positive relationship) (Warner, 2013). A value of 0 indicates no relationship.

A simple linear regression will then be run in SPSS to quantify the relationship between the criterion (burnout) and predictor variable (emotional empathy. *P*-values and coefficients are the key regression outputs- collectively these statistics indicate whether the variables are statistically significant and describe the relationship between the criterion and predictor variables (Frost, 2019).

The slope coefficient will be examined to reveal the amount of change in burnout that can be expected as a result from a unit increase in emotional empathy. This coefficient allows the researcher to predict the value of one variable (burnout) based on the value of another (emotional empathy).

The p-value will be examined to indicate whether the relationship between teacher burnout and emotional empathy is statistically significant. The *p*-value measures how reliable the finding is and whether the result is due to chance or to a real correlation in the population. The p-value is a probability that ranges from 0 to 1. A *p*-value >.5 suggests the effect is not significant and that changes in the predictor are not associated with changes in the criterion. If the *p*-value is < .5, the effect is significant and the null hypothesis will be rejected.

The R^2 coefficient (the coefficient of determination), will be examined to describe the nature of the relationship between teacher burnout and emotional empathy scores. R^2 is the primary measure of how well the regression model fits the data (Frost, 2019). The validity of the R^2 is based on several assumptions (data is continuous, data values are independent of each other, samples are from normal distribution and a linear relationship exists between variables). The range of R^2 is 0 to 1. A higher coefficient is an indicator of a better goodness of fit. An R^2 below .05 reveals too small an effect to be considered meaningful. An R^2 of .05 and above reveals a small but meaningful effect. An R^2 of .10: reveals a moderate effect. And an R^2 of above .25 reveals a large effect.

To ensure a rigorous test of the first and second null hypotheses and to minimize the risk of a Type I error, an alpha level of .05 is selected . . . and to be certain to reject a false null hypothesis, a .7 power level will be applied to be consistent with sample size of 100 and a medium effect size (Gall, Gall, & Borg, 2007). Confidence level of .95 will enable researchers to

estimate population values from the statistical findings. Cohen's d will be used to measure effect size.

Null Hypotheses Three

The third null hypothesis explores the difference between the mean scores of the teachers' levels of emotional empathy by dividing them into two groups, regular education and special education. Provided the data meets the assumptions of linearity, normal distribution and no outliers, the researcher will run an independent samples *t*-test comparing the regular education and special education teachers mean scores on the Questionnaire of Emotional Empathy (QUEE). The independent samples *t*-test compares the means between two related groups (regular and special education teachers) on the same continuous, dependent variable, (emotional empathy score). Statisticians have found that independent *t*-tests provide accurate estimates of statistical significance even under conditions of substantial violation of assumptions (Gall et. al, 2007). Statistical significance will be investigated using the *p*-value. A two-tailed test will be used because the test is non-directional which is appropriate for the current study as it did not propose a particular direction of the associations between variables (Harmon, 2009). This score will score will reveal if the two means are significantly different. If the Sig. (2-tailed) value is less than or equal to 0.05, there is a significant difference between the two groups. If the Sig. (2-tailed) value is greater than 0.05, there is no significant difference.

Null Hypotheses Four

The fourth hypothesis investigates the difference between the mean scores of the teachers' levels of emotional empathy of the two groups, regular education and special education. The researcher will run independent samples *t*-test comparing the regular education and special education teachers mean scores on the Maslach Burnout Inventory- Educator Survey

(MBI-ES). As with null hypothesis three, the data must meet the assumptions of linearity, normal distribution and have no outliers. Statistical significance will be investigated using the *p*-value. A two-tailed test will be used because the test is non-directional which is appropriate for the current study as it did not propose a particular direction of the associations between variables (Harmon, 2009). This score will reveal if the two means are significantly different. If the Sig. (2-tailed) value is less than or equal to 0.05, there is a significant difference between the two groups. If the Sig. (2-tailed) value is greater than 0.05, there is no significant difference.

CHAPTER FOUR: RESULTS

Overview

Chapter four presents a discussion of the research methodology and results of the statistical analysis. The purpose of this study was to explore the relationship between emotional empathy and burnout among K-12 public school teachers. Survey data were collected from 100 public school teachers. The data was evaluated by the researcher and results are organized and discussed by research question and hypotheses. Results were determined to be statiscally significant at the $p<.01$ level. A simple linear regression analysis was performed in an effort to determine how much of the outcome variance can be attributed to the model of the predictor. An independent samples *t*-test analysis was performed to determine whether regular education and special education teachers differed in the variables of burnout and emotional empathy.

Research Question

RQ1: Is there a relationship between emotional empathy and burnout among regular education teachers?

RQ2: Is there a relationship between emotional empathy and burnout among special education teachers?

RQ3: Is emotional empathy stronger among special education teachers or regular education teachers?

RQ4: Is burnout stronger among special education teachers or regular education teachers?

Null Hypotheses

$H_0 1:$ There is no statistically significant correlation between emotional empathy, as measured by the Questionnaire of Emotional Empathy (QUEE), and teacher burnout, as measured by the Maslach Burnout Inventory- Educator Survey (MBI-ES), among regular education teachers.

$H_0 2:$ There is no statistically significant correlation between emotional empathy as measured by the Questionnaire of Emotional Empathy (QUEE), and teacher burnout, as measured by the Maslach Burnout Inventory- Educator Survey (MBI-ES), among special education teachers.

$H_0 3:$ There is no statistically significant difference in the level of emotional empathy, as measured by QUEE, between regular education and special education teachers.

$H_0 4:$ There is no statistically significant difference in the level of teacher burnout, as measured by MBI-ES, between regular education and special education teachers.

Descriptive Statistics

This study was conducted within five school districts located in the same rural county of Pennsylvania. The school districts of the participants range in size from 2,522 students to 4,321 students. All of the districts qualify as Title I and are located within economically disadvantaged areas. Of the total participants ($N=100$), 100% were teaching in Title I schools. More than half of the student body within each district lives in poverty as indicated by the students in the county that receive free and/or reduced lunch and are indicators of the county as a whole.

A convenience population sample of regular education and special education K-12 teachers was drawn. The participants are a convenience group of teachers, chosen because of availability and close proximity to one another, from school districts within a regional

geographic area (Warner, 2013). The participants make up a naturally occurring group of teachers.

One hundred (*N*= 100) K-12 public school teachers completed the Maslach Burnout Inventory-Educator Survey (MBI-ES) Questionnaire of Emotional Empathy (QUEE). Of the total participants 50% were regular education teachers (*n=50*) and 50% were special education teachers (*n=50*).

Table 5

Participant Demographic Variables

Demographic Variables		Frequency	Percent
Job Title	Regular Education Teacher	50	50%
	Special Education Teacher	50	50%

According to 2010 Census reported demographics for the county, the population of the county is 132,733 with 92.8% Caucasian, 4.7% African American, 1.7 % Two or More Races, <1% Asian, <1% Hispanic, and <1% Native American/Alaskan Native and Native Hawaiian/Pacific Islander with 49% of the population identified as female and 51% male. There is limited diversity among participants. The demographics of the participants (*N=100*) is reflective of the overall population of the county.

Though differences exist in subject taught, grade level taught, gender, racial ethnicity, and socioeconomic status among teachers, all teachers (*N=100*) hold a state teaching certificate and 100% are currently employed, full-time public school teachers. All have a minimum of 1-year, full-time teaching experience. Further, 100% have a bachelor's degree or higher. No other identifying information was taken in the participant survey. The descriptive statistics of these groups can be found in Table 6.

Table 6

Descriptive Statistics

Descriptives				Statistic	Std. Error
teachertype					
MBI	Reg Ed	Mean		43.9800	2.78839
		95% Confidence Interval for Mean	Lower Bound	38.3765	
			Upper Bound	49.5835	
		5% Trimmed Mean		43.9222	
		Median		42.5000	
		Variance		388.755	
		Std. Deviation		19.71686	
		Minimum		9.00	
		Maximum		85.00	
		Range		76.00	
		Interquartile Range		29.00	
		Skewness		-.056	.337
		Kurtosis		-.714	.662
	Spec Ed	Mean		37.1400	2.20963
		95% Confidence Interval for Mean	Lower Bound	32.6996	
			Upper Bound	41.5804	
		5% Trimmed Mean		36.9222	
		Median		36.5000	
		Variance		244.123	
		Std. Deviation		15.62443	
		Minimum		9.00	
		Maximum		68.00	
		Range		59.00	
		Interquartile Range		24.00	
		Skewness		.130	.337
		Kurtosis		-.971	.662
QUEE	Reg Ed	Mean		33.2800	3.20485
		95% Confidence Interval for Mean	Lower Bound	26.8396	
			Upper Bound	39.7204	
		5% Trimmed Mean		33.0222	
		Median		32.0000	
		Variance		513.553	
		Std. Deviation		22.66170	
		Minimum		-10.00	
		Maximum		79.00	
		Range		89.00	
		Interquartile Range		40.00	
		Skewness		.231	.337
		Kurtosis		-.988	.662
	Spec Ed	Mean		35.2400	3.04464
		95% Confidence Interval for Mean	Lower Bound	29.1216	
			Upper Bound	41.3584	
		5% Trimmed Mean		35.2444	
		Median		34.5000	
		Variance		463.492	
		Std. Deviation		21.52887	
		Minimum		-10.00	
		Maximum		89.00	
		Range		99.00	
		Interquartile Range		30.25	
		Skewness		.017	.337
		Kurtosis		-.191	.662

Results

Hypothesis One

Research Question 1 asked "Is there a relationship between emotional empathy and burnout among regular education teachers?" This research question had one related hypothesis.

Null Hypothesis One predicted that, "There is no statistically significant correlation between emotional empathy, as measured by the Questionnaire of Emotional Empathy (QUEE), and teacher burnout, as measured by the (MBI-ES), among regular education teachers." A simple linear regression was conducted to evaluate the null hypothesis. The sample consisted of 50 regular education teachers ($n= 50$).

Prior to conducting the linear regression, assumption testing was conducted. Assumptions testing for linear regression requires that five assumptions be met: (1) both the predictor and criterion variables are confirmed to be two continuous scores on a continuous scale, (2) the variables have a linear relationship, (3) the data must normally distributed, (4) there should be no significant outliers, and (5) there is homoscedasticity (Gall, Gall & Borg, 2007)..

The assumption that there were no outliers was evaluated using boxplots. The data had no outliers (see Figure 1).
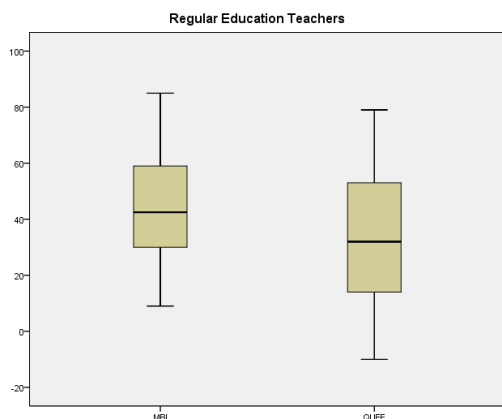
Figure 1. Boxplots for MBI-ES and QUEE of Regular Education Teachers.

The assumption of normality was evaluated using the Shapiro-Wilk test of normality (see Figures 2 and 3) and a *p*-plot (see Figures 4). The normality assumption was not violated in either case. The examination of a histogram for both the QUEE and MBI-ES with a superimposed normal curve demonstrated no gross violations of the assumption of normality.
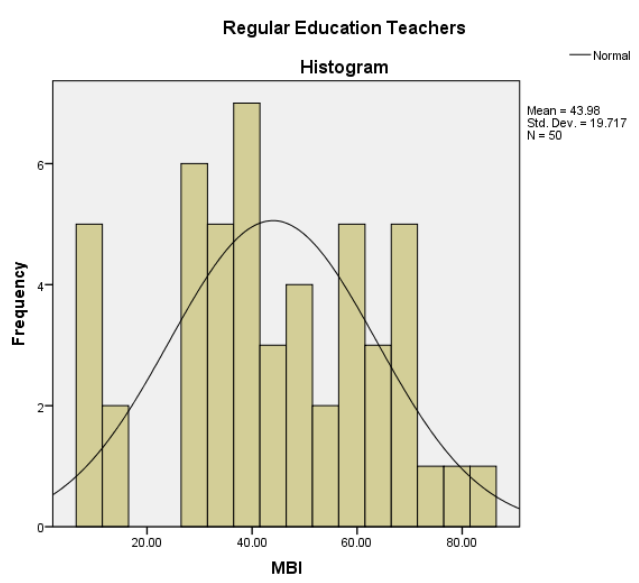

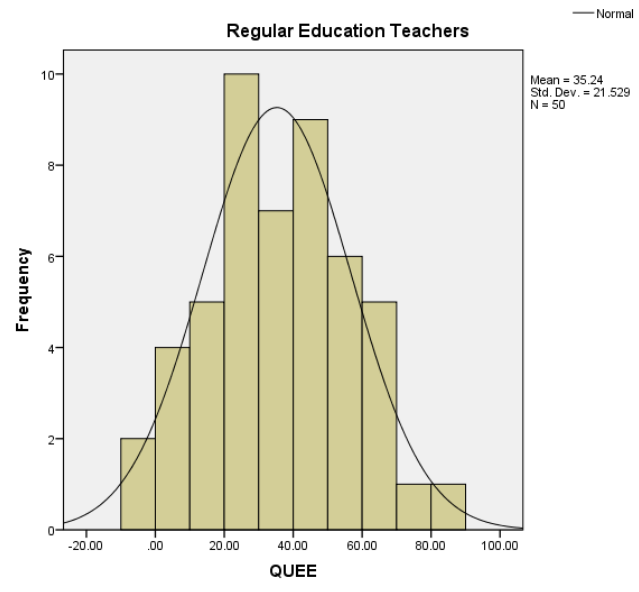*Figure 2.* Histogram of MBI-ES for Regular Education Teachers.
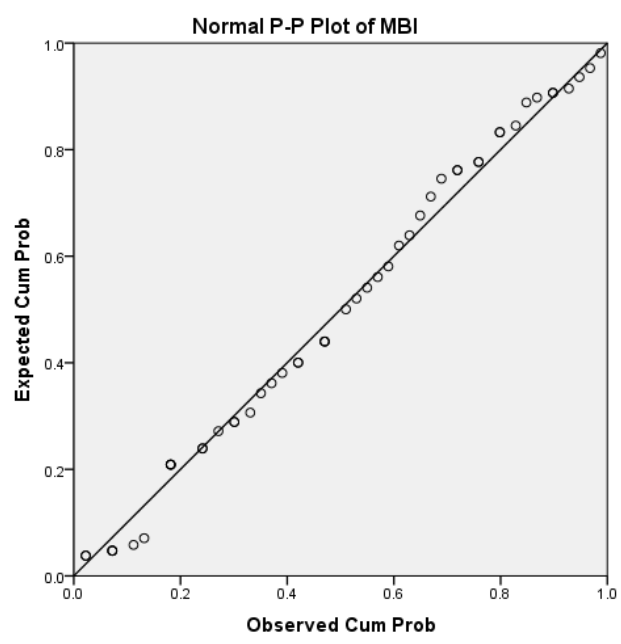

Figure 3. Histogram of QUEE for Regular Education Teachers.

Figure 4. P-plot of MBI-ES for Regular Education Teachers.

Assumptions of homoscedasticity and linearity were evaluated using scatter plots. Based on visual inspection, the scatter plots indicated a linear relationship between the variables and homoscedasticity was acceptable.
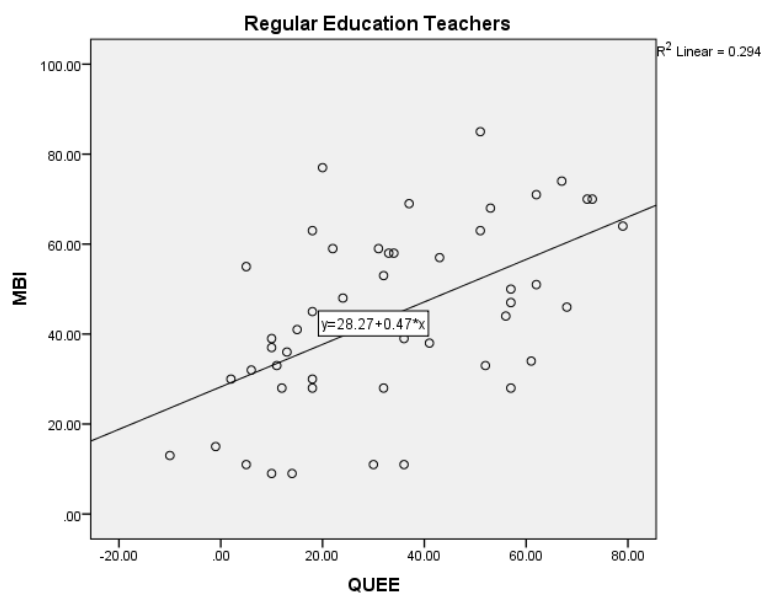

Figure 5. Scatterplot for Regular Education Teachers.

No violation of assumptions indicated that a simple linear regression was not appropriate. Therefore, the simple linear regression was conducted.

A linear regression analysis was calculated to evaluate the prediction of burnout scores from the overall emotional empathy scores for special education teachers (N=50). The results were statistically significant $F(1, 48) = 20.017$, $p < 0.00$ with an R^2 of .294. Cohen's d was calculated as 0.338 which reveals a moderate effect size. Thus, the null hypothesis was rejected. The association between burnout and emotional empathy was a moderate positive indicating that as emotional empathy increased, burnout increased. Participants' predicted burnout is equal to 28.272 + .472 (empathy) points when empathy is measured in points. Burnout increased .472 points for each point of emotional empathy. The 95% confidence interval for the slope, y=28.27 + 0.47*x , does not contain the values of zero and therefore the overall burnout score is significantly related to the overall emotional empathy score. The correlation between the burnout index and the empathy index was .542. Approximately 29% of the variance of the burnout score was accounted for by its linear relationship with the emotional empathy scores.

Hypotheses Two

Research Question 2 asked "Is there a relationship between emotional empathy and burnout among special education teachers?" This research question had one related hypothesis.

Null Hypothesis Two predicted that, "There is no statistically significant correlation between emotional empathy as measured by the Questionnaire of Emotional Empathy (QUEE), and teacher burnout, as measured by the (MBI-ES), among special education teachers." A simple linear regression was conducted to evaluate the null hypothesis. The sample consisted of 50 special education teachers (n=50).

Prior to conducting the linear regression, assumption testing was conducted. Assumptions testing for linear regression requires that five assumptions be met: (1) both the predictor and criterion variables are confirmed to be two continuous scores on a continuous scale, (2) the variables have a linear relationship, (3) the data must normally distributed, (4) there should be no significant outliers, and (5) there is homoscedasticity (Gall, Gall & Borg, 2007)..

The assumption that there were no outliers was evaluated using boxplots. No extreme outliers were found.
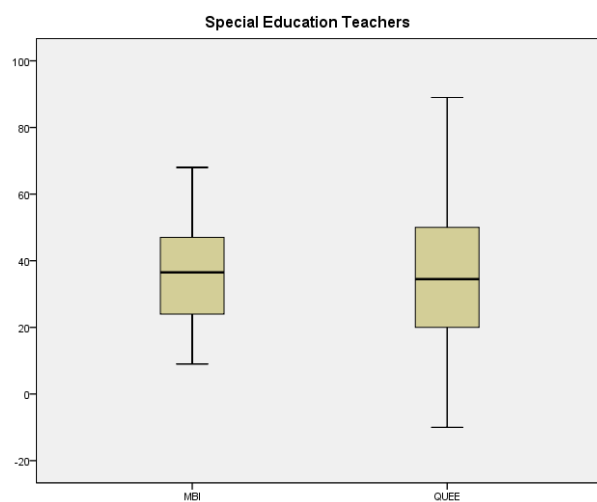

Figure 6. Boxplots of MBI-ES and QUEE for Special Education Teachers.

The assumption of normality was evaluated using the Shapiro-Wilk test of normality (see Figures 7 and 8) and a *p*-plot (see Figure 9). The normality assumption was not violated in either case. The examination of a histogram for both the QUEE and MBI-ES with a superimposed normal curve demonstrated no gross violations of the assumption of normality.
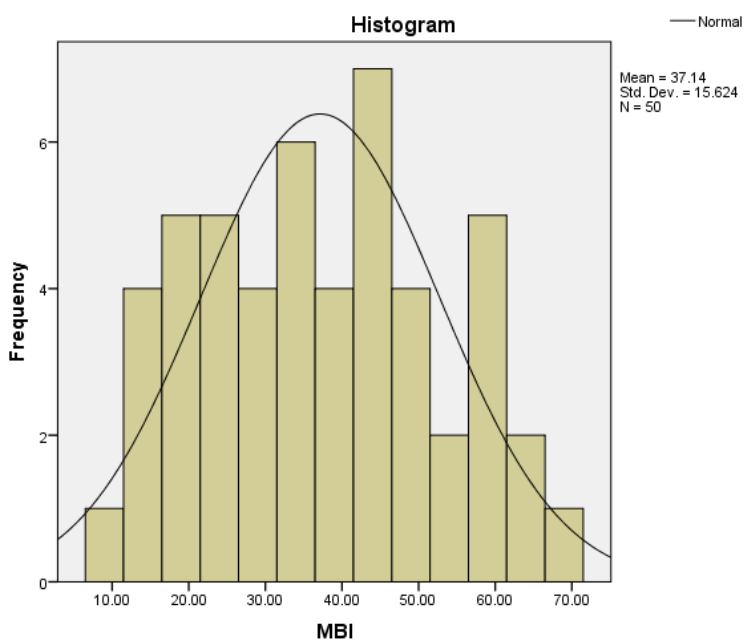
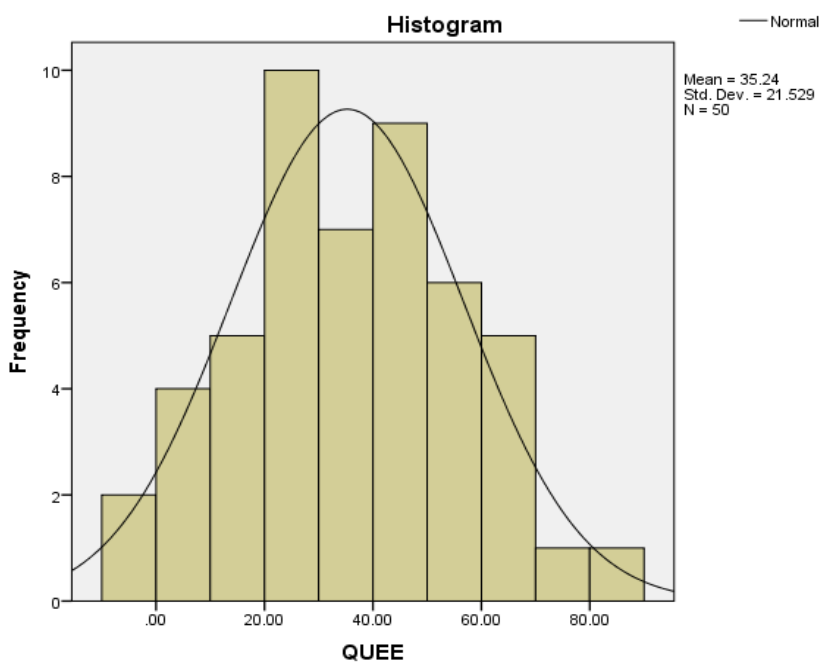*Figure 7*. Histogram of MBI-ES scores for special education teachers.

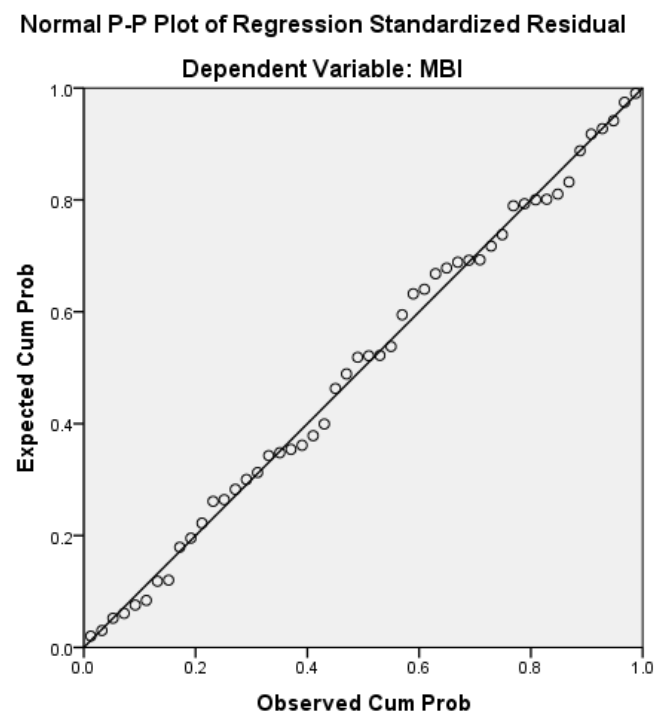*Figure 8*. Histogram of QUEE for special education teachers.

Figure 9. *P*-plot for Special Education Teachers.

Assumptions of homoscedasticity and linearity were evaluated using scatter plots. Based on visual inspection, the scatter plots indicated a linear relationship between the variables and homoscedasticity was acceptable.
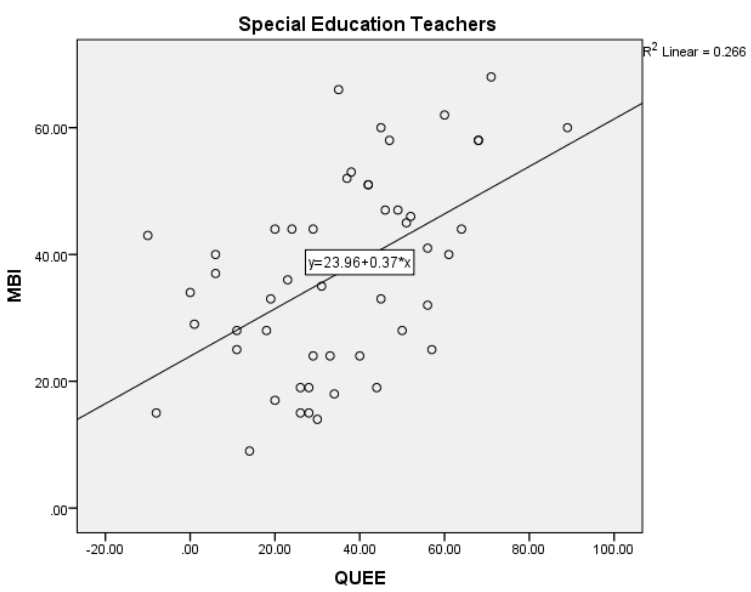

Figure 10. Scatterplot for Special Education Teachers.

No violation of assumptions indicated that a simple linear regression was appropriate. Therefore, the simple linear regression was conducted.

A linear regression analysis was calculated to evaluate the prediction of burnout scores from the overall emotional empathy scores for special education teachers (N=50). The results were statistically significant $F(1, 48) = 17.335$, $p < 0.00$ with an R^2 of .266. Cohen's d was calculated as 0.389 which reveals a moderate effect size. Thus, the null hypothesis was rejected. The association between burnout and emotional empathy was a moderate positive indicating that as emotional empathy increased, burnout increased. Participants' predicted burnout is equal to 23.955 + .374 (empathy) points when empathy is measured in points. Burnout increased .374 points for each point of emotional empathy. The 95% confidence interval for the slope, y=23.96 + .37*x , does not contain the values of zero and therefore the overall burnout score is significantly related to the overall emotional empathy score. The correlation between the burnout index and the empathy index was .516. Approximately 27% of the variance of the burnout score was accounted for by its linear relationship with the emotional empathy scores.

Hypotheses Three

Research Question 3 asked "Is emotional empathy stronger among special education teachers or regular education teachers?" This research question had one related hypothesis.

Null Hypothesis Three stated that, "There is no statistically significant difference in the level of emotional empathy, as measured by QUEE, between regular education and special education teachers." An independent samples t-test was conducted to evaluate the null hypothesis.

Prior to conducting the independent samples t-test, assumption testing was conducted. Assumptions testing for independent samples t-test requires that five assumptions be met: (1)

both the predictor and criterion variables are confirmed to be two continuous scores on a continuous scale, (2) should have two categorical independent groups, (3) the data must normally distributed, (4) there should be no significant outliers, and (5) should have independence of observations, and (6) homogeneity of variances (Gall, Gall & Borg, 2007).

Box and whisker plots were used to detect outliers on each dependent variable. No outliers were identified.
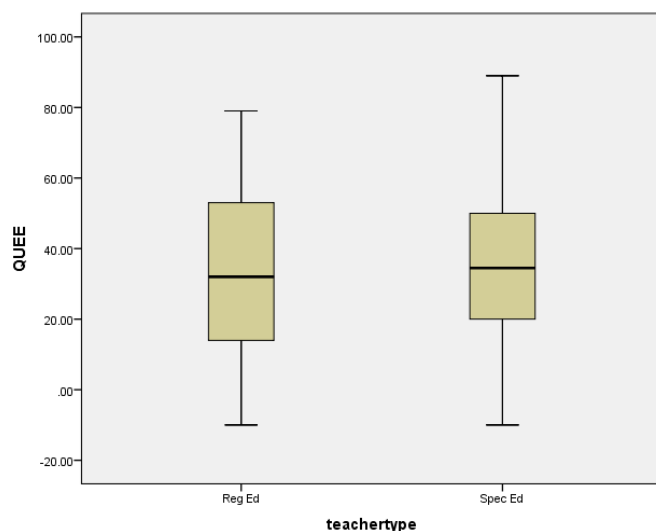

Figure 11. Boxplot of QUEE for Regular and Special Education Teachers.

The Shapiro-Wilk test of normality was used to test the assumption of normality for the QUEE scores for each group of teachers. The findings were insignificant. Thus, normal distribution is assumed.

Table 7

Shapiro-Wilk test of normality for QUEE

Group	Shapiro-Wilk Statistic	p
Group 1: Regular Education Teachers	.962	.112
Group 2: Special Education Teachers	.993	.993

The assumption of homogeneity of variance was determined using the Levene's Test of Equality of Error Variance. The Levene test was not significant, where $F(1, 98) = .496$, $p = .483$. Equal variances of the independent samples *t*-test were assumed.

Table 8

Test of Homogeneity of Variance for QUEE

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
QUEE	Based on Mean	.496	1	98	.483
	Based on Median	.459	1	98	.500
	Based on Median and with adjusted df	.459	1	97.876	.500
	Based on trimmed mean	.483	1	98	.489

With all assumptions being met, an independent-samples *t*-test was then conducted to compare the mean emotional empathy scores of regular (*n=50*) and special education teachers (*n=50*). The test was not significant, $t(98) = -.443$, $p = .658$, two-tailed. Thus, the researcher failed to reject the null hypothesis. There was no significant difference in the scores for emotional empathy among regular education teachers (*M*=33.2800, *SD*=22.66170) and special education teachers (*M* = 35.2400, *SD* = 21.52887). These results suggest that there is no significant difference in QUEE scores among regular and special education teachers.

Hypotheses Four

Research Question 4 asked "Is burnout stronger among special education teachers or regular education teachers?" This research question had one related hypothesis.

Null Hypothesis Four stated that, "There is no statistically significant difference in the level of teacher burnout, as measured by MBI-ES, between regular education and special education teachers."

Answering this question required an independent samples *t*-test, which tested the null hypothesis that there is no difference in the MBI-ES between regular education teachers and special education teachers.

Prior to conducting the independent samples *t*-test, assumption testing was conducted. Assumptions testing for independent samples *t*-test requires that five assumptions be met: (1) both the predictor and criterion variables are confirmed to be two continuous scores on a continuous scale, (2) should have two categorical independent groups, (3) the data must normally distributed, (4) there should be no significant outliers, and (5) should have independence of observations, and (6) homogeneity of variances (Gall, Gall & Borg, 2007).

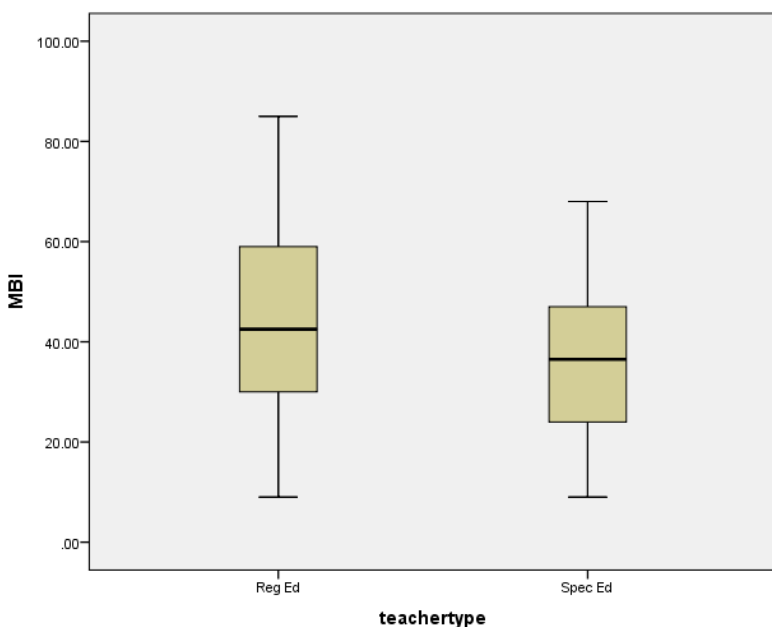Box and whisker plots were used to detect outliers on each dependent variable. No outliers were identified.

Figure 12. Boxplot of MBI-ES for Regular and Special Education Teachers.

The Shapiro-Wilk test of normality was used to test the assumption of normality for the MBI scores for each group of teachers. The findings were insignificant. Thus, normal distribution is assumed. Table 9 shows the results of the Shapiro-Wilk test.

Table 9

Shapiro-Wilk test of normality for MBI-ES

Group	Shapiro-Wilk Statistic	p
Group 1: Regular Education Teachers	.971	.258
Group 2: Special Education Teachers	.968	.185

The assumption of homogeneity of variance was determined using the Levene's Test of Equality of Error Variance. The Levene Test was not significant, where $F(1, 98) = 2.331$, $p = .130$. Equal variances of the independent samples t-test were assumed.

Table 10

Levene's Test of Variance for MBI-ES

Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
MBI	Based on Mean	2.331	1	98	.130
	Based on Median	2.305	1	98	.132
	Based on Median and with adjusted df	2.305	1	89.743	.132
	Based on trimmed mean	2.337	1	98	.130

With all assumptions being met, an independent-samples t-test was then conducted to compare the mean burnout scores of regular and special education teachers ($N=100$). The test was not significant, $t(98)=1.923$, $p = .057$, two-tailed. Thus, the researcher failed to reject the null hypothesis. There was no significant statistical difference in the mean scores for burnout among regular education teachers ($M=43.9800$, $SD=17.71686$) and special education teachers ($M=37.1400$, $SD= 15.62443$). These results suggest that that burnout is not more prevalent among any particular type of teacher.

CHAPTER FIVE: DISCUSSION

Overview

Chapter five begins with a review of this study and its purpose. The discussion portion compares and contrasts the results of the present study with findings from earlier studies in related literature, where applicable. Chapter five also presents the implications of the present study's outcomes, the limitations of the present study, and recommendations for future research.

Discussion

The purpose of this study was to explore the relationship between emotional empathy and teacher burnout among K-12 public school teachers. This study used predictive and causal comparative analysis to examine the relationship between emotional empathy and teacher burnout among regular and special education teachers.

A convenience, sample population of regular education and special education K-12 teachers were drawn from the five, largest, rural school districts located in the same county of Pennsylvania. This survey included two instruments, the Maslach Burnout Inventory Educator Survey (MBI-ES) (Maslach, 2003) and the Questionnaire of Emotional Empathy (QUEE). A simple linear regression was used to analyze data and determine if there is a relationship between emotional empathy (predictor variable) and burnout (criterion variable). An independent samples *t*-test was conducted to explore whether emotional empathy and burnout are stronger among a certain type of teacher.

Emotional empathy was defined as the vicarious emotional response to the perceived emotional experiences of others (Mehrabian & Epstein, 1972). The total score of the Questionnaire of Emotional Empathy (QUEE) was used to measure the level of emotional empathy of regular and special education teachers. Burnout is a psychological syndrome that

involves prolonged response to stressors in the workplace (Maslach, 2001). The total score of the Maslach Burnout Inventory-Educator Survey (MBI-ES), after reverse coding the subscale of personal accomplishment, was used to measure burnout among regular and special education teachers.

In addition, the self-reported Questionnaire of Emotional Empathy (QUEE) scores of regular education teachers was compared with special education teachers. The self-reported Maslach Burnout Inventory-Educator Survey (MBI-ES) scores of regular education teachers was compared with special education teachers.

Research Questions One and Two

Research question one asked, "Is there a relationship between emotional empathy and burnout among regular education teachers?" Answering this question required a linear regression analysis, which tested the null hypothesis that a regular education teacher's burnout could not be predicted by their level of emotional empathy. The corresponding null hypothesis was rejected

Research question two asked, "Is there a relationship between emotional empathy and burnout among special education teachers?" Answering this question also required a linear regression analysis, which tested the null hypothesis that a special education teacher's burnout could not be predicted by their level of emotional empathy. The corresponding null hypothesis was rejected.

As concluded by this study, there is a positive, predictive relationship between burnout and emotional empathy among both regular education teachers and special education teachers. As indicated by simple linear regression, in both cases, burnout increases as emotional empathy increases. This implies that emotional empathy is a predictor of burnout among regular education

and special teachers alike.

Past research on empathy and burnout is fitting with this study. A considerable amount of research has been done on the relationship between emotional empathy levels and burnout among those in the medical profession, especially nurses. According to a study by Martínez et al. (2015) there is a significant relationship between the dimensions of burnout and the empathy construct. This relationship occurs between emotional exhaustion and empathetic stress. In many of these studies, high levels of emotional empathy were found to be predictors of job burnout (Molaro, Perez-Fuentes, Linares, & Martin 2018).

The literature also indicates that burnout is extensively experienced among professionals providing social and human services, including teachers at all levels of education (De Stasio et al., 2017). Helping professions, like teaching and nursing, are considered relationship-intensive careers (Loyola, 2006). Helping others costs mental resources (DeWall, Baumeister, Gaillot, & Maner, 2008). A great deal of mental and emotional energy is required on a daily basis. Helping professions, in general, are potentially high-effort, low reward occupations (Adams et al., 2017). Thus, helping is an exhausting business, that's likely why we have so much burnout (Keith-Lucas, 2010).

Research Question Three

Research question three asked, "Is emotional empathy stronger among special education teachers or regular education teachers?" Answering this question required an independent samples *t*-test, which tested the null hypothesis that no statistically significant difference in the level of emotional empathy, as measured by QUEE, between regular education and special education teachers. The null hypothesis failed to be rejected and was accepted.

A review of the research suggested that teaching special education may require even

higher levels of emotional empathy than teaching regular education, because special educators empathize with their students in order to become highly committed to the implementation of a creative and flexible instruction which attends the specific psycho-pedagogical and socio-emotional needs of these students (Pearce, Gray, & Campbell-Evans, 2009). Students with special needs require added attention and support. This constitutes increased emotional work for teachers which, over time, may lead to emotional exhaustion, a component of burnout. Despite this, the present study did not find a difference between regular and special education teachers in emotional empathy levels.

Both regular education and special education teachers chose careers in helping professions. Thus, this similarity may be the reason that there is no difference in their empathy scores. Perhaps there is no discrepancy because the teachers are more alike than different in many key areas that affect emotional empathy.

Research Question Four

Research question four asked, "Is burnout stronger among special education teachers or regular education teachers?" Answering this question required an independent samples *t*-test, which tested the null hypothesis that no statistically significant difference in the level of emotional empathy, as measured by MBI-ES, between regular education and special education teachers. The null hypothesis failed to be rejected and was accepted.

There is limited research on the differences in teacher burnout between regular and special education teachers. However, a review of the literature revealed that there are more dynamics of the special education teachers' job that have been proven to lead to teacher burnout. Despite this, the present study found that there is no difference between regular and special education teacher's burnout scores.

The outcome of the present study is contrary to the findings of a study completed by Roach (2009). When Roach (2009) compared the burnout scores of regular and special education teachers, the regular education teachers scored higher than the special education teachers. However, her sample size was very small which may indicate that the results are not representative of the general population.

It is quite possible that teachers within the same geographic regions are similar in situational variables that affect burnout such as classroom dynamics, discipline issues, administration, etc., resulting in similar burnout scores.

Implications

This study is significant to the field of education for several reasons. Although there have been previous studies on the causes and predictors of teacher burnout and its negative impact on the educational systems of the world (Amos, 2014; Garwood, Werts, Varghese & Gosey, 2018; Hanselman, et al, 2011; Ronfeldt et al., 2013; Sarıçam, 2014), there is currently little research on the relationship among teacher burnout and teacher emotional empathy. The findings of this study will help close the gap in educational literature by providing empirical research on the relationship between emotional empathy and burnout among special and regular education teachers.

Awareness of the relationship between emotional empathy and teacher burnout could result in decreased occurrences of burnout and, in turn, decrease the teacher attrition and turnover that is currently plaguing the American education system. Further, the monies lost due to absenteeism, attrition, and turnover can be recovered and allow for the addition of teacher wellness programs that can help prevent and target teacher burnout.

Moreover, findings of this study can aide administrators with creating the best working conditions possible to eliminate the loss of valuable, talented regular and special education teachers and, in turn, maintain a motivated staff to drive positive student outcomes. Wellness of both teachers and American school systems may be positively impacted by the results of this study.

Limitations

All studies are limited by threats to internal validity, the degree to which effects can be unambiguously attributed to specific causes, and external validity, the degree to which the study's findings can be generalized beyond the study sample (Gravetter & Forzano, 2016). Although the researcher attempted to minimize the limitations, the present study had a few of concern.

Threats to Internal Validity

Internal validity depends largely on the procedures of a study and how rigorously it is performed (Cunsic, 2019). This research study had a few limitations that could have possibly affected the internal validity.

The research design of this study was limiting because it was survey based. Participants responded and self-reported on survey questions. Self-reporting on surveys can cause several issues within a study. Participant bias, where participants will sometimes second-guess what the researcher is after and change their answers to fit, can have a significant impact on research findings (Farnworth, 2019). Also, with consideration of social desirability, teacher may not have reported their honest feelings and may have responded based on what they felt was socially acceptable based on social desirability (Warner, 2003). The researcher attempted to control this

limitation by ensuring each teacher was able to anonymously and privately take the test at a location and time of their choosing. Thus, minimizing social desirability in the process.

Other limitations that are associated with self-administered survey questionnaire are the possibility that the respondent either did not complete the questionnaire himself or sought help to do so (Coughlin, Cronan & Ryan, 2009). This may interfere with the representiveness of the data thus affecting internal validity. The researcher attempted to minimize this limitation by requesting that each participant respond based on self-evaluation.

While the sample size met the minimum requirements for the statistical testing of the present study, a much larger sample size would have improved the effect size and validity. The use of convenience sampling was a limitation in this study. Warner (2013) stated that convenience sampling is "not representative of any real-world population."

Threats to External Validity

External validity refers to the degree to which the findings from a study can be generalized to other individuals, other places, and other times (Gravetter & Forzano, 2016).

Sample selection bias was a limitation of the present study. Out of the eight school districts in the county, the researcher only chose five. The five school districts were all in the same state, all were Title I districts, with most of the population of teachers being White. Several components of the school districts were similar, such as the geographic location and demographics. Receiving survey data from other rural areas would be required before assumptions could be made for rural K-12 teachers.

Another limitation affecting the external validity of the present study was the timing of the survey distribution. The survey was taken in the month of November. This is very early in the school year. While the emotional empathy scores likely wouldn't have been affected, the

timing of this test possibly could have affected the outcome of the burnout scores. Perhaps, giving the test closer to the end of the school year would have resulted in different scores and outcomes.

Recommendations for Future Research

Because this study is relatively exploratory, more research is needed to further analyze the relationship of teacher burnout and emotional empathy among teachers. Future research may include:

1. Expand the size of the study to other geographic regions.

2. Expand the scope of the study by including K-12 private school teachers.

3. Expand the scope of the study by surveying teachers in more ethnically diverse regions.

4. Consider surveying teachers at the end of the school year rather than early on in the schoolyear.

5. Consider a qualitative study in which interviews are conducted with teachers who are experiencing high levels of burnout to discover common themes among them.

6. Conduct a study that correlates emotional empathy with burnout and gender.

7. Conduct a study that compares the emotional empathy scores of public and private school teachers

8. Conduct a study to examine the relationship of emotional empathy with the three subscales of the Maslach Burnout Inventory- Educator Survey.

Teacher burnout is an epidemic. Further research would provide valuable insight into the causes and relationships of other variables with burnout.

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APPENDIX A

Permissions

Maslach Burnout Inventory Manual

Fourth Edition

Includes These MBI Review Copies:
Human Services - MBI-HSS
Medical Personnel - MBI-HSS (MP)
Educators - MBI-ES
General - MBI-GS
Students - MBI-GS (S)

Christina Maslach: Manual, and MBI-GS, MBI-GS(S), MBI-HSS, MBI-HSS(MP), MBI-ES
Susan E. Jackson: Manual, and MBI-GS, MBI-GS(S), MBI-HSS, MBI-HSS(MP), MBI-ES
Michael P. Leiter: Manual, and MBI-GS, MBI-GS(S)
Wilmar B. Schaufeli: MBI-GS, MBI-GS(S)
Richard L. Schwab: MBI-ES

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APPENDIX B

IRB Approval Letter

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

August 19, 2019

Lori J. Rosensteel
IRB Exemption 3859.081919: A Predictive and Causal-Comparative Analysis of Teacher
Burnout and Emotional Empathy among K-12 Public School Teachers

Dear Lori J. Rosensteel,

The Liberty University Institutional Review Board has reviewed your application in accordance
with the Office for Human Research Protections (OHRP) and Food and Drug Administration
(FDA) regulations and finds your study to be exempt from further IRB review. This means you
may begin your research with the data safeguarding methods mentioned in your approved
application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in
which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

> (2) Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude,
> achievement), survey procedures, interview procedures, or observation of public behavior (including visual
> or auditory recording) if at least one of the following criteria is met:
>
> > (i) The information obtained is recorded by the investigator in such a manner that the identity of
> > the human subjects cannot readily be ascertained, directly or through identifiers linked to the
> > subjects;

Please note that this exemption only applies to your current research application, and any
changes to your protocol must be reported to the Liberty IRB for verification of continued
exemption status. You may report these changes by submitting a change in protocol form or a
new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether
possible changes to your protocol would change your exemption status, please email us at
irb@liberty.edu.

Sincerely,

G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

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APPENDIX C

Superintendent Letter

Dear Superintendent:

I am completing a doctoral dissertation at Liberty University entitled "A Correlational Analysis of Emotional Empathy and Teacher Burnout among Regular Education and Special Education Teachers." I am requesting permission to survey K-12 teachers in the Connellsville Area School District. I will need to access an emotional empathy rating from the Questionnaire Measure of Emotional Empathy (QMEE) and a teacher burnout rating on the Maslach Burnout Inventory-Educator Survey (MBI-ES) from each teacher who voluntarily participates in the research study. Both surveys will be administered online for teacher convenience. I will use the SurveyMonkey.com site to collect data. I want to note that no identifying information will be released on staff, schools, school districts will be utilized in the study. The privacy and protection of participants is of the upmost concern. A numerical number will be assigned to each participant that will be correlated with the survey ratings. Thus, no names will be taken.

The requested permission extends to any future revisions and editions of my dissertation. ProQuest may produce and sell copies of my dissertation on demand and may make my dissertation available for free Internet download upon my request.

If you are in agreement, please sign this letter below and return using the addressed envelope provided. Your signature will confirm that you give permission for me to obtain assent and consent to participate from your teaching staff. Please feel free to contact me with any questions/concerns at 724 469 3353. Thank you for your time and consideration.

Sincerely,

Lori J. Rosensteel, EdS

PERMISSION GRANTED FOR THE USE REQUESTED ABOVE:

_____   _____
Superintendent (Printed)   School System

_____   _____
Superintendent (Signature)   Date

APPENDIX D

CONSENT FORM

CONSENT FORM

A Predictive and Correlations Analysis of Teacher Burnout and Emotional Empathy
among K-12 Public School Teachers
Lori J. Rosensteel
Liberty University
School of Education

You are invited to be in a research study of the relationship between emotional empathy and teacher burnout. You were selected as a possible participant because you are 18 years of age or older and a full-time regular education or special education teacher employed in Fayette County, PA, with at least one year of full-time teaching experience. Please read this form and ask any questions you may have before agreeing to be in the study.

Lori J. Rosensteel, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to investigate whether a relationship exists between emotional empathy and teacher burnout among regular education and special education teachers. The study will analyze and compare the levels of job burnout and the levels of emotional empathy between regular education and special education teachers.

Procedures: If you agree to be in this study, I would ask you to do the following things:

1. Take an online, anonymous survey asking you to respond to 57 items. The entire survey will take about 18 minutes to complete.

Risks: There is the risk that you may find some of the questions about your emotional empathy levels, job conditions and you experience with teacher burnout to be sensitive.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study. The findings of this study may help close the gap in educational literature by providing empirical research on the relationship between emotional empathy and teacher burnout among special education and regular education teachers.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private. Research records will be stored securely and only the researcher, the researcher's chair, and the researcher's methodologist will have access to the records. No identifying information will be collected. Data will be stored on a password locked computer. After three years, all electronic records will be deleted.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If

you decide to participate, you are free to not answer any question or withdraw, prior to submitting the survey, without affecting these relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

Contacts and Questions: The researcher conducting this study is Lori J. Rosensteel. If you have any questions, **you are encouraged** to contact her at ljrosensteel@liberty.edu. You may also contact the researcher's faculty chair, Tracey Pritchard, at tbpritchard@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers.

- I **agree** to give consent to participate in the study.
- I **do not agree** to give consent to participate in the study.

APPENDIX E

Teacher Survey

<u>SCREENING</u>

The consent and screening listed in Appendix D will be on the opening screen of survey
1. Are you currently a full-time regular education or special education teacher employed in Fayette County, PA with at least one year of full-time teaching experience?
     Yes   No

1. **Are you employed as a regular education or special education teacher?**
     Regular Education Teacher   Special Education Teacher