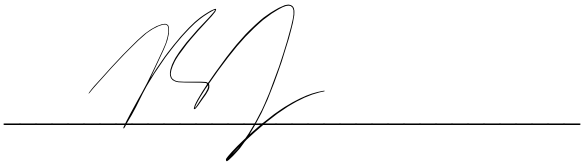
DIFFERENCES IN COMPASSION FATIGUE SCORE BETWEEN EDUCATORS' EXERCISE ROUTINE, LOCATION, AND TENURE STATUS

The undersigned, approved by the Department Chair of Graduate Studies in Education, have examined a dissertation entitled:

DIFFERENCES IN COMPASSION FATIGUE SCORE BETWEEN EDUCATORS' EXERCISE ROUTINE, LOCATION, AND TENURE STATUS

Presented by Sheridan E. Turner, a candidate for the degree of Doctor of Education and hereby certify that in their opinion it is worthy of acceptance.



Dr. Benny Hoiwah Fong, Advisor/Chair

Southwest Baptist University

Dr. Kevin Schriver

Southwest Baptist University

Dr. Nancy Colbaugh

Southwest Baptist University

# DIFFERENCES IN COMPASSION FATIGUE SCORE BETWEEN EDUCATORS' EXERCISE ROUTINE, LOCATION, AND TENURE STATUS

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A Dissertation

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The Faculty of the Graduate Education Department

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Doctor of Education

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By

Sheridan Turner, B.S.Ed, M.S.Ed, Ed.Sp.

Dr. Benny Hoiwah Fong, Dissertation Advisor

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## ACKNOWLEDGEMENTS

I would like to first, and foremost thank my Lord and Savior. If it were not for His love and patience this dissertation would not exist. I give my future and all to you. I would also like to thank my family for standing in and bridging the gaps while I was undertaking this endeavor. Thank you for feeding me when I was hungry; transporting me when I was tired; and for tireless hours just listening. Thank you, Mom, Ryan, Keeley, Kinsley, and Little Ryan. I would also like to thank the next generation of us, Lyle, Owen, and Shiloh. You are everything to me. You are the reason I went into education, and the reason that I get up each day. You have inspired me to be better and to want better for our educational system. I do this for our generation of teachers and the next generation of learners.

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I am also dedicating this, Ed.D. to me. This is the one thing I did for me. Times got tough, really tough, and it was hard to even picture myself moving forward with this degree. When life threw catastrophic things at me, I want it known that in the end I did not give up and buckle. With all the turmoil, tornados, roof cave-ins, stripping and gutting my entire house for roof purposes, sleepless nights, unexpected pandemic hiccups, grandchildren, near life threatening COVID-19 and Influenza simultaneously, horrible migraines, and life in general; I did not give up, and I did not give in. I did get knocked down, and I did suffer from both burnout and compassion fatigue, but I am living proof one can overcome.

This dissertation is also for those who do not believe in extreme compassion fatigue, frustration, exhaustion, and the hopelessness that it brings exist. Thank you, as this fact only makes me want to be more thoughtful in my explanation of the process, and to make others feel heard and valued. It is even more important and should be noted that not just one thing can fix the compassion fatigue, secondary trauma, and burnout that educators face. So, much more research is needed on compassion fatigue in education, because it does seem to cross over into the taboo realm of mental health and educators often do not talk about it. I hope and pray the individuals who read my work will have their heart stirred and their bodies propelled into action to want to contribute to furthering research or at least several ideas for viable treatment options.

Finally, educators, my dissertation is also dedicated to you, as you are often given high goals and expectations and low resources. Often educators are the select few who turn the impossible into the possible. My dissertation is for educators who are expected to work miracles, and then often do. I have completed this work to offer awareness which

in turn will lead to action and resolution of compassion fatigue. Often, individuals are far too busy caring and providing for the needs of others, one's own needs are neglected. Accordingly, at times only God and my sheer love of caregivers willed me to finish this work. Thus, an individual must take care of oneself first so one's care for other individuals can be more effective. Know that I am in the trenches with you, want a better future for our educators, and in turn for the future of our children.

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## ABSTRACT

Through the lens of Maslach's (1995) Multi-Dimensional Theory of Burnout, and Stamm's (2012) Quality of Life Survey (ProQOL), the study examined educators scores regarding various logistics. The purpose of this quantitative, causal comparative study was to test the multi-dimensional theory of burnout by comparing various demographics of school educators. The components that were compared include the ProQOL score between educators who exercise 15 minutes or less compared to educators who exercise 15 minutes or more. Then rural educators' ProQOL scores were compared to urban educators ProQOL score. Finally, tenured educators ProQOL scores were compared to non-tenured educators ProQOL score. This study adds to body of research of studies on compassion fatigue in education, and comparison of the ProQOL scores compared to all three independent variables: exercise, geographic location, and educator tenure. While this study found no statistically significant results, there was data added to the cannon of the literature for compassion fatigue in education, exercise, geographical location, and tenure compared against the Quality-of-Life score (ProQOL).

# CHAPTER ONE

# INTRODUCTION

## Introduction

In 1981, Christina Maslach and Susan Jackson developed the first Maslach Burnout Inventory which analyzed three areas associated with burnout: emotional exhaustion, depersonalization, and personal accomplishment. Maslach and Jackson (1981) noted once the burnout phase has been reached, it is hard to undo. After the initial, generalized burnout inventory, two other career specific inventories were created in human services and education. However, Stamm (2010) recognized that there are more components to treatment of burnout than a simple inventory, and several more components such as compassion fatigue, and secondary stress were also identified. The hope of the first initial burnout survey by Maslach and Jackson, was to be able to identify and treat the grey area termed compassion fatigue much sooner to prevent complete burnout. Chapter One will present the need for using The Quality-of-Life Survey (ProQOL) to discover compassion fatigue before burnout ensues, and an overview the theoretical framework of Maslach, Figley, and Stamm. Furthermore, limitations and delimitations of the study will be discussed, and design controls put into place for this study. Moreover, research gaps and a definition of terms will be defined.

Accordingly, the grey area before burnout, termed compassion fatigue, was studied by Perez-Chacon, Chacon, Borda-Mas, and Avargues-Navarro (2021), and they describe compassion fatigue as the physical and mental stress and anxiety associated with a helper profession. The study cautioned individuals exhibiting a high sensitivity to

compassion fatigue and trauma can lead individuals to experience burnout if ignored. Accordingly, Wozencroft, Scott, and Waller (2019) noted a difference between compassion fatigue and burnout. Compassion fatigue can have a quick onset of symptoms, but is relatively treatable, while burnout often results in a change in job duties and even one's profession. Stamm (2010), Maslach (2002), and Figley (2002) noted during the initial or the foundational phase of the Maslach Burnout Inventory, individuals directed focus was placed on working in the health science helper field, particularly the nursing field. However, a gap was evident in the research for other helping fields. Thus, the research gap, prompted several more editions of Maslach's Burnout Inventory to be created with a lens and scope encompassing more helping professions such as teaching, counseling, nursing, and civil service. This holds true for Maslach's Burnout Inventory and The ProQOL which measures the grey area before burnout termed compassion fatigue.

Before COVID-19, literature for compassion fatigue in the educational field was almost non-existent. Himmelstein (2020) noted numerous individuals including teachers, counselors, auxiliary staff, and librarians in education suffering from compassion fatigue in one aspect or another. Subsequently, the pandemic added another depth to an already-overwhelmed staff. Nadeem, Shernoff, and Coccaro (2022) reported 124,000 schools in the US, and 55 million students were impacted by school closures due to the COVID-19 Pandemic. However, even after all the closures, schools remained the hub of the community. Moreover, teachers, because of their critical link, remained interconnected to their student's and student's families. During the pandemic, teachers were expected to take care of the learning needs of their students, while simultaneously taking care of

themselves and their family. With the increase of responsibility and stress, because of the pandemic, there was a backlog of secondary vicarious trauma which in turn resulted in compassion fatigue. Himmelstein (2020) further remarked since the pandemic, librarians who typically had the least compassion fatigue and the highest level of compassion satisfaction also suffered greatly from the pandemic. Compassion fatigue scores have increased, and compassion satisfaction scores have decreased in a non-linear a-typical way that is outside the limits of normality for the helper community. Lluch, Galiana,Doménech, and Sansó,(2022) found that the pandemic amplified mental health disorders, as many individuals were often isolated and alone. In essence, many individuals experienced a loss of hope and decrease in self-compassion. Numerous professions, including the helper professions, were impacted from the pandemic. The impact of the pandemic increased the need to study helper professionals such as teaching. Furthermore, Nadeem, Shernoff, Cocaro, and Stokes-Tyler (2022) asserted the COVID-19 pandemic exacerbated health and educational disparities, and highlighted unequal access to mental healthcare for the helping professions. This increased the need to study the gap in helping professions such as teaching.

Figley (2002), Maslach (2002), Stamm (2010), and Sanchez, Valdez, and Johnson (2014) concurred educators are in the business of helping others. However, employees in the helper fields often suffer exacerbated symptoms brought on by the cost of caring for others as part of their jobs. People who work in a helper career, such as teaching, counseling, and nursing, are most at risk to suffer compassion fatigue, and burnout, as such individuals has no one to help or serve them. Subsequently, when workers employed to help others witness trauma, many have little time for self-care and then

stress can build up. In an average setting, humans are able to cope, but when stress, secondary trauma, and tasks build up, compassion fatigue ensues. Thus, the build-up of stress often results with individuals experiencing compassion fatigue.

The stress that builds up is one strand of compassion fatigue, but when the helper is unable to triage him or herself, compassion fatigue can be an endless cycle difficult to reverse. Figley (2002), Potter (2010), Stamm (2010), and Tepper (2007) suggested individuals in the helping professions such as teaching and counseling spend much time triaging others and finding solutions to everyday problems. Essentially, many individuals in the helper/helping profession sacrifice personal needs to help others. Individuals constantly helping and caring for others can often experience compassion fatigue. Doing for others, and the cost of caring can often lead up to compassion fatigue. Compassion fatigue is the grey area before burnout. It is usually onset by experiencing secondary trauma from those we help. Most notable symptoms of compassion fatigue are feelings of powerlessness, lack of empathy, numbness, and a lack of enjoyment for activities that were once enjoyed. Figley (2002) deemed compassion fatigue and the litany of symptoms associated therein as the cost of caring. If not promptly treated, compassion fatigue and secondary traumatic stress can result in the individual having burnout within one's profession. Maslach's (2002) research deemed burnout to be the long lasting, nearly permanent feeling of emotional discomfort with one's work.

Compassion fatigue can impact one's profession in education by avoidance through anxiety. The worker or helper may avoid situations and show lack of empathy as a protective or self-preservation measure. The worker also may become numb to work, and not be interested in activities that he or she used to enjoy. Helper workers often

experience disassociation, anxiety toward their job, and lack of empathy. As such, these symptoms can often be unnoticed or overlooked. In the field of education there is a responsibility to teach and look after others is necessary. With the responsibility and accountability to look after those that cannot look after themselves, there is a great weight to care for others often to the detriment of the helper. Individuals in helper professions often put so much energy into the care of others, and then neglect themselves.

Moreover, the business of being a helper in the education field could greatly benefit from understanding the causes of compassion fatigue and the potential treatments that help support those struggling with compassion fatigue. The greatest benefit of this study to the helper profession would be calling attention to the self-awareness component and identifying compassion fatigue early, so that it does not affect those that we help or get as far as burnout. Not only would this contribute to higher productivity but individuals in helper professions could benefit greatly by identifying compassion fatigue quickly before it becomes burnout. It is important that an understanding is gained about who is susceptible, and the potential treatments such as support programs, self-awareness, counseling, exercise, and meditation.

**Problem Statement**

Compassion fatigue as defined by Figley (2002), can impact individuals employed in professions designed to help others and may be an early precursor to burnout in one's profession. Burnout effects are long lasting and do not simply go away. The effects can be debilitating both mentally and physically, and often leave the employee searching for a new career. Moreover, the symptoms of compassion fatigue have a

negative effect on productivity for the company and on the mental health for the employee. There is a problem with burnout and compassion fatigue in helper professions.

However, Wozencroft, Scott, and Waller (2019) suggested compassion fatigue is the precursor to burnout, and while onset of compassion fatigue occurs quickly and suddenly, treatment is relatively effective. Compassion fatigue occurs immediately before burnout, so it is important to catch it before burnout ensues. Consequently, it is important to note that compassion fatigue is not burnout. Burnout cannot be easily treated, and usually only resolves after a change in job duties or profession is indicated. There are numerous studies on burnout in the field of education, but a shortage of studies on compassion fatigue. Further compassion fatigue studies in the helper field of education are necessary because the treatment may lead to prevention of burnout. Furthermore, a gap exists in the literature review on compassion fatigue treatment options, especially suggesting exercise and recreation.

Figley (2002), Maslach (2002), Stamm (2010), & Smallwood-Butts (2012) hold that burnout may not just simply affect performance on the job, but it may also spill over into the personal lives of the helper. Without effective strategies for managing stress and burnout, Stamm (2010), stated overall satisfaction with work and helping others is compromised resulting in compassion fatigue. There is a problem with the burnout inventory; once burnout is diagnosed it is usually too late to keep an employee. Attrition generally follows. Because of the reactive solution to burnout, the Professional Quality of Life survey (ProQOL) was created to become more proactive to address and reverse the negative symptoms before one attained burnout (Stamm, 2010; Butts, 2012). There is a gap in literature on compassion fatigue in the secondary education helper field, and if any

variables such as teacher tenure, or exercise impact this problem. Therefore, further study is warranted.

While compassion fatigue was not widely spoken about in the education profession, COVID-19 brought it to the forefront. There is a secondary problem of intensified symptoms from the COVID-19 pandemic, and at the time this research was written, Holmes, Rentrope, Korsch-Williams, and King (2021) suggested an urgency to study secondary trauma and compassion fatigue especially treatment options, due to mental health issues because of COVID-19. It is also believed compassion fatigue has since grown into collective trauma, because of the overwhelming amount of stress present and the lack of ability to cope because of repetitious loss. It was common to see compassion fatigue more prevalent in those helper groups who care for clients in difficult or distressing circumstances. This has been even more prevalent with the COVID-19 pandemic. Furthermore, Raimondi (2019) suggested the reason for a lack of literature on this subject is because the field of education does not have the language to discuss compassion fatigue in a way that contextualizes the problem and recommended further study.

Compassion fatigue and burnout are serious and long-lasting syndromes, therefore an aim toward treatment options needs to be taken (Figley, 1998; Stamm, 2010; Butts, 2012). Greco (2021), and Rosales-Ricardo, and Ferreira, (2022) suggested that exercise or rigorous physical activity could be useful in the treatment of compassion fatigue. However, there is a gap in research on treatment effectiveness. Only a few controlled random studies reported a reduction in perceived stress. The goal of this study is to add

to the body of literature compassion fatigue and interpret if any treatments have a statistically significant impact on the problem.

**Theoretical Framework**

The scope and lens of this study is viewed through the framework of Maslach and Jackson (1981). Christina Maslach was the pioneer of the Multi-Dimensional Theory of Burnout. Maslach's theory was comprised of three main premises indicating burnout: emotional exhaustion, depersonalization, and lack of personal accomplishment. Subsequently, three premises led to the invention of the first Maslach Burnout Inventory (MBI). Maslach's Burnout Inventory (MBI) was created based on workplace emotions and was initially for health and human service workers and later expanded to educators. According to Maslach & Jackson, (1981) a partner Freudenburger, coined the phrase burnout, based on the emotional depletion drug addicts experienced. Maslach (1995) and Henson (2020) later made the connection that the emotional depletion occurring because of job stress and leading to similar emotional exhaustion and work-related angst, should also be deemed burnout. Today there are five categories the MBI studies and services. While part of Maslach's Burnout study seemed final, the work only opened the door for future compassion fatigue studies; the ProQOL specifically.

Years later in 1995, Maslach's research entered the empirical phase. The researcher became more focused on the perceptions, attitudes, and demographics of individuals experiencing burnout. The researcher organized groups of people experiencing burnout and added the symptoms of emotional exhaustion and job stress to the definition of burnout. Furthermore, it was during this phase Maslach added an MBI for educators noting that they suffered burnout just as health and human service workers.

Accordingly, Stamm (2010) and Figley (2002) picked up the work of Maslach to call attention to the lasting nature of burnout and expanded on Maslach's research and developed a compassion fatigue instrument to measure a person's unique perception of exposure to secondary stressful work events. As a result of the development of the instrument, the researchers coined the phrase secondary trauma or secondary traumatic stress. Accordingly, secondary stress can occur for workers in the helping professions. As such, stress can result from the individual experiencing trauma, hearing about the trauma for the people the individual is helping. Additionally, secondary stress can also encompass the residual stress which remains after one sees a fight, deals with a harsh situation, or becomes desensitized to critical situations.

Moreover, a multi-modal instrument needed to be created to pick up secondary trauma, as well as compassion fatigue. Therefore, The Professional Quality of Life instrument was produced by Charles Figley in 1995 in cooperation with Beth Stamm. It was not yet labeled ProQOL, because of statistical anomalies. The work was picked up and revised as Stamm (2010) realized the positive aspect of compassion satisfaction also had to be recognized and measured. It was Figley's (2002) work in the development of an instrument with preventative measure in mind, and Stamm's (2010) work to revise the instrument and differentiate between compassion fatigue, secondary traumatic stress, burnout, and compassion satisfaction with a positive direction in mind. The instrument is important to note in this section, because it has a self-assessment tool embedded, and Stamm (2010) noted that self-assessment is important to prevention. Maslach (2001), Figley (1995), and Stamm (2010) all concurred action needed to be taken in order to prevent burnout, because burnout is serious and long lasting.

Furthermore, Ziaian-Ghafari and Berg's (2019) theory reported teachers with more years of service are better equipped to deal with the hazards of the helper profession and have less compassion fatigue. The premise behind Zianian-Ghafari and Berg's (2019) theory is teachers with more years of service have a guaranteed contract and are often more comfortable talking to their supervisors and finding resources. Generally, teachers feel more at ease in their situation if tenure has been established. This may also be associated with a lower compassion fatigue score, because generally the two variables counteract one another. If a compassion fatigue score is low, then often a compassion satisfaction score will be higher. Due to the gap of study of compassion fatigue in educators and the effects that several variables such as teacher tenure, geographical area, and exercise have on compassion fatigue, further study is warranted and lead to the purpose of the study.

**Purpose of the Study**

Maslach (2002) has identified burnout in the workplace as one of the most detrimental to the employed, but also the employer. Burnout in the workplace set forth a purpose for study, because of the emotions involved, and the long-lasting impact burnout has. Figley (2002), and Stamm (2010) have expanded Maslach's (2002) study by identifying the prevalence of compassion fatigue. This study will further expand variables such as time management, recreation, and self-awareness to determine if any have an impact on compassion fatigue.

By using Maslach's (1995) Multi-Dimensional Theory of Burnout, and Stamm's (2012) Quality of Life Survey (ProQOL), the study will examine educators scores regarding various logistics. The purpose of this quantitative, causal comparative study is

to test the multi-dimensional theory of burnout by comparing various demographics of school educators. The components that will be compared include the ProQOL score between educators who exercise 15 minutes or less compared to educators who exercise 15 minutes or more. Then rural educators ProQOL score will be compared to urban educators ProQOL score. Finally, tenured educators ProQOL score will be compared to non-tenured educators ProQOL score.

It is equally important to see if compassion fatigue can be treated in the early phases, so burnout and the long-lasting impact does not occur. The dependent variable study is compassion fatigue or the ProQOL score. The independent variables studied are exercise minutes of educators, location of educators, and finally the tenure of educators. These variables contributed to the creation of three important research questions.

**Research Questions**

**RQ1:** What is the difference in ProQOL scores between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week?

**RQ2:** What is the difference in ProQOL scores between rural and suburban educators?

**RQ3:** What is the difference in ProQOL scores between tenured educators and non-tenured educators?

**Null Hypotheses**

The researcher has made the following null hypothesis:

**$H_{01}$:** There is no statistically significant difference in ProQOL scores between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week.

**$H_{02}$:** There is no statistically significant difference in ProQOL scores between educators teaching in rural school districts and educators teaching in suburban school districts.

**$H_{03}$:** There is no statistically significant difference in ProQOL scores between tenured educators and non-tenured educators.

## Limitations and Delimitations

Mills and Gay (2019) noted limitations and delimitations are the parameters the researcher finds which may affect research methodology and outcomes. Moreover, in any study, the researcher cannot control all factors related to the participants or variables. Accordingly, in this research study, both limitations and delimitations were present. The researcher has established the following limitations:

## Limitations

1. This study is limited to the percent of participants returning/completing the survey.
2. This study is limited with the lack of prior research in areas such as compassion fatigue in education and a comparison analysis of exercise on compassion fatigue.
3. The research is limited to self-reported data from the ProQOL survey.
4. The researcher is limited to the access of the DESE portal for participants.

5. The research is limited on the causality of the independent variables of exercise routines, geographical location, and teacher tenure status and the dependent variable of the ProQOL score.

**Delimitations**

1. The delimitations are geographically narrowed to secondary public-school educators in rural and suburban district locations in Missouri.
2. The study was delimited to secondary education, specifically grades 9-12.
3. The delimitations are narrowed demographically to teacher tenure and divided into two categories: teachers with one to six years of service and teachers with more than six years of service.
4. The study was delimited to exercise habits of teachers and the time frame of 15 minutes a week.
5. The study was delimited to two categories of time spent on exercise: 15 minutes or less, or more than 15 minutes per week.

**Assumptions**

This study noted the following assumptions:

1. Participants were open and honest with their survey responses.
2. Generalizability of quantitative research methods on a sample population.
3. Statistical assumption of a normal distribution.

**Design Controls**

This study contained limitations, delimitations, and assumptions. In an attempt to ensure a valid study, several design controls were implemented. Furthermore,

participants were allowed to remain anonymous and could skip a question or opt out of the survey at any time. This quantitative study sought to gain insight into compassion fatigue in education and across demographics. To control self-reported bias the survey questions were neutral, non-leading, and the anonymity of the participants was ensured by the survey program. Schools were chosen through preliminary surveys sent to school administrators in both rural and suburban school districts in the state of Missouri via the Missouri Department of Elementary and Secondary Education portal.

The ProQOL displayed discriminant validity and satisfactory internal consistency. For each of the sub scales, scores are categorized as low (22 or less), moderate (between 23 and 41), or high (42 or more). – Secondary Traumatic Stress, *Mean* = 22.4, *SD* = 5.9. The reliability and validity found for the Professional Quality of Life Scale (ProQOL): Compassion Satisfaction $\alpha$ = .88 *(n*=1130*)*, Burnout $\alpha$ = .75 *(n*=976*)*, Compassion Fatigue $\alpha$ = .81 *(n*=1135*)*, interscale correlations show 2% shared variance (*r*=*.23; cov* = .05*; n*=1187) with Secondary Traumatic Stress and 5% shared variance (*r*=.14*; cov* = *.02; n*=1187) with Burnout.

When considering validity, it is important that the instrument can be replicated and tested. According to Stamm (2010) there is good construct validity with over 200 published papers. The compassion fatigue scale is distinct with over 100,000 internet articles and 100 research papers over half of them have used the full ProQOL scale. The validity and reliability were confirmed through Statistics Solution and verified by the authors (Stamm, Higson-Smith, Hudnell & Stamm IV, 2016). The tool being provided is the ProQOL 5th edition.

Researcher bias is always a factor when researching. The researcher has put aside any opinion or judgment and will solely utilize the quantitative data found in the survey. The researcher eliminated her building and the teachers therein to eliminate personal bias. Once the preliminary step of gathering demographic data from DESE was completed, surveys were sent to schools which met rural and suburban criteria. This demographic and survey recipient information was retrieved from The Department of Elementary and Secondary (DESE) website. Finally, a random selection of completed surveys from educators was compiled by the researcher. Analysis was conducted using the Statistical Product and Service Solutions (SPSS) which allowed the researcher to compare the ProQOL scores from educators in rural and suburban schools to ascertain if demographics, exercise, or teacher tenure had any significant impact on the scores.

To ensure surveys were answered honestly, candidly, and in a timely manner, surveys were collected online anonymously through google forms. Next, google forms electronically collected the surveys and tracked the confidential responses of respondents. Additionally, responses will be returned to the researcher anonymously.

**Definition of Key Terms**

**Compassion Fatigue.** A relatively new term in education but has been frequently used in the nursing and counseling workplace. For the intent and purpose of this study, compassion fatigue means emotional distress or apathy, seemingly as the result of caring for others, or by vicarious trauma (Stamm, 2010).

**Burnout.** The prolonged response to chronic emotional and interpersonal stressors on the job. If untreated can lead to cynicism, loss of job performance and

productivity, and loss of efficacy. Generally, when burnout is present, a change of job duties or profession is warranted (Maslach, 1995).

**Compassion Satisfaction.** The positive cost of caring and satisfaction with one's job and encompasses the feeling one is contributing to society (Stamm, 2010).

**ProQOL.** The Professional Quality of Life fifth edition survey used to measure the positive and negative effects a professional helper may experience (Stamm, 2012).

**Teacher Tenure.** For all intents and purposes, this is defined as working in education for more than five years. Additionally, teacher tenure is also referenced as years of service.

## Summary

Chapter One presented an overview of this causal comparative quantitative study and defined the need to utilize compassion fatigue scores on the Professional Quality of Life fifth edition. Chapter One also presented a gap in research in compassion fatigue in the educational helper field. The gap in the research set the tone and need for the research questions, and hypotheses. The purpose of this study was to determine if a correlation between an independent variable and dependent variable exists, and if scores are impacted by teacher tenure, geographical location, and exercise.

This study attempted to fill existing gaps related to compassion fatigue in an educational setting. Additionally, this chapter also contained an overview of the theoretical framework of Maslach's Burnout Inventory (1995), woven together with Stamm's (2010) evolutionary work on the ProQOL to self-assess quality of life. This study intends to determine the prevalence of compassion fatigue, secondary traumatic

stress, and burnout among secondary public-school educators when compared to amounts of exercise.

Using Stamm's (2012) Quality of Life Survey (ProQOL) and demographic data, the purpose of this quantitative, casual comparative study was to test if there is any difference in ProQOL score between educators exercising 15 minutes or less compared to educators exercising 15 minutes or more. Next, The ProQOL scores will be compared between rural educators versus urban educators. Finally, ProQOL scores will be compared between tenured educators and non-tenured educators ProQOL scores.

Chapter Two of this study provides a literature review of current studies of compassion fatigue (CF)with the development of The Professional Quality of Life Survey (ProQOL), and the treatability of compassion fatigue before burnout ensues. Chapter Two also explores the gap in the literature of exercise and recreation in response to compassion fatigue. Finally, superior support and the effect of the superior's care on compassion fatigue is explored.

Chapter Two also explores the theoretical underpinnings of Maslach (1995) and Stamm (2010), and how the new instrument, ProQOL was developed. ProQOL was updated to a fifth edition to reflect the needs of the last helper group, educators. The researcher will look for statistical differences between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week. Additionally, the researcher will identify statistical significance among compassion fatigue and teachers teaching in rural and suburban areas. Finally, educators who are tenured and those who are not. The researcher also identifies the method for selection of secondary schools and the random selection process of survey participants. Furthermore, a selection of

quantitative data and data treatment is provided, as well as the proposed hypothesis and research questions.

# CHAPTER TWO

# REVIEW OF RELATED LITERATURE

## Introduction

Educators are often under tremendous stress for things that remain outside of their control. When stress becomes cumulative and affects an educator's work, compassion fatigue can ensue. This is problematic in any helper profession, but particularly in the education field. Educators are responsible for the care of others that often cannot care for themselves. Consequently, educators feel the responsibility to care for others and neglect the to care for themselves. Furthermore, compassion fatigue can impact educators as the result of time constraints and work-related stress that often occur as part of the profession. Still others in the education field cannot turn off their jobs, or their minds after work hours. Thus, it is of no surprise when the COVID-19 pandemic hit, that compassion fatigue registered an all-time high. Compassion fatigue has existed for many years in education, but COVID-19 was the catalyst placing attention on compassion fatigue in the field of education (Himmelstein, 2020).

The purpose of this quantitative, causal comparative study is to test the multi-dimensional theory of burnout by comparing various demographics of school educators. The components that will be compared include the ProQOL score between educators who exercise 15 minutes or less compared to educators who exercise 15 minutes or more. Then rural educators ProQOL score will be compared to urban educators ProQOL score. Finally, tenured educators ProQOL score will be compared to non-tenured educators ProQOL score.

The following review of the literature is organized first by looking at the history of Maslach (1992), Maslach's Burnout Inventory (1992), and then the evolution to Maslach's Multi-Dimensional Theory of Burnout (1996). Maslach's early studies bore the premise for researching compassion fatigue by Figley (1998) and Stamm (2010). Moreover, the development of The Professional Quality of Life Survey or ProQOL (2012) and how the COVID-19 pandemic impacted compassion fatigue and created awareness of the presence of compassion fatigue in the educational context.

In the same vein, COVID-19 also brought more visibility to the treatment of compassion fatigue such as exercise, and behavior modification. This review of the literature explores the amount of exercise and the significance that exercise may have to lowering compassion fatigue, as well as possible treatment opportunities for compassion fatigue and burnout, and while studies are limited; because of the COVID-19 more are forthcoming to bridge the gap. Additionally, this review of the literature also reported the demographics of individuals experiencing compassion fatigue, and delves into causes, treatments, and alternative therapies.

Untenured educators are usually left at risk, because of only a probationary contract. Often attaining their tenure is at stake. They are often harshly criticized for the performance of their students. In addition, educators have very little time and energy to pour into their life outside of education to exercise and utilize healthy habits which are non-existent during the normal school year (Cuthbert, Kin-Shier, Ruether, Tapp & Culos-Reed, 2017; Figley, 1998; Stamm, 2010; Berg, Harshbarger, Ahlers-Schmidt, and Lippholdt, 2016). The following review was comprehensive but not limited to compassion fatigue in education, impacts of exercise on compassion fatigue, and limited

to the searches of suburban and rural schools. More specifically, the reviewer had to search and remove many of the compassion fatigue in healthcare articles and narrow the search to compassion fatigue in education.

**Compassion Fatigue, Secondary Traumatic Stress, and Burnout**

The concept of compassion fatigue was born out of the nursing field and the majority of early studies such as Joinson (1992), Figley (2002), and Stamm (2002) occurred in the medical field. In fact, the foundation laid for compassion fatigue began as a staffing crisis that began with burnout. Employees were leaving their jobs and the field of nursing entirely. The fundamental reason that it is imperative to study burnout is because there is nothing to be done once the sufferer has reached that point. Compassion fatigue occurs in a grey area right before the onset of burnout. Generally, burnout cannot be cured and oftentimes the only solution for an individual suffering from burnout is to change employment or be removed from one's current situation. Therefore, researchers became fascinated because of treatment, with compassion fatigue which occurs prior to burnout. Burnout is the long-lasting condition causing emotional drain, while compassion fatigue is a condition with rapid onset from repeated exposure to workplace trauma (Maslach, 1981; Cook, 2012; Davis & Palladino, 2011; Mahmoodi-Shahrebabki,2015). Considering recent research coming to the forefront for other helper professions, there is also a significance in the evolution of compassion fatigue.

Compassion fatigue occurs in helper professions or professions responsible for caring for others. There are numerous helping professions wherein compassion fatigue can occur, but few include education. Moreover, the nursing profession has had many studies focused-on compassion fatigue studies conducted, but it was not until COVID-19

that education was called to the forefront (Maslach & Leiter, 2021; Cuthbert, Kin-Shier, Ruether, Tapp, & Culos-Reed, 2017; Cook, 2012; Tepper, 2007). While there is a defining need in this area, other occupations in the service industry, or otherwise classified as helping others, are in the high- risk category for compassion fatigue. Those in the business of helping others often neglect themselves to triage their patients, and education proves to be no different (Maslach, 1981; Figley, 1998; Stamm, 2010; Berg, Harshbarger, Ahlers-Schmidt, and Lippholdt, 2016; Potter, Deshields, Divanbeigi, Berger, Cipriano, Norris, & Olsen, 2010).

Researchers including Stamm (2010), Cook (2012), and Tepper (2007) reported compassion fatigue in education as a result of teachers navigating issues requiring immediate attention, caring for others, and having additional work after hours such as grading and preparing future lessons. It was also reported that having no real down time at work and being responsible for someone else throughout the day led to compassion fatigue. Finally, a lack of attention to oneself did lend an opportunity for compassion fatigue to set in.

Figley (1998) and Stamm (2010) suggested that compassion fatigue has a gradual onset of negative feelings that one has about the job and can lead to burnout if not addressed. Compassion fatigue could be an earlier indicator of burnout which is much longer lasting. Burnout is the long-lasting utter hopelessness one feels related to work. Holding to Figley's (1998) intent to create a self-assessment tool, compassion fatigue and secondary traumatic stress was recognized in the nursing and counseling field. Stamm (2010) also recognized secondary traumatic stress as an important element of compassion fatigue. Secondary stress is the stress that one experiences when their client, student, or

patient experiences a traumatic situation. Hence, this becomes trauma that the helper also takes on vicariously.

Before compassion fatigue was studied, burnout, the result of compassion fatigue, was approached. While burnout and compassion fatigue are similar, it is foundationally important to look at both aspects of them. The need to begin treatment when one experiences compassion fatigue is the operative with this study. Foundationally, Maslach's (1981) original instrument was used for health and human service workers but was later revised to include education because of the need to assess compassion fatigue in other professions. Maslach and Jackson's (1982) research on burnout prompted a tool for assessment. Moreover, because studies of burnout expanded, The Multi-Dimensional Theory of Burnout was created to solidify symptoms. Maslach and Leiter (2021) were concerned with experiences people had in the workplace. Maslach's (1992) Multi-Dimensional Theory of Burnout, also prompted the need to call the grey area before burnout, by a research specific term. Therefore, The Multi-Dimensional Theory of Burnout paved the way for Stamm (2002, 2009, 2016), and Figley (2002) to begin their work with the grey area before burnout named compassion fatigue. Stamm and Figley began working together in 1988 and collaborated on revisions that paved the way for all helper professions that assess compassion fatigue. Thus, The Quality-of-Life Survey or ProQOL was created.

Consequently, a distinction was made in burnout that is characterized by feelings of being emotionally drained and chronic work dread. Compassion fatigue differs because anxiety, depressions, and individual experiences are related to repeated exposure to traumatic events in vulnerable demographic groups. Typically, compassion fatigue

develops from an impulse to help others, while burnout results from stress and workload (Zianian-Ghafari & Berg, 2019). Researchers, Sorenson, Bolick, Wright, & Hamilton (2016) reviewed over 307 studies directly related to compassion fatigue, secondary traumatic stress, and burnout to better understand compassion fatigue. The purpose was to understand the true meaning of the term and the differentiation between compassion fatigue and burnout. The rationale was to identify, prevent, and treat compassion fatigue before it became problematic to the helper profession. While in pursuit of their purpose, the true differentiation between the terms became apparent. Several studies concurred compassion fatigue is often confused with secondary traumatic stress and burnout (Figley, 2002; Stamm, 2010; Sorenson, Bolick, Wright & Hamilton, 2016; and Henson, 2017). While compassion fatigue, secondary traumatic stress, and burnout terms are often used interchangeably, compassion fatigue is actually used to describe acute onset of emotional and physical work-related stressors. These work-related stressors affect efficacy and relationships (Sorenson, Bolick, Wright, & Hamilton, 2016; Henson, 2017). Henson (2017) found compassion fatigue is like burnout, but the symptoms vary. Compassion fatigue is noted to have a sudden onset and is often triggered by the inability to deal with overwhelming stress and caring for others (Henson, 2017). Hence, compassion fatigue is often termed the cost of caring (Figley, 2002; Stamm, 2010; Joinson, 1992; Henson 2017). Figley's (2002) work resulted in the definition of secondary traumatic stress. Moreover, Sorenson, Bolick, Wright, &Hamilton, (2016), Figley (2002) used the underpinnings of Joinson's (1992) study which discussed exposure to traumatic events resulting in a stressor. This stressor defined by Joinson (1992), was a key event which led to compassion fatigue, eventually burnout if not

treated. Researchers, Figley (2002, 2009, 2021), and Stamm (2010) later coined this as the cost of caring by those who chose to help others. Figley (2002, 2009, 2021) also went on to define this exposure to traumatic events that require empathy from the provider as secondary traumatic stress. If the exposure continues and the empathy of the caregiver wears down, the result is compassion fatigue (Maslach, 1998; Sorenson, Bolick, Wright, & Hamilton, 2016). Empathy dwindles, and emotional exhaustion ensues suddenly. In contrast, burnout is the result of powerlessness, emotional distress, lack of job satisfaction, and decreased performance and efficacy (Maslach, 1998; Sorenson, Bolick, Wright, & Hamilton, 2016).

Compassion fatigue symptoms may be hard to overcome, but there is some hope in the form of exercise and recreation. Researchers, Wozencroft, Scott, & Waller (2019) identified a research gap in recreational therapists, physical trainers, and compassion fatigue. Exercise and compassion fatigue coincide with the research gap in education, compassion fatigue, and the effects of exercise on compassion fatigue. In the same study, researchers specified the difference between secondary traumatic stress and compassion fatigue. The terms have often been used synonymously, but research specifies that secondary traumatic stress is operationalized trauma one experiences when they are a caretaker to the traumatized (Wozencroft, Scott, & Waller, 2019). Compassion Fatigue is the overarching term sometimes stemming from secondary traumatic stress. The compassion fatigue therein is a result of the stress and the buildup of anxiety of going back to work and caring for others.

When considering compassion fatigue and the treatment thereof it is important to consider the source that compassion fatigue stems from, secondary traumatic stress.

Compassion fatigue and burnout are also mistakenly used interchangeably and make a pretty profound distinction the compassion fatigue onset happens rapidly and can be highly treatable, while burnout takes time and results in changes to one's job duties or even profession (Wozencroft, Scott &Waller, 2019). The onset of compassion fatigue happens rapidly, and degeneration ensues from there. The same degeneration from compassion fatigue helpers experience happens in part due to secondary trauma or vicarious trauma. Secondary trauma occurs when the educator sees their students going through traumatic events or a series of catastrophic events (Berg, Harshbarger, Ahlers-Schmidt, &Lippolt, 2016; Henson, 2020). The secondary trauma experience would build up and be as if the educator was also experiencing trauma through the eyes of their student in the form of secondary vicarious trauma (Maslach, 1998; Sorenson, Bolick, Wright, & Hamilton, 2016). Researchers, Schmulian, Redgren, & Fleming (2020) identified helping clients through distressing situations as being a reason for individuals in the helper profession to develop compassion fatigue and burnout. Furthermore, interactions with clients who required a high level of empathetic engagement were also key to playing a role in compassion fatigue and burnout (Schmulian, Redgren, & Fleming, 2020). However, using the ProQOL tool 75% of the participants scored in the high range for secondary traumatic stress or compassion fatigue and more than half (58.5%) were identified as symptomatic for burnout.

## Tools to Assess Burnout, Compassion Fatigue, and Quality of Life

### Maslach's Burnout Inventory

Maslach's initial burnout study was designed to identify individuals who are exhausted with their workplace situations. This initial study led to Maslach's Burnout

Inventory (1992) which was completed to measure the effects on emotions in the workplace. Additionally, this study led to a pivotal Multi-Dimensional Study of Burnout completed in 1996 that identified three important feelings about burnout in the workplace: depersonalization, exhaustion, and lack of personal achievement. Maslach was also the first person to identify burnout as the concept of emotional exhaustion, cynicism, and lack of professional competence (Maslach, 1992; Joinson, 1992; Akman, 2016). Maslach also determined in later studies, the more severe the burnout, the more burnout consumes life energy with negative thoughts. The attitudes one has toward the workplace, and the hopelessness that ensues led researchers to believe the only real way to overcome burnout was to leave the situation (Maslach and Leiter, 1998). To better identify burnout, three dimensions were contained in the Maslach Burnout Inventory (MBI): emotional exhaustion, depersonalization, and personal accomplishment (Ahlgreen & Gillander-Gadlin, 2010). Of these three dimensions, there is a gender gap in findings. Males score higher on depersonalization, and females score higher on emotional exhaustion. There is also a correlation between burnout and job stress. Individuals experiencing on the job stress versus stress at home are more likely to burnout (Maslach & Leiter, 1998; Ahlgreen & Gillander-Gadlin, 2010).

Despite Maslach's work on burnout, Stier-Jarmer, Frisch, Oberhauser, Berberich, and Schuh (2016) suggested there is much more work to be done, and that research has not begun to study all the components and contributions of burnout. It is important to catch burnout before the full litany of symptoms, and more preventions need to be considered. More work needs to be done in stress management, physical exercise, and leisure. Researchers also noted that there should be defined classification criteria for

burnout, compassion fatigue, and secondary traumatic stress developed. Without developed classification, the variables of compassion fatigue, burnout, and secondary stress are difficult to quantify (Stier-Jarmer, Frisch, Oberhauser, Berberich, and Schuh, 2016). In an attempt to measure burnout, compassion fatigue, and secondary traumatic stress, Stamm (2002, 2010, 2016) developed the Professional Quality of Life Survey or the ProQOL.

**Professional Quality of Life ProQOL**

ProQOL is an important tool specifically for educators as noted in edition five. It impacts education because it is a useful assessment tool for many categories such as secondary trauma, compassion fatigue, compassion satisfaction, and burnout. It is important to remain self-aware in a helper profession, especially in education because it can be a truly selfless profession wherein time for oneself can be lacking. Over a decade after Maslach's study, Stamm (2010) developed an inventory to assess compassion fatigue, secondary traumatic stress, burnout, and oppositely compassion satisfaction. While an inventory wholly measures compassion fatigue to prevent burnout is non-existent, the ProQOL has been used extensively to determine quality of life (Figley, 2002; Stamm, 2002, 2010, 2016). The ProQOL inventory is not meant to diagnose physical or mental disorders, but rather to bring emotional self-awareness to the surface (Stamm, 2002, 2010, 2016).

The Professional Quality of Life scale or the ProQOL is now the third-generation burnout inventory (Stamm, 2002, 2010, 2016). It was originally developed to help assess burnout in mental health care workers. Since its inception, ProQOL has had five revisions and the last one is for use with educators (Stamm, 2002, 2010, 2016). Much

like Maslach's burnout inventory, it is also useable in other professions with those revisions (Butts, 2012).

The first ProQOL was for mental health workers. The first revision or second ProQOL was for healthcare workers, specifically nurses. The third ProQOL was for the broad-spectrum healthcare worker, the fourth ProQOL was for other helper professions, and counselors were generally using this one. The fifth edition had a few revisions and focused on the needs of the Educator. The rationale for giving the ProQOL is that it is a valid and reliable measurement tool and has expanded the work of Maslach in that it has been redeveloped for educators (Stamm, 2002, 2010, 2016; Butts, 2012). The reliability and validity found for the Professional Quality of Life Scale (ProQOL) according to Statistics Solutions, and Stamm (2010): Compassion Satisfaction α = .88 (*n* = 1130), Burnout α = .75 (n = 976),Compassion Fatigue α = .81 (*n* = 1135),inter-scale correlations show two percent shared variance (*r =.23;coσ = 5%; n = 1187*) with Secondary Traumatic Stress and five percent shared variance (*r =.14; coσ = 2%; n = 1187*) with Burnout. This material may be freely copied as long as (a) the author is credited, (b) no changes are made, and (c) it is not sold.

**Epidemic-Pandemic Impacts Inventory**

During the Covid-19 pandemic most of the working population discovered compassion fatigue, secondary traumatic stress, and burnout. Grasso's (2020) study used the Epidemic-Pandemic Inventory to assess how the pandemic affected different domains of one's personal and family life. Moreover, the effect the pandemic had on one's personal life impacts one's professional life. The epidemic-pandemic inventory of Grasso's (2020) also measured a portion of compassion fatigue, stressors, and secondary

traumatic stress. Nadeem, Shernoff, Coccaro, and Stokes-Tyler (2022) used the same survey in their research and discovered three main concerns teachers had related to COVID-19. Teachers were concerned with instructional loss, trauma exposure due to a loss of a loved one, and increased exposure to domestic violence or housing insecurity. While not much was done for educators during the pre-pandemic years, COVID-19 seemingly propelled the subject of compassion fatigue to the forefront for educators (Nadeem, et al., 2022).

**Demographics**

Teacher tenure is often debated as a meaningless piece of demographic data when in fact it may be very useful in insight to compassion fatigue. There are several components to teacher tenure such as academic impact, test scores, steps or raises, on the job incentives. In most cases researchers found that teachers teaching for over five years, and had superior support had less instances of compassion fatigue (Tepper, 2007; Cook, 2012; Ackman, 2012; Linedecker, & Cramer, 2021). Most employees or helpers who experience compassion fatigue, secondary traumatic stress, and in some instances burnout, have less than five years on the job experience. Compassion fatigue may be due to lack of support or poor leadership structures which fail to communicate expectations, curriculum standards, and discipline outcomes (Ackman, 2016; Tepper, 2007). There is also concern that the impoverished community is more susceptible to compassion fatigue, and narrows the susceptibility to educators because of their numerous, and almost chronic exposure to secondary trauma (Tepper, 2007; Cook, 2012; Linedecker & Cramer, 2021). In addition, researchers, Linedecker and Cramer (2021) added consensus of exposure to secondary trauma, but in contrast their research suggests if an educator is more self -

aware and is a reflective in nature then individuals are twice as likely to suffer from secondary trauma leading to compassion fatigue. In the same vein, self- reflective educators are twice as likely to seek help for the secondary trauma exposure, and compassion fatigue.

Demographics, particularly age and experience on the job are important in determining who may be at risk. Studies give historical insight and trends on who may be most at risk. Teachers younger than 30 years of age are twice as likely to experience compassion fatigue as compared to their older counterparts. The older and more experienced a teacher was on the job, the lower their compassion fatigue score (Tepper, 2007; Cook, 2012; and Ackman, 2012). While higher education and stress is counterintuitive, there is a high level of stress that corresponds to having a higher degree or continuing one's education (Maslach, Schaufeli, & Leiter, 2001; Kramer & Linedecker, 2021). Employees with tenure or more years of experience reported statistically lower levels of compassion fatigue. The same demographics predicting teacher enthusiasm also predicts compassion fatigue. There is a direct correlation for individuals less enthusiastic and having less than 15 years of experience on the job (Linedecker & Cramer, 2021; Kaslack & Dagyar, 2022; and Capri & Guler, 2018). For example, males with less than 15 years teaching experience are generally more apt to be less enthusiastic and have a higher compassion fatigue score (Kaslack, and Dagyar, 2022).

Teaching is meaningful work, but when tenure is at stake, other tasks take precedence, and joy turns into worry about one's job stability. Furthermore, compassion fatigue had a direct correlation to tenure. Teachers teaching five years or less were

especially more likely to suffer from compassion fatigue leading to burnout (Capri & Guler, 2018; and Kaslack & Dagyar, 2022). Congruently, age is also a factor. Educators as a whole in the thirty years of age and younger category are more likely to suffer from compassion fatigue. Educators that are younger and untenured may not have enough life experience to handle secondary traumatic stress, and it turns compassion fatigue occurs (Maslach Schaufeli, & Leiter, 2001; Capri & Guler, 2018; and Kaslack & Dagyar, 2022). While age is an important demographic while discussing compassion fatigue, gender is also important when looking at risk factors.

Traditionally speaking, Maslach, Schaufeli, & Leiter (2001), Capri and Guler (2018), Kaslack & Dagyar (2022), Linedecker & Cramer (2021), Tepper (2007), Cook (2012), and Ackman (2016) concur on the role of gender and compassion fatigue. Females generally retain higher levels of compassion fatigue. Researchers specifically found that more women than men experienced compassion fatigue and or burnout (Goodwin & Richards, 2017; Stier-Jarmer, Frisch, Oberhauser, Berberich, & Schuh, 2016; and Kleiner &Wallace, 2017). However, Bermejo-Toro, and Prieto-Ursua (2014) reported differences from the other compassion fatigue studies. Demographically, more men reported leaves from work than their women counterparts in education, specifically, 22% of men versus 12.8% of women for long term. It was further reported that men had a total of 69 days accumulation of leave, and women had a total of 48 days accumulation of leave. The reason for leaves of absence varies among genders (Bermejo-Toro, & Prieto-Ursa, 2014).

Men take more leaves because of outwardly physical symptoms that lead to taking sick leaves and women are taking less leave but suffer inwardly or mentally. Men are

taking more leave than women and leave from work was attributed to higher levels of compassion fatigue. Men who suffer from burnout are generally affected physically, as opposed to women who suffer from burnout who are affected psychologically and psychiatrically (Bermejo0Toro, &Prieto-Ursa, 2014).

In addition to gender and time off work, both Bermejo-Toro, & Prieto-Ursua (2014), and Goodwin & Richards, (2017) concur and found women are more likely to be self-aware and self-assess their health as opposed to men. That may contribute to this study because women were finding health related issues and were proactive, whereas men were more reactive and required more leave to remedy the situation. Therefore, the reasoning behind this contradictory study that women are less vulnerable to compassion fatigue than their male counterparts and they are less likely to burnout of the profession. It can be ascertained that realizing mental health, and self -assessment is the key to being proactive with compassion fatigue and ultimately preventing burnout.

**Compassion Fatigue and Burnout: Causes and Contributing Factors**

Compassion fatigue was an invisible issue in education for many years. When COVID 19 became and epidemic and was found all over the United States, compassion fatigue was catapulted to the forefront of research. While the pandemic was not the cause it is a contributing factor (Nadeem, Shernoff, Coccaro, and Stokes-Tyler, 2022; and Grasso, 2020). Most of the workplace concerns about compassion fatigue and secondary trauma were present before the pandemic, however they have been amplified by COVID-19 (Nadeem, Shernoff, Coccaro, and Stokes-Tyler, 2022; Grasso, 2020).

During the COVID-19 pandemic a new cause of compassion fatigue was identified. Teachers were in the business of helping or supporting others during the crises

and many were themselves directly impacted by the pandemic. The risk factor for compassion fatigue and lower efficacy was in part by the educator's beliefs that they could rely on the administrators and school district. This led to a false sense of security and being let down, and finally compassion fatigue. Both risk factors of physical health, and mental wellbeing were added in 2020 because of the unique demands and restrictions COVID-19 placed on the education helper community (Nadeem, Shernoff, Coccaro, & Stokes-Tyler, 2022).

While it is not a normal occurrence, the COVID-19 pandemic should figure into research because it has affected studies, schooling, and specifically the occurrence of burnout and compassion fatigue (Verheyden,VanHolen, West, & Vanderfaeillie, 2020). Helper professions experienced increased compassion fatigue, secondary traumatic stress, and burnout. COVID-19 impacted an already fatigued staff to a moderate to high secondary traumatic stress, compassion fatigue, and burnout level. COVID-19 created an extra variable that impacted and increased compassion fatigue scores. Survey information revealed a fear of contamination and increased wait times being an indicator which led child care workers to feel helpless and not in control because of COVID-19 (Verheyden,VanHolen, West, & Vanderfaeillie, 2020). In addition to higher than usual compassion fatigue, teacher efficacy suffered as well. It was further noted that when teachers have a normal compassion fatigue score, they can buffer more burdens, but when compassion fatigue scores rise, it is hard to filter out other stresses that occur in everyday life. The cumulative effect of stress makes life seem more difficult for educators, because individuals are not only responsible for themselves, but for others (Hupe, 2019).

Holmes, Rentrope, Korsch-Williams, & King (2021) and Lluch, Galiana, Doménech, & Sansó (2022) observed while compassion fatigue was ever present in the education before the pandemic, collective trauma in the form of compassion fatigue, secondary traumatic stress, and burnout are occurring on a larger global scale. Research conducted during the COVID-19 outbreak was consistent with collective trauma which occurs when experiencing grief and taking care of others who are experiencing grief at the same time (Holmes, Rentrope, Korsch-Williams, & King, 2021; Lluch, Galiana, Doménech, & Sansó, 2022). Normally, compassion fatigue and burnout would rank lower, but the helper professions experienced high rates of depersonalization and emotional exhaustion, which resulted in low levels of self -achievement and compassion satisfaction (Holmes, Rentrope, Korsch-Williams, & King, 2021; Lluch, Galiana, Doménech, & Sansó, 2022). This type of secondary trauma that educational professionals experience, is like the 911 attacks wherein groups of people shared personal and professional trauma through loss (Holmes, Rentrope, Korsch-Williams, & King, 2021). The secondary trauma occurring presently due to loss of life, job loss or restructuring, long covid, financial upheaval on a global scale is termed collective trauma. The trauma is occurring at all angles because while many helpers experienced illness, death in their personal lives, maintained employment, and tried to manage isolation. Compassion fatigue ensued due to the repeated cycle of devastation, and also the helplessness of not being able to control the aspects in one's life.

While many causes of compassion fatigue come from outside causes, many lie deeply rooted within. Furthermore, environmental factors may be a cause, but one must also treat vicarious trauma, and the empathy level of the helper. During the stress-

process model a person's hormonal and endocrine functions could make an employee more susceptible to compassion fatigue. The increased hormone function led to illness and a secondary cause of stress. Also, work related conflict, particularly administrative conflict and general lack of support contributed to compassion fatigue. Administrators failed to build rapport with employees and led to a lack of trust on the part of the superior or administrator and a general failure for compassion satisfaction to thrive (Boscarino, Adams, & Figley, 2010; Berg, Harshbarger, Ahlers-Schmidt, & Lippoldt, 2016). A lack of empathetic concern on the part of the superior is an indicator of compassion fatigue. Other causes were prolonged exposure to a job-related stressor, traumatic recollections one is unable to shake, and life disruption which causes unexpected changes to responsibilities and require immediate attention (Figley, 2021).

A diversity of causes of compassion fatigue have been separated based on public and private school needs. Compassion fatigue was reported to be relatively high in secondary public schools, due to the secondary or vicarious trauma that is seen or dealt with daily. In contrast, compassion fatigue is lower in primary or elementary school, in the private sector, and with those teachers who have taught over twenty years. This trend suggested that elementary schools are simpler and teach more innocent in content. Moreover, the private sector seems to be subject to less scrutiny and regulations and is not as stressful and demanding. Also, teachers teaching over twenty years are the voice of reason and experience. They have the schedule perfected, are aware of their surroundings, risks, and liabilities. This leads to an advanced awareness and lowers stress because of awareness of expectations. Finally, teachers teaching over twenty years have a higher efficacy, are more confident in their profession, and overall, their jobs not

at risk due to having tenure. Experienced teachers are more at ease and have experienced and know how to handle a variety of situations and may be nearing retirement or pension, and would have already received tenure (Navindinia, & Heiran, 2017; and Yu, Sun, Sun, Yuan, Ding, & Zhang ,2022). The only instance of compassion fatigue in a private school was due to lower salary, shortage of educational equipment/facilities, heavy workload, and lack of teacher autonomy, but overall was much lower than the public sector. The statistically significant cause of compassion fatigue on educators in public education is the formal evaluation procedure tied to tenure, lack of teaching materials, standardized testing, and overcrowded classes (Navindia &Heiran, 2017). In addition, student misbehavior, lack of motivation, class sizes and the time and pressure to complete units in the classroom were also high contributory factors to compassion fatigue (Navindia & Heiran, 2017). Additionally, the extent that work interferes or outright interrupts homelife could be a contributor to compassion fatigue. Conflict also occurs when workload rises and overruns homelife. This creates a perceived feeling of pressure and leads to detachment at home when at work, and detachment of work when at home. Time pressure muddies the water and blends the line of work and home life. Time pressure has been the leading predictor of burnout leading to compassion fatigue. Researchers noted time pressure as a predictor for compassion fatigue, and work hours are negatively associated with burnout (Kleiner, and Wallace, 2017).

In general, when focusing on the workplace climate and staff, a significant cause of compassion fatigue lies with co-workers, lack of communication about job roles, high workload, long hours, and high levels of bureaucracy leads to compassion fatigue (Stamm, 2010; Figley, 2021; and Henson, 2020). All these areas are outside of the

control of the employee or helper. In turn, because this is outside of the realm of control, it leads the helper to become more vulnerable to stressors and be less resilient when a secondary traumatic event is present. The lack of control, and sense of helplessness becomes a repetitive cycle. The school bureaucracy and lack of control is one of the hardest to overcome. The school's success and failure depend on the amount of compassion fatigue experienced by staff (Demirdag, 2016). While often peers are implicated, another cause of compassion fatigue can be the difficulties students experience in the classroom students that educators teach. Often in school there is exposure to violent student temperament causing staff secondary trauma, and directly leading to compassion fatigue. Furthermore, student temperament and discipline were the leading significant causes of compassion fatigue in schools. How an administrator chooses to discipline a student with a misbehavior is also a contributing cause of compassion fatigue (Olivier, Janosz, Morin, Archambault, Geoffrion, Pascal, Goulet, Marchand, & Pagani, 2021). Finally, the majority of susceptible compassion fatigue behavior lies within oneself. While student behavior, and how a superior disciplines the behavior is outside of the educators control, but the educator can affect ones behavior directly (Olivier, Janosz, Morin, Archambault, Geoffrion, Pascal, Goulet, Marchand, & Pagani, 2021). An educator's enthusiasm and empathy towards helping others may impact their ability to develop compassion fatigue. If secondary trauma is present that leads to a lack of empathy and anxiety in attending one's job. For a teacher that can have a drastic impact. Not only does lack of empathy and enthusiasm impact a teacher on their performance review, lack of empathy and enthusiasm would also impact student performance which in turn is tied to tenure. Once again this would continue a cycle of

compassion fatigue leading towards burnout. The prevalence of empathy as opposed to those who are less inclined to become involved in the life of others, indicates a greater risk for developing compassion fatigue, and burnout (Diaconescu, 2015).

**Prevention and Treatment**

Compassion fatigue is normally considered an individual issue, and the individual generally deals with it on his or her own. Often a stigma surrounds the issue when in fact it is a psychological hazard to health, welfare, and safety (Edwards & Goussios, 2021). Due to this burden of self-care and the psychological challenges of COVID-19, those in the healthcare, social services, and education careers have become hyper aware that compassion fatigue may in fact be an ecological issue that requires multiple personnel to resolve (Edwards, & Goussios, 2021). In general, compassion fatigue and burnout require more than just the individual for treatment, and it may take multiple steps to effectively treat the effects that it has on the body.

Compassion fatigue will simply not resolve alone, and early identification and treatment is key (Maslach & Leiter, 1998; Figley, 1998; and Stamm, 2010). However, as identification of compassion fatigue is occurring more frequently, treatment has been successful in turning around compassion fatigue. Treatment has also been effective in bringing back the vitality of compassion satisfaction. One of the keys to prevention and treatment is self-awareness as a prevention technique, and active focus as a treatment strategy. If compassion fatigue is left unresolved it will lead to burnout, which leaves the employee very little options for treatment.

The reason for a lack of information on compassion fatigue in education exists is the result of uncommon vocabulary and methods to contextualize problems correctly.

First and foremost, more research is warranted on compassion fatigue in education to be able to prevent and or treat the problem correctly. Next, the changing acculturation, building awareness among educational professionals, and taking steps to ensure compassion satisfaction are steps that ensure professionals can better deal with compassion fatigue (Raimondi, 2019). When building compassion satisfaction, the opposition of compassion fatigue, high demand of service work found in education was of benefit. This was also found to be a protective factor against compassion fatigue and encourage compassion satisfaction. The high demand of service work contributed to the human capacity, empathy, and service required of the individual helper. Furthermore, the high demand of service work increases the emotional cost of concern for the patient or the student and the helper achieved greater satisfaction or compassion satisfaction from doing so (Perez-Chacon, Chacon, Borda-Mas, & Avargues-Navarro, 2021).

The workplace and the culture within the workplace are one of the key factors of compassion fatigue and burnout. Individuals associated within the workplace can evoke powerful emotions which are contributory to negative workplace factors (Maslach & Leiter, 1998; Raimondi, 2019). When combatting negative workplace emotions and stress, a fairly new concept in the treatment of compassion fatigue has proved effective. Benefits from recreation were identified and were found to turn around compassion fatigue by utilizing stress management skills through recreation (Bennett, Lundberg, Zabriski, &Eggett, 2014; Koller, Abel, & Milton, 2022). A feasibility study was completed through a one-hour training program for sufferers of compassion fatigue. The feasibility study was a one-hour training program that was statistically significant in helping sufferers identify compassion fatigue, and viable treatment options. Furthermore,

the most viable option for those that were experiencing compassion fatigue from vicarious trauma, was recreation. Treatment was also viable and turned compassion fatigue caused by vicarious trauma around by learning to take personal time for fitness and recreation. Taking time for fitness, recreation and personal time led to a recharge (Bennett, Lundberg, Zabriski, & Eggett, 2014; Koller, Abel, & Milton, 2022). Those in the helper professions reported a better score on the Quality-of-Life Survey after completing the course intervention. While the original intent with this study was for veterans with PTSD, the effects that it had on caregivers and helpers transcended the original intent. While there was a slight reduction in PTSD symptoms and marital discord, the quality of life from recreation was the largest benefit (Bennett, Lundberg, Zabriski, & Eggett, 2014).

In general, compassion fatigue and burnout require more than just the individual for treatment, and it may take multiple steps to effectively treat the effects that it has on the body. As one moves from the causes of compassion fatigue, it is necessary to acknowledge viable treatment options. A subjective body of research by Dieser, Edginton, & Ziemer (2017) suggested a Serious Leisure Perspective, (SLP), and of this perspective, there are three forms or systematic pursuits. The first is called the amateur, the second is the hobbyist, and the third form is called career volunteerism. Research described how each degree of leisure or systematic pursuits fit into decreasing patient stress and physician or medical workforce burnout. Patients experience stress, and physicians or those in the medical workforce sometimes suffer due to secondary trauma because of what their patients are going through. Then, the other piece to the equation is patients initially experience stress from their illness and then physicians experience stress

from burnout from working on those patients. Using SLP and uncovering leisure pathways can reduce stress as patients and medical providers find holistic refuge and discover self- protection from bodily stressors. Burnout treatment is often suggested, but futile, therefore the same treatment is utilized in compassion fatigue with greater success. There is increasing correlational evidence for the benefit of physical activity in patients with stress related exhaustion, psychological disorders, and individuals scoring highly in the Shirome- Melamed burnout (Lindegard, Jonsdottir, Borjesson, Lindwall, & Gerber, 2015). In the Shirome-Melamed burnout inventory, physical activity is utilized at two hours or more each week for patients receiving treatments. No correlation between the groups from six to twelve months was observed, but past the eighteen- month treatment, the decrease in burnout was statistically significant. The longer a patient persevered, the better benefit from the treatment the individuals received (Lindegard, Jonsdottir, Borjesson, Lindwall, & Gerber, 2015). Sports Psychology was useful during the pandemic. Thus, Sports psychology supports ideas of team cohesion as well as balancing work and life. Moreover, recognizing the pandemic was out of human control and providing grace to others because of recognizing the signs of compassion fatigue in oneself and colleagues, prove to be helpful in navigating work and life experiences (Reel, 2020).

When seeking a viable treatment, it is often best to choose an option that is an all-encompassing assessment and treatment. A multimodal prevention program can help with strategies and assessments for helping participants with long range burnout. While it sounds like long range burnout is easy to control, professionals need to take seriously and take care of it with a multi-step approach. One measure is not as effective as a multi-

step approach and has a larger effect size. Embedded mental health and mindfulness in normal occupational therapy helped affect compassion satisfaction instead of compassion fatigue (Răducu & Stanculescu, 2022; and Stier-Jarmer, Frisch, Oberhauser, Berberich, & Shuh, 2016, Raimondi, 2019; and Koller, Abel, & Milton (2022). After the pandemic, more attention was placed on the effects of compassion fatigue because it affects not only staffing but also performance (Contreas-Solazzo, & Esposito, 2020; Himemelstein, 2020). After this epiphany, the Nursing Union paid more attention to the Institute for Healthcare Improvements (IHI) recommendations on worker wellbeing which included investing in stress management techniques, breathing exercises, and improving employee satisfaction in the workplace (Abel, &Milton, 2022; Contreras-Solazzo & Esposito, 2020). Himmelstein (2020) noted that even librarians who generally have the highest compassion satisfaction suffer from compassion fatigue and burnout directly attributable to the pandemic. At the inception of this study, research and literature was limited to the nursing and counseling field. However, compassion fatigue prevails in every helper profession directly related to the COVID-19 pandemic.

While alternative options can often be viewed as taboo treatment, many have gained traction in the treatment of compassion fatigue. Alternative therapies such as techniques focused on relaxation and meditation and noted 75% of participants had decreased symptoms of burnout while 69% of the participants experienced relief (Stier-Jarmer, Frisch, Oberhauser, and Berberich, and Shuh (2016). In a similar study, Donahoo, Siegriest, and Garrett-Wright (2018) reported special education teachers frequently using prayer and mindfulness reported the most benefit in lowering their compassion fatigue score on The Profession Quality of Life Survey ProQOL. In both

studies, participants were able to find relief by taking time for themselves or using a form of meditation or prayer. Prayer and mindfulness treatment research was completed using The Professional Quality of Life Scale, perceived stress scale, and pre and posttest scores. Additionally, individual interviews using Malterud's Systematic Text Condensation and discovered two different themes and categories for compassion fatigue and teaching during the COVID-19 pandemic and included satisfaction and enjoyment from work, and relief of the feeling of less-than-ideal work-related stress. There was a higher occurrence of compassion fatigue since the inception of the COVID-19 pandemic is evident (Gultom, Endriani, & Sastrawan-Harap, 2022).

The physical effects from compassion fatigue and burnout can lead to higher cardiac risk factors and mental fatigue as well. (Dreyer, Dreyer, & Rankin, 2013; Ochtenel, Humphrey, & Pfeifer, 2018). There is also a litany of symptoms people with burnout suffer such as depression, loss of interest in one's job, lack of self-care, hopelessness, and loss of efficacy (Dreyer, Dreyer, & Rankin, 2013; Ochtenel, Humphrey, & Pfeifer, 2018). The symptoms of burnout are persistent and chronic. It is not merely just physical, but usually presents as mental fatigue. Along with mental fatigue, Dreyer, Dreyer, & Rankino (2013) found coronary risk factors based on burnout factors. After, the baseline assessment treatment of a ten-week exercise program of cycling, running, and stair- climbing was completed, and the pre and post data were analyzed, the program had a significant positive effect on individuals that took part (Dreyer,Dreyer, and Rankin 2013). Moreover, regular intense physical activity has a preventative effect on diseases associated with burnout (Octenel, Humphrey & Pfiefer, 2018).

**Time Management**

In many cases small resolutions of compassion fatigue can add up to big differences. It is of no surprise that time management is an effective treatment. However, the treatment success lies in how the treatment is carried out. Time management techniques such as journaling events, taking notes, marking the calendar, keeping to a schedule, and completing daily thought processing were effective in combating compassion fatigue (Dionescu, 2015). Prospective counselors and teachers who practiced time management in their internship were more effective when they found a job. They exhibited time management skills that became a habit which led to them being more effective and leaving more time for what counts: students (Dionescu, 2015). Utilizing time management skills while prioritizing and making lists helped participants manage their lesson plans more effectively, and thus led to a more positive outlook on life. Proper time management enabled most participants to engage and generate appropriate adaptive responses to stressors. Participants responded better to stressors because time management allowed them to create a plan that they focused on (Tepper, 2007). Teachers tend to be more depressed and ill due to stress, abusive parents, and an overwhelming caseload. This research suggested a different type of time management when employees are off the timeclock. This particular type of time management allows the employee to clearly delineate work tasks and off the job tasks. Administrators should focus on the freedom that employees have when they are not at work, so that work does not seem like a prison. (Austin, Shah, & Muncers, 2005). Researchers, Leech, Gullett, & Cummings (2022) found during the pandemic it was not time management that was the culprit. Teachers in general do not have trouble with time management, but rather they

are given more work than necessary and some of it may not even be in their contracts. This technicality may expressly be underrated and not talked about in the profession, but it is a common stressor (Leech, Gullett, &Cummings, 2022; Tepper, 2007; Austin, Shah, & Muncer, 2005; Mahmoodi-Sharhrebabki 2015).

Often helper professions have work that is required outside of the normal seated school day. Administrators can put teacher's back in control by reducing their workload outside of school hours. Flex time, paid time off, work partner backup system, and uninterrupted or not on call hours are positive ways that administrators can help employees manage their time (Austin, Shah, & Muncer, 2005). Teachers who were less likely to organize, utilize schedules, and manage their time, were more likely to leave the profession due to longstanding burnout (Mahmoodi-Sharhrebabki, 2015).

**Wellness Programs**

Wellness programs are a requirement in many school districts. However, there is so much more than meets the eye. Wellness programs have several elements such as personalization, technology, social networks, evidence, and measure. Not just physical health, but mental health and wellbeing are considered also. Students and teachers need to have particularly healthy minds and bodies. Evidence based treatment of mental and physical conditions of compassion fatigue is critical to healthcare and education. In response to an increasing need for healthy minds and bodies, Canada launched The National Standard for Psychological Health in the workplace in 2013 focusing on mental health, tools, resources, and guidelines. This furthered the standard launched in 2013 to bring about awareness of mental health, give tools and resources, and set voluntary guidelines. The standard was revised in 2017 and 2020 to connect more tangible ideas

like workplace absenteeism and stress (Burjeck, 2017; Gale, 2017; Frost, Ritchie, & Leslie, 2020; and Limberg, Cook, Gonzalez, McCartnery, & Romangnolo, 2021).

There are many pieces of a wellness program. While there is a financial impact of setting up a wellness program the treatment and the services provided exceed the expenditure. Often, money is saved with the preventative health measures in place. (Limberg, Cook, Gonzalez, McCartnery, & Romangnolo, 2021; and Mendenhall,2021). A singular entity should not be responsible for a wellness program or compassion satisfaction. The supervisor or administrator should be responsible for the creation of care system cultures which support and educate workers, but it takes all employees to remain vigilant and keep it working. If the pandemic did anything, it brought awareness to the true need for a wellness program. The pandemic also taught health care workers that healthcare and any helper profession needed to transcend the top-down expert driven services and strive for a community-based approach (Mendenhall, 2021). All helpers, and those being provided care, should work together to create needs-based interventions. This means creating positive wellness experiences that all vested interests need to come together to create an all-encompassing wellness program.

When a wellness program comes to mind, many think that only the students should benefit from that. That should not be the case. A true wellness program should meet the needs of students and educators. Researchers, Avery, Johnson, Cousins, & Hamilton (2013), and Kendrick (2021) noted wellness programs seek to bridge a gap in developing wellness programs and to create a comprehensive model of wellness, not just for the student, but also for educators and other staff. Educators encountering trauma on their jobs had a higher instance of compassion fatigue and became the cost of caring with

many repercussions. Educators may experience the well-known symptoms of compassion fatigue such as, reduced initiative to complete work- related tasks, reduced performance of work- related tasks, reduced imagination or creativity, memory problems, and inability to make decisions, but wellness programs seek to focus on modifying behavior and sustain interventions that have been introduced (Kendrick, 2021; and Avery, Johnson, Cousins, & Hamilton, 2013). It is hoped that wellness programs will continue to expand within the next three to five years, and because of growing awareness of compassion fatigue they become more of a necessity than a value added (Burjeck, 2017).

Employee Wellness Programs or EWP's have been around for years, and The American Medical Association suggests the benefits of an employee wellness program outweighs the cost. Several components of an employee wellness program may include physical activity, weight loss, reporting wellness advocacy, and promoting wellness coaching (Berry, Irabito, & Baum, 2010; and Levin, 2007). The Alberta Teachers Association deemed compassion fatigue as a predictable and treatable occupational hazard in education, and as such a hazard, a standard wellness program should be applied (Kendrick, 2021).

Finally, when employers think of a wellness program, physical health often comes to mind. However, mental well-being should also be considered when dealing with stress reduction and burnout preventions. Mental health is a necessity when analyzing wellness programs, specifically in relationship to compassion fatigue and burnout (Stier-Jarmer, Frisch, Oberhauser, Berberich, & Schuh, 2013). Furthermore, over seventy percent of the participants noted their burnout decreased significantly after the intervention. The results

are positive and would not have been possible without an appropriate wellness program. Not only would the replication of this study in education be financially feasible, but it would be prudent to continue such wellness programs for the populations of people serviced.

**Superior Support**

In the early phases of research by Maslach (2002), it was determined burnout is often interwoven with relationships. Relationships often span from helper or provider to client or recipient of service, to co-workers and superiors, and to family. Subsequently, these positive relationship building experiences can either lesson the burden or put strain on the helper and further cause burnout. The educator's perceptions of being connected with the school also played a role in the perceptions of superior support which in turn had an impact on compassion fatigue (Yang, Manchanda, & Greenstein, 2021).

When working with students with exceptionalities, experience matters. Teachers with few years of experience and underdeveloped rapport with leadership led to failure to acknowledge compassion fatigue and finally burnout. The main demographic suffering from compassion fatigue was educators with few years of teaching experience which led to the perception of lack of superior support (Yang, Manchanda, & Greenstein, 2021). Moreover, teachers lacking years of experience and leadership support may have a more difficult time balancing the diverse needs of their students with exceptionalities (Zianian-Ghafari & Berg, 2019) Three themes emerged from educating students with exceptionalities and administrator support: personal investing in students' needs, challenges with inclusion, and limited resources to support success. These themes could be lessened with superior support, and years of experience on the job (Zianian-Ghafari &

Berg, 2019). Remote teaching was similar to teaching students with exceptionalities because of limited access to administrators due to teaching remotely. Teachers were not supported by their administrators because they lacked communication with them. Educators also felt inadequately trained in online format, and this challenged even the most adept educator (Leech, Gullet, & Cummings, 2022).

Perseverance in teaching is important. Each year one learns a new skill to build off the prior year and learn to be the best at their trade for their students. Only half of the present-day teachers make it to their fifth year in teaching, and twenty percent will not make it to their third year in teaching (Farmer, 2020). Work related stress is staggering and factors such as high stakes testing and teaching students with exceptionalities, and teaching during the pandemic have been recent causes for teachers to leave the profession (Farmer, 2020). Teaching by nature should be foundationally built through relationship building, and this should be evident in the work environment (Makhdoom, Atta, & Malik, 2019; Farmer, 2020). With all the work-related stressors, navigating these tough times in education, lack of superior support and peer relationships contributed largely to special education teachers leaving their career (Farmer, 2020). Among the top reasons for higher compassion fatigue in a helper career is organizational politics or perceived organizational politics. This can also fall under the category of lack of superior support. Organizational politics occurring in the workplace can contribute to poor efficacy, poor behavior, lack of motivation, and feeling the need for a career change (Makhdoom, Atta, & Malik, 2019). Teachers with less than five years' experience in the field do not feel prepared by their superiors and have not received adequate training. Subsequently, lack of support can lead to efficacy issues and educators exiting the field of supportive

principals can indirectly relieve some stressors. Decreased stressors in turn can make a teachers' work easier and can lead to improved teaching with higher job and compassion satisfaction (Zianian-Gharfari & Berg, 2019; Farmer, 2020).

All educators, and especially new teachers that taught in the pandemic were among the top tier group at risk during the pandemic and needed the most help and resources from their superiors. While most teachers suffered from the difficulties of the pandemic, new teachers that had a lack of support often experienced even more stress. New teachers were impacted the most because they struggled to teach in a new forum while managing stress levels from the pandemic at home, and difficulty obtaining resources. High poverty schools were in the top tier of at risks schools on the needs assessment as well (Nadeem, Shernoff, Coccaro, & Stokes-Tyler, 2022). Not only were resources scarce, but administration was also overwhelmed with day-to-day operations trying to obtain resources and provide equal access. In turn, to combat being on the top tier of at risks schools, teacher self-efficacy and superior support were on the top priority list combatting and preventing compassion fatigue (Yang, 2021). Papazoglou, Koskelainen, and Stuewe (2018) noted if compassion fatigue is not dealt with it not only affects the employee, but others as well. Administrators or higher-ranking officials can counteract compassion fatigue by developing practices which identify and celebrate successes and boost natural compassion satisfaction (Papazoglou, Koskelainen, & Stuewe, 2018). Other strategies such as briefing and debriefing sessions with the staff as a whole and reflection of gratitude ceremonies also boost compassion satisfaction enough to overtake compassion fatigue (Papazoglou, Koskelainen, & Stuewe, 2018).

Subsequently, feelings of connectedness from superiors and peers serve as a protective factor against feelings of secondary traumatic stress. Furthermore, it was found when teachers have connectedness with supportive supervisors, they feel a greater sense of ownership with decision making. Superior support is often developed and fostered when teachers have adequate access to resources, and the result of secondary trauma is reduced (Yang, Manchanda, & Greenstein, 2022). Moreover, this increased ownership in decision making in turn, led to lower emotional exhaustion, and reduced workplace stress.

Destructive leadership is one of the leading contributing causes of burnout. Many administrators do not mean to cause harm, but as a result of thoughtlessness, destructive leadership occurs. If not affectively dealt with, destructive leadership can lead to chronic absenteeism, feelings of isolation, the need to retire early, and low self- esteem (Akman, 2016). Accordingly, superior support and active leadership is crucial, otherwise employees can become dehumanized, and seek isolation (Gupta, Paterson, VonZwech & Lysaught, 2012). Job satisfaction in an allied health discipline depends on superior support and the inclusion of the employee in decision making. Interpersonal relationships, adequate staffing, multi-professional teamwork also play a role and contribute to making the employee feel the support of their employer (Gupta, Paterson, VonZwech, and Lysaught, 2012). In contrast Leland and Armstrong (2020) noted when the helper is unsupported by a superior, compassion fatigue (CF) corresponds negatively with higher caseloads, diminishing efficacy, having to create more documentation, and focus on outcomes for those who are helped. Superior support could boost efficacy and counteract lower compassion fatigue scores. Moreover, high helper efficacy and

compassion satisfaction is a blessing, but lack of superior support or no one to go to or count on when secondary trauma and compassion fatigue are on the rise would counteract efficacy.

Not only is superior support an important component in lessening the effects of compassion fatigue during normal operations, but it is even more so during trying times. During the pandemic both nurses and physicians were scored for compassion fatigue and compassion satisfaction on the ProQOL. While physicians suffered high rates of compassion fatigue and burnout, nurses who were supported by superiors had a higher rate of compassion satisfaction. Doctors are the equivalents of superiors and nurses are the equivalent of teachers for all intents and purposes. This study also indicated both physicians and nurses who were caring for patients with COVID-19 had a higher instance of compassion fatigue, and burnout (Ruiz-Fernadez, Ramos-Richardo, Ibanez-Masero, Cabrera-Troya, & Carmona-Rega, 2020). The pandemic nurses felt they were connected to society and were taking care of society and helping the sick recover. In contrast, physicians in this study felt the weight of the world on their shoulders with a general sense of helplessness in finding the answers for the COVID-19 virus (Ruiz-Fernadez, Ramos-Richardo, Ibanez-Masero, Cabrera-Troya, & Carmona-Rega, 2020; Reel, 2020).

**Exercise and Recreation**

For decades exercise has been determined to have many powerful effects on the mind and the body. Wellbeing was assessed with a malaise inventory and a general health questionnaire. Subsequently, poor health can affect one's emotional wellbeing and thus impair one's ability to participate in rigorous exercise (Steptoe & Lancet, 1996). Greater participation in vigorous exercise and leisure activities contributed to greater

emotional well-being of the participant. Sports and recreational activities can lower risks for premature death, lesson the occurrence of diabetes and cardiovascular disease, and increase one's overall emotional well-being (Steptoe, Butler, & Lancet, 1996; Warburton, Nicol & Bredin, 2006). Subsequently, physical activity is often reduced because of an individual's level of burnout and mentality. Fewer positive feelings about exercise also occurred in this group. In this same group the less exercise that one would partake in, the greater the decline in well-being. This was one of the first studies of its kind to correlate physical activity and well-being (Liang, Kao, & Lin, 2013).

When assessing physical activity, it is important to quantify the different types and the effect on compassion fatigue. Mixed physical activity of cardio and strength training had the greatest effect on compassion fatigue. Physical activity combined with physiological interventions had a positive gain as well (Greco (2021), and Rosales-Ricardo, & Ferreira, 2022). The RE-AIM approach combines physiological and physical activity, and stands for R-Reach, E-Efficacy/Effectiveness, A- Adoption, I-Implementation, and M- Maintenance. Physical activity in this body of research was measured with self- report questionnaires and pedometers. Moreover, the group did respond to physical activity and overall reported a decrease in depression rate and anger score, lower blood pressure and perceived stress, decrease in perceived stress, and increased sleep quality and self-efficacy (Cuthbert, King-Shier, Ruether, Tapp, & Culos-Reed, 2017).

Less prevalent, but just as important, is leisure. Leisure is particularly important to those that have suffered trauma. The degree an individual is active in activities such as yoga, meditation, and self-awareness can potentially improve one's outlook on life Wu,

Xuan, Xiao, Fu, Jiang, & Zhao, 2016). Veterans suffering from traumatic stress disorder identified leisure and recreational activities contributed to help one better cope and navigate the trauma (Bennett, Lundberg, Zabriskie, & Eggett, 2014). Moreover, less prevalent alternative methods such as mindfulness, meditation, and prayer cannot be discounted when the employed helper is struggling with compassion fatigue (Folio, 2014; Donahoo, Siegrest, Garret-Wright, 2017; Henson, 2020). A research gap was noted with alternative treatment methods on compassion fatigue for educators and medical staff. The research gap was limited to studies on alternative treatment methods on compassion fatigue. This specifically includes mindfulness, meditation, and prayer. The use of mindfulness and prayer reduced perceived stress and corresponded positively with the increase in compassion satisfaction (Donohoo, 2017).

Exercise can modify antecedent disruptive behavior in adolescents (Folio, 2014). Baseline behavior levels were measured and exercise behavior levels, and up to two-hour post behavior levels. All students in the study were tested for baseline behavior levels, resting heart rate, and target heart rate. Students were observed and recorded for the following behaviors: disruptive behavior, prosocial behavior, and compliance to a teacher request. The highest level of positive correlational evidence came after exercise took place. That is the place in the research where compliance to teacher request rose from 53.3% to 82.7%. Folio's (2014) research adds to the body of literature in support of exercise to reduce stress, and now disruption.

The idea exercise is medicine is a false assumption. Exercise is recreation, and therefore should be included in the category. The reason general practitioners place exercise in the medicinal categories is they often prescribe exercise for a litany of

medical reasons. However, it is often excluded from the general category of recreation, because of the stigma physicians might face for writing a prescription for leisure. Hence, exercise may be a powerful medicine prescribed for compassion fatigue. However, leisure may be just as important in the role of compassion fatigue as medicinal exercise (Smith 2016). Researchers, Kaur, Singh, Arya, & Mittel (2020) found the physical fitness of individuals were hampered by the cessation of outside activity. The closure of fitness centers and recreation parks led to decreased scheduled physical activities. There was also a relationship between decreased physical activity and increased anxiety, stress, and depression. Researchers also found relational evidence because these centers and parks were closed this led to radical lifestyle changes. Exercise can indeed surpass physical barriers and hold the key to better mental well-being.

**Self -Assessment**

The Trauma Practice Questionnaire is a tool used to self-assess and provide information to individuals impacted by compassion fatigue (Smallwood-Butts, 2012). Once compassion fatigue is identified, cognitive therapies are recommended. Once compassion fatigue is identified, cognitive therapies such as Eye Movement Desensitization Reprocess (EMDR) and behavior therapy are recommended (Smallwood-Butts, 2012). Self-care and assessment is the most successful measure to protect against compassion fatigue. Furthermore, self-care using a positive outlook, self-efficacy, and the perception of one's own ability to have control over life, decreased the probability of developing compassion fatigue (Sorenson, Bolick, Wright, & Hamilton, 2016). Evidence supports knowledge and attitudes in response to utilizing self- assessments can contribute to lessening the burden of compassion fatigue (Smallwood-Butts, 2012; Hayuni, Hasson-

Ohayon, Goldzweig, Bar Sela, and Braun, 2019). The idea of employing self -assessment in direct response to the onset of compassion fatigue is of advanced benefit and proactive to the sufferer. An assessment tool should provide data regarding the needs of the participant. The distress from compassion fatigue is an emotional response to the suffering of others. Subsequently, as an individual engages with self-reflection, one is aware of the individuals' feelings. Thus, one takes perspective and can choose to take action to improve one's life and how they care for others. (Hayuni, Hasson-Ohayon, Goldzweig, Bar Sela, & Braun, 2019). Empathy does not make a caregiver more susceptible to compassion fatigue or burnout (Braun, 2019).

One of the most important components of compassion fatigue is self-care. Self-care is an important means of both assessing and treating compassion fatigue. Self-assessment and self-care became top tier criteria for treating compassion fatigue and found that early treatment can lead to intervention opportunities for individuals (Márquez, Galiana, Oliver, & Sansó, 2021; Johnson, 2020; Harwood, Wilson, Crandall, & Morano, 2020). The six most important categories of self- care include physical self-care (nutrition, exercise, and health appointments), emotional self-care (counseling visits), social self-care (celebrating successes), cognitive self-care (reading and writing for fun), financial self- care (responsible spending), and spiritual self- care (prayer, meditation, and worship (Harwood, Wilson, Crandall, & Morano, 2021). Finally, self-care can also be a form of being mindful and utilizing self-compassion. Mindful self-compassion involves a non-judgmental, kind, supporting, caring, and understanding approach to self, acknowledging all individuals are imperfect. Self- compassion is also deemed a protective factor for the quality-of-life scale, as well as a buffer for work

related stress. This preventative factor may indeed lower compassion fatigue or prevent it (Harwood, Wilson, Crandall, & Morano, 2021).

**Summary**

Current studies and theoretical underpinnings of Maslach (1995), Figley (1995), and Stamm (2010) were provided in Chapter Two, as well as the theories leading to the development of instruments identifying burnout and compassion fatigue. The gap in literature on compassion fatigue in education, and the lack of viable treatment of compassion fatigue led to the thoughtful development of the research questions that informed this study. Additionally, a review of the theoretical underpinnings of the effect of exercise, mindfulness, and wellness on burnout and compassion fatigue was examined. Moreover, Chapter Two also examined superior support or lack thereof, and various causes of compassion fatigue. COVID-19 also informed this study and reflected new data about prevalence of compassion fatigue in education, and the development of a new instrument correlating with compassion fatigue.

Maslach (2002) has identified burnout in the workplace as one of the most detrimental to the employed, but also the employer. Burnout in the workplace sets forth a purpose for study, because of the long-lasting impact. It is equally important to see if compassion fatigue can be treated in the early phases, so burnout and the long-lasting impact does not occur. The dependent variable study is compassion fatigue or the ProQOL score. The independent variables studied are exercise minutes of educators, location of educators, and finally the tenure of educators. These variables contributed to the creation of three important research questions.

Given what researchers triangulated, the problem is the prevalence of compassion fatigue in education, and a gap in vital treatment options. The review of the literature found that exercise was the most statistically significant in lowering compassion fatigue scores on the Quality-of-Life survey. Moreover, there are also many other new and alternative treatments that are gaining traction in the treatment areas of compassion fatigue. While many alternative treatments were previously not given any thought, COVID-19 caused educators to take notice and seek alternative treatments. It is vital in helper professions that care for others, to care for themselves by seeking out and researching compassion fatigue, and to find a viable treatment before the compassion fatigue turns into burnout.

The purpose of the study is solidified with data. Chapter Three described the purpose for the study with data and discussed the research setting. The data suggests that there is a gap in any viable treatment for compassion fatigue, specifically in education. Moreover, in Chapter Three, the researcher identified the method for selection of secondary schools and the random selection process of survey participants. Additionally, a selection of quantitative data, and data treatment was provided, along with answers to support the proposed hypothesis and research questions. The overarching Compassion Fatigue research examined statistical differences among educators exercising less than 15 minutes a week, with educators exercising more than 15 minutes a week, educators teaching in rural and suburban areas, and finally tenured and non-tenured educators.

In Chapter Four research findings are treated, analyzed, and presented. Visual representations of the statistical analysis are included. The survey, letter to obtain survey,

and tables serve as a visual representation and may be found in the appendix at the end of the manuscript.

Chapter Five includes a summary of findings from the study, along with the implications for education. Additionally, Chapter Five addressed the research gaps in education, demographics, and treatment. Recommendations for future studies and potential next steps in research were addressed as well.

# CHAPTER THREE

# RESEARCH DESIGN AND METHODOLOGY

## Introduction

This quantitative study of educators in a rural or suburban secondary setting, specifically grades nine through twelve, was completed to determine the prevalence of compassion fatigue, and the impact of exercise on compassion fatigue. Much research has been completed on compassion fatigue leading to burnout in the healthcare fields, but little has been done in the field of education (Stier-Jarmer, Frisch, Oberhauser, Berberich, & Schuh, 2016). If not treated timely, then burnout a much more serious condition, ensues. Compassion fatigue is often termed the cost of caring and for other individuals can be prevalent in any helper related field. Compassion fatigue if not treated can lead to burnout. As Maslach (2002) noted, burnout can be long lasting and life altering.

Exercise is notable for healthy effects contributed to an individual's body. In the same vein, this research delved into the effects exercise can have on one's wellbeing and mind. Additionally, in the second part of the study, the researcher examined the difference, if any, exercise can have on compassion fatigue. Currently, no study of such kind has been undertaken in education, and a research gap exists. Thus, this research sought to find if differences exist between one's amount of exercise and one's experience with burnout.

Using a three-part Professional Quality of Life Survey (ProQOL), the researcher will examine the relationship between exercise and compassion fatigue within rural and suburban school settings. Furthermore, the researcher's population of participants will include tenured and non-tenured educators teaching ninth through twelfth grade. In this

section, methodology will be discussed, as well as the selection of participants, the demographics of those participants, random sampling, research setting, research design, and instrumentation.

## Purpose of Study

The purpose of this quantitative, causal-comparative study is to test the multi-dimensional theory of burnout. The researcher, by comparing exercise routines, rural and suburban geographical location and tenure status will compare this demographic data against The Quality-of-Life Survey score for educators in school districts in the state of Missouri. By using Stamm's (2012) Quality of Life Survey (ProQOL), data is compared between tenured and non-tenured educators teaching in rural and suburban settings and educators exercising 15 minutes or less compared with educators exercising 15 minutes or more.

## Research Questions

In this study, the researcher examined the following research questions:

**RQ1:** What is the difference in ProQOL scores between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week?

**RQ2:** What is the difference in ProQOL scores between rural and suburban educators?

**RQ3:** What is the difference in ProQOL scores between tenured-educators and non-tenured educators?

## Null Hypotheses

The researcher made the following null hypotheses:

**$H_{01}$:** There is no statistically significant difference in ProQOL scores between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week.

**$H_{02}$:** There is no statistically significant difference in ProQOL scores between educators teaching rural school districts and educators teaching in suburban school districts.

**$H_{03}$:** There is no statistically significant difference in ProQOL scores between tenured educators and non-tenured educators.

## Participants

Using the Missouri Department of Elementary and Secondary Education's definition and directory database the researcher located principals at the secondary level. The survey was then forwarded to educators of the same school district. The participants included secondary teachers teaching ninth through twelfth grade in rural and suburban school districts in Missouri. To select participants, the researcher emailed a survey to principals and superintendents in Missouri school districts using the DESE database. The administrators of each school district were asked to forward the survey to educators. The purpose of this survey was to uncover differences, if any, that exercise had on compassion fatigue, as well as differences in compassion fatigue ProQOL scores among tenured teachers and non-tenured teachers, and finally to uncover differences in ProQOL compassion fatigue scores between rural versus suburban educators. The participants will

also complete basic demographic data to determine if certain demographics experience a higher rate of compassion fatigue.

This study included 88 rural schools and 22 suburban schools. Among these schools this study included 1 non-classified or non-binary, 31 males, and 78 females, 59 tenured educators, and 51 educators who are not tenured. Moreover, 72 educators exercised for less than 15 minutes, and 38 educators exercised for more than 15 minutes.

For the purposes of the study, the researcher chose purposeful sampling as the questionnaire was sent to all principals and superintendents supporting a secondary setting of grades nine through twelve. Additionally, the researcher also used criterion sampling for both tenured and non-tenured teaching and the amount of exercise completed According to Faul, Erdfelder, Lang, and Buchner (2007) using the G*Power for research found for medium effect size, with alpha = .05, and a power of .8, the researcher needed participants for at least 102 samples or 51 for each group.

Currently, the researcher is aware of no known risks for the participants of this study. However, to minimize the occurrence of any risk to human participants, the researcher, and Southwest Baptist University took several precautions. The survey given to participants was anonymous and the participants were able to remove themselves at any time. Additionally, any such data and survey questions were kept password secured on a personal device. In accordance with the guidelines of Southwest Baptist University regarding the protection of human participants, a request for review was submitted to the Institutional Research and Review Board for approval to send a questionnaire to approximately 1,200 of Missouri's public-school educators in a secondary setting serving

grades nine through twelve. After receiving the approval from the Research and Review Board, the researcher sent out surveys and collected data from those surveys.

**Research Setting**

The research setting for this causal comparative quantitative study consisted of suburban and rural school districts in the state of Missouri. The geographic location was selected due to the need for access by the researcher through the Missouri Department of Elementary and Secondary Education website. Schools were selected based on rural and suburban areas as defined by population within the state.

The research setting includes secondary Missouri rural and suburban public education. Using Google Forms, a survey was developed and emailed to public school administrators serving in ninth through twelfth grade buildings. The questionnaire consisted of three sections including compassion fatigue, compassion satisfaction score, comparison of exercise routines, and basic demographic information. The first section is the ProQOL compassion fatigue and compassion satisfaction score. This determines the prevalence of compassion fatigue amongst the surveyed individual. The second section is meant to gather data on whether or not there was any difference in scores between educators who exercise less than 15 minutes and those who exercise more than 15 minutes. Finally, the third section was to gather the basic demographic information such as age, gender, how many years the teacher has invested in education, and they type of degree the educator holds. In general, this last section will be used to determine if there is a difference in the ProQOL score between teachers who are tenured and those who are not. One argument for using quantitative data is a higher rate of reproducibility. The

higher the rate of reproducibility, the higher the rate of others uncovering a solution to the problem (Brundson, 2016).

**Research Design**

The researcher's objective with this study is to determine the prevalence of compassion fatigue. The researcher is also trying to determine if there is any statistical significance between compassion fatigue and exercise as well as other demographics such as location and teacher tenure to see if it impacts The Quality-of-Life Survey scores.

This causal-comparative research sought to examine relationships between independent and dependent variables (Brewer, 2010). The goal with causal comparative research is to discover if the independent variable is affected by the outcome, or the dependent variable by comparing the participants (Brewer & Kuhn). For the purposes of this study, significant inter-construct correlations among three subscales of ProQOL were compassion satisfaction, burnout, and secondary traumatic stress. The ProQOL displayed discriminant validity and satisfactory internal consistency. For each of the sub-scales scores were categorized as the following: low (22 or less), moderate (between 23 and 41), or high (42 or more). Secondary Traumatic Stress, ($M$ = 22.4), ($SD$ = 5.9). This causal comparative quantitative study was used to compare compassion fatigue among both tenured and non-tenured educators teaching in rural and suburban school districts. Furthermore, the study also compared the differences in compassion fatigue scores between educators exercising 15 minutes a day or more with educators exercising less than 15 minutes a day. To study differences, the researcher used t-tests to discover any statistically significant differences among the groups. Kim (2015) suggested the *t*-test in

this study would be the most feasible option because the *t*-test would compare groups and identify any statistical difference.

For the purposes of this study, demographic information was collected to determine if a certain demographic area experienced a higher rate of compassion fatigue. To collect information accordingly, a three-section survey was used to collect usable data on each variable. Due to the large population and geographical territory the research encompassed, using a survey was the quickest, safest, and most inexpensive method to retrieve the necessary data. The survey was developed through Google Forms and all data were housed on a computer that is password protected. Finally, the survey was sent to principals, who in turn emailed the survey to approximately 1,200 teachers in a grade nine through twelve secondary setting.

**Instrumentation**

The instrumentation used in this research is the fifth edition of the Quality-of-Life Survey (Stamm, 2010). Please see appendix B. Directions for taking the survey are also included in appendix B. The approximate time to complete the survey is 15 to twenty minutes. The survey was used to identify and rate compassion fatigue and compassion satisfaction using a five-part Likert scale. Extended work is to be completed on Maslach's Burnout Inventory, and Stamm's Quality of Life Inventory or ProQOL. The ProQOL edition five will be given as section one of the researcher's survey. For this study, the ProQOL was the most appropriate in assessing compassion fatigue levels, when compared with demographic information including tenured and non-tenured teacher's exercise routines. The Quality-of-Life survey was developed by Stamm (2010) to catch compassion fatigue before burnout ensues. Compassion fatigue has a quick

onset, but is easier to treat than burnout and usually happens before burnout sets in. This instrument was developed to assess the helper for compassion fatigue, so that burnout may be prevented.

Permission to use the survey was obtained from Stamm, Higson-Smith, Hudnell, and Stamm IV, (2016). The authors allow permission if appropriate credit is given, and the instrument is not sold for monetary gain. Scoring for the survey was completed using a five- part Likert scale using the following descriptions: 1=Never, 2 = Rarely, 3=Sometimes, 4=Often, and 5=Very Often. The Quality-of-Life Survey is a 60 question self- report survey requiring approximately thirty minutes to complete. The minimum score is 60 and the maximum score is 300. Significant inter-construct correlations among three subscales of ProQOL were compassion satisfaction, burnout, and secondary traumatic stress. The ProQOL displayed discriminant validity and satisfactory internal consistency. For each of the sub scales, scores are categorized as low (22 or less), moderate (between 23 and 41), or high (42 or more). – Secondary Traumatic Stress, ($M$ = 22.4), ($SD$ = 5.9). The reliability and validity found for the Professional Quality of Life Scale (ProQOL): Compassion Satisfaction $\alpha$ = .88 *(*$n$=1130*)*, Burnout $\alpha$ = .75 *(*$n$=976*)*, Compassion Fatigue $\alpha$ = .81 *(*$n$=1135*)*, interscalene correlations show 2% shared variance ($r$=*.23; cov* = .05*;* $n$=1187) with Secondary Traumatic Stress and 5% shared variance ($r$=.14*; cov = .02;* $n$=1187) with Burnout.

When considering validity, it is important that the instrument can be replicated and tested. According to Stamm (2010) there is good construct validity with over 200 published papers. The compassion fatigue scale is distinct with over 100,000 internet articles and 100 research papers over half of them have used the full ProQOL scale. The

validity and reliability were confirmed through Statistics Solution and verified by the authors (Stamm, Higson-Smith, Hudnell & Stamm IV, 2016). The tool being provided is the ProQOL 5th edition. All that is needed is a computer for the survey, energy, vision, and time commitment. The purpose of this section of the survey is to examine the ProQOL compassion fatigue and compassion satisfaction score and see if there is a difference between educators who exercise, teachers who are tenured versus those who are not, and in general the prevalence of compassion fatigue. Section two will examine the relationship, and the strength therein, of that relationship between exercise and compassion fatigue. Section three of the survey will be to gather demographic data on the sample of human participants.

**Procedures**

For this study, the researcher used the Quality-of-Life Survey (ProQOL) fifth edition survey tool, with permission from the creators. Due to the addition of demographic questions in the survey, the researcher conducted a pilot study to ensure the validity and fidelity of the research. To protect the identity of participants, the survey is anonymous and raw dissertation data will only be shared between the researcher and the Southwest Baptist University Advisor. Thusly, Southwest Baptist University requires approval from the Research and Review Board (RRB) to be granted to ensure human participants are protected prior to conducting research. The researcher requested approval from the Research and Review Board to complete the fifth edition of the ProQOL on human participants along with demographic information. Permission was granted to collect data and conduct analysis and report the findings. This dispatched Missouri principals via email, and respondents were found through the DESE webserver.

The survey found in Appendix B was initially sent out to principals. Principals let the researcher know if their schools were rural or suburban and then sent a request to teachers to complete the survey. Once permission was obtained by the principal, the initial survey and informed consent, found in Appendix B and Appendix C, was sent out via the principal. The first wave of data was compiled, and a second round of surveys with a follow up email (found in Appendix D) was sent out one month later to ensure a good rate of data return. If needed, the researcher will call on schools as a reminder to take the survey and send the link for the third time to take the survey. Surveys will be housed anonymously on a password protected computer. From the survey results, the researcher will organize and compile the raw data. Data will show the percentage of tenured educators exercising 15 minutes or more and how individuals within the population suffer from compassion fatigue. Furthermore, the researcher will then analyze and prepare tables to make the raw data useable.

**Data Analysis**

Once the data for this study was downloaded, data cleaning was performed. Each variable was changed to scale and variables were named and labeled. A descriptive statistical analysis was performed to identify inaccurate or incomplete data. Incomplete data was cross listed and pulled from the spreadsheet. The researcher will complete random population sampling. Moreover, the researcher assumes sample independence, normality, equal variance, and stability.

Accordingly, demographic information collected included: gender, years on the job, education level, and minutes exercised, and used research grouping paired each individual ProQOL score. For this specific research, the *t*-test best fits the research as the

data was compared with the means of each of the different groups. In this research, the ProQOL score of the tenured and non-tenured teaching exercising versus not exercising will be compared.

Basic assumptions are required to complete the statistics. The researcher will complete random population sampling. The researcher analyzed the data using the independent t-test. To determine if the *t*-test was the best tool to use, the researcher analyzed six assumptions to make sure valid results were given. Below are the six assumptions:

- **Assumption #1:** The dependent variable is the ProQOL score was measured. on a continuous scale.
- **Assumption #2:** The independent variable consisted of two categorical independent groups: tenured and non-tenured teachers and teachers exercising for more or less than 15 minutes.
  teachers who exercise for 15 minutes and those who do not.
- **Assumption #3:** Independence of observation, with no relationship between the observations in each group with all participants in only one group. group and no participant is in more than one group. The SPSS statistical test selector was used to determine each group.
- **Assumption #4:** To make sure significant outliers could not negatively affect the data and diminish the validity, using SPSS, the researcher created box plots with a box and whisker test approach.
- **Assumption #5:** The dependent variable was approximately normally distributed for each group of the independent variables. Using the Shapiro-Wilk test of

normality via SPSS, the researcher was able to test the distribution of normality.

- **Assumption #6:** There is a homogeneity of variances. The researcher tested the assumption in SPSS using Levene's test for homogeneity.

Should the research have failed any of the assumptions, the researcher was confident the statistical *t*-test was robust enough to violations of normality to continue with the findings of the data.

The survey addressed each research question, and each research question is a *t*-test statistic. To establish the groups for the t-test, demographic information, such as teacher tenure, gender, geographic location, and minutes exercised, will be analyzed. The demographic information allowed the researcher to identify if certain trends were occurring in educators who exercise and those who do not, tenured or non-tenured educators, and rural versus suburban settings. Statistical significance will be determined at the alpha level. Furthermore, for the intent and purpose of the research, the statistical level to reject a null hypothesis was a .05. If a statistically significant difference in any of the three *t*-tests occurs, then the researcher will report the effect size in Cohen's *d* (Vogt, 2005).

**Summary**

In Chapter Three the researcher identified the method for selection of secondary principals in rural and suburban schools in the state of Missouri. The guiding purpose was considered when selecting appropriate research methods. Moreover, the purpose of this quantitative, causal comparative study is to test the multi-dimensional theory of burnout by comparing various demographics of school educators. The components that will be compared include the ProQOL score between educators who exercise 15 minutes

or less compared to educators who exercise 15 minutes or more. Then rural educators ProQOL score will be compared to urban educators ProQOL score. Finally, tenured educators ProQOL score will be compared to non-tenured educators ProQOL score. Additionally, the instrument was discussed along with the instructions for implementation, time constraints and scores. Furthermore, the research was discussed for the random selection process of survey participants, and the protection and ethical treatment of participants was examined. Moreover, data treatment information including the selection of quantitative data was provided as well as the data supporting the proposed hypothesis and research questions.

Research findings were analyzed and presented in Chapter Four. To better visualize findings, raw data was presented to ensure a complete analysis using tables, charts, and graphics. Moreover, Chapter Four will conclude with a summary of findings from the study and the implications for education. Finally, recommendations for future studies and potential next steps in research are summarized.

Chapter Five concludes with a summary of findings from the study and the implications for education. The researcher will discuss newly uncovered research gaps along with how to fill those gaps in education, demographics and treatment. Finally, the researcher will present and include recommendations for future studies, and potential next steps in research.

# CHAPTER FOUR

# FINDINGS AND RESULTS

## Introduction

The field of education is classified as a helping profession and helpers often pay the cost of care and empathy through compassion fatigue as a result of working within a helping profession and serving others. Individuals working in the helper professions rank at the top for suffering from compassion fatigue and vicariously reliving moments happening to the individuals they are helping (Figley, 1998; Stamm, 2010). Compassion fatigue is prominent and front and center for care in the health care profession. The field of education, however, has a different depiction of compassion fatigue and did not gain full traction in this helper profession until COVID-19. During and after the COVID-19 pandemic, the symptoms of compassion fatigue were amplified, but researchers have been unsure why an increase resulted. (Nadeem, Shernoff, Coccaro, & Stokes-Tyler, 2022; Grasso, 2020).

Compassion fatigue as defined by Figley (2002) can impact individuals employed in professions designed to help others and may be an early precursor to burnout in one's profession. Burnout effects are long lasting and do not simply go away. The effects can be debilitating both mentally and physically, and often leave the employee searching for a new career. Moreover, the symptoms of compassion fatigue have a negative effect on productivity for the company and on the mental health of the employee. Thus, it is evident a problem exists with burnout and compassion fatigue in helper professions.

However, Wozencroft, Scott, and Waller (2019) suggested compassion fatigue is the precursor to burnout. While the onset of compassion fatigue occurs quickly and suddenly, treatment is relatively effective. Compassion fatigue occurs immediately before burnout, so it is important to catch the symptoms before burnout ensues.

In Chapter One, the researcher provided a brief overview of the theories of Maslach's Multiple Dimensions of Burnout, and the evolution of the burnout inventory to The Professional Quality of Life (ProQOL) by Figley and Stamm (2010). Chapter Two focused on a thorough review of the literature surrounding the topics of burnout, compassion fatigue, secondary trauma, and the role COVID-19 played in bringing compassion fatigue to the forefront for educators. In Chapter Three, the researcher provided a detailed description of the methodology which was utilized in the study. Chapter Four provides a descriptive analysis of analysis and overview of the data aligned to the identified research questions and purpose of the study.

**Purpose Of Study**

The purpose of this quantitative, causal-comparative study was to test the multi-dimensional theory of burnout. The researcher, by comparing exercise routines, rural and suburban geographical location, and tenure status utilized the demographic data against Stamm's (2012) Quality-of-Life Survey (ProQOL) score for educators in school districts in the state of Missouri. By using the (ProQOL) survey, the data is compared between tenured and non-tenured educators teaching in rural and suburban settings and educators exercising 15 minutes or less was compared with educators exercising 15 minutes or more.

## Research Questions

**RQ1:** What is the difference in ProQOL scores between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week?

**RQ2:** What is the difference in ProQOL scores between rural and suburban educators?

**RQ3:** What is the difference in ProQOL scores between tenured educators and non-tenured educators?

## Null Hypotheses

**$H_{01}$:** There is no statistically significant difference in ProQOL scores between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week.

**$H_{02}$:** There is no statistically significant difference in ProQOL scores between educators teaching in rural school districts and educators teaching in suburban school districts.

**$H_{03}$:** There is no statistically significant difference in ProQOL scores between tenured educators and non-tenured educators.

## Descriptive Statistics

Each research question and related null hypothesis was investigated through the analysis of survey output data using the SPSS statistics tool. The independent samples *t*-test was utilized to compare the means in percentages of ProQOL scores to urban and suburban educators, tenured and non-tenured educators, educators exercising less than 15 minutes a day, and educators exercising more than 15 minutes a day. Levene's test for

equality of variances was used to test for homogeneity of variance. Cohen's *d* was calculated to determine the standardized difference between the means. Interpretation of Cohen's *d* can be cautiously interpreted by using the effect size of 0.2 as a small effect size, 0.5 as a medium effect size, and 0.8 as a large effect size (Shafer & Schwarz, 2019). Equal variances were assumed with all groups. The mean and standard deviation for educators exercising less than 15 minutes was ($M = 47.28$), ($SD = 3.81$). While the mean and standard deviation of educators exercising more than 15 minutes was ($M = 47.79$), ($SD = 3.67$). Cohens *d* could be interpreted as a small effect size with -.14. Exercise minutes in educators were not statistically significant. The mean and standard deviation for rural or suburban geographical demographics of educators was ($M = 47.37$), ($SD = 3.87$) for rural educators, and ($M = 47.77$), ($SD = 3.87$) for suburban educators. Cohens *d* could be interpreted as a small effect size with a -.11. Demographic geographic location was not statistically significant. Finally, the mean and standard deviation for tenured and non-tenured educators was ($M = 47.22$) , ($SD = 3.69$) for tenured educators and( $M = 47.71$), ($SD = 3.85$) for non-tenured educators. Cohens *d* could be interpreted as a small effect size at -.13. Thus, educator tenure was not statistically significant.

**Data Analysis and Findings**

Survey samples were collected via a teacher survey sent to all 518 Missouri Public Schools. Confirmation from the principals ensured the staff met all the qualifications of rural or suburban educators. Moreover, the survey was then completed by qualified educators.

Purposive sampling occurred to obtain data aligned with the purpose of study. Accordingly, purposive sampling is purposeful when looking for a certain domain such

as secondary encompassing education 9-12 grade, when several varieties of school dynamics and school districts are represented. The researcher chose the method of purposive sampling to seek out experts within the profession, and to ensure the research remained within limitations. Accordingly, purposive sampling is also done in this case to improve the data obtained as well as the rigor of the study (Saunders, Lewis, & Thornhill, 2012).

The researcher received 110 responses from the survey. However, seventy-seven schools were dismissed due to the schools representing either charter schools or classified based off of population as urban. Additionally, another seventy-three districts were also dismissed from this study as well because the schools were classified as a K-8 only district. Moreover, the researcher dismissed her own school to refrain from bias. Lastly, Missouri principals receiving the survey further vetted the process by only sending the survey to staff meeting the criteria of this study.

For demographic purposes, the researcher used the Department of Elementary and Secondary Education (DESE) website directory to collect samples of principals and teachers to take the survey. For this study, participants included 110 educators representing 97 schools across the state of Missouri. For the purposes of this study, only participants teaching in rural or suburban Missouri secondary schools were utilized for the research. For data collection, educators were surveyed using the Professional Quality of Life edition five (ProQOL) survey tool. Once the survey tool was completed by the participants, the data was compared to demographic data based on each participant's home school of rural or suburban status, and if the participant reported completing less than 15 minutes a week of exercise or more than 15 minutes a week of exercise.

Additionally, each participant was surveyed on their tenure status as well. Once all data was collected, the data was entered into the SPSS system and analyzed to determine if a statistically significant difference among each of the groups and the ProQOL score was present.

## Data Cleaning

School districts classified as urban, private, charter, or the researcher's home school were removed from this study. Additionally, schools classified as K-8 in the DESE database were removed from this study as well. The researcher sent the survey to the principals of each of the schools which met the demographic expectations including suburban as well as the 9-12 secondary school for the study.

Once the data was obtained from the survey, the data was categorized three ways: ProQOL score, rural or suburban, and teaching status of tenured or untenured. The data was then coded in an excel spreadsheet with one of the three scores for ProQOL. The three scores represented the following codes: 43 for low, 50 for normal, and 57 for high. Following the scores of the ProQOL, the data for educator exercise was entered as a 1 for less than 15 minutes a week or a 2 for more than 15 minutes a week. Then, demographic data for the type of school was entered as a 1 for rural schools or a 2 for suburban schools. Finally, for educator tenure data, a 1 for tenured educators and a 2 for nontenured educators was entered.

## Findings

### *Research Question 1*

What is the difference in ProQOL scores between educators exercising less

than 15 minutes a week and educators exercising more than 15 minutes a week?

***Null Hypothesis 1***

There is no statistically significant difference in ProQOL scores between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week.

Table 1 provides the mean and standard deviation for educators exercising for less than 15 minutes and educators exercising for more than 15 minutes a week compared to the ProQOL scores of compassion fatigue and burnout.

**Table 1**

***Exercise***

| Group | *N* | Mean | Standard Deviation | Standard Error Mean |
|---|---|---|---|---|
| Less than 15 minutes | 72 | 47.28 | 3.81 | .45 |
| More than 15 minutes | 38 | 47.79 | 3.68 | .60 |

The educators exercising less than 15 minutes a week ($M = 47.28$, $SD = 3.82$) were less than the educators exercising for 15 minutes or more each week ($M = 47.79$, $SD = 3.67$). The standard error of mean for educators exercising for less than 15 minutes is .45, while the standard error of mean for educators exercising for more than 15 minutes is .60.

Table 2 presents an analysis of the data output presented to answer Research Question 1. There were 38 educators who exercised more than 15 minutes a week, compared to 72 educators who exercised less than 15 minutes a week when compared to

their Professional Quality of Life (ProQOL) scores. An independent samples *t*-test was run to determine if there were statistically significant differences in scores.

**Table 2**

***Independent Samples t-Test Professional Quality of Life Score***

| | | | | | | 95% Confidence Interval of Difference | |
|---|---|---|---|---|---|---|---|
| | *t* | *df* | Sig. (two sided *p*) | Mean Difference | Standard Error Difference | Lower | Upper |
| Equal variances assumed | -.68 | 108 | .50 | -.51 | .76 | -2.0 | .99 |

Levene's test for equality of variances tested the assumption that the variances in ProQOL scores within the two groups were approximately equal. Levene's test with a significance of greater than .05 indicated that equal variance within the group was assumed and there was no statistical difference between the variances of the groups. The two-sided *p* difference for the two groups was 0.50, which was not significantly different ($p > .05$). A small effect size existed with Cohen's $d = -0.14$. There was homogeneity of variances, as assessed by Levene's test for equality of variances $p = .248$. Educators who exercised less than 15 minutes had a lower ProQOL score ($M = 47.27$, $SD = 3.82$) than educators exercising more than 15 minutes ($M = 47.79$, $SD = 3.68$), not statistically significant difference, $M = -.51$, 95% *CI* [-2.0,.99], $t(108) = -.68$, $p = .50$. Thus, the null hypothesis for Research Question 1 ($H_0 1$) failed to be rejected.

***Research Question 2***

What is the difference in ProQOL scores between rural and suburban educators?

***Null Hypothesis 2***

There is no statistically significant difference in ProQOL scores between educators teaching in rural school districts and educators teaching in suburban school districts.

Table 3 presents the mean and standard deviation for the educators teaching in rural or suburban Missouri public schools compared to their Professional Quality of Life Score (ProQOL).

**Table 3**

***Rural or Suburban School Status***

| Group | *N* | Mean | Standard Deviation | Standard Error Mean |
|---|---|---|---|---|
| Rural | *88* | 47.38 | 3.87 | .41 |
| Suburban | *22* | 47.77 | 3.33 | .71 |

The educators teaching in rural schools equated ($M = 47.38$, $SD = 3.87$) were greater than educators teaching in suburban schools ($M = 47.77$, $SD = 3.33$). The standard error of mean for educators teaching in rural public schools was .41, while the standard error of mean for educators teaching in suburban public schools was .71.

Table 4 presents an analysis of the data output presented to answer Research Question 2. There were 88 educators teaching in rural Missouri public schools, compared to 22 educators teaching in suburban Missouri public schools when compared with the Professional Quality of Life (ProQOL) scores. An independent samples *t*-test was run to determine if there were statistically significant differences in scores.

**Table 4**

***Independent Samples* t-*Test Professional Quality of Life Score***

| | | | | | | 95% Confidence Interval of Difference | |
|---|---|---|---|---|---|---|---|
| | *t* | *df* | Sig. (two-sided *p*) | Mean difference | Standard Error Difference | Lower | Upper |
| Equal variances assumed | -.44 | 108 | .67 | -.40 | .76 | -2.18 | .36 |

Levene's test for equality of variances tested the assumption that the variances in ProQOL scores within the two groups were approximately equal. Levene's test with a significance of greater than .05 indicated equal variance within the group was assumed and there was no statistical difference between the variances of the groups was evident. Accordingly, the ProQOL percentages were greater for educators teaching in suburban Missouri schools. The two-sided *p* difference for the two groups was 0.66, which was not significantly different ($p > .05$). A small effect size existed with Cohen's $d = -0.11$. Fittingly, there was homogeneity of variances, as assessed by Levene's test for equality of variances $p = .33$. Subsequently, educators teaching in rural Missouri public schools had a lower ProQOL score ($M = 47.38$, $SD = 3.87$) than educators teaching in suburban Missouri public schools ($M = 47.77$, $SD = 3.33$), but not a statistically significant difference, $M = -.40$, 95% *CI* [-2.18, .36], $t(108) = -.44$, $p = .66$. Thus, the null hypothesis for Research Question 2 ($H_0 2$) failed to be rejected.

***Research Question 3***

What is the difference in ProQOL scores between tenured educators and

non-tenured educators?

***Null Hypotheses 3***

There is no statistically significant difference in ProQOL scores between tenured educators and non-tenured educators.

Table 5 presents the mean and standard deviation for educators with tenure, and for educators without tenure, compared with the Professional Quality of Life Score (ProQOL).

**Table 5**

***Educator Tenure Status***

| Group | *N* | Mean | Standard Deviation | Standard Error Mean |
|---|---|---|---|---|
| Tenured | *58* | 47.22 | 3.69 | .49 |
| Non-Tenured | *52* | 47.71 | 3.85 | .53 |

The tenured educators in this study ($M = 47.22$, $SD = 3.69$) were less than the non-tenured educators ($M = 47.71$, $SD = 3.85$). Accordingly, the standard error of mean for educators with tenure was .49, while the standard error of mean for educators without tenure was .53.

Table 6 presents an analysis of the data output presented to answer Research Question 3. There were 58 tenured educators compared with 52 educators without tenure. This analysis was compared to the Professional Quality of Life (ProQOL) scores. Additionally, an independent samples *t*-test was run to determine if statistically significant differences in scores were evident.

**Table 6**

*Independent Samples t-Test Professional Quality of Life Score*

| | | | | | | 95% Confidence Interval of Difference | |
|---|---|---|---|---|---|---|---|
| | *t* | *df* | Sig. (two-sided *p*) | Mean difference | Standard Error Difference | Lower | Upper |
| Equal variances assumed | -.67 | 108 | .50 | -.49 | .72 | -1.9 | .94 |

Levene's test for equality of variances tested the assumption that the variances in ProQOL scores within the two groups were approximately equal. Levene's test with a significance of greater than .05 indicated equal variance within the group was assumed and no statistical difference between the variances of the groups was evident. Subsequently, the ProQOL percentages were greater for educators without tenure. The two-sided *p* difference for the two groups was 0.50, which was not significantly different ($p > .05$). A small effect size existed with Cohen's $d = -0.13$. There was homogeneity of variances, as assessed by Levene's test for equality of variances $p = .25$. Educators with tenure had a lower ProQOL score ($M = 47.22$, $SD = 3.69$) than educators without tenure ($M = 47.71$, $SD = 3.85$), not a statistically significant difference, ($M = -.49$, 95% *CI* [-1.9,.94], $t(108) = -.67$, $p = .50$). Thus, the null hypothesis for Research Question 3 ($H_03$) failed to be rejected.

**Summary**

The statistical analysis and findings of this study explored the differences in ProQOL scores compared with Missouri public school educators' exercise habits such as

exercising more or less than 15 minutes per week, educators' geographical location of suburban or rural, and educator tenure status. Three research questions were researched and data was collected. Following the data collection and analysis, the three null hypotheses failed to be rejected.

**$H_{01}$:** There is no statistically significant difference in ProQOL scores between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week.

**$H_{02}$:** There is no statistically significant difference in ProQOL scores between educators teaching in rural school districts and educators teaching in suburban school districts.

**$H_{03}$:** There is no statistically significant difference in ProQOL scores between tenured educators and non-tenured educators.

This chapter included the research questions, null hypotheses, data analysis and findings, sampling, demographics of the study, data cleaning, and findings. Based on the information collected throughout this chapter, Chapter Five presents a summary of the causal-comparative study and includes data interpretations and analysis aligned with the review of literature from Chapter Two. Finally, Chapter Five presents future recommendations, and conclusions to be gleaned from the study.

# CHAPTER FIVE

# CONCLUSIONS AND RECOMMENDATIONS

## Introduction

This qualitative, causal comparative study tested the multi-dimensional theory of burnout by comparing various demographics of school educators. The Professional Quality of Life (ProQOL) score was compared with educators exercising 15 minutes or less compared to educators exercising 15 minutes or more. Then, ProQOL scores were compared between rural educators and urban educators. Finally, ProQOL scores were compared among tenured educators versus non-tenured educators.

The Professional Quality of Life survey instrument used was developed by Figley (1998) and Stamm (2010) expanded upon the implications of compassion fatigue and developed several editions. The fifth edition of the ProQOL was designed for helpers who are educators. Often termed as the helping profession, educators regularly pay the cost of care and empathy through compassion fatigue. Educators are helpers and are accordingly grouped within the helping profession. Moreover, the helper profession group ranks at the top for individuals suffering from compassion fatigue and vicariously reliving moments experienced by the individual they are helping (Figley, 1998; Stamm, 2010).

Moreover, compassion fatigue is prominent and front and center for problem care in the health care profession. However, researchers have yet to replicate transferable results from health care to education. Education is a difficult career field because it is

difficult to identify the crossover from compassion fatigue to burnout, and many educators are left frustrated and leave the profession.

Furthermore, a gap exists in the study of compassion fatigue in education particularly in rural and suburban demographics. Subsequently, it is important to study compassion fatigue to call awareness to the problem in public education as compassion fatigue is an early precursor for burnout. Once burnout sets in, not many options are available and may be why so many educators have left the profession (Nadeem, Shernoff, Coccaro, & Stokes-Tyler, 2022; Grasso, 2020).

In this chapter, the researcher will present a summary of findings from this study as well as provides implications for education. Additionally, newly uncovered research gaps along with how to fill those gaps in education, demographics, and treatment are presented as well. Finally, Chapter Five concludes with recommendations for future studies and potential next steps in research.

**Purpose of the Study**

By using Maslach's (1995) Multi-Dimensional Theory of Burnout and Stamm's (2012) Quality of Life Survey (ProQOL), the study examined educators scores regarding various logistics. The purpose of this quantitative, causal comparative study was to test the multi-dimensional theory of burnout by comparing predetermined demographics of school educators. The components compared included the ProQOL score between educators exercising 15 minutes or less compared with educators exercising 15 minutes or more. Additionally, rural educators' ProQOL score were also compared to urban educators' ProQOL score. Finally, tenured educators' ProQOL score were also compared with non-tenured educators' ProQOL score.

## Research Questions

**RQ1:** What is the difference in ProQOL scores between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week?

**RQ2:** What is the difference in ProQOL scores between rural and suburban educators?

**RQ3:** What is the difference in ProQOL scores between tenured educators and non-tenured educators?

## Null Hypotheses

**$H_{01}$:** There is no statistically significant difference in ProQOL scores between educators exercising less than 15 minutes a week and educators exercising more than 15 minutes a week.

**$H_{02}$:** There is no statistically significant difference in ProQOL scores between educators teaching in rural school districts and educators teaching in suburban school districts.

**$H_{03}$:** There is no statistically significant difference in ProQOL scores between tenured educators and non-tenured educators.

Each research question and related null hypothesis was investigated through the analysis of survey output data using the SPSS statistics tool. The independent *t*-test was utilized to compare the means in percentages of ProQOL scores to urban or suburban educators, tenured or non-tenured educators, educators exercising less than 15 minutes a

day, and educators exercising more than 15 minutes a day. Additionally, Levene's test for equality of variances was used to test for homogeneity of variance. Lastly, Cohen's *d* was calculated to determine the standardized difference between the means as well.

**Limitations**

1. This study was limited to the percent of participants returning/completing the survey.
2. This study was limited with the lack of prior research in areas such as compassion fatigue in education and a comparison analysis of exercise with compassion fatigue.
3. The research was limited to self-reported data from the ProQOL survey.
4. The researcher was limited to the access of the DESE portal for participants.
5. The research was limited to the causality of the independent variables of exercise routines, geographical location, teacher tenure status, and the dependent variable of the ProQOL score.

**Delimitations**

1. The geographic delimitation was set to secondary public school educators in rural and suburban school district locations in Missouri.
2. The study was delimited to secondary education, specifically grades 9-12.
3. The delimitations were narrowed demographically to teacher tenure and divided into two categories: teachers with one to six years of service and teachers with more than six years of service.
4. The study was delimited to exercise habits of teachers and the time frame of 15 minutes a week.
5. The study was delimited to two categories of time spent on exercise: 15

minutes or less or more than 15 minutes per week.

**Summary of Findings**

The statistical analysis and findings of this study explored the differences in ProQOL scores compared with Missouri public school educators' exercise habits such as exercising for 15 minutes or more per week, educators' geographical location of suburban or rural, and educators' tenure status. Three research questions were researched, and data was collected. After data collection and analysis, three null hypotheses failed to be rejected.

Independent samples *t*- test was utilized to analyze data aligned to the research questions to compare the differences between the means of educators exercising less than 15 minutes was ($M = 47.28$, $SD = 3.81$). While the mean and standard deviation of educators exercising more than 15 minutes was ($M = 47.79$, $SD = 3.67$). The *p* value was $p = .50$ and the *t*-test value for educators exercising 15 minutes was $t(108) = -.68$. Educators who exercised more than 15 minutes did not have a statistically significant benefit over those who did not exercise 15 minutes a week. Therefore, the null hypothesis for Research Question 1 ($H_0 1$) failed to be rejected.

Moreover, the next independent *t*-test sample analyzed the differences of the means between demographic geographical locations of schools, specifically rural and suburban schools. The mean and standard deviations for educators in rural schools was ($M = 47.38$ and $SD = 3.87$) and was compared to the mean and standard deviation for educators in suburban schools at ($M = 47.77$ and $SD = 3.34$). Educators teaching in rural areas experienced a lower ProQOL score than educators teaching in suburban areas, but this was not a statistically significant finding. The *p* value for rural and suburban teachers

was $p = .66$, and the $t$-test value was $t(108) = -.44$. Therefore, the null hypothesis for Research Question 2 ($H_02$) failed to be rejected.

The final independent samples $t$-test sample analyzed and compared educator tenure with educators without tenure. The mean and standard deviation for tenured educators was ($M = 47.22$ and $SD = 3.69$) and was compared to non-tenured educators ($M = 47.71$ and $SD = 3.85$). Tenured educators scored lower on their ProQOL from compassion fatigue than educators who were not tenured. The $p$ value was $p = .50$ and the $t$-test value was $t(108) = -.68$. However, this finding was not statistically significant. Therefore, the null hypothesis for Research Question 3 ($H_03$) failed to be rejected.

**Discussion of Findings**

Compassion fatigue is not a new concept, but compassion fatigue is not as researched in the field of education as it is in other helper professions. After Covid 19 impacted schools with closures, compassion fatigue became prevalent in education, and many administrators and teachers were left struggling with ways to achieve a positive outcome. Hence, the first research question was to determine if exercise impacted educators' ProQOL scores.

While examining the ProQOL differences between educators exercising less than 15 minutes compared with educators exercising more than 15 minutes, no statistically significant differences were noted, and the null hypotheses failed to be rejected. However, while no statistically significant differences were identified, the only time frame exercise studied was 15 minutes a week. Accordingly, this study is limited to self-report, educators are not compelled to exercise, yet many do. Inherently, exercise with the discipline it requires with the importance placed on exercise to some of the

participants surveyed, may not be a priority for other educators. With this research conducted near the end of COVID 19, many educators may have been too ill themselves to exercise or had to prioritize other time-consuming efforts. During COVID-19, educators' may have had time at home to prioritize exercise, but with the Post COVID-19 safe return to work protocol, educators may not have had as much time to prioritize exercise. Moreover, educators may not prefer exercise over recreation, and may not define recreational exercise as exercise. However, this statement regarding recreational exercise made above cannot be made with complete certainty and thus the results found were inconclusive.

Effect size is another indicator that may have been created with exercise among educators as part of their weekly routine. Analysis of the data indicates a negative effect size for both educators who exercise less than 15 minutes and educators exercising more than 15 minutes of $d = -.14$. Accordingly, this indicates the impact of exercise on ProQOL did not have the intended results. However, the negative effect size may suggest exercise did keep educators from scoring at a high level of compassion fatigue or burnout. Furthermore, the results of this study contrast the studies of Rosales-Riccardo and Ferreira (2022), and Greco (2021), and in both studies researchers experienced a positive effect size using mixed physical activity of cardio and strength training which was not the outcome of this study.

Moreover, Greco's (2021) study found a large effect size with intervention groups and those groups enjoyed a significant impact with reduction of depersonalization, perceived stress, and increased personal accomplishment. Greco's (2021) study was needed due to the large effect size that participants experienced with exercise. Rosales-

Riccardo and Ferreira (2022) reported that out of the three groups, the burnout exercise group demonstrated the most benefits from physical activity. The aerobic group had the greatest reduction in exhaustion with a moderate effect size of ($d$ = 0.53), and the strength training group had the greatest diminishment of the inefficacy in burnout with a moderate effect size of ($d$ = 0.70). Over the length of time and on overall symptoms of burnout it was concluded that mixed exercise had the greatest reduction of overall symptoms of burnout. Furthermore, Liang, Kao, and Lin (2013) reported an effect size of which equated to those suffering from burnout and are working on career promotions typically have reduced physical activity.

Educators' exercise habits were compared to The Professional Quality of Life (ProQOL) and examined in this study. The work of this study aligned with the literature of Liang, Kao, and Lin (2013). Liang, et al (2013) as their work uncovered a possible explanation for the lack of exercise experienced by those surveyed. Accordingly, the research provided in this study supports the idea of educators making time for exercise for 15 minutes or more a week, may indeed be positively impacted and reflected in ProQOL scores. While there was not a statistically significant difference between the groups, regarding the amount of exercise completed, the review of the literature with positive results suggests continued study is warranted in the pursuit of better quality of life for educators.

Research Question 2 examined rural geographical location with suburban geographical location in comparison to educators' ProQOL scores. Educators teaching in suburban schools appeared to have a higher ProQOL score than rural educators, but not enough to be statistically significant. Moreover, the null hypothesis failed to be rejected.

While no statistically significant differences were identified, this study does provide context to a gap in regard to information as few demographic studies exist among rural and suburban schools compared to ProQOL scores.

Navindia and Heiran (2017) found in urban schools the higher the school population, the higher the prevalence of burnout. Accordingly, urban schools suffered due to a higher population of the impoverished in one area, lack of resources, and overcrowded classes resulting in a higher student to teacher ratio. Additionally, the population density of the school may in fact impact with the educators' ProQOL scores as the higher the population density, the quicker the resources deplete. Furthermore, population density also leads to a higher student to teacher ratio as well.

This survey is one of the first focusing on rural or suburban schools. Most of the literature review and previous related content was focused on urban public schools with greater population density. While urban population is generally the focus for burnout studies, rural educators have greater issues securing resources and less access to retaining full time teaching staff. Many rural areas cannot afford to pay their teaching staff as much as their urban or suburban counterparts. Furthermore, the participants completing the current survey returned more rural educators than suburban educators with a difference of 88 rural educators returning the survey to 22 suburban educators returning the survey.

Based on the evidence of more rural educators completing the survey, one would expect suburban schools to have a similar outcome when compared to rural schools due to having a higher population density. Subsequently, suburban educators did have a minimally lower ProQOL score. However, this statement cannot be made with complete certainty and the results found were inconclusive.

Effect size is another indicator which was studied among suburban educators compared to rural educators' geographical location of schools with the ProQOL score. Analysis of the data indicated a negative effect size for educators teaching in rural and suburban geographical locations. The effect size was $d$ = -.11 and the small effect size indicated the geographical location did not have significant results. However, the negative effect size may suggest the geographical location kept educators from scoring a higher level of compassion fatigue or burnout on the ProQOL. The findings from this study aligned with the work of Read, and Salmela-Aro (2022) as their work found similar insignificant results on burnout when comparing scores to semi-urban and rural schools in Finland. For semi-urban schools, the effect size was -.02 and for rural schools the effect size was -.03. While the results of their study were insignificant, Read and Salmela-Aro (2022) reported significant results for burnout in urban populated schools. Thus, with several negative effect sizes for urban and suburban schools when compared to small or moderate effect sizes in urban schools, may account for the lack of study or follow up on suburban and rural schools when compared to the ProQOL.

For this study, the researcher examined evidence of how demographic geographical location compares with the Professional Quality of Life (ProQOL) survey tool. The findings from this study supports location as related to population density indeed may positively impact ProQOL scores. According to to Navindia and Heiran (2017), as the denser the population, the higher the demand for services and resources as well as a higher student-to-teacher ratio. The result of the increased demand for services and resources as well as increased student-to-teacher ratios, contributes to statistically significant causes of burnout in urban schools. However, while there was not a

statistically significant difference between the groups in this research, the higher mean could support the geographical location may impact an educator's quality of life.

Finally, Research Question 3 compared the remaining variable of demographic information regarding educator tenure. For the purposes of examining this variable, tenured educators' ProQOL scores were compared with non-tenured educators. Subsequently, no statistically significant results were noted, and the null hypothesis failed to be rejected.

While there was not a significant benefit identified among both tenured and non-tenured educators when compared with the scores on the ProQOL assessment tool, this study does contribute to filling gaps in the research for the demographic of educator tenure. While this study did not have the same outcome as Navindia and Heiran (2017), and Yu, Sun, Sun, Yuan, Ding, and Zhang (2022), the content and recommendations remain the same. Recent studies such as work completed by Navindia and Heiran (2017) suggested teachers with tenure are experienced, aware of their surroundings especially the risks and liabilities. Tenured teachers have endured time, are experienced, and know how to react to a variety of situations quickly. Overall a tenured educator often exhibits an advanced awareness which can contribute to a lower stress level and lower levels on the ProQOL. Also, in alignment with the work of Navindia and Heiran (2017), the work of Yu, Sun, Sun, Yuan, Ding, and Zhang (2022) reported teachers teaching over twenty years have a higher efficacy, are more confident in their profession, their jobs are not at risk due to having tenure. Moreover, experienced teachers are more at ease, know how to handle a variety of situations, and may be nearing retirement or pension and already received tenure. Subsequently, in the majority of the literature reviewed for this study,

researchers found that teachers teaching for over five years and receive superior support have less instances of compassion fatigue (Tepper, 2007; Cook, 2012; Ackman, 2012; Linedecker, & Cramer, 2021). This is similar to the benefit that participants experienced in this study on a smaller scale.

Effect size is another indicator that may be studied among educators with tenure compared to those educators who do not have tenure in relation to their ProQOL score. Analysis of the data indicated a negative effect size of -.13 for tenured versus non-tenured educators. The small effect size suggests the impact of tenure did not have the intended results but may suggest teacher tenure did keep educators from scoring a higher level of compassion fatigue or burnout on the ProQOL assessment tool. Aligning with the findings of this study, Linedecker and Cramer (2021) also experienced similar results related to years on the job for an educator when compared to compassion fatigue and burnout scores. According to the findings, the length of the teaching experience or time on the job was unrelated to compassion fatigue score ($F = .59$, $p = .55$) and teacher tenure did have an impact on compassion satisfaction of the participants (Linedecker and Cramer, 2021). Furthermore, Hegeney, Rees, and Hegney (2018) experienced the same phenomena with ProQOL scores and variables that are accurate for compassion satisfaction, but not as accurate when compassion fatigue is compared to any variable. Overall, the human variable is difficult to quantify compassion fatigue related to any variable. Accordingly, a method was developed to enable researchers to better quantify the scores from the ProQOL. The Raush analysis allowed the human aspect to quantify various aspects of compassion fatigue more effectively than what was available in previous versions of the ProQOL assessment tool.

Furthermore, the participants of the study included more tenured educators than non-tenured educators. The participants included 58 educators who were tenured, and 52 educators non-tenured educators. Ther results of the survey demonstrated a small decline in ProQOL score and the mean for the tenured educator, but it was not statistically significant. The tenured educator may have a lower ProQOL score due to less job insecurities as a result of tenure and having superior support. However, this statement cannot be made with complete certainty and therefore, the results found were inconclusive. In sum, the research provided in this study supports teacher tenure may positively impact ProQOL scores. Overall, while there was not a statistically significant difference between the groups of tenured and non-tenured educators, the higher mean could support teacher tenure can potentially impact one's quality of life.

When holistically analyzing the results of the study, the researcher discovered the findings align with the work of Steptoe, Butler, and Lancet (1996) regarding exercise as poor health and lack of exercise do lead to decreased overall wellbeing. Likewise, Liang, Kao, and Lin, (2013) also uncovered lack of exercise and burnout are a cycle as individuals typically entering burnout do not want to overextend themselves into physical activity. In alignment with the work of Liang, Kaom and Lin (2013), the researcher noted not all educators may view exercise as valuable as exercise may consume too much time when commitments to on-the-job tasks or projects are already in place. Accordingly, once an educator experiences compassion fatigue, or burnout, it may be difficult to add another variable like exercise to an already overwhelmed schedule. In sum, this study identified motivation and mixed exercise have the greatest impact on an individual's quality of life.

This study consistent with the findings of Navindia and Heiran, (2017) identified a statistical relationship with educators teaching in urban schools and higher compassion fatigue levels on ProQOL assessment as a result of higher population density as well as higher concentrations of impoverished communities, lack student motivation, larger class sizes, and increased student-to-teacher ratios. Unexpected data was uncovered regarding the rural and suburban demographics as the participants of the survey included 88 educators from rural schools and only 22 educators from suburban school districts across the state of Missouri. Disparity in the number of rural educators versus the number of suburban educators completing the survey may be due to similar findings by Navindia and Heiran (2017) where when a level of compassion fatigue is attained, any effort or activity consuming time such as this, may become too taxing for an individual to complete. Historically, suburban schools have a higher student population than rural schools and may contribute to why only one-fourth of the suburban educators completed the survey for this study. Despite this, suburban school districts still had a higher mean. There is a gap in the literature about suburban and urban public schools, so this study does add to the public school cannon in comparison to ProQOL scores.

In general, educators having tenure typically experience lower burnout rates. The lower mean for tenured teachers demonstrated in this study teachers teaching over five years and having superior support may also experience a lower compassion fatigue rate. A tenured educator often experiences a lower compassion fatigue rate as tenure often provides more flexibility instructing students, more superior support, less fear of negative academic impact or achieving specific test scores and increased self-efficacy (Linedecker & Cramer, 2021; Tepper, 2007; Cook, 2012; Ackman, 2012).

It is important to consider the impact COVID-19 may have had throughout the duration of this study. During the COVID-19 pandemic, many teachers left the profession due to the undue stress and restrictions the virus placed on educators in the teaching profession. In the teaching profession, more than 300,000 educators left the profession between 2020 and 2022 (Peck, 2024). At the time of this research, the return to normalcy in public school settings has been in place for only two years so the results of this study provide a look at the tenure rate of the educators post COVID-19. Thus, this study services as an addition to post COVID-19 data and literature.

**Implications**

The data collected in this study provided evidence supporting the statement that weekly exercise, geographical location, and educator tenure may have a positive effect on compassion fatigue and compassion satisfaction as found on the ProQOL survey tool. The results of the survey identified 38 of the participants did exercise for 15 minutes or more and 72 of the participants did not exercise for any lengthy time. One implication for the participants of the study spending time exercising, could be the timing of 15 minutes may not be significant, but if it were changed to 20 or 30 minutes, results may have varied. However, due to the overall number of participants in this study not exercising when compared to the number of participants who do exercise it was difficult to determine if any benefit could be obtained.

While the work of Rosales-Riccardo, and Ferrira's (2022) differed from this study, due to having attained a statistically significant impact with exercise, it is still important to pursue exercising compared to an educator's ProQOL score as a future recommendation. Exercise when performed in mixed methods research could be the

missing link to lowering ProQOL scores in the category of compassion fatigue. It is important to note the positive effects exercise can have on the body and overall well-being. Studies indicate having a greater participation in vigorous exercise and leisure activities contributes to an individual's greater emotional wellbeing (Steptoe, Butler, & Lancet,1996; Warburton, Nicol & Bredin,2006). Additionally, sports and recreational activities can lower risks for premature death, lesson the occurrence of diabetes and cardiovascular disease, and increase one's overall emotional well-being. However, the results coincided with the work of Warburton, Nicol, and Bredin (2006) due to having a larger number of participants not exercising when compared with the number of participants who did exercise. In sum, although exercise has many benefits, exercise may not be a priority to individuals who may be trying to balance work and personal life and feel overwhelmed.

When data was reviewed for the demographic location of schools and educator tenure, the means suggest there is not a statistically significant difference of to teaching in rural schools ($M = 47.37$) nor a significant benefit for educators with tenure ($M = 47.22$). While the results yielded a small effect size, the effect size was not significant in this study. Likewise, Navindia and Heiran (2017) reported that the more dense the population, the higher the demand for services and resources along with a higher student-to-teacher ratio. This accounts for statistically significant causes of burnout in urban schools. Normally, a negative effect size indicates however, a result had an adverse effect of the intentions. In this case, a negative effect size indicates the independent variables decreased resulting in an unwanted outcome of a higher ProQOL score as the higher the ProQOL score the more compassion fatigue the educator experiences. For example, The

ProQOL assessment allows for three possible scores 43, 50, and 57. Scoring a 43 is low or not experiencing compassion fatigue, a 50 is normal stress with compassion satisfaction balancing compassion fatigue, and 57 is a higher-than-normal compassion fatigue leading into burnout. The results from this study with the negative effect size of all components, $d$ = -.14 for exercise, $d$ = -.11 for demographic geographical location, and $d$ = -.13 for educator tenure and resulted in hindering most of the ProQOL scores from reaching 57 or the highest category.

In addition, this study is a post COVID-19 education study. The information collected from this study has an important archival date due to the COVID-19 pandemic. Due to the onset of COVID-19 many educators had to adapt to various restrictions. Educators may have also learned to adapt to their stressed environment, and when COVID-19 restrictions are removed feel a sense of relief even though other stressors are still present. Additionally, following the conclusion of the pandemic, educators also had to navigate various situations and stressors that resulted when various restrictions were then removed.

As a result of the timing of this study, the findings could have an impact on educators as they continue to work to continue to work to adjust to normal instruction in a post COVID-19 world. Moreover, the findings on demographic geographical location and educator tenure were also inconsistent, but the literature examined suggested population density does contribute to a higher stress level in part because of larger class sizes equating to more responsibilities as well as a larger concentration of impoverished communities than rural counterparts. Moreover, many more rural educators turned in the survey than suburban educators despite an equal number of surveys' being dispersed to

each demographic. Accordingly, 88 rural educators returned the survey versus 22 suburban educators which may suggest a brief snapshot of rural education related to ProQOL scores was represented, but suburban educators may be due to the lower number of participants.

The study's findings regarding the tenure of educators align with findings from other studies. Accordingly, teacher tenure is vital for efficacy and superior support as when tenure is obtained, often an educator's efficacy as well as the feeling of support from superiors increases. Additionally, the support from superiors can also bring about relief from negative pressure experienced from formative and summative reviews in trying to obtain tenure. Moreover, knowing where to go for resources and having a familiarity with one's employer can also help reduce the symptoms and development of compassion fatigue so educators knowing where to go for resources and being familiar with your employer also help reduce compassion fatigue as teachers with less than five years' experience in the field often do not feel prepared by superiors or receive adequate training. Subsequently, when leaders are supportive educators often feel less burdened and stressed, but lack of support can lead to efficacy issues and ultimately leaving the profession. When leaders are supportive it can indirectly relieve stress and the feeling of burden. On the contrary, decreased stressors can lead to improved teaching with higher job and compassion satisfaction (Zianian-Gharfari & Berg, 2019).

Moreover, the mean in this study does suggest a small gain was made when tenured educators were compared with non-tenured educators. In all instances and comparisons this study adds to body of data and research about compassion fatigue in education where data was once sparse. Additionally, this study could potentially serve as

a baseline for educator exercise, teacher tenure data compared with ProQOL scores, along with geographical data on suburban and rural schools as geographical data outside of urban schools is nearly non-existent. Finally, it is important to share this data during the post COVID-19 timeframe to have a baseline of responses as educators continue to adjust from the COVID-19 pandemic.

The findings from this study could have an impact on educators in the field of education as they work to improve upon the overall well-being for themselves and fellow educators. Moreover, the information in this study could be useful to share with educators, counselors, and administrators specifically in the field of education. Counselors and administrators should take an active role in the overall well-being of staff. Moreover, and of equal importance is the premise that helpers in the field of education stay mentally strong and focused because thus, one's wellbeing can impact the individual's they are trying to help. Educators must learn to triage their own needs, so that they can help others more effectively. This research publication will serve as a means for disseminating the findings. The data collected for this research would be a piece of evidence for individuals in education along with educational decision makers, and stakeholders. All those with a vested interest in the field of education could benefit from creating and maintaining an environment for teachers to thrive, so in turn, teachers can help their students thrive.

The results of this research would be valuable to any educator, counselor, or administrator, but specifically individuals serving in secondary school settings in urban or suburban demographic areas. Accordingly, educators in rural schools often have a lower instance of compassion fatigue than their peers educating in suburban schools.

The findings demonstrated exercise, teaching in rural schools, and attaining tenure did not have a negative impact on ProQOL scores. Therefore, the research recommends attention be directed to the Professional Quality of Life survey (ProQOL) fifth edition as this survey is free, self-directed, and will place attention on balancing an educators work and personal life. Additionally, the survey also brings awareness in balancing compassion fatigue and compassion satisfaction in one's work life. Subsequently, having awareness and implementing self-examinations are the first line of defense against burnout for educators. Furthermore, the research recommends educator exercise be implemented along with attaining teacher tenure with positive administrator support.

**Recommendations For Future Research**

Building on this study, the next phase of research could include a more in-depth study of different kinds of exercise such as stretching, cardio intensive, weight training, calisthenics, or mixed exercise. Researchers have had several different outcomes based on different types of exercise, with mixed exercise having the greatest benefit. There was no statistical significance of exercise for the amount of t15 minutes per week, but one may have a different outcome with an increase to 20- or 30 minute increments of exercise. Due to this study being so near to COVID-19, educators may have been too ill or fatigued to consider exercise as once a point of compassion fatigue is reached, a task causing a pull or burden on an individual may not get completed (Navindia and Heiran, 2017). Additionally, if exercise was clearly defined to include recreational exercise, perceptions along with outcome may have varied. For future research, it is appropriate to consider whether recreation sports such as kayaking and hiking are observed as exercise and if such activites would have any impact on the Professional Quality of Life score

(ProQOL). Thus, it is important to determine for further studies as educators may only view exercise as constrained by a fitness institution or running and recreational exercise must not be overlooked. Additionally, due to the high variability of the outcomes, the impact of exercise on compassion fatigue should further be studied to contribute to the efficacy in improving an educator's overall health and well-being. Moreover, an important consideration with any future study related to exercise is participants may be burdened with the word exercise but associate relief with the word recreation.

More study is also recommended on compassion fatigue in a secondary public school education setting regardless of geographical location. Studies in nursing, counseling, and oncology are numerous, but few researchers have addressed compassion fatigue in education. Moreover, as few studies have been completed compassion fatigue is an under-researched problem and important to investigate in education. Additionally, very few researchers have attempted to view compassion fatigue in public schools through the lens of rural or suburban geographical locations. When compassion fatigue in the field of education has been studied only a few researchers have delved into urban public school issues, thus, leaving variability in research for suburban and rural schools. The occurrence of compassion fatigue is not immune to suburban or rural areas or regular education students so the researcher proposes more investigation of each individual layer of compassion fatigue, and the many systematic causes be completed. This study had a high rate of rural educators return the survey as almost four times as many rural educators when compared to suburban educators participated. Therefore, with the lack of suburban educators representing a voice in this study, it is important to study the effects of

suburban educators compared to the ProQOL score to see if that demographic has the same outcome with more participants.

Compassion fatigue is one of the largest singularly overlooked issues faced in education. While compassion fatigue in education existed before COVID-19, compassion fatigue was brought to the forefront during the pandemic. Furthermore, to build on this study, it may be helpful to add new strands of research related to post-pandemic study of compassion fatigue in education. Trends suggest compassion fatigue has settled and educators have developed coping methods because of the pandemic. Before COVID-19 literature trends suggested compassion fatigue when ignored or left untreated may turn into burnout and once burnout ensues little hope for treatment exists. Generally, in the case of burnout an educator often changes roles, schools, or employment altogether, as a result.

Often, scholarly work initiates more questions than what is answered and this was the case with exercise and classification of recreation, as well as educator tenure. It may be important to study different components of teacher tenure to impact ProQOL scores. Tenured educators did show a slight advantage in ProQOL scores when compared to non-tenured educators. In future studies it may be important to categorize elements of tenure such as superior support, years teaching, time management, age, to see if one component had an advantage over the other on ProQOL scores as research has begun to separate out a few trends. For example, the trends of tenure include: years on the job, educator age, time management, resources, predictable schedule, more advanced classes, superior support, comfortable roles, mutual trust and respect between teachers and

administrators. Thus, comparing each of these trends with ProQOL scores could yield better quantifiable outcomes.

Finally, at the conclusion of this study, a new theory on the ProQOL would be worth future study. As the results of this study yielded, Heritage, Rees, and Hegney (2018) found similar insignificant results in multiple studies compared to the ProQOL citing the most recent edition was accurate in quantifying compassion satisfaction but lacking in quantifying compassion fatigue and burnout. The suggested modification resulted in the researchers using the Rausch Method to simplify compassion fatigue variables to account for the human factor in future studies. Thus, future study would be worthwhile to replicate this study utilizing the Rausch Method to demonstrate to see if compassion fatigue and burnout can be quantified with a different effect size. Additionally, the researcher stresses that further study, particularly in a qualitative format would be worthwhile. This study was completed as quantitative, but often numbers were hard to quantify the human factor and the human condition. Mixed method may also be of assistance in triangulating the data. Therefore, this study completed as a qualitative method may provide the depth that was previously unable to be quantified.

**Conclusion**

Researchers continue to search for ways to improve the quality of life for helpers, specifically educators, because an individual's quality of life impacts the lives who they educate daily (Himmelstein, 2020). With the hope contributing to improving the quality of life for educators, this research sought to fill the gaps of compassion fatigue studies in education. Given what was gleaned from the literature and the gaps in the current research including, educator exercise, demographical and geographical location, and

educator tenure, this causal comparative research sought to bridge these gaps. Focusing on educator exercise, demographical location, and educator tenure, the researcher compared this data with ProQOL scores.

The first variable compared in the research was educator exercise for more than 15 minutes compared to educators exercising less than 15 minutes a week. While educators exercising for more than 15 minutes a week enjoyed a slight benefit in ProQOL scores than educators not exercising for 15 minutes or more. However, other studies suggested supporting educators to exercise is beneficial for overall well-being and can potentially reduce the ProQOL score to a normal or below normal score. Furthermore, another study found after a ten-week baseline treatment regular intense physical activity can potentially have a preventative effect on diseases associated with burnout, and mixed physical activity of cardio and strength training has the greatest effect on compassion fatigue (Dreyer, Dreyer, &Rankin, 2013; Octenel, Humphrey & Pfiefer, 2018; Greco 2021).

Research has been conducted in urban public schools and public schools with a focus on special education, but there is a gap in the data for rural and suburban public schools. Accordingly, this research also compared suburban and rural geographic locations of public school educators in an attempt to bridge a gap and gather ProQOL data. Since the *p*-value was not low, there was no conclusive benefit noted to teaching in rural schools ProQOL score when compared to educators teaching in suburban schools. While this data seemingly aligns with the current literature, the results can serve as a baseline for data on suburban and rural schools and contribute to the current research. The findings do indicate an alignment with Navindia and Heiran, (2017) in having a

statistical relationship between public school and higher compassion fatigue levels on the ProQOL due to factors such as having a higher population density, higher concentrations of impoverished communities, lack of student motivation, and larger class sizes or student to teacher ratios.

Finally, the last variable compared to the ProQOL assessment was teacher tenure. The researcher focused on teacher tenure in an attempt to fill a data gap due to sparse research and data collected regarding teacher tenure and ProQOL scores. While the literature review suggested educators with tenure may have a lower compassion fatigue score, no benefit was noted in this study when tenured educators were compared with non-tenured educators. As noted by Tepper (2007), Cook (2012), and Ackman (2012), the older and more experienced a teacher is on the job, the lower their compassion fatigue score. Accordingly, employees with tenure or more years of experience reported statistically lower levels of compassion fatigue when compared to educators with less years' experience. Thus a direct correlation for individuals less enthusiastic in their jobs, and having less than15 years of experience on the job is evident (Linedecker & Cramer, 2021; Kaslack & Dagyar, 2022;Capri & Guler, 2018).

Overall, several lessons can be gleaned from this research. Through this study the researcher suggests a clear distinction of recreation, especially in the form of exercise should also be counted in the data category of mixed exercise. The researcher suggests a focus on recreational exercise as an educator's feelings regarding exercise may impact what is self-reported and the burnout or compassion fatigue score may determine whether an individual exercises regularly. In summation, the literature supports a

cyclical theory in an individual's feelings towards exercise and burnout and compassion fatigue.

Moreover, it is also important to include the data from this research study in post COVID-19 research, because the trend of higher ProQOL scores is lessening. With the trend of higher ProQOL scores lessening, more questions such as educator tolerance for stress or better time management and multi-tasking may become more prevalent as the current research suggests the peak of compassion fatigue occurred during COVID-19 (Greco, 2021). At the time of this study, many of the restrictions implemented during the COVID-19 pandemic are no longer in place, as the timing is now considered post COVID-19 years in education. However, as a result of restrictions implemented during the COVID-19 pandemic, educators may have adjusted to an over exertion of stress and may have adapted to compassion fatigue in the new post COVID-19 time in education. Thus, further studies examining compassion fatigue should be completed to see if any trends develop throughout the post-pandemic timeframe.

Finally, clear take-away messages are evident from this study. One take-away from the data collected from this study is more effort must be put into the quality of life for educators who are responsible for caring for others. Additionally, educators can benefit not only from exercise for the body but exercises for the mind as well. Moreover, research also suggests geographical trends with lower populations and class sizes can be beneficial as well. Furthermore, teacher tenure when combined with administrator support can create the optimum environment to benefit an educator's quality of life and positively impact one's scores on the Professional Quality of Life survey. The researcher

stresses the importance of pursuing each of the further recommendations suggested and to explore the various impacts on the ProQOL assessment.

## REFERENCES


Abraham-Cook, S. (2012). *The prevalence and correlates of compassion fatigue, compassion satisfaction, and burnout among teachers working in high poverty urban public schools* (Order No. 3575412). Seton Hall University. Available from ProQuest Dissertations & Theses Global. (1461391768).

Ahlgren, C., & Gillander-Gådin, K. (2011). Struggle for time to teach: Teachers' experiences of their work situation. *Work (Reading, Mass.)*, *40 (*S111-S118). doi:10.3233/WOR-2011-1272

Akman, Y. (2016). The relationship between destructive leadership and job burnout: A research on teachers. *Journal of Theory & Practice in Education (JTPE)*, *12*(3), 627-653.

Audin, K., Burke, J., & Ivtzan, I. (2018). Compassion fatigue, compassion satisfaction and work engagement in residential childcare. *Scottish Journal of Residential Childcare*, *17*(3), 1–25.

Austin, V., Shah, S., & Muncher, S. (2005). Teacher stress and coping strategies used to reduce stress. *Occupational Therapy International*, *12*(2), 63-80.

Avery, G., Johnson, T., Cousins, M., & Hamilton, B. (2013). The school wellness nurse: A model for bridging gaps in school wellness programs. *Pediatric Nursing*, *39*(1), 13-17.

Basol, G. (2013). A comparison of female and male school administrators' burnout levels controlling for perceived social support. *Education & Science/Egitim Ve Bilim*, *38*(169), 3-18.

Battle, L. (2011). *Compassion fatigue, compassion satisfaction, and burnout among police officers who have experienced previous perceived traumas* (Order No. 3497906). University of Memphis. Available from ProQuest Dissertations & Theses Global. (923639624).

Bennett, J. L., Lundberg, N. R., Zabriskie, R., & Eggett, D. (2014). Addressing posttraumatic stress among Iraq and Afghanistan veterans and significant others: An intervention utilizing sport and recreation. *Therapeutic Recreation Journal*, *48*(1), 74-93.

Berg, G. M., Harshbarger, J. L., Ahlers-Schmidt, C. R., & Lippoldt, D. (2016). Exposing compassion fatigue and burnout syndrome in a trauma team: A qualitative study. *Journal Of Trauma Nursing*, *23*(1), 3-10. doi:10.1097/JTN.0000000000000172 References

Bermejo-Toro, L., & Prieto-Ursúa, M. (2014). Absenteeism, burnout and symptomatology of teacher stress: sex differences. *International Journal of Educational Psychology*, *3*(2), 175–201. doi:10.4471/ijep.2014.10

Boscarino, J, Adams, R. E & Figley, C.R. (2010). Secondary trauma issues for psychiatrists: Identifying vicarious trauma and job burnout. *Psychiatric Times, 27*(11), 24-26.

Brunsdon, C. (2016). Quantitative methods I. *Progress in Human Geography*, *40*(5), 687-696. doi:10.1177/0309132515599625

Burjek, A. (2017). Weighing the value of workplace wellness. *Workforce*, *96*(2), 30.

Cancio, E. J.., Larsen, R., Mathur, S. R., Estes, M. B., Mei , C., & Johns, B. (2018). Special education teacher stress: Coping strategies. *Education & Treatment of Children*, *41*(4), 457–481. https://doi.org/10.1353/etc.2018.0025

Capri, B., & Guler, M. (2018). Evaluation of burnout levels in teachers regarding socio-demographic variables, job satisfaction and general self-efficacy. *Eurasian Journal of Educational Research*, (74), 123–144. doi:.14689/ejer.2018.74.7

Cure, L. (2021). 5 ways to overcome compassion fatigue in K-12 education: Unaddressed compassion fatigue leads to anxiety, trouble concentrating and desire to leave one's position. *District Administration*, *59*(3), 16.

Contreras-Sollazzo, L., & Esposito, C. L. (2020). Nurses' unions can help reduce stress, burnout, depression, and compassion fatigue part 1: The background. *Journal of the New York State Nurses Association*, *47*(1), 18–44.

Cuthbert, C. A., King-Shier, K., Ruether, D., Tapp, D. M., & Culos-Reed, S. N. (2017). What is the state of the science on physical activity interventions for family caregivers? A systematic review and re-aim evaluation. *Journal of Physical Activity & Health*, *14*(7), 578–595.

Demirdağ, S. seyithandemirdag@gmail. co. (2016). The relationship between faculty members' school culture and burnout. *E-International Journal of Educational Research*, *7*(3), 49–62. https://doi.org/10.19160/e-ijer.96556

Diaconescu, M. (2015). Burnout, secondary trauma and compassion fatigue in social work. *Revista De Asistenta Sociala (Social Work Review)*, *14*(3), 57-63.

Dieser, R. B., Edginton, C. R., & Ziemer, R. (2017). Special article: Decreasing patient stress and physician/medical workforce burnout through health care environments: Uncovering the serious leisure perspective at mayo clinic's campus in Rochester, Minnesota. *Mayo Clinic Proceedings*, *92(*1080-1087). doi:10.1016/j.mayocp.2017.03.017

Edwards, K., & Goussios, A. (2021). Who is responsible for compassion satisfaction? shifting ethical responsibility for compassion fatigue from the individual to the ecological. *Ethics & Social Welfare*, *15*(3), 246–262. https://doi.org/10.1080/17496535.2021.1888141

Ekşi, H., Summermatter, A., & Kahraman, A. (2017). A study on guidance teacher's organizational commitment through path analysis with prediction intervals of professional quality of life and self-esteem. *Online Journal of Counseling & Education*, *6*(2), 1-16.

Farmer, D. (2020). Teacher attrition: The impacts of stress. *Delta Kappa Gamma Bulletin*, *87*(1), 41–50.

Farmer, L. (2017). How to beat teacher burnout with more education. *Education Digest*, *83*(2), 13.

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power.

Fernandez-Ballesteros, R. (2002). Encyclopedia of psychological assessment. *Encyclopedia of Psychological Assessment*, 1-1731.

Figley, C. (2002). Compassion fatigue: Psychotherapists' chronic lack of self-care. In Session: *Psychotherapy in Practice,* (*58*)11. 1433-1441. Updated January 21, 2021.

Figley, C. R., & Stamm, B. H. (1996). Psychometric review of compassion fatigue self-test. In B.H. Stamm (Ed), *Measurement of stress, trauma and adaptation*.(58) 11. 1433-1444:Sridran Press.

Folino, A., Ducharme, J. M., & Greenwald, N. (2014). Temporal effects of antecedent exercise on students' disruptive behaviors: An exploratory study. *Journal of School Psychology*,*52*, 447–462. https://doi.org/10.1016/j.jsp.2014.07.002

Frost, G., Ritchie, K. C., & Leslie, L. (2020). Are teachers in trouble? *Education Canada*, *60*(1), 10–12.

Gale, S. F. (2017). Workplace wellness programs continue healthy ascent. *Workforce*, *96*(2), 44.

Goodwin, M. (2017). Work/life balance. Best practices in healthcare management begin with self. *Nursing Economic$*, *35*(3), 152-155.

Grasso, D.J., Briggs-Gowan, M.J., Ford, J.D., & Carter, A.S. (2020). The Epidemic – Pandemic Impacts Inventory (EPII), 6.

Greco, G. (2021). Effects of combined exercise training on work related burnout symptoms and psychological stress in the helping professionals. *Journal of Human Sport & Exercise*, *16*(2), 424–434.

Gultom, S., Endriani, D., & Sastrawan-Harap, A. (2022). Emotional learning (SEL) competencies, and compassion fatigue among educators during the COVID-19 Pandemic. *Kinestetik*, (6)1, 146-158.

Gupta, S., Paterson, M., von Zweck, C., & Lysaght, R. (2012). *Using hermeneutics to understand burnout and coping strategies utilized by occupational therapists*. q*ualitative report*, *17(105) 1-25.*

Harwood, L. (2021). Resilience, mindfulness, and self-compassion: Tools for nephrology nurses. *Nephrology Nursing Journal*, *48*(3), 241–249. https://doi.org/10.37526/1526-744X.2021.48.3.241

Hayuni, G., Hasson-Ohayon, I., Goldzweig, G., Bar Sela, G., & Braun, M. (2019). Between empathy and grief: The mediating effect of compassion fatigue among oncologists. *Psycho-Oncology*, *28*(12), 2344–2350. https://doi.org/10.1002/pon.5227

Henson, J. S. (2020). Burnout or compassion fatigue: A comparison of concepts. *MEDSURG Nursing*, *29*(2), 77–95.

Heritage, B., Rees, C.S., Hegney, D. G., (2018) The ProQOL-21: A revised version of the Professional Quality of Life (ProQOL) scale based on Rasch analysis. *PLOS ONE 13*(2) 1-20. https://doi.org/10.1371/journal.pone.0193478

Himmelstein, D. (20201). Stress tested: Compassion fatigue is taking a toll among librarians. *School Library Journal*, *66*(2), 26.

Hoffman, S., Palladino, J. M., & Barnett, J. (2007). Compassion fatigue as a theoretical framework to help understand burnout among special education teachers. *Journal of Ethnographic & Qualitative Research*, *2*(1), 15-22.

Holmes, M. R., Rentrope, C. R., Korsch-Williams, A., & King, J. A. (2021). Impact of COVID-19 pandemic on posttraumatic stress, grief, burnout, and secondary trauma of social workers in the United States. *Clinical Social Work Journal*, *49*(4), 495–504. https://doi.org/10.1007/s10615-021-00795-y

Huai-Liang,L, Yueh-Tzu, K., & Cheng-Lin, L. (2013). Moderating Effect of Regulatory Focus on Burnout and Exercise Behavior. *Perceptual & Motor Skills*, *117*(3), 696–708.

Hupe, T. M., & Stevenson, M. C. (2019). Teachers' intentions to report suspected child abuse: The influence of compassion fatigue. *Journal of Child Custody*, *16*(4), 364–386. https://doi.org/10.1080/15379418.2019.1663334

Johnson, M. M. (2020). Self-Care: The antidote to compassion fatigue. *Educational Leadership*, *78*(2), 46–51.

Kasalak, G., & Dağyar, M. (2022). Teacher burnout and demographic variables as predictors of teachers' enthusiasm. *Participatory Educational Research*, *9*(2), 280–296. https://doi.org/10.17275/per.22.40.9.2

Kendrick, A. (2021). How strong is your bucket? Compassion fatigue, burnout and ways to be emotionally whole. *Fully Alive*, *5*(2), 18–19.

Kleiner,S., Wallace, J. (2017). Oncologist burnout and compassion fatigue: Investigating time pressure at work as a predictor and the mediating role of work-family conflict. *BMC Health Services Research*, *17*(1), 1–8. https://doi.org/10.1186/s12913-017-2581-9

Koller, E. C., Abel, R. A., & Milton, L. E. (2022). Caring for the caregiver: A feasibility study of an online program that addresses compassion fatigue, burnout, and secondary trauma. *Open Journal of Occupational Therapy (OJOT)*, *10*(1), 1–14. https://doi.org/10.15453/2168-6408.1847

Kroupis, I., Kourtessis, T., Kouli, O., Tzetzis, G., Derri, V., & Mavrommatis, G. (2017). Job satisfaction and burnout among Greek P.E. teachers. A comparison of educational sectors, level and gender. / Satisfacción laboral y burnout de los profesores de la educación física en Grecia. *Cultura, Ciencia y Deporte*, *12*(34), 5–14. doi: 10.12800/ccd.v12i34.827

Lee, W., Veach, P., MacFarlane, I., & LeRoy, B. (2015). Who is at risk for compassion fatigue? An investigation of genetic counselor demographics, anxiety, compassion satisfaction, and burnout. *Journal of Genetic Counseling*, *24*(2), 358-370. doi:10.1007/s10897-014-9716-5

Leech, N. L., Gullett, S., Cummings, M. H., & Haug, C. A. (2022). The challenges of remote K-12 education during the COVID-19 pandemic: Differences by grade level. *Online Learning*, *26*(1), 245–267. https://doi.org/10.24059/olj.v26i1.2609

Leland, N. E., & Armstrong, M. (2015). Compassion fatigue: A scoping review of the literature...AOTA/NBCOT national student conclave Dearborn, Michigan November 18-19, 2016. *American Journal of Occupational Therapy*, *69*, 247–250. https://doi.org/10.5014/ajot.2015.69S1-RP207C

Leiter, M. P., & Maslach, C. (2024). Job burnout. In L. E. Tetrick, G. G. Fisher, M. T. Ford, & J. C. Quick (Eds.), *Handbook of occupational health psychology* (3rd ed., pp. 291–307). American Psychological Association. https://doi.org/10.1037/0000331-015

Limberg, D., Cook, C. A., Gonzales, S., McCartnery, E., & Romagnolo, S. (2021). examining school counselors' wellness and its contribution to their levels of altruism and burnout. *Journal of School Counseling*, *19*(24), 2–32.

Lindecker, C. A., & Cramer, J. D. (2021). Student self-disclosure and faculty compassion in online classrooms. *Online Learning*, *25*(3), 144–156. https://doi.org/10.24059/olj.v25i3.2347

Lluch, C., Galiana, L., Doménech, P., & Sansó, N. (2022). The impact of the COVID-19 pandemic on burnout, compassion fatigue, and compassion satisfaction in healthcare personnel: A systematic review of the literature published during the first year of the pandemic. *Healthcare (Basel, Switzerland)*, *10*(2), 364. https://doi.org/10.3390/healthcare10020364

Mahmoodi-Shahrebabaki, M. (2015). Relationships between language teachers' time-management skills, creativity, and burnout: A mediation analysis. *Alberta Journal of Educational Research*, *61*(1), 20-39.

Makhdoom, I. F., Atta, M., & Malik, N. I. (2019). Counterproductive work behaviors as an outcome of job burnout among high school teachers. *Bulletin of Education and Research*, *41*(2), 79–92.

Márquez, M. A., Galiana, L., Oliver, A., & Sansó, N. (2021). The impact of a mindfulness-based intervention on the quality of life of Spanish national police officers. *Health & Social Care in the Community*, *29*(5), 1491–1501. https://doi.org/10.1111/hsc.13209

Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior (Pre-1986), 2*(2), 99. doi:10.1002/job.4030020205

Maslach, C. & Leiter, M. (1998). *The truth about burnout: How organizations cause personal stress and what to do about it.* Jossey Bass.

Maslach, C., Schaufeli, W.B, &Leiter, M.P. (2001). Job burnout. *Annual Review Psychology.* 52, 397-422.

Maslach, C., & Leiter, M. P. (2017). Understanding burnout: New models. In C. L. Cooper, & J. C. Quick (Eds.), *The handbook of stress and health: A guide to research and practice* (pp. 36–56). Wiley Blackwell. https://doi.org/10.1002/9781118993811.ch3

Maslach, C. (2001). Psychology of burnout. In N. J. Smelser, & P. B. Baltes (Eds.), *International encyclopedia of the social and behavioral sciences* (Vol. 2, 1415-18).Elsevier.

Maslach, C. (2002). Burnout assessment. In R. Fernandez-Ballesteros (Ed.), *Encyclopedia of psychological assessment*. (1-1731).

Mendenhall, T. (2021). We are in this together: Maintaining our health care teams' wellness during challenging times. *Families, Systems & Health*, *39*(3), 541. https://doi.org/10.1037/fsh0000650

Merriman, J. (2015). Enhancing counselor supervision through compassion fatigue education. *Journal Of Counseling & Development*, *93*(3), 370-378. doi:10.1002/jcad.12035

Messing, K., Caroly, S., & Riel, J. (2011). Counting the minutes: Administrative control of work schedules and time management of secondary school teachers in Québec. *Work*, *40* (59-70).

Mills, G. E., & Gay, L. R. (2019). *Educational research: Competencies for analysis and applications, 12th Edition*. Pearson.

Molero-Jurado, M., Del M., Pérez-Fuentes, M., Del C., Atria, L., Oropesa-Ruiz, N. F., & Gázquez-Linares, J. J. (2019). Burnout, perceived efficacy, and job satisfaction: perception of the educational context in high school teachers. *BioMed Research International*, *2019*, 1021408. (1–10). https://doi.org/10.1155/2019/1021408

Nadeem, E., Shernoff, E. S., Coccaro, C., & Stokes-Tyler, D. (2022). Supporting teachers during the COVID-19 pandemic: A community-partnered rapid needs assessment. *School Psychology*.37(4)309-318 https://doi.org/10.1037/spq0000503.supp

Navidinia, H., & Heiran, A. (2017). Exploring the demographic and contextual factors influencing english language teachers' burnout: Implications for teacher education programs. *ASEAN Journal of Teaching & Learning in Higher Education*, *9*(1), 1–19.

Olivier, E., Janosz, M., Morin, A. J. S., Archambault, I., Geoffrion, S., Pascal, S., Goulet, J., Marchand, A., & Pagani, L. S. (2021). Chronic and temporary exposure to student violence predicts emotional exhaustion in high school teachers. *Journal of School Violence*, *20*(2), 195–211. https://doi.org/10.1080/15388220.2021.1875841

Olsen, K. D., & Laskowski, E. R. (2013). Physical activity, quality of life, and burnout among physician trainees: The effect of a team-based, incentivized exercise program. *Mayo Clinic Proceedings, 88*(12), 1435-42. DOI: 10.1016/j.mayocp.2013.09.010

Otenyo, E. E., & Smith, E. A. (2017). An overview of employee wellness programs (EWPs) in large U.S. cities: does geography matter? *Public Personnel Management*, *46*(1), 3-24. doi:10.1177/0091026016689668

Papazoglou, K., Koskelainen, M., & Stuewe, N. (2018). Exploring the role of compassion satisfaction and compassion fatigue in predicting burnout among police officers. *Open Journal of Psychiatry & Allied Sciences*, *9*(2), 107–112. https://doi.org/10.5958/2394-2061.2018.00020.4

Peck, D. (2024). *Teacher burnout statistics: why teachers quit in 2024*. DP. Devlin Peck Consulting LLC. https://www.devlinpeck.com/content/teacher-burnout-statistics#:~:text=More%20than%20300%2C000%20public%20school,February%202020%20and%20May%202022.

Pérez-Chacón, M., Chacón, A., Borda-Mas, M., & Avargues-Navarro, M. L. (2021). Sensory processing sensitivity and compassion satisfaction as risk/protective factors from burnout and compassion fatigue in healthcare and education professionals. *International Journal of Environmental Research and Public Health*, *18*(2): 611.https://doi.org/10.3390/ijerph18020611

Potter, P., Deshields, T., Divanbeigi, J., Berger, J., Cipriano, D., Norris, L., & Olsen, S. (2010). Compassion fatigue and burnout: Prevalence among oncology nurses. *Clinical Journal of Oncology Nursing*, *14*(5), E56 - E62. doi:10.1188/10.CJON.E56-E62

Răducu, C. M., & Stănculescu, E. (2022). Protective factors and burnout risk of teachers during the COVID-19 Pandemic - A two-step cluster analysis. *International Electronic Journal of Elementary Education*, *14*(5), 573–585. https://doi.org/10.26822/iejee.2022.264

Raimondi, T. P. (2019). Compassion fatigue in higher education: Lessons from other helping fields. *Change*, *51*(3), 52–58. https://doi.org/10.1080/00091383.2019.1606609

Read, S., Hietajärvi, L., & Salmela-Aro, K. (2022). School burnout trends and sociodemographic factors in Finland 2006–2019. *Social Psychiatry & Psychiatric Epidemiology*, *57*(8), 1659–1669. https://doi.org/10.1007/s00127-022-02268-0

Reel, J. J. (2020). Leading during a pandemic: Lessons gleaned from sport psychology. *Journal of Clinical Sport Psychology*, *14*(4), 325–329.

Robinson, B. C. (2005). *Exploring career satisfaction, burnout, and compassion fatigue as indicators of the quality of career engagement of public school educators* (Order No. 3201740). West Virginia University. Available from ProQuest Dissertations & Theses Global. (305384210).

Rosales-Ricardo, Y., & Ferreira, J. P. (2022). Effects of physical exercise on burnout syndrome in university students. *MEDICC Review*, *24*(1), 36–39. https://doi.org/10.37757/mr2022.v24.n1.7

Sánchez, C., Valdez, A., & Johnson, L. (2014). Hoop dancing to prevent and decrease burnout and compassion fatigue. *JEN: Journal of Emergency Nursing*, *40*(4), 394–395. https://doi.org/10.1016/j.jen.2014.04.013

Saunders, M., Lewis, P., & Thornhill, A. (2012) *Research methods for business students 6th edition*, Pearson Education Limited.

Schmulian, D. L., Redgen, W., & Fleming, J. (2020). Impostor syndrome and compassion fatigue among graduate allied health students: A pilot study. *Focus on Health Professional Education (2204-7662)*, *21*(3), 1–14. https://doi.org/10.11157/fohpe.v21i3.388

Shaheen, F. F.., & Mahmood, N. (2016). Demographic variables as determinants of emotional burnout among public school teachers. *Journal of Research & Reflections in Education (JRRE)*, *10*(1), 37-50.

Sharp-Donahoo, L. M., Siegrist, B., & Garrett-Wright, D. (2018). Addressing compassion fatigue and stress of special education teachers and professional staff using mindfulness and prayer. *Journal of School Nursing*, *34*(6), 442–448. https://doi.org/10.1177/1059840517725789

Smallwood-Butts, K. (2012). *Burnout, compassion fatigue, and the utilization of evidence-based practices by mental health professionals* (Order No. 3539303). Available from ProQuest Dissertations & Theses Global. (1095388895). Temple University.

Sorenson, C., Bolick, B. Wright, K., & Hamilton, R. (2016). Understanding compassion fatigue in healthcare providers: A review of current literature. *Journal of Nursing Scholarship, 48(5), 456-465.*

Stamm, B. H. & Figley, C. R. (2009) Advances in the theory of compassion satisfaction and fatigue and its measurement with the ProQOL 5. *International Society for Traumatic Stress Studies*. Atlanta, GA.

Stamm, B .H. (2016*). Professional quality of life: compassion satisfaction and fatigue version 5 (ProQOL*). www.proqol.org.

Stamm, B. H. (2012). Helping the helpers: Compassion satisfaction and compassion fatigue in self-care, management, and policy of suicide prevention hotlines. Resources for Community Suicide Prevention, Pacatello, Idaho: Idaho State University.

Steptoe, A., & Butler, N. (1996). Sports participation and emotional wellbeing in adolescents. *Lancet (London, England)*, *347*(9018), 1789–1792. https://doi.org/10.1016/s0140-6736(96)91616-5

Stier-Jarmer, M., Frisch, D., Oberhauser, C., Berberich, G., & Schuh, A. (2016). The effectiveness of a stress reduction and burnout prevention program. *Deutsches Aerzteblatt International*, *113*(46), 781-788. doi:10.3238/arztebl.2016.0781

Syamsul, G., Dewi E., & Agustin S. H. (2022). Less emotion but more fatigue: Social-emotional learning (SEL) competencies, and compassion fatigue among educators during the COVID-19 pandemic. *Kinestetik*, *6*(1), 146–158. https://doi.org/10.33369/jk.v6i1.21034

Tepper, E. L., & Palladino, J. M. (2007). Compassion fatigue and burnout: Precursors to elementary special educators' exodus from teaching. Ed.Gov: Institute of Education Sciences, (1-25), (accessed November 28, 2016).

Verheyden, C., Van Holen, F., West, D., & Vanderfaeillie, J. (2020). Secondary traumatic stress, burnout and compassion satisfaction among Flemish foster care workers during the COVID-19 lockdown. *Developmental Child Welfare*, *2*(4), 227–243. https://doi.org/10.1177/2516103220987227

Vogt, W.P. (2005). *Dictionary of statistics & methodology: A nontechnical guide for the social sciences*. Sage.

Wagaman, M. A., Geiger, J. M., Shockley, C., & Segal, E. A. (2015). The role of empathy in burnout, compassion satisfaction, and secondary traumatic stress among social workers. *Social Work*, *60*(3), 201-209. doi: 10.1093/sw/swv014

Warburton, D. E. R., Nicol, C. W., & Bredin, S. S. D. (2006). Health benefits of physical activity: The evidence.*CMAJ :Canadian Medical Association Journal = Journal de l'Association Medicale Canadienne*, *174*(6), 801–809. https://doi.org/10.1503/cmaj.051351

Williams, J., & Dikes, C. (2015). The implications of demographic variables as related to burnout among a sample of special education teachers. *Education*, *135*(3), 337–345. https://api.semanticscholar.org/CorpusID:142255619

Wozencroft, A. J., Scott, J. L., & Waller, S. N. (2019). Professional quality of life in recreational therapists. *Therapeutic Recreation Journal*, *53*(1), 22. https://doi.org/10.18666/TRJ-2019-V53-ll-9098

Wu, S., Xuan, Z., Li, F., Xiao, W., Fu, X., Jiang, P., & Zhao, X. (2016). Work-recreation balance, health-promoting lifestyles and suboptimal health status in southern China: A cross-sectional study. *International Journal of Environmental Research and Public Health*, *13*(3). doi:10.3390/ijerph13030339

Yang, C., Manchanda, S., & Greenstein, J. (2021). Educators' online teaching self-efficacy and compassion fatigue during the COVID-19 pandemic: The dual roles of connect. *School Psychology Review*, 36 (6), 504–512. doi: 10.1037/spq0000475

Yang, C. (2021). Online teaching self-efficacy, social-emotional learning (SEL) competencies, and compassion fatigue among educators during the COVID-19 pandemic. *School Psychology Review*, *50*(4), 505–518. doi:10.1080/2372966X.2021.1903815

Yu, X ., Sun,C .,Sun, B., Yuan, X., Ding, F., & Zhang, M. (2022). The cost of caring: Compassion fatigue is a special form of teacher burnout. *Sustainability*, *14*(6), 6071. https://doi.org/10.3390/su14106071

Ziaian-Ghafari, N., & Berg, D. H. (2019). Compassion fatigue: The experiences of teachers working with students with exceptionalities. *Exceptionality Education International*, *29*(1), 32–53. https://doi.org/10.5206/eei.v29i1.7778

## APPENDIX A

## LETTER TO PRINCIPALS

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Pilot Survey Letter

To Whom It May Concern:

I am completing the doctoral program in Educational Leadership at Southwest Baptist University in Bolivar, Missouri. I am writing to request your assistance on my survey which can be found linked below. As a final part of my doctoral program, I am assessing the effects of exercise on compassion fatigue, as well as evaluating quality of life scores across demographics to see if any correlation among educational professionals exists. Your participation will take less than 30 minutes (15 minutes on average), and I would really appreciate your input. Results will be used to explore new possibilities in the wellness realm and raise awareness of compassion fatigue and burnout.

The teacher survey is confidential, electronic, and will take less than 30 minutes (15 minutes on average) to complete. The teacher survey is 57 questions and is divided into three categories: 1) Compassion Fatigue, 2) Exercise, Recreation, Meditation, 3) Demographics. The survey questions are statements for the participants and demonstrate their level of agreement and will be scored using a 5-category Likert scale (1=Never, 2=Rarely, 3=Sometimes, 4=Often, and 5=Very Often). Your participation is voluntary and you may withdraw at any time. This research study survey has been approved by the Research Review Board at Southwest Baptist University Research Review Board, see attached documentation.

Thank you in advance for your help with this study. Please feel free to contact me if you have further questions. Lastly, I will be happy to provide you with the pilot survey if requested.

Sincerely,

Sheridan Turner

## APENDIX B

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## PROQOL QUALITY OF LIFE

When an individual helps another person, you have direct contact with the person's life. As you may have found, reflecting can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative as a helper. Consider the following questions about you and your work situation. Select the number that honestly reflects how frequently you experience each component in the last 30 days.

1=Never 2=Rarely 3=Sometimes 4=Often 5=Very Often

**SECTION 1- Compassion Fatigue, Compassion Satisfaction, Traumatic Stress, and Burnout.**

_____ 1) I am happy.

_____2) I am preoccupied with more than one person.

_____3) I get satisfaction from being able to help people.

_____4) I feel connected to others.

_____5) I jump or am startled by unexpected sounds.

_____6) I feel invigorated by working with those I help.

_____7) I find it difficult to separate my life as a helper.

_____8) I am not as productive at work because I am losing sleep over the traumatic experiences of a person I help.

_____9) I think I might have been affected by the traumatic stress of those I help.

_____10) I feel trapped by my job as a helper.

_____11) Because of my helping, I have felt on edge about various things.

_____ 12) I like my work as a helper.

_____13) I feel depressed because of traumatic experiences of those that I help.

_____14) I feel as though I am experiencing the trauma of someone I have helped.

_____15) I have beliefs that sustain me.

_____16) I am pleased with how I can keep up with helping techniques and protocols.

_____17) I am the person I always wanted to be.

_____18) My work makes me feel satisfied.

_____19) I feel worn out because of my work as a helper.

_____ 20) I feel happy thoughts and feelings about those I help and how I could help.

_____21) I feel overwhelmed because my casework seems endless.

_____22) I believe I can make a difference through my work.

_____23) I avoid certain activities or situations because they remind me of frightening experiences of the people I help.

_____24) I am proud of what I can do to help.

_____25) As a result of my helping, I have intrusive, frightening thoughts.

_____26) I feel "bogged down" by the system.

_____27) I have thoughts that I am a success as a helper.

_____28) I can't recall important parts of my work with trauma victims.

_____29) I am a very caring person.

_____ 30) I am happy that I chose to do this work.

**Section 2-Health/Wellness, Exercise, and Meditation**

_____31) I am a healthy person.

_____32) I include exercise into my lifestyle daily.

_____33) I enjoy exercise.

_____34) I include yoga, devotion, or some form of meditation into my lifestyle daily.

_____35) I enjoy exercise weekly.

_____36) Exercise is important to me.

_____37) Yoga, devotion, or some form of meditation is important to me.

_____38) I enjoy yoga, devotion, or meditation.

_____39) I have plenty of time for exercise in my schedule.

_____40) I have plenty of time for yoga, devotion, or meditation in my schedule.

_____41) When I am stressed, exercise helps me cope.

_____42) When I am stressed, yoga, devotion, or meditation helps me cope.

_____43) I take time for exercise.

_____44) I consider recreation exercise.

_____45) I take time for recreation.

_____46) Exercise makes me feel better.

_____47) Yoga, devotion, or meditation makes me feel better.

_____48) Exercise improves my performance on the job.

_____49) Yoga, devotion, or meditation improves my performance on the job.

----------50) Exercise clears my head.

**Section 3 – Demographic Information- Please give a short answer response or check the line applying best to you.**

_____51) Age

_____52) Gender

53) Race/Ethnicity: Please check a box below:

_____ Black/African American

_____ Hispanic/Latino

_____White/Caucasian

_____ Asian/Other

_____Prefer not to answer

54) Relationship Status: Please check a box below:

_____ Married

_____ Cohabitating

_____ In a relationship

_____ Single

_____Prefer not to answer.

55)

_____Number of Years in Field of Education:

56) Employment Status: Please check a box below:

_____Full-time

_____Part-time

_____Substitute

57) Highest Level of Education Attained: Please check a box

_____ Associates

_____ Bachelors

_____ Masters

_____ Specialist

_____ Doctorate

58) Do you exercise at least 15 minutes a day?

_____ Yes

_____ No

59) Tenure status?

_____ Yes

_____ No

60) School district criteria

____ Rural

____ Suburban

## APENDIX C

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## INFORMED CONSENT

Dear Colleague,

My name is Sheridan Turner, and I am the A+ Coordinator for Springfield Public Schools, Hillcrest High School, Springfield, Missouri. I am a doctoral student at Southwest Baptist University, and I am conducting a research study to gather information about compassion fatigue and burnout in education. I would like to invite you to participate in this causal comparative quantitative study with a survey questionnaire. You have been purposefully selected as a potential participant in this study because you meet the specific criteria established by the researcher. Possible benefits include an opportunity for you to reflect on your level of compassion fatigue and burnout along with minutes spent on exercise and demographic information to determine if any significant correlation between exercise and compassion fatigue, teacher tenure and compassion fatigue, and other demographics correlating with compassion fatigue may exist.

I know you are very busy. However, the survey should only take 15-20 minutes of your time and can conveniently be taken through a link in this email. The questions were constructed on Google Forms and were carefully and thoughtfully separated into three categories. The first category sets out to assess compassion fatigue and compassion satisfaction. The second category assesses exercise routine, and the third category is general demographic material. Your privacy is important so the survey will remain anonymous and only the survey program will track participation. There is no penalty should you choose not to participate or answer all of the questions. Your response to this letter will indicate your consent to participate and permission to use the information you have provided in my study.

Before you make a final decision about participation, please read the following statements about how your responses will be used and how your rights as a participant will be protected:

• Participation in this study is completely voluntary. You may stop participating at any point without penalty.

• You do not need to answer all questions.

• Your answers will be kept confidential. Results will be presented to others in summary form only, without names or other identifying information.

• Your participation will take less than 30 minutes (approximately 15 minutes)

During this time, you will answer questions about how you implement effective, research-based leadership practices.

This project has been reviewed and approved by the RRB Committee at Southwest Baptist University, 417-326-1659. The committee believes the research procedures adequately safeguard the subject's privacy, welfare, civil liberties, and rights.

You may contact me at the email below if you have questions or concerns about your participation. If you would like a copy of the results of this study, you may contact me via email at seturner@spsmail.org. Thank you for your time and consideration.

Sincerely,

Sheridan Turner
Springfield Public Schools/Hillcrest High School

## APENDIX D

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## FOLLOW UP SURVEY

Dear Participant:

I am following up with you to make sure you have an opportunity to take my survey related to compassion fatigue in education. I am completing the doctoral program in Educational Leadership at Southwest Baptist University in Bolivar, Missouri. I am writing to request your assistance to take a little time with my survey which can be found linked below. As a final part of my doctoral program, I am assessing the effects of exercise on compassion fatigue, as well as evaluating quality of life scores across demographics to see if any correlation among educational professionals exists. Your participation will take less than 30 minutes (15-20 minutes on average), and I would really appreciate your input. Results will be used to explore new possibilities in the wellness realm and to raise awareness of compassion fatigue and burnout.

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Research Review Board (see attached documentation). Thank you in advance for your help in this study. Please feel free to contact me if you have further questions. I will be happy to provide you with the pilot survey if requested.

Sincerely,

Sheridan Turner

## TABLES

**Table 1**

***Exercise***

| **Group** | ***N*** | Mean | Standard Deviation | Standard Error Mean |
|---|---|---|---|---|
| Less than 15 minutes | *72* | 47.28 | 3.81 | .45 |
| More than 15 minutes | *38* | 47.79 | 3.68 | .60 |

**Table 2**

***Independent Samples t-Test Professional Quality of Life Score***

| | | | | | | 95% Confidence Interval of Difference | |
|---|---|---|---|---|---|---|---|
| | *t* | *df* | Sig. (two-sided p) | Mean Difference | Std. Error Difference | Lower | Upper |
| Equal variances assumed | -.68 | 108 | .50 | -.51 | .76 | -2.0 | .99 |

**Table 3**

***Rural or Suburban School Status***

| **Group** | ***N*** | Mean | Standard Deviation | Standard Error Mean |
|---|---|---|---|---|
| Rural | *88* | 47.38 | 3.87 | .41 |
| Suburban | *22* | 47.77 | 3.33 | .71 |

**Table 4**

***Independent Samples* t-*Test Professional Quality of Life Score***

| | | | | | | 95% Confidence Interval of Difference | |
|---|---|---|---|---|---|---|---|
| | *t* | *df* | Sig. (two-sided p) | Mean difference | Std. Error Difference | Lower | Upper |
| Equal variances assumed | -.44 | 108 | .67 | -.40 | .76 | -2.18 | .36 |

**Table 5**

***Educator Tenure Status***

| **Group** | ***N*** | Mean | Standard Deviation | Standard Error Mean |
|---|---|---|---|---|
| Tenured | *58* | 47.22 | 3.69 | .49 |
| Non-Tenured | *52* | 47.71 | 3.85 | .53 |

**Table 6**

***Independent Samples* t-*Test Professional Quality of Life Score***

| | | | | | | 95% Confidence Interval of Difference | |
|---|---|---|---|---|---|---|---|
| | *t* | *df* | Sig. (two-sided p) | Mean difference | Std. Error Difference | Lower | Upper |
| Equal variances assumed | -.67 | 108 | .50 | -.49 | .72 | -1.9 | .94 |