School-Based Health Centers Versus Telehealth Programs on Professional Quality of Life of Public School Teachers in Arkansas

Amber Ellis
Harding University

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SCHOOL-BASED HEALTH CENTERS VERSUS TELEHEALTH PROGRAMS

ON THE PROFESSIONAL QUALITY OF LIFE OF PUBLIC

SCHOOL TEACHERS IN ARKANSAS

by

Amber Ellis

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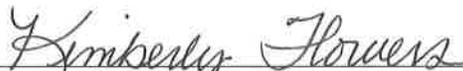
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Michael Brooks   _07.29.22_
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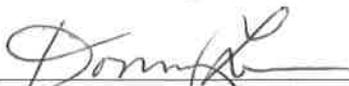
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My administrative team, Brandy and Taylor, thank you for supporting me in this endeavor. Doc and Joey, I cannot adequately explain how much you have given me throughout this process. A mere *thank you* is not enough. Finally, I will forever be indebted to my dissertation team: Drs. Kimberly Flowers, Michael Brooks, and Todd Patten. You have had a hand in changing the focus of my work, my passion. Dr. Flowers, thank you for guiding me in my research, but especially for helping sustain me through the most difficult period of my life, the loss of my precious dad. Only by the grace of God, am I where I am today. Thank you all for believing and investing in me.

ABSTRACT

by
Amber Ellis
Harding University
July 2022

Title: School-Based Health Centers Versus Telehealth Programs on Professional Quality of Life of Public School Teachers in Arkansas (Under the direction of Dr. Kimberly Flowers)

This dissertation aimed to determine by type of school-based health program—school-based health centers (SBHCs) or telehealth programs (tSBHC)—and years of teaching experience on the effects of compassion satisfaction, burnout, and secondary traumatic stress among public school teachers in Arkansas districts. Mandates legitimize the additional mental health supports for students; however, supports for teachers who interact with those students is almost non-existent. The Professional Quality of Life survey measures compassion satisfaction, burnout, and secondary trauma in the work setting. Data were collected from novice and experienced teachers from nine Arkansas school districts and analyzed using factorial ANOVAs. SBHC and tSBHC did not affect the professional quality of life of novice and experienced teachers; however, experienced teachers had higher levels of compassion satisfaction and burnout than their novice peers. Further, school-based health programs did not affect teachers' professional quality of life. School-based health programs and other support services, such as professional training and development focused on teachers' professional quality of life, are imperative for ensuring the mental health supports for the teaching profession.

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CHAPTER I

INTRODUCTION

The landscape of public schools today is markedly different from only a few decades ago. School systems are complex organizations that must employ various differentiated and innovative strategies to adequately and appropriately meet the academic, health and wellness, and social/emotional needs of an increasingly diverse student population and their families. Schools should also maintain a community of teachers and staff who are emotionally, mentally, and physically capable of effectively delivering those strategies. Currently, experienced teachers' overall annual attrition rate is 8%, and up to 30% of novice teachers with less than 3 years of teaching experience leave the profession before investing 5 years into the practice (Chesak et al., 2019). Over time, this exodus of teachers may prove detrimental to the field of education, especially as experienced teachers depart from the profession and fewer and fewer teachers remain in the field to replace them.

As public schools seek out resources for families in need, adopt and implement mandatory and elective programs and strategies, and meet state and federal directives' compliance requirements, classroom teachers have generally borne the brunt of the added responsibilities of those initiatives. The Division of Elementary and Secondary Education (2015) outlined recent legislation aligned with the federal Every Student Succeeds Act, which emphasized schools' accountability regarding underserved student populations,

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including a heightened focus on students from high-poverty areas and those coming from disadvantaged backgrounds. When compounded with multiple interactions with students who have experienced trauma, the increasing demands of the teaching profession may pose a profound threat to the physical and mental health of teachers who may engender symptoms of compassion fatigue, the conscious and innate need to provide relief to victims of suffering (Ziaian-Ghafari & Berg, 2019). The inherent need to help students beyond academic requirements may result in teachers' acute and long-term health issues. If mandates for more stringent educational and behavioral practices among educators continue to focus on student academic outcomes without considering the deleterious effects that such rigor may have on teachers' physical and mental health, public schools may continue to see an increase in teachers leaving the profession.

Public schools have also explored additional avenues of support through school-based health programs. School-based health centers (SBHCs) and school-based telehealth (tSBHCs) are two resources that public schools use to target students, especially those in high-poverty areas with inadequate access to quality health care. Many schools participating in these programs provide services to teachers and the surrounding communities. School-based health programs include primary health and mental and behavioral health care (Cormack et al., 2016). Although a considerable amount of research exists on SBHCs and their effects on student populations, the research regarding tSBHCs is scant. Furthermore, few researchers have attempted to analyze how these programs benefit the teaching community. Such a study might help identify the interventions for teachers suffering from burnout and secondary traumatic stress and guide future practice regarding school-based health programs.

Compassion fatigue may negatively affect all teachers' professional quality of life; however, experienced teachers generally have more stamina to cope with work-related stressors than their less experienced colleagues. Gavish and Friedman (2010) deduced that burnout symptoms, a component of compassion fatigue, may present in novice teachers during their preparation courses. Some novice teachers come into the classroom with significant stress and negative feelings concerning their self-efficacy at the beginning of their teaching careers. Therefore, a cycle of over-stressed, underprepared teachers continues to enter a field with significant, seemingly unattainable, expectations. Gavish and Friedman noted that novice teachers tended to feel a sense of failure throughout their entire first year of practice and also suggested that teachers, especially those in their early years of teaching who suffer from burnout, tend to be less effective in their classrooms, which could have negative consequences beyond the classroom. Professional quality of life, specifically compassion fatigue, if not recognized and remedied, might have grave implications for teachers, students, families, and the overall structure of the public school organization.

Statement of the Problem

First, the purpose of this study was to determine the effects by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on compassion satisfaction measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts. Second, the purpose was to determine the effects by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on burnout measured by the Professional Quality of Life

Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts. Third, the purpose was to determine the effects by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on secondary traumatic stress measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts.

Background

Theoretical Framework: Professional Quality of Life

People's emotions about their work determine professional quality of life. Stamm (2010) defined *Professional Quality of Life* as how people feel as a direct result of their work, and this concept comprises positive and negative components: compassion satisfaction and compassion fatigue. Compassion satisfaction is the enjoyment or pleasure experienced by workers, not only when they perform their jobs but performing these successfully, and is further characterized by feelings of gratification often associated with helping others (Audin, Burke, & Ivtzan, 2018). In short, compassion satisfaction embodies the positive feelings derived from performing the work of helping others. Although professional quality of life may be applied to various occupations, this study will examine the framework through the lens of the helping professions, including the field of education.

Conversely, compassion fatigue encompasses workers' negative feelings and emotions due to their occupations and includes two elements: burnout and secondary traumatic stress. Secondary traumatic stress is also referred to as vicarious traumatization. Burnout is characterized by emotional exhaustion, depersonalization, and cynicism. However, although workers suffer the primary effects of burnout, the implications may

also have inimical effects on personal and professional relationships and the overall organization in which they are employed. Gavish and Friedman (2010) theorized that the state of burnout was characterized by symptoms that adversely affected the employee's job performance due to long-term exposure to situations with the potential for emotional harm. Teachers typically spend more than 40 hours per week performing their job requirements, which places them at an increased risk of burnout. Secondary traumatic stress is also a risk factor for teachers, especially those who serve in school districts in high-poverty communities. Relative to other professions, the condition occurs when workers are repeatedly exposed to the effects of people's traumatic events, often clients with whom they work or have multiple, consistent associations. Figley (1995) noted that this stress emanated from the helper's innate desire to provide solace for the victim. Bride and Figley (2009) asserted that secondary traumatic stress was considered an occupational hazard for workers in the helping professions. Although teaching has not officially been added to the list of occupations affected by secondary traumatic stress, teachers, by nature, feel an overwhelming need to help suffering students and are thereby at risk for developing symptoms consistent with the disorder. Professional quality of life should be applied as a framework to the teaching profession, as compassion satisfaction and compassion fatigue are significant factors in determining classroom teachers' physical, emotional, and mental health.

Compassion satisfaction is one component of the Professional Quality of Life model. Gauging an employee's compassion satisfaction level is paramount, as increased compassion satisfaction levels seem to counterbalance the effects of compassion fatigue. With Colorado child protection workers, participants with higher compassion satisfaction

levels had significantly lower compassion fatigue levels (Conrad & Kellar-Guenther, 2006). In other words, the negative feelings associated with compassion fatigue were nullified by the positive feelings concomitant to compassion satisfaction (See Figure 1). The higher workers' levels of compassion satisfaction, the more likely workers would feel optimistic about their professional quality of life.

Compassion fatigue is a concept often applied to professions where nurturing others is an absolute priority. Occupations such as ministry, nursing, and social work are often studied by measuring the employee's professional quality of life. In contrast to compassion satisfaction, "Compassion fatigue is a state of tension and preoccupation with traumatized patients by re-experiencing the traumatic events, avoidance of reminders, and persistent arousal associated with the patient" (Roney & Acri, 2018, p. 75). Figley established the idea of compassion fatigue during his research about veterans' experiences of the Vietnam War (Roney & Acri, 2018). Stamm (2010) defined compassion fatigue in two parts: burnout and secondary traumatic stress (see Figure 1). Burnout is the state of one having an inability to effectively perform a job due to feelings of depression and hopelessness resulting from the duties associated with that job. Secondary traumatic stress results from on-the-job exposure to others who have personally experienced a traumatic event. Compassion fatigue has many adverse effects on the employee and may manifest across various facets of a worker's professional and personal life. Much like medical personnel, ministry workers, and social workers, the title of caregiver is often attributed to teachers as they are responsible for students' safety and well-being in their care. As a result, teachers should be included in the category of helping professions where the professional quality of life framework is already widely recognized.
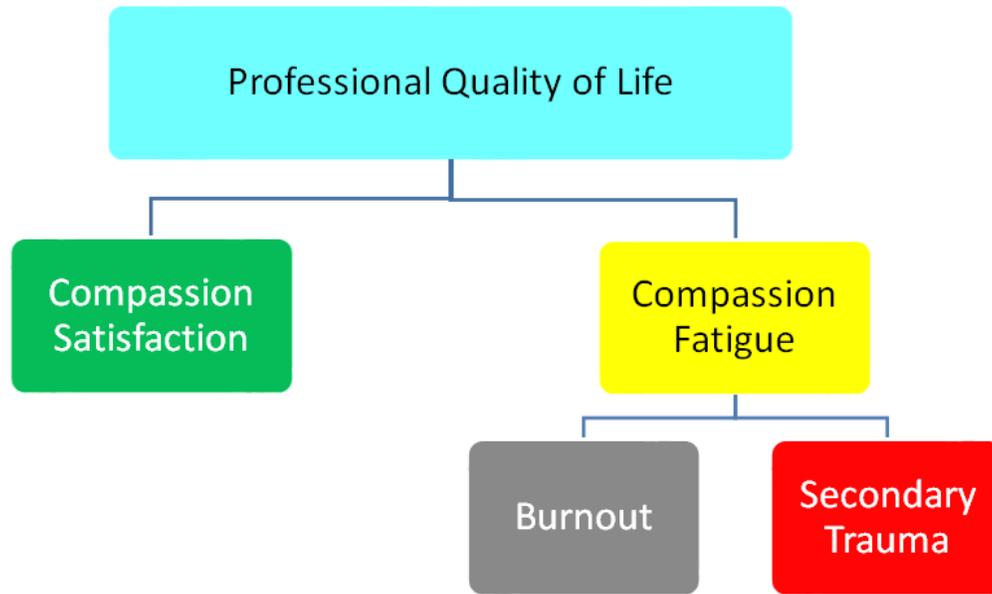
Figure 1. Professional quality of life. From "The concise proqol manual" (2nd ed.), by B. H. Stamm, 2010, Pocatello, ID: ProQOL (Retrieved from http://proqol.org/uploads/ProQOL_Concise_2ndEd_12-2010.pdf). Copyright 2010 by the Centers for Victims of Torture. Reprinted with permission.

Further, compassion fatigue is aligned with the teaching profession because teachers often assume the caregiver role and might be exposed to increasing on-the-job, secondary traumatic stress. The Arkansas Department of Health (2017) listed poverty and inadequate access to preventative health care as adversity indicators, specifically adverse childhood experiences that teachers encounter daily. Additionally, the Centers for Disease Control and Prevention (2019) defined adverse childhood experiences as events that have the potential for traumatic outcomes occurring in children ages birth to 17 years of age. Reinbergs and Fefer (2018) asserted that 12.5% of the United States' students were abuse victims before age 18. Assistance is often provided to students who have experienced trauma; however, minimal support is available to assist teachers with the

repercussions of exposure to their students' traumatic stress. Although compassion fatigue has been a research topic for years, the concept has yet to become an essential piece of the framework for education research. Professional quality of life, especially compassion fatigue, applied as a framework in education, could have meaningful implications for teachers, students, and community stakeholders.

School-Based Health Programs

SBHC programs are one of the services schools implement to help meet the school community's developmental, physical, and emotional needs. The inception of school-based health is credited to the public health nursing movement of the early 1900s, which targeted the high rates of student absenteeism due to severe, communicable illnesses (Keeton, Soleimanpour, & Brindis, 2012). Eventually, school-based nurses helped change the landscape of school health, specifically in student absenteeism, by providing various health-related benefits, including education for students and their families. As access to health care continued to be problematic for residents in rural areas of the United States, SBHC, and later the addition of tSBHC programs for mental health, began to gain notoriety. According to the Health Resources and Services Administration (2017), approximately 2,000 SBHCs exist nationwide. Love, Panchal, Schlitt, Behr, and Soleimanpour (2019) reported that the prevalence of telemedicine in schools was 19% during the 2016-2017 school year, up from 7% just 9 years prior. Accessible health care for public school students is rising in the United States. As these health care services become more commonplace for public schools, targeting teachers as a focal point of service delivery is imperative.

Teacher Effectiveness

Teacher effectiveness is measured across various categories and is often based on student assessment scores, formal observations, and self-reflection. Teachers' professional quality of life, compassion satisfaction levels, and compassion fatigue may significantly influence these outcomes. Although research on compassion satisfaction applied to education is minimal, Turner and Theilking (2019) asserted that teachers with high levels of well-being demonstrated positive outcomes, including a deeper commitment to the school and overall satisfaction with their occupation. In contrast, teachers presenting with burnout and stress symptoms had a lower sense of self-efficacy, ultimately affecting their instruction quality and other job-related responsibilities (Chesak et al., 2019; Haydon, Leko, & Stevens, 2018; Yong & Yue, 2007). In short, if teachers did not believe they could perform to expectation, their work performance reflected that belief. Various factors may contribute to the prevalence of compassion fatigue, particularly burnout within the teaching profession. Haydon et al. (2018) cited inadequate administrative support, increased paperwork, and a lack of autonomy to make decisions as a few reasons for increased teacher stress rates. As responsibilities and duties continue to grow, teachers experience less independence regarding the governance of their classrooms. Understanding how levels of compassion satisfaction and compassion fatigue influence teachers' self-perceptions and productivity could provide school-based health program providers, district and building administration, and state and federal policymakers a foundation for making decisions relative to teacher preparation and training, professional development, and resiliency programs, as well as appropriate methods of accurately measuring teacher effectiveness.

Hypotheses

The following hypotheses were formulated to address the problem in this study:

1. No significant difference will exist by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on compassion satisfaction measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts.

2. No significant difference will exist by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on burnout measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts.

3. No significant difference will exist by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on secondary traumatic stress measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts.

Description of Terms

Advanced practice registered nurse. The National Council of State Boards of Nursing (2019) defined an advanced practice registered nurse as a registered nurse with a minimum of a master's degree and privileges such as writing prescriptions and diagnosing certain illnesses.

Adverse childhood experiences. The Centers for Disease Control and Prevention (2019) defined adverse childhood experiences as events occurring in a child's life that can potentially result in traumatic outcomes.

Burnout. Stamm (2010) defined burnout as the inability to perform work to expectations due to feelings of despair and depression resulting directly from the work an individual is expected to perform.

Compassion fatigue. Stamm (2010) defined compassion fatigue in two parts: burnout and secondary traumatic stress. Compassion fatigue involves the worker experiencing stress, exhaustion, and empathy from working with others, especially those who have experienced traumatic events firsthand.

Compassion satisfaction. Compassion satisfaction is the contentment workers experience knowing they receive pleasure from their jobs and perform their duties effectively and successfully (Stamm, 2010). Further, higher levels of compassion satisfaction may help allay symptoms of compassion fatigue.

Diagnostic and Statistical Manual of Mental Disorders. The American Psychiatric Association (2020) defined the Diagnostic and Statistical Manual of Mental Disorders as the handbook by which mental health disorders are diagnosed and classified.

Experienced teacher. Under the Every Student Succeeds Act, the Arkansas Division of Elementary and Secondary Education (2021c) defined an experienced or effective teacher as an educator with 4 or more years of teaching experience.

Novice teacher. The Arkansas Division of Elementary and Secondary Education (2017) defined a novice teacher as an educator with 3 years or less of classroom teaching experience.

Professional quality of life. Stamm (2010) defined the professional quality of life as the positive (compassion satisfaction) and negative (compassion fatigue) emotions workers feel toward their occupation.

School-based health center (SBHC). The National Assembly on School-Based Health Care (2002) defined SBHCs as collaborative partnerships between schools and local health care organizations that provide onsite, health-related medical and mental health services for students enrolled in the school; however, teachers and the community may also be served.

Secondary traumatic stress. Stamm (2010) defined secondary traumatic stress as stress that occurs in people who are exposed, through work, to another person who has experienced a traumatic event.

Telehealth (tSBHC). The Health Resources and Services Administration (2021) defined telehealth, also known as telemedicine, as delivering health care and health-related education services through electronic telecommunications from one location to another.

Trauma. The American Psychological Association (2021) defined trauma as an emotionally-driven response to a negative event. Effects can be short-term or long-term and are often characterized by mental and physical symptoms.

<div align="center">

Significance

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Research Gaps

Although past research regarding professional quality of life, specifically compassion satisfaction and compassion fatigue, has been almost exclusively implemented in helping professions outside of education, including health care and social

work, new research has suggested that the professional quality of life framework should be applied to the teaching profession. According to Søndenaa, Lauvrud, Sandvik, Nonstad, and Whittington (2013), one facet of compassion fatigue, burnout, was a common occurrence in people whose professions require an emotional investment in their work. Teachers spend considerable time and energy ensuring their students' success. The study attempted to apply the professional quality of life framework to Arkansas public school teachers in Grades K through 12. Currently, limited research exists regarding the professional quality of life applied as a framework for education research.

Possible Implications for Practice

Results could interest building and district administrative personnel in public schools and might be used as a catalyst for additional mental health-based professional development and support for teachers. Mental health professionals, social workers, and local health care agencies may also benefit from this study because these results could initiate meaningful conversations regarding support in rural and high-poverty public schools that employ teachers at risk for developing compassion fatigue symptoms. Other implications include the rationale for supplemental grant funding for new SBHCs and continuing funding for existing SBHCs. Additionally, the potential for increased collaboration between health care organizations and public schools to implement school-based telehealth programs should be considered.

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Process to Accomplish

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Design

A quantitative, causal-comparative design was used. For Hypotheses 1 through 3, three 2 x 2 factorial between-groups designs were used. The independent variables were

years of teaching experience (novice versus experienced) and availability of an onsite SBHC versus a tSBHC program only. The dependent variables for Hypotheses 1 through 3 included compassion satisfaction, burnout, and secondary trauma, respectively.

Sample

The sample included Professional Quality of Life scores collected from kindergarten through 12th-grade teachers in nine Arkansas school districts. Four school districts were chosen based on access to an onsite SBHC. These schools collaborated with a local health care agency and included an onsite SBHC available to students, staff members, and the community. Five school districts had access to a tSBHC only. These schools had a collaborative partnership with a local health care agency and included an onsite tSBHC available to students and staff members. The districts' teachers were stratified by type of SBHC and years of experience. Student populations in the nine districts ranged from 574 to 1,964. The districts' free and reduced-price lunch status ranged from 56% to 63%.

Instrumentation

During the 2020-2021 school year, teachers in the nine school districts were given the Professional Quality of Life Scale. The Professional Quality of Life Scale consists of three sections: 10 questions measured compassion satisfaction, 10 questions measured burnout, and 10 questions measured secondary trauma. Each question was scored from 1 (*never*) to 5 (*very often*), and the composite score was calculated for the three sections. The Professional Quality of Life Scale was administered as an online survey to teachers in the nine school districts. The scores were collected from the online survey, and the results were tabulated. The Professional Quality of Life Scale noted that each subscale's

scores had the following alpha scale reliability: compassion satisfaction (.88), burnout (.75), and secondary trauma (.81) (Stamm, 2010). The reliability scores were considered acceptable.

Data Analysis

A 2 x 2 factorial analysis of variance (ANOVA) was conducted using access to an onsite SBHC versus access to an onsite tSBHC only by years of teaching experience as the independent variables to address each of the three hypotheses. The three hypotheses' dependent variables were as follows: compassion satisfaction, burnout, and secondary traumatic stress. An alpha level of .05 was set for the two-tailed test of each null hypothesis.

<div align="center">**Summary**</div>

Compelling evidence exists that professional quality of life, compassion satisfaction, and compassion fatigue, directly affect workers' mental and physical health and their abilities to adequately and effectively carry out their occupations' requirements. Mental and physical illness can result from burnout and secondary traumatic stress (Johnson et al., 2005). Teachers in high-poverty areas are at an increased risk of compassion fatigue due to the population they serve (Ollison, 2018). Those teachers are often exposed to students who present with trauma ranging from hunger and neglect to physical and sexual abuse. If the intention of school-based health programs, including telehealth programs, is to improve the overall wellness of the school environment by ensuring accessible health care is available to those in need, the teaching population should be considered a notable target for service delivery. Chapter II reviews the literature with the Professional Quality of Life as the theoretical framework.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

Public schools are one element of society in which significant changes have occurred over the last several decades in the United States. These changes are due to various factors, including legislative mandates, increasingly diverse student populations, and changes in the school's communities and families. Froese-Germain (2014) pointed to a dramatic change in the family structure since 1990 on Canadian work-life balance, noting that several characteristics, including decreased financial stability due to low-paying jobs, had become commonplace. As students' and their families' needs continue to become increasingly disparate, schools should evaluate the types of services offered and pursue collaborative partnerships with community-based entities, such as mental health and community health care agencies, to educate children academically, physically, and emotionally.

School district personnel, specifically teachers, are the key facilitators of the educational experience, including creating and maintaining the climate in which students are expected to perform. However, this learning space should teach the academic skills necessary to achieve adequate yearly progress. Yao et al. (2015) described the school environment as a psychosocial setting, where collegial support, autonomy, access to resources, and even student behavior significantly affected teachers' perceptions of their work. Positive supports for these elements are critically needed today as societal and

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environmental changes affect students and families. Teachers bear the burden of the additional responsibilities associated with the needs of the families they serve, especially those of the students who present with unique living situations and, often, traumatic histories.

The volume of students who have suffered a traumatic event is significant. The Centers for Disease Control and Prevention (2020) reported that, within the previous year, approximately one in seven children had experienced trauma in the form of abuse or neglect in the United States. Reasonably, those same children comprise a portion of the student population in today's public school classrooms. Christian-Brandt, Santacrose, and Barnett (2020) discussed the push for trauma-informed practices in education to respond to the increasing number of students who have experienced a traumatic event, citing problematic behaviors and poor physical and mental health as potential issues for those students. Schools continue to mandate that teachers provide trauma-informed instruction to adequately serve students presenting with these types of histories as part of a nationwide initiative. The Every Student Succeeds Act included provisions requiring schools to provide accessible mental and behavioral health practices for qualifying students (Division of Elementary and Secondary Education, 2015). Since teachers often have the most direct interaction with students, exposure to trauma-related behaviors in the classroom is likely. SBHCs and tSBHCs may be valuable resources to allay compassion fatigue among teachers by providing primary care and mental health services focused on wellness for teachers and students.

This chapter includes a review of the literature related to the theoretical framework, professional quality of life, including compassion satisfaction and

compassion fatigue, and the effects on novice and experienced teachers in school districts. This chapter reviews the literature detailing the history and research relevant to SBHCs and tSBHC programs to include the school environment's effects, specifically on kindergarten through 12th-grade teachers.

Background

Theoretical Framework: Professional Quality of Life

Professional quality of life is multifaceted but is generally defined by two major components: compassion satisfaction and compassion fatigue. Compassion satisfaction is the enjoyment or pleasure experienced by helping professionals perform their jobs successfully, characterized by feelings of gratification often associated with helping others (Audin et al., 2018). In short, compassion satisfaction embodies positive feelings related to helping others. Conversely, compassion fatigue encompasses workers' negative feelings and emotions due to their occupations and includes two elements: burnout and secondary traumatic stress.

Burnout is characterized by emotional exhaustion, depersonalization, and cynicism. However, although workers suffer the primary effects of burnout, the implications may also have inimical effects on personal and professional relationships and the overall organization in which they are employed. Gavish and Friedman (2010) theorized that the state of burnout was characterized by symptoms that adversely affected the employee's job performance due to long-term exposure to situations with the potential for emotional harm. Teachers typically spend more than 40 hours per week performing their job requirements, which places them at an increased risk of burnout. Secondary traumatic stress is also a risk factor for teachers. Relative to other professions, the

condition occurs when workers are repeatedly exposed to the effects of people's traumatic events. These people are usually clients with whom they work or have multiple, often consistent, associations. Figley (1995) noted that this stress emanated from the helper's innate desire to provide solace for the victim. Bride and Figley (2009) asserted that secondary traumatic stress was considered an occupational hazard for helping professions. Although teaching has not officially been added to the list of occupations affected by secondary traumatic stress, teachers, by nature, feel an overwhelming need to help suffering students and are thereby at risk for developing symptoms consistent with the disorder. Professional quality of life could be applied as a framework to the teaching profession as compassion satisfaction and compassion fatigue are significant factors in determining classroom teachers' physical, emotional, and mental health.

Compassion Satisfaction

Performance expectations and job-related duties may affect how individuals feel about their work. For laborers in the helping professions, the satisfaction experienced and the efficacy of helping others is known as compassion satisfaction (Christian-Brandt et al., 2020). Workers with high levels of compassion satisfaction enjoy assisting or supporting others, but they also gain a sense of accomplishment from their work and benefit from a positive emotional state of well-being. Higher levels of compassion satisfaction help safeguard against compassion fatigue's adverse effects (Audin et al., 2018; Conrad & Kellar-Guenther, 2006). In other words, although persons may still experience the negative feelings and emotions associated with compassion fatigue regarding their work, those feelings may be mitigated by higher levels of compassion satisfaction. Applied to the field of education, self-care and resiliency-focused trainings

and professional development opportunities, as well as access to quality health and mental health resources, may help yield higher levels of compassion satisfaction in teaching professionals, culminating in positive feelings about their work as well as their professional and personal relationships.

Compassion Fatigue

In contrast to compassion satisfaction, compassion fatigue, a condition characterized by levels of burnout and secondary traumatic stress exposure, produces negative or unpleasant feelings directly related to one's job duties and performance expectations. The term *compassion fatigue* was popular by Charles Figley in the late 20th century. Previous terms used to describe the disorder included *emotional contagion* (Miller, Stiff, & Ellis, 1988) and *secondary survivor syndrome* (Cash & Wiener, 2006); however, the most commonly known terms to date are *vicarious traumatization* or *secondary traumatic stress disorder.* Although compassion fatigue may be more commonly known within the helping occupations, the illness also presents in members of other professions, specifically education. The condition may affect teachers across grade levels and disciplines; however, current literature focuses almost exclusively on teachers of students with exceptionalities (Bozgeyikli, 2018; Hoffman, Palladino, & Barnett, 2007; Sharp, Siegrist, & Garrett-Wright, 2018; Ziaian-Ghafari & Berg, 2019). Although instructing individuals with developmental and academic delays is often physically and emotionally taxing for teachers, students displaying behaviors indicative of trauma presents additional challenges for teaching staff. Compounded with the ever-growing list of duties and performance expectations, responsibility for successfully instructing this unique subpopulation of students is likely to increase the chances of compassion fatigue.

Burnout

Burnout is the most commonly acknowledged but perhaps the most misunderstood facet of compassion fatigue, warranting closer examination. Even though the phenomenon has been culturally regarded as the state of being overworked, Gavish and Friedman (2010) noted that no precise definition for burnout existed. In the mid-1970s, those in health care and human service work began defining the condition. At that time, psychiatrist Herbert Freudenberger used the term *burnout,* a term related to drug addiction's clinical treatment, specifically to describe the decline of emotions and feelings of apathy he and others experienced in the workplace (Maslach, Schaufeli, & Leiter, 2001). Around the same time, social psychologist Christina Maslach researched the phenomenon through the human service professions' lens. This early research focused on relationships, and contextual data were gleaned from personal interviews and observations between patients and providers, colleagues, and family members (Maslach et al., 2001). Maslach et al. (2001) saw the effects of burnout as a stress-induced workplace anomaly and a disorder that negatively affected professional and personal relationships and workers' relationships with their occupational duties. Burnout was detrimental to nearly every part of an individual's life. As burnout became prevalent, researchers broadened their focus to include a way to identify and define the condition quickly.

As the process for determining the implications of burnout moved into the empirical phase, additional tools were developed to measure the condition. In 1981, the Maslach Burnout Inventory was published. A second version specifically for educators, the Maslach Burnout Inventory-Educator Survey, was published in 1996 (Kokkinos,

2006). Another version, the Maslach Burnout Inventory-General Survey, was created and applied to a greater variety of occupations (e.g., military personnel and management positions) due to revisions of the original measures (Maslach et al., 2001; Mind Garden, 2019). As of February 2021, five versions of the Maslach Burnout Inventory existed, including the Maslach Burnout Inventory-General Survey for Students and the Maslach Burnout Inventory-Human Services Survey for Medical Personnel. The human services and educator surveys measure emotional exhaustion, depersonalization, and personal accomplishment, while the General Surveys measure exhaustion, cynicism, and professional efficacy. The development of additional measures in response to burnout's pervasiveness allowed a more significant percentage of the working population to recognize burnout and understand the condition's personal and professional effects.

Burnout may have damaging and long-lasting effects on any working person, regardless of occupation. Specific characteristics were prevalent among victims of burnout: emotional exhaustion, cynicism or depersonalization, and inefficacy, which were components of the Maslach Burnout Inventory (Alarcon, 2011; Jurado, Perez-Fuentes, Atria, Ruiz, & Linares, 2019; Kulkarni, Bell, Hartman, & Herman-Smith, 2013). The condition of burnout was also generally comorbid with evidence of mental health disorders such as depression and anxiety (Kulkarni et al., 2013; Maslach et al., 2001). Koenig, Rodger, and Specht (2018) defined exhaustion as a lack of energy that hindered caregivers' ability to show concern for the clients with whom they worked. Simply stated, exhaustion prohibited caregivers from fulfilling their professional obligation to care. Although exhaustion may be quite profound as a stand-alone ailment, the condition becomes more severe as a worker progresses through the burnout continuum.

As previously stated, burnout is a multifaceted condition. The second component, cynicism or depersonalization, was the state of dehumanizing others as a coping mechanism and was often characterized by alienation and detachment (Gavish & Friedman, 2010; Koenig et al., 2018). Miller et al. (1988) described this condition as a transition from empathy, a vicarious identification with another person's feelings, to apathy, an absence of emotion. Maslach (1976) discussed detachment and depersonalization as secondary manifestations of burnout and that each was evidenced in verbal, nonverbal, intentional, and unintentional behaviors. One coping strategy included abstract vocabulary assigned to clients to abate their humanness (Maslach, 1976). Another approach included using humor to negate feelings of burnout. In other words, some people were able to use humor and other coping strategies to assuage anxious or stressful thoughts or emotions. Maslach (1976) also added that some workers consciously decided to leave their work at the office and set rigid boundaries in their occupational relationships to cope with the stress of burnout. Although some workers found this discipline a relatively simple practice, others had difficulty not allowing work stress to permeate other areas of their lives. Understandably, cynicism may affect the worker's professional and personal relationships.

The final aspect of burnout was inefficacy. This phase involved the negative feelings one had toward oneself and was often characterized by an inability to perform a required task or even relate to the people they served (Johnson et al., 2005; Koenig et al., 2018). Workers whose burnout had progressed to this state experienced significant difficulty carrying out job expectations due to the decreased capacity to believe that they could do their work, making successful working relationships challenging. As evidenced

in the literature, burnout has dangerous implications for those affected if not identified and treated.

Although burnout victims generally presented with the three major symptoms, not all symptoms developed simultaneously. Alarcon (2011) noted that these burnout elements were believed to develop in succession. In other words, as burnout in a worker progressed, the symptoms changed from fatigue to genuine feelings of ineffectiveness and inadequacy. Rodriguez-Mantilla and Fernandez-Diaz (2017) echoed previous research claiming that burnout was not an acute condition but rather the outcome of a continuous process. Additional burnout symptoms included irritability, decreased self-control, and other job inefficiencies (Yong & Yue, 2007). Further, Maslach and Jackson (1981) stated that, in some cases, burnout led to familial incongruity and the likelihood of increased consumption of drugs and alcohol. Johnson et al. (2005) expounded on the physical effects of long-term stress exposure and cited significant medical issues such as coronary and gastrointestinal problems. The repeated and extended exposure to negative workplace stimuli resulted in mental health-related issues that were generally akin to high stress and included emotional exhaustion and depression. The effects of burnout were not limited to affective consequences but also included physical illnesses. In essence, burnout's progression affects the victim's professional quality of life and personal quality of life, including mental and physical health.

Burnout may be attributed to organizational and job-specific factors. Johnson et al. (2005) referenced these factors, including adverse working conditions, performance expectations that did not align with job descriptions, job security and room for professional advancement, peer relationships, and lack of input in decision-making. Work

environments that did not promote positive practices, such as reasonable and unambiguous performance expectations, consistent and meaningful communication, and employee input, were at-risk of high work-related stress or burnout. However, not all employees that had workplace stress experienced symptoms of burnout. A person's work may also determine the risk of developing burnout. Johnson et al. referenced *emotion work* and the prevalence in professions where workers and clients had to interact either visually or verbally and where those interactions were intended to guide or influence another person's thinking. One could liken this scenario to therapists' relationships with their clients or health care providers with their patients. Perhaps less obvious is the emotional work in the relationships between teachers and students. Teachers communicate face-to-face with their students and may influence their thinking across various disciplines. Although Johnson et al. claimed that emotional work was heavily embedded into helping professions such as health care and social work, the argument might be made that emotional work is an intricate element of the teacher-student relationship, making teachers equally at risk for developing emotional exhaustion and, eventually, burnout. Applied to the teaching profession's context and the array of mental and physical symptoms accompanying the condition, burnout, the possible effect on teacher absenteeism, and job performance could have significant implications for future research.

Secondary Traumatic Stress

Secondary traumatic stress is the second component of the compassion fatigue framework and is closely associated with post-traumatic stress disorder (PTSD). PTSD gained attention in the early 1980s when the disorder formally appeared in mental health

(Cash & Weiner, 2006). An official definition of PTSD was published in the third edition of the *American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders* (DSM-III) in 1980, which aided professionals working directly with trauma victims. However, Figley (1995) noted that much of the new research focused on the primary trauma victim but did not address those who suffered indirectly. Although defining PTSD helped organize research and aided practitioners in treating trauma victims, little attention was given to the victims' support systems, neither personally nor clinically. By the end of the 20th century, additional research in PTSD would justify further exploration into the effects of secondary traumatic stress.

By the mid-1990s, secondary traumatic stress became recognized as a potential by-product of PTSD. Figley (1995) emphasized that the following was added to the PTSD diagnostic criteria in the DSM-IV, "…or learning about the unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associates" (American Psychiatric Association, 1994, p. 424). Figley (1995) further explained that the victim's emotional blight transference was almost inevitable due to families' emotional connections. Bride, Radey, and Figley (2007) agreed that the same risk was true for clinicians. Otherwise stated, trauma does not exclusively vitiate the firsthand sufferer but affects those closest to them and those employed to treat them. Figley (1995) referred to this as the *cost of caring*. The DSM-IV also listed several events considered traumatic if learned about by an invested companion, including violence, injury, or death (American Psychiatric Association, 1994). Merely finding out about a traumatic event that happened to a loved one was enough to put the companion at risk for secondary traumatic stress or compassion fatigue. Although secondary traumatic stress

results from PTSD, the potential to cause health complications in those affected is as significant as in primary trauma victims.

Secondary traumatic stress may have profound implications for the affected person. Kulkarni et al. (2013) pointed out that secondary traumatic stress disorder and PTSD symptomatology were analogous. The effects of secondary traumatic stress on the sufferer were comparable to those of the primary victim and could include intrusive thoughts, avoidance, and other cognitive and behavioral issues (Kulkarni et al., 2013). Bride and Figley (2009) also added that secondary traumatic stress was characterized by hyperarousal and an inability to perform essential functions. Extreme responses to trauma profoundly affected the victim and had the potential to disrupt daily life activities. These disruptions could have grave consequences for victims' personal lives, professional relationships, and the employment organizations.

Symptoms of secondary traumatic stress may affect people in various ways and for several reasons. In mental health professionals, McCann and Pearlman (1990) noted that secondary trauma could result in an altered schema, how the professionals viewed the world, and their perceptions of self. Being exposed to another's traumatic material was sometimes enough to modify how highly-trained professionals interpreted and reacted to experiences around and within them. Unlike burnout symptoms, these and other symptoms often occurred suddenly and endured over an extended period (Figley, 1995). In short, primary and secondary victimology manifests quickly and similarly. Kulkarni et al. (2013) also maintained that preexisting factors such as personal trauma or a history of mental illness might put caretakers or companions at a higher risk of experiencing secondary traumatic stress disorder. Trauma survivors who are later

exposed, secondarily, to the traumatic event of a loved one are likely to be more susceptible to suffering from the effects of that event. Bride and Figley (2009) further explained the extent to which secondary trauma could reach, stating that external relationships, which existed outside of the primary and secondary victims' fundamental connection, were often negatively affected. Mitigating factors affecting secondary traumatic stress have been studied, including poverty, age, and education level (Kulkarni et al., 2013); however, research has been controversial. In research on residential child placements, Ireland and Huxley (2018) proposed that the traumatic events experienced by professionals were often a combination of hearing about the past traumas of their clients as well as the physical and verbal abuse they received from their clients as a result of those traumatic experiences. In other words, secondary traumatic stress presented in workers and was further compounded by the exacerbation of symptoms in the clients they served with PTSD. Secondary traumatic stress and PTSD are further complicated as similar symptoms are reciprocated from client to caregiver.

Residential home workers are tasked with their clients' day-to-day care and may have a high risk of indirectly experiencing their clients' trauma. Implications included further research on secondary traumatic stress and vicarious trauma regarding children (Ireland & Huxley, 2018). Minimal research exists for secondary traumatic stress as a disorder related to children, especially in the teaching profession, where compassion fatigue has only recently been applied as a theoretical framework. In California teachers, Ollison (2018) found that high secondary traumatic stress and high rates of burnout were prevalent in individuals working in high-poverty schools. Students from high-poverty

populations often presented with deprivation, including developmental delays, poor

health and hygiene, and even homelessness.

Although poverty was a predictor of secondary traumatic stress, Ollison's (2018)

follow-up interviews with teachers indicated that additional factors such as school

climate and commitment level also contributed to teachers' trauma experience. For

example, teachers were responsible for educating students with challenging behaviors

and poverty-related disadvantages in an unsupportive environment. Christian-Brandt et

al. (2020) echoed this sentiment, acknowledging the lack of attention focused on meeting

teachers' needs. Many teacher participants also implied a reciprocal relationship between

teacher morale and student behavior. Relative to secondary traumatic stress, teachers of

students who exhibit challenging behaviors indicative of trauma want to dissociate from

those students because of those behaviors. Similarly, students with traumatic

backgrounds often have difficulty engaging academically and socially with teachers,

perpetuating a cycle of disengagement that exacerbates trauma, primary and secondary.

Although the application of secondary traumatic stress in the teaching profession is still a

work in progress, the existing data indicates the need for additional research.

School-Based Health Programs

School-Based Health Centers

Inadequate access to health care, especially for children and youth in rural and low-

income households, justified the need for alternative health care service delivery systems.

Keeton et al. (2012) characterized the SBHC alternative system as a health care standard that

included primary and mental health services delivered at school campuses. Keeton et al. noted

that in the early 20th century, students who fell victim to highly contagious illnesses like scarlet

fever and whooping cough were excluded from the school population. However, since treatment plans were not prescribed and medical consultation was rarely sought, those illnesses spread among families, neighborhoods, and schools. With SBHCs in many areas of the country, students who were once unable to access primary health care services easily could visit a medical professional, often without leaving their assigned campuses. With the target population identified and the SBHC model developed, schools and health care organizations were tasked with establishing funding for the initiative.

The SBHC model was costly, as many programs required additional space plus modern medical equipment to effectively and efficiently provide student services. The initiative for SBHCs began in the 1960s; additional funding became available to expand the scope of practice and the number of SBHCs through the Robert Wood Johnson Foundation in the 1970s and the W. K. Kellogg Foundation in later years. Subsequently, other state agencies began allocating funds for SBHCs, including the Maternal and Child Health Services Title V block grant and Medicaid participants' reimbursement opportunities (Scudder, Papa, & Brey, 2007). For this model of health care to serve the intended purpose of meeting the medical and mental health needs of the target populations, many of whom were characterized as low-income, enrolled in Medicaid, or both, schools and health care organizations not only needed a coordinated goal but also depended heavily on funding sources for service development and sustainability. While funding was a concern, the types of student health care services were equally important for various reasons.

SBHCs provide a range of services for underinsured students from low-income families. According to Keeton et al. (2012), those benefits included childhood immunizations and other well-child check-up criteria such as hearing and vision screenings. Even though community

health care providers administered these services, SBHCs could provide these assessments and screenings to students onsite with benefits such as decreased class absences and less time missed from work for parents. Pastore and Techow (2004) described other advantages that SBHCs provided over traditional community health care providers, noting that the collaboration between medical providers and teachers allowed keen insight into various issues with which children and adolescents struggled. Teachers and school staff could make a referral for students who exhibited signs of suicide or abuse to primary care or mental health providers almost immediately. The teamwork coordination assisted the student and allowed the health and mental health care workers and teachers to operate within their designated scope of expertise. Reinbergs and Fefer (2018) also recognized the need for a collaborative partnership between clinicians and educators to safeguard against secondary traumatic stress. SBHCs equipped public schools with valuable preventative services and an accessible avenue of treatment for acute physical and mental health issues. Even though the benefits of SBHC services for students living in poverty and rural, underserved areas are evident, not all schools have access to or funding for onsite brick-and-mortar health care clinics.

Many Arkansas organizations have joined to create funding sources for school-based health programs. A collaboration between the Division of Elementary and Secondary Education, Office of School Health Services, Arkansas Department of Health, Arkansas Department of Human Services, and Medicaid in the Schools in combination with the Arkansas Tobacco Excise Tax of 2009 resulted in the development of the Arkansas School-Based Health Center Grant (Division of Elementary and Secondary Education, 2021a). SBHC grants are competitive between qualifying school districts and require further collaborative agreements with community-based health care providers to administer various health care services to students,

staff, and, if the school chooses, members of the surrounding community. Arkansas School-Based Health Center Grant funds are distributed in a deescalating 5-year cycle, with up to $150,000 awarded for the first year. To date, 41 schools across Arkansas have been awarded the Arkansas School-Based Health Center Grant through the Division of Elementary and Secondary Education since 2010 (Division of Elementary and Secondary Education, 2021b). Although the state helps public schools find solutions to the increasing need for students' health care services, barriers still exist that prohibit adequate medical and mental health services for many students in rural communities across the state. Brick-and-mortar medical clinics are expensive to construct and operate and require sustainable funding that most public school districts do not have.

School-Based Health Centers Telehealth

Another alternative to the traditional delivery of health care services is telehealth programs, specifically telemedicine. Telemedicine has been a common practice in mental health for several years. The telehealth primary health care movement is rapidly spreading in many states to provide quality, accessible health care to rural populations, including those in Arkansas. "School-based telehealth (tSBHC) is emerging as an effective way to provide high-quality health care to children in the school setting," as noted by Cormack et al. (2016, p. 237). As schools continue to seek accessible health care services for students, especially in low-income, rural areas, SBHC programs offer primary health care to students in the nonclinical school environment, usually through the school's existing facilities like the nurse's office. These programs further benefit schools by requiring less staff, minimal space, and lower costs than traditional SBHCs.

While similar in scope to the SBHC model, telehealth provides various services using modern technologies rather than the conventional practice of face-to-face doctor visits. Through

video conferencing, patients can access scheduled and acute medical care, follow-up services, ongoing treatment, and various therapies from health care professionals attending from a remote location. In the current practice of tSBHCs, nurses use medical technology designed to transmit information offsite, such as Bluetooth-enabled otoscopes, instruments used to assess the ear canal visually, and portable electrocardiogram or EKG devices used to monitor the heart, to check a patient's vital signs. The results are sent via Bluetooth to the nurse's electronic device; the nurse then sends the information to the telehealth practitioner using a phone app (K. Wood, personal communication, November 1, 2019). While observing the patient on a computer screen, a doctor or advanced practiced registered nurse receives the results and can continue with the patient visit. Another instrument used in telehealth's practice is the Horus Scope, a multi-use, handheld video system designed explicitly for telehealth. The equipment has three separate lenses: otoscope (ears), dermascope (skin), and opthalmoscope (eyes) to serve pediatric patients in the tSBHC setting (L. Fields, personal communication, November 3, 2019). Even though the scope is specifically used to check these three areas in pediatric patients, the instrument can also be used for audiology assessments and women's health. The tSBHC services closely simulate what a patient would experience during a typical doctor's office visit.

Although tSBHCs are trending in public schools across Arkansas, telehealth program implementation relative to serving school populations onsite is not a novel concept. In 2006, the University of Texas Medical Branch developed a tSBHC program to address low-income families' mental health needs in Galveston, Texas. The local school district funded the program with additional funding provided by the Robert Wood Johnson Foundation and was budgeted for 4 years. Like current tSBHC operations, services were delivered via video conferencing and served a population where 60% of patients did not have insurance coverage (Brown University

Child and Adolescent Behavior Letter, 2009). Notably, the program was instrumental in helping clients' mental health needs during the aftermath of Hurricane Ike and received substantial recognition within the health care community for efforts in the mental health field. Although mental health was a worthy focus of pediatric health care, rural schools needed to help meet students' primary health care needs.

Around the same time, primary care telehealth implementation studies were being conducted in Arkansas. From August 2007 to August 2009, the University of Arkansas for Medical Sciences, Center for Distance Health, and Telehealth Kids in Delta Schools focused on telehealth consultations specifically for acute illness and chronic conditions such as asthma and diabetes in four Arkansas schools (Bynum et al., 2011). Researchers sought to determine the influence a tSBHC would have in a medically underserved region of the state. In addition to providing access to health care, the study aimed to cut Medicaid costs and improve clinical outcomes for participating students and their families, including fewer emergency room visits and lower student absenteeism rates. Participants were allowed to receive medical consultation and a health education component for asthma and diabetes management. Bynum et al. (2011) proposed that telehealth could minimize the challenge of distance barriers since the nearest hospital was more than 20 miles away. South Carolina tSBHC programs also cited travel as an obstacle to accessing health care (Kistler et al., 2019). In addition to the cost and length of travel, tSBHC programs would reduce the time a parent or caregiver would have to be away from work to take the child to an appointment. Other benefits exist for schools taking advantage of tSBHC programs. In May 2019, Arkansas initiated Act 851, which allowed school districts to obtain prescriptions for the drugs epinephrine and albuterol used in emergency medical events likely to result in death. After administering the drugs, district personnel, generally the school nurse, can

immediately connect to a medical provider via telehealth for additional medical treatment. Although telehealth in schools is rapidly becoming more popular due to the ease of access and implementation, the practice should evolve and adapt to rural populations' needs.

Teacher Effectiveness

Teachers meet demands from various school and community stakeholders ranging from state-mandated testing outcomes to ensure that their instruction is differentiated enough to meet every student's needs, now in physical and virtual classrooms. Borntrager et al. (2012) referenced the number of times students spend in the school setting as a rationale for further exploring the effects of secondary traumatic stress on teachers. Maslach (1976) also found that teachers in childcare who worked longer hours and actively engaged with students tended to feel negatively toward those students. In other words, teachers who spent more direct, uninterrupted time with students developed a demeanor of antipathy indicative of burnout. Participants further explicated that the change brought about additional stressors, such as new curricula and adjustments in the time teachers had to give direct instruction to students. Ultimately, as job-related responsibilities increased, teacher independence diminished.

Public schools have long been considered more than just a place where students learn to read and write. Schools can now access resources to help feed children, often at free or minimal cost, provide ancillary services such as speech and other related services, and even provide clothing and hygiene products for students and families in need. In short, schools have become tasked with providing for their students' basic needs, which may be imperative for social and emotional welfare. Repie (2005) referenced schools as *community mental health centers* and emphasized students' prevalence of emotional and

behavioral disorders in the general education population. Lindo et al. (2014) claimed that one in five students was believed to suffer from a mental health issue. Thus, in addition to the profession's day-to-day performance expectations, teachers are also tasked with differentiating and successfully delivering instruction to a population of students with diverse needs, many of which are outside of teachers' scope of expertise. However, a teacher's success in meeting these additional needs may not be represented in current evaluation practices and might not accurately reflect the breadth of their effectiveness.

Like many other professions, education personnel receives annual training focused on identifying and addressing child abuse and neglect, earning the additional responsibility of being identified as mandated reporters, persons legally obligated to report suspicion of child abuse and maltreatment. According to the United States Department of Health and Human Services (2018), education professionals reported 19.4% of suspected child maltreatment cases. That percentage was more than any other profession, including law enforcement officers and social workers. Of the four million reports that same year, nearly 700,000 were validated. As teachers spend a substantial portion of the day with students, they should logically expect exposure to one or multiple students who have experienced at least one traumatic event. Although not accurate for every trauma victim, PSTD was often present in children exposed to traumatic events, including natural disasters, environmental events such as war, and physical and sexual abuse (Ackerman, Newton, McPherson, Jones, & Dykman, 1999). Otherwise stated, many trauma victims were affected somehow by the trauma they encountered. The Canadian Teachers' Federation (2014) reported that student health and personal issues incited stress in 62% of teachers surveyed. Teacher preparation programs generally focus

on core academic training with little time to instruct teachers on meeting students' emotional, health, and personal needs, especially those with traumatic histories. In short, teachers are coming into the field inadequately prepared to handle the nonacademic issues among many of their students.

Novice Teachers

A significant problem exists concerning new teachers beginning their careers in classroom instruction. Based on the Division of Elementary and Secondary Education (2017) rules for supporting educators' development, novice teachers have 3 years or less of teaching experience. The teacher attrition rate within the first 5 years of practice is considerably higher than that of teachers with more than five years of experience (Chesak et al., 2019; Haydon et al., 2018). Gavish and Friedman (2010) attributed the loss of novice teachers from the profession to the environment's expectations in which they were to engage as professionals immediately. The assumption was that those novice teachers would know the school's organizational climate and inner workings. In other words, teachers who had just completed preparation courses were expected to have the same pedagogical and institutional knowledge as their more experienced peers. Dicke et al. (2015) asserted that although novice teachers presented some pedagogical knowledge from their preparation courses, that knowledge did not sufficiently sustain them when faced with the classroom's realities. Preservice teachers gained some insight into the school environment through their field experiences and internships; however, when they began their first year of teaching, their roles and responsibilities assumed reality did not equate to the actuality of their experiences. Yong and Yue (2007) also referenced this discrepancy as a conflict and was noted as a primary reason for burnout. Gavish and

Friedman (2010) suggested that these feelings associated with burnout did not begin during the first year of teaching but rather during the training and preparation stage. When pre-service teachers were exposed to the school environment, negative emotions such as doubt and failure began to occur.

Consequently, the process slowly deteriorated preconceived ideologies that carried over to the first year of professional practice. Gavish and Friedman (2010) argued that novice teachers exhibited high burnout levels within the first 3 months of teaching. This finding further solidified their argument that, since burnout was considered a culmination of ongoing stress, burnout did not begin at the onset of teaching but rather when the teachers were in preservice training. Additional research in compassion satisfaction and compassion fatigue applied to education may prove beneficial in recruiting and retaining this community of educators.

Experienced Teachers

Like novice teachers, experienced teachers have been leaving the profession at a surprising rate. According to the Division of Elementary and Secondary Education (2021c), experienced teachers are those educators who have professionally practiced teaching for 4 or more years. Chesak et al. (2019) noted that the teaching profession's annual attrition rate was 8%. In Canadian teachers' balance of their professional and personal lives, Froese-Germain (2014) noted that over half of the participants, including teachers with 5 or more years of teaching experience, indicated a lack of professional autonomy to be a negative stressor. More importantly, the level of autonomy in their professional roles had decreased moderately to significantly over the last 5 years. The more responsibilities teachers were given, the less control they had over decisions

relating to those responsibilities. This lack of autonomy, compounded by other work-related stress, could be particularly distressing for teachers who have spent a substantial portion of their careers implementing programs and policies while adjusting to changes in legislation, curriculum, and administrative directives.

Training, Preparation, and Resiliency

Teachers' pedagogical knowledge, professional competence, and motivation are influenced by their training and preparation experiences. Lauermann and König (2016) acknowledged that these characteristics, personal beliefs, and skills were critical predictors of achievement and overall wellness. Essary, Barza, and Thurston (2020) argued that teachers do not receive adequate training on the brain and how the brain responds to trauma. As previously discussed in the literature, students who have suffered adverse experiences are common in today's public school classrooms. Although trauma-informed classrooms have recently become a focal point of school districts nationwide, novice and experienced teachers are ill-prepared to effectively assist students with trauma-related behaviors and protect themselves from secondary trauma. Various measures could support preservice teachers, including engaging with cognitive science experts and counseling (Essary et al., 2020). In other words, preservice teachers, having been exposed to secondary traumatic stress and how to avoid this, might be better prepared to handle the primary and secondary trauma experiences they will inevitably encounter in their future classrooms.

Teachers' compassion satisfaction and compassion fatigue levels affect their emotional and mental states and significantly affect other school environment facets, including student engagement, morale, and success. Johnson et al. (2005) reported that some professions are at a

greater risk of high stress and compared the teaching profession, in this context, to that of paramedics and social workers. Teachers' classroom stressors are comparable to those usually present in fields where emergency and maltreatment-related situations are common. Compassion fatigue can worsen over time; however, the condition does not have to be inveterate. According to Figley (1995), compassion fatigue is common among caring professionals and is also preventable and treatable. In the context of secondary traumatic stress, McCann and Pearlman (1990) acknowledged that mental health professionals needed a supportive environment to help ease the burden of symptoms. In education, Essary et al. (2020) also pointed out that a teacher's working environment must help allay secondary traumatic stress symptoms by implementing school-based strategies focused on awareness, prevention, and remediation of the condition. School districts, having identified and addressed child trauma through the implementation of trauma-informed practices, should focus on helping teachers who are now experiencing secondary traumatic stress due to exposure to the primary trauma of the students they serve. Compassion satisfaction and compassion fatigue may become a vital component of the education sector and embedded in best practices for school districts, specifically teachers, to successfully educate a growing population of students with traumatic histories.

Summary

The professional quality of life of people working in the helping professions is positively and negatively affected by their compassion satisfaction levels and compassion fatigue. As evidenced in the literature review, teachers are exposed to an increasing number of medically underserved students and those who have experienced some trauma. Borntrager et al. (2012) reported that secondary traumatic stress had not yet been studied among educators, a population of workers who spend a great deal of the workday among

students, but an abundance of research existed on other helping professions such as first responders and social workers. Teachers should be included in the helping professions and the research exploring compassion fatigue's effects on working professionals.

SBHCs and tSBHCs are resources for public schools in underserved regions of the United States. These programs provide necessary acute, preventative, and mental health care for students who experience substantial barriers to those services. As a more significant number of students present with behaviors indicative of trauma, and as teachers take on the responsibility of delivering trauma-informed instruction, SBHCs and tSBHCs may prove to be a support to help teachers improve compassion satisfaction levels as well as mitigate the effects of compassion fatigue. This study's focus was to explore SBHCs and tSBHCs effects on teachers' professional quality of life and start conversations about SBHCs and tSBHCs, broadening the scope of practice to concentrate on teacher and student wellness. The next chapter provides a closer look at the sample used, the research design, and an analysis of the Professional Quality of Life Scale. Finally, the chapter includes the limitations of the study.

CHAPTER III

METHODOLOGY

Research on the professional quality of life, compassion satisfaction, and compassion fatigue has been sparsely applied to education. Although much of the existing research that applies to education relates primarily to teachers of students with exceptionalities, the teaching profession has yet to qualify as a significant contender in the helping occupations where compassion satisfaction and compassion fatigue are commonly identified and certainly better understood. The literature review suggested that the professional quality of life, particularly compassion fatigue, could be applied to education workers. This study examined school-based health programs' effects on the professional quality of life of teachers, novice and experienced, in Arkansas, specifically in compassion satisfaction, burnout, and secondary traumatic stress. The hypotheses are as follows:

1. No significant difference will exist by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on compassion satisfaction measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts.

2. No significant difference will exist by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access

to a tSBHC only on burnout measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts.

3. No significant difference will exist by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on secondary traumatic stress measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts.

The research design, target population, sampling procedure, instrumentation, data collection procedures, and statistical process are described in this chapter and include the study's limitations.

Research Design

A quantitative, causal-comparative design was used. The design was appropriate as the variables could not be manipulated (Mills & Gay, 2019). For Hypotheses 1 through 3, three 2 x 2 factorial between-groups designs were used to examine the effects, if any, of years of teaching experience (experienced versus novice) and the availability of a school-based health program (onsite SBHC versus tSBHC only) on three dependent variables (compassion satisfaction, burnout, and compassion fatigue). A novice teacher was identified by 3 or less years of teaching experience and an experienced teacher by 4 or more years.

Sample

The sample included teachers' survey responses from nine public schools in Arkansas because these teachers taught in a school district with either an SBHC or

tSBHC program. Participation from certified teachers largely varied between the school districts; however, important to note was that populations served by the participating school districts were not proportional to one another. At School A (SBHC), 39 certified teachers responded: 82.1% were experienced teachers, and 17.9% were novice teachers. At School B (SBHC), 32 certified teachers responded: 87.5% were experienced teachers, 12.5% were novice teachers. At School C (tSBHC), 45 certified teachers responded: 95.6% were experienced teachers, and 4.4% were novice teachers. At School D (tSBHC), 57 certified teachers responded: 84.2% were experienced teachers, and 15.8% were novice teachers. At School E (tSBHC), 80 certified teachers responded: 85% were experienced teachers, and 15% were novice teachers. At School F (SBHC), 136 certified teachers responded: 78.7% were experienced teachers, and 21.3% were novice teachers. At School G (SBHC), 42 certified teachers responded: 83.3% were experienced teachers, and 16.7% were novice teachers. At School H (SBHC), three certified teachers responded: 0% were experienced teachers, and 100% were novice teachers. Finally, at School I (tSBHC), 119 certified teachers responded: 93.3% were experienced teachers, and 6.7% were novice teachers. The schools had a collaborative partnership with a local health care agency; however, not all school-based health care programs offered services to the general public. Additional demographics regarding each district are presented in Table 1.

Table 1

Self-Reported Demographic Characteristics by School

School	Location	Population (2019)	F/R Lunch Rate (2020-2021)	Type of Service
School A	Northeast AR	3,952	61.24%	SBHC
School B	Northeast AR	521	54.83%	SBHC
School C	Northeast AR	2,878	60.90%	tSBHC
School D	Northeast AR	1,730	57.17%	tSBHC
School E	Central AR	26,217	43.41%	tSBHC
School F	Central AR	20,231	46.44%	SBHC
School G	Southwest AR	808	59.41%	SBHC
School H	Northwest AR	2,545	50.57%	SBHC
School I	Northeast AR	23,767	52.47%	tSBHC

Note. F/R Lunch Rate = Free and reduced lunch rate.

Survey responses were collected via Google Forms. Data were stratified by years of teaching practice: novice (0-3 years), experienced (4 years or more) and type of school-based health service provided: SBHC, tSBHC. Thirty scores were randomly selected from the four groups. Each hypothesis sample had approximately 120 teacher survey responses.

Instrumentation

The instrument used was the Professional Quality of Life Scale (ProQOL) Version 5. The survey consisted of 30 questions: 10 questions measured compassion satisfaction, 10 questions measured burnout, and 10 questions measured secondary trauma. Two demographic questions were asked in a separate portion of the survey,

including gender and the number of years of teaching experience. The survey comprised

compassion satisfaction, burnout, and secondary traumatic stress. According to Stamm's

Concise ProQOL Manual (2010), compassion satisfaction encompasses positive feelings

about work. Burnout is one component of compassion fatigue and is characterized by

feelings of despondency and ineffectual job performance. Another component of

compassion fatigue is secondary traumatic stress, which involves exposure to someone

who has experienced trauma through one's work. Furthermore, secondary traumatic stress

affects a person's psychological well-being and is exacerbated by continued exposure to

another's traumatic experiences.

Although the instrument is generally scored across each component resulting in

one composite score for each participant, cut scores are available for each subscale which

may provide a deeper dive into the participant's risk factors for compassion satisfaction

and compassion fatigue. Each question was scored on a Likert scale of 1 *(never)* to 5

(very often), excluding the demographic questions. The ProQOL's subscale scores had

the following alpha scale reliability: compassion satisfaction (.88), burnout (.75), and

secondary trauma (.81) (Stamm, 2010). Stamm (2010) provided the following

interpretations of each subscale: compassion satisfaction (22 or less = low, 42 or more =

high); burnout (22 or less = low, 42 or more = high); secondary trauma (22 or less = low,

42 or more = high). Survey submissions were anonymous; however, participants were

given a link to a self-score measure which would allow them to determine their scores in

each category.

Data Collection Procedures

The process for data collection was initiated after receiving approval from the Institutional Review Board in the spring of 2020. With permission from the ProQOL and the Center for Victims of Torture, the Professional Quality of Life Scale survey was modified to a digital format and sent via email to district administrators, who then sent the survey to certified teaching staff within their districts. The administrators of nine Arkansas school districts were contacted to obtain consent for their certified teachers to participate. After obtaining written permission from each district, a digital copy of the survey was sent via email to the district or building administrators, who then sent the survey to their certified teaching staff. Due to Arkansas public schools being virtual during the spring of 2020 because of the coronavirus (COVID-19) pandemic, the surveys were administered during the 2020-2021 school year.

Each survey included introductory statements outlining a general overview of the survey requirements, including the expected completion time and the number of questions the survey contained. Participants were informed that their answers would be confidential and that no personally identifiable information would be used. Each district was given a deadline for survey submission. The survey data were collected and stored on a password-protected laptop computer. Data were then disaggregated and entered into a statistical analysis platform.

Analytical Methods

The three hypotheses were analyzed using a quantitative, causal-comparative strategy using the *IBM Statistical Package for Social Sciences Version 27*. A 2 x 2 factorial ANOVA was conducted using access to an onsite SBHC versus access to an

onsite tSBHC by years of teaching experience (experienced or novice) as the independent

variables to address the three hypotheses. The dependent variables for the three

hypotheses were compassion satisfaction, burnout, and secondary traumatic stress. An

alpha level of .05 was set for the two-tailed test of each null hypothesis. Per ProQOL

scoring specifications for *IBM Statistical Package for Social Sciences Version 27*, some

items were reversed and then summed by subscale.

Limitations

Some limitations of this study should be noted. First, a causal-comparative design

was used, meaning that the independent variables were predetermined and could not be

influenced. Mills and Gay (2019) described the issue as a weakness of causal-

comparative research due to the lack of random assignment of the variable groups. In

other words, other variables may contribute to the differences between groups instead of

the ones that are the basis for the study. As mentioned in the literature review, the

professional quality of life framework has been chiefly applied to education in special

education. A variable such as specificity of the subject area was not a variable accounted

for on the survey instrument used but could account for levels of burnout and secondary

traumatic stress of teachers.

Second, the surveys were distributed during the first academic school year after

the onset of the COVID-19 pandemic in March 2020, when teachers participating in the

study were managing the added stress of restrictions and mandates set forth by the

Arkansas Division of Elementary and Secondary Education based on recommendations

from the Centers for Disease Control as well as the Arkansas Department of Health

(Division of Elementary and Secondary Education, 2020). When surveys were

distributed, teachers were navigating dual modalities of instruction—face-to-face

instruction and blended instruction, where teachers pivoted between face-to-face and

remote instruction using a learning platform like Google classroom or Zoom. Marshall,

Shannon, and Love (2020) referred to the rapid transition during COVID-19 as

emergency remote teaching, a platform for online instruction intended to be implemented

in crises. MacIntyre, Gregersen, and Mercer (2020) noted, "Balancing personal and

professional roles is a challenge for many teachers, but online delivery of courses with

work-at-home protocols and ubiquitous online work-related activity creates a lack of

physical, temporal, and/or psychological boundaries between school and home" (p. 1). In

other words, teachers were forced to quickly transition to alternative methods of

instruction to include synchronous and asynchronous remote instruction and work from

their homes, spaces unlikely equipped or designed to function as venues for effective

instruction. Marshall et al. (2020) echoed this sentiment claiming that teachers felt their

instruction suffered due to lack of time, lack of access to their instructional materials due

to school closures, and decreased student accountability. In short, teachers' answers to

survey questions may have been motivated by the additional stress and workload created

during the COVID-19 pandemic.

Finally, due to the content of the ProQOL survey, teachers may not have

answered some questions truthfully, either intentionally or unintentionally. Price and

Murnan (2004) claimed that this type of internal threat happens when participants answer

according to what they feel is most socially acceptable rather than accurately representing

their feelings or beliefs. Teachers may have answered questions on the survey

inaccurately or perceived they should answer without regard for their recent experiences, specifically the inundation of issues that arose during the COVID-19 pandemic.

Summary

Professional quality of life has long been the subject of study across many occupations in which helping others with their mental, physical, social, or spiritual wellness is a priority. A significant amount of existing research focused on workers in the helping professions (Bride & Figley, 2009); however, the concept has scarcely been applied to the field of education. Partnerships in health care and education have resulted in SBHCs and, most recently, tSBHCs. This chapter included the research methodology, design, and procedures for data collection, analysis, and limitations. Chapter IV contains the results of the data analysis for the three hypotheses.

CHAPTER IV

RESULTS

The purpose of this study was ternary. First, the purpose of this study was to determine the effects by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on compassion satisfaction measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts. Second, the purpose was to determine the effects by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on burnout measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts. Third, the purpose was to determine the effects by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on secondary traumatic stress measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts. The independent variables for each hypothesis were years of teaching experience (novice versus experienced) and access to a school-based health program (SBHC versus tSBHC). The dependent variables for the three hypotheses were compassion satisfaction, burnout, and secondary traumatic stress as measured by the scores on the ProQOL Scale.

IBM Statistical Packages for the Social Sciences (SPSS) Version 27 analyzed the

collected data. The data for the three hypotheses were coded according to the years of

teaching experience and school-based health program. The following codes were used for

each independent variable: years of teaching experience (1 = novice, 2 = experienced)

and school-based health program (1 = onsite SBHC, 2 = tSBHC only). The three

hypotheses were then analyzed using a 2 x 2 factorial between-groups ANOVA. Scores

for each of the three domains were measured using a Likert scale. Histograms were used

to check assumptions of normality. The homogeneity of variances was checked with

Levene's test of variance. Assumptions of normality were checked before running the

statistical test to ensure the proper test was selected for the analysis.

Hypothesis 1

Hypothesis 1 stated that no significant difference will exist by years of teaching

experiences between teachers who have access to an onsite SBHC versus teachers who

have access to a tSBHC only on compassion satisfaction measured by the Professional

Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas

school districts. A 2 x 2 factorial ANOVA was conducted to test the hypotheses. Data

were screened for missing values, and none were found. The assumptions for factorial

ANOVA, including independent observations, normal distribution of each group's

dependent variables, outliers, and homogeneity of variance were checked. Histograms

were used to check normality. Descriptive statistics and inferential results were also

reviewed. Table 2 displays the group means and standard deviation for engagement by

type of school-based health program and years of experience.

Table 2

Means, Standard Deviations, and Number for ProQOL Compassion Satisfaction by Years of Teaching Experience and Type of School-Based Health Center

	Years Teaching Experience								
	Experience			Novice			Total		
Type	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
SBHC	40.87	5.95	31	39.71	6.97	31	40.29	6.45	62
tSBHC	41.90	3.99	31	37.55	7.43	31	39.73	6.31	62
Total	41.39	5.05	62	38.63	7.23	62			

Note. Type = Type of School-Based Health Program; SBHC = Onsite School-Based Health Clinic; tSBHC = Telehealth School-Based Health Clinic.

To test the assumptions of normality, outliers were checked, and none were found. The pre-analysis was run, and Shapiro-Wilk statistics and histograms were examined for each group. The skewness and kurtosis values were within the 1.0 and -1.0 range for two groups; however, two groups were outside the range of 1.0 and -1.0. The Shapiro-Wilk test was used to assess normality for the four groups (0-3 years/SBHC, p = .077; 0-3 years/tSBHC, p = .152; 4 years or more/SBHC, p = .035; 0-4 years/tSBHC, p = .313). The only group that violated normality was 4 years or more/SBHC. Levine's test of equality of variance was conducted within the ANOVA, and the test indicated that homogeneity of variances across the groups could not be assumed, $F(3, 120) = 4.51$, p = .005; therefore, this assumption was violated; however, a factorial ANOVA is robust to these types of normality violations. The results of the ANOVA are displayed in Table 3.

Table 3

Factorial Analysis of Variance Results for ProQOL Compassion Satisfaction Scores as a

Function of Years of Teaching Experience and Type of School-Based Health Center

Source	SS	df	MS	F	p	ES
YrsTExp	235.81	1	235.81	6.08	.015	0.048
Type	9.88	1	9.88	0.25	.615	0.002
YrsTExp*Type	79.04	1	79.04	2.04	.156	0.017
Error	4654.26	120	38.79			

Note. YrsTExp = Years Teaching Experience; Type = Type of School-Based Health

Program.

Results of the factorial ANOVA indicated no significant interaction effect

between years of teaching experience and type of SBHC, $F(1, 120) = 2.04$, $p = .156$, $ES =$

0.017, which is a small effect size (Cohen, 1988). Years of teaching experience and the

type of SBHC did not significantly affect the compassion satisfaction of teachers, and the

null hypothesis was affirmed. The main effect of each variable was examined

independently, given that a significant interaction did not exist between years of teaching

experience and the type of school-based health center. The main effect for years of

teaching experience was significant, $F(1, 120) = 6.08$, $p = .015$, $ES = 0.048$, which is a

small effect size. Conversely, the main effect for the type of school-based health center

was not significant, $F(1, 120) = 0.25$, $p = .615$, $ES = 0.002$, which is a small effect size.

The means for compassion satisfaction scores as a function of years of teaching

experience and type of SBHC are displayed in Figure 2.
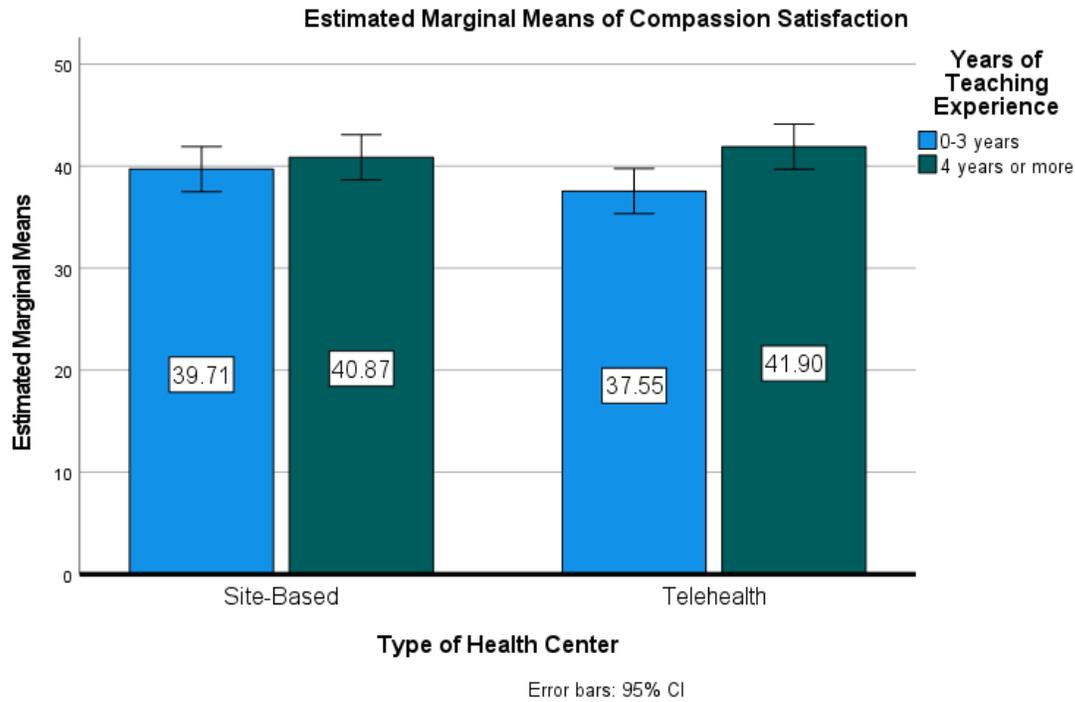
Figure 2. Means for compassion satisfaction as a function of years of teaching experience and type of school-based health center for teachers in Arkansas.

Regarding years of teaching experience, a significant difference was found on compassion satisfaction between the experienced teachers' mean ($M = 41.39$, $SD = 5.05$) and the novice teachers' mean ($M = 38.63$, $SD = 7.23$). The experienced teachers' mean was 2.67 higher on compassion satisfaction than novice teachers. In contrast, no significant difference was found on compassion satisfaction between the SBHC group's mean ($M = 40.29$, $SD = 6.45$) and tSBHC group's mean ($M = 39.73$, $SD = 6.31$). Both groups scored, on average, the same on compassion satisfaction. Therefore, the null hypotheses for the interaction effect and the main effect for the type of health center were retained; however, the hypothesis for the main effect of years of experience was rejected.

Hypothesis 2 stated that no significant difference will exist by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on burnout measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts. A 2 x 2 factorial ANOVA was conducted to test this hypothesis. Data were screened for missing values, and none were found. The assumptions for factorial ANOVA, including independent observations, normal distribution of each group's dependent variables, outliers, and homogeneity of variance were checked. Histograms were used to check normality. Descriptive statistics and inferential results were also reviewed. Table 4 displays the group means and standard deviation for engagement by type of school-based health program and years of teaching experience.

Table 4

Means, Standard Deviations, and Number for ProQOL Burnout by Years of Teaching Experience and Type of School-Based Health Center

	Years Teaching Experience								
	Experience			Novice			Total		
Type	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
SBHC	37.13	3.09	31	34.71	4.00	31	35.92	3.75	62
tSBHC	35.86	2.45	28	34.55	4.82	31	35.17	3.90	59
Total	36.53	2.85	59	34.63	4.39	62			

Note. Type = Type of School-Based Health Program; SBHC = Onsite School-Based Health Clinic; tSBHC = Telehealth School-Based Health Clinic.

To test the assumptions of normality, outliers were checked, and three extreme outliers were identified and deleted. The pre-analysis was rerun, and Shapiro-Wilk statistics and histograms were examined for each group. The skewness and kurtosis values were within the 1.0 and -1.0 range for the four groups. The Shapiro-Wilk test was used to assess normality for the four groups (0-3 years/SBHC, $p = .358$; 0-3 years/tSBHC, $p = .047$; 4 years or more/SBHC, $p = .644$; 4 years or more/tSBHC, $p = .054$). One group violated normality, 4 years or more/tSBHC. Levine's test of equality of variance was conducted within the ANOVA, and the test indicated that homogeneity of variances across the groups could not be assumed, $F(3, 117) = 4.12$, $p = .008$; therefore, this assumption was violated; however, a factorial ANOVA is robust to these types of normality violations. The results of the ANOVA are displayed in Table 5.

Table 5

Factorial Analysis of Variance Results for ProQOL Burnout Scores as a Function of Years of Teaching Experience and Type of School-Based Health Center

Source	SS	df	MS	F	p	ES
YrsTExp	104.91	1	104.91	7.56	.007	0.061
Type	15.50	1	15.50	1.12	.293	0.009
YrsTExp*Type	9.31	1	9.31	0.67	.414	0.006
Error	1622.98	117	13.87			

Note. YrsTExp = Years Teaching Experience; Type = Type of School-Based Health Program.

Results of the factorial ANOVA indicated no significant interaction effect between years of teaching experience and type of SBHC, $F(1, 117) = 0.67$, $p = .414$, $ES = 0.006$, which is a small effect size. Years of teaching experience and the type of SBHC did not significantly affect burnout of teachers, and the null hypothesis was affirmed. The main effect of each variable was examined independently, given that a significant interaction did not exist between years of teaching experience and the type of SBHC. The main effect for years of teaching experience was significant, $F(1, 117) = 7.56$, $p = .007$, $ES = 0.061$, which is a medium effect size. Conversely, the main effect for the type of school-based health center was not significant, $F(1, 117) = 1.12$, $p = .293$, $ES = 0.009$, which is a small effect size. The means for burnout scores as a function of years of teaching experience and type of SBHC are displayed in Figure 3.
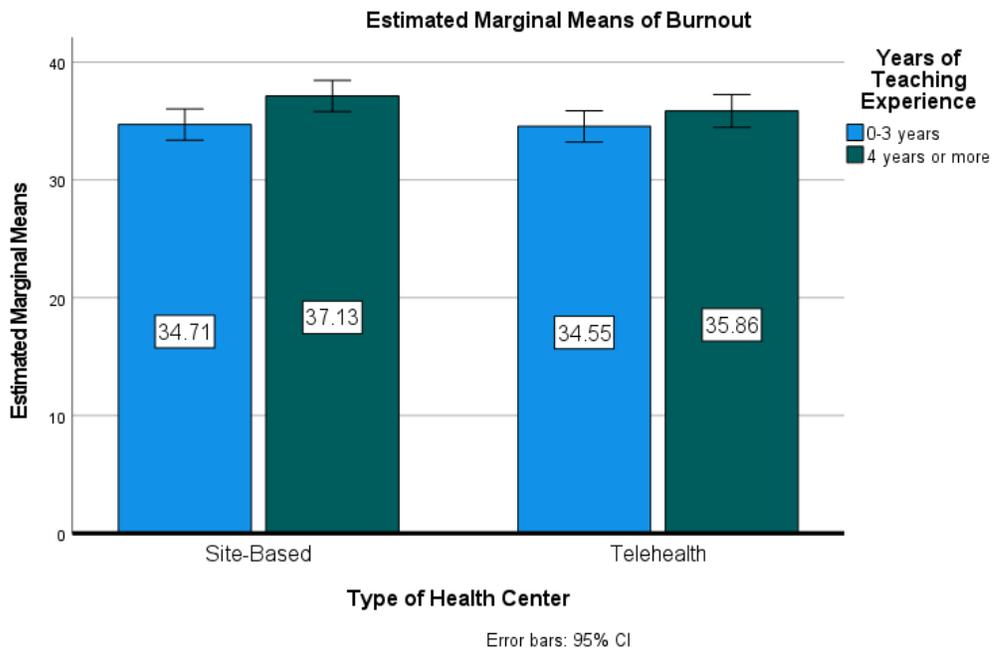
Figure 3. Means for Burnout as a function of years of teaching experience and type of school-based health center for teachers in Arkansas.

Regarding years of teaching experience, a significant difference was found on burnout between the experienced teachers' mean ($M = 36.53$, $SD = 2.85$) and the novice teachers' mean ($M = 34.63$, $SD = 4.39$). The experienced teachers' mean was 1.90 points higher in burnout than novice teachers. In contrast, no significant difference was found on burnout between the SBHC group's mean ($M = 35.17$, $SD = 3.90$) and tSBHC group's mean ($M = 35.55$, $SD = 3.83$). Both groups scored, on average, the same on burnout. Therefore, the null hypotheses for the interaction effect and the main effect for the type of health center were retained; however, the hypothesis for the main effect of years of experience was rejected.

Hypothesis 3

Hypothesis 3 stated that no significant difference will exist by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on secondary traumatic stress measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts. A 2 x 2 factorial ANOVA was conducted to test this hypothesis. Data were screened for missing values, and none were found. The assumptions for factorial ANOVA, including independent observations, normal distribution of each group's dependent variables, outliers, and homogeneity of variance were checked. Histograms were used to check normality. Descriptive statistics and inferential results were also reviewed. Table 6 displays the group means and standard deviations for engagement by type of school-based health program and years of experience.

Table 6

Means, Standard Deviations, and Number for ProQOL Secondary Traumatic Stress by Years of Teaching Experience and Type of School-Based Health Center

	Years Teaching Experience								
	Experience			Novice			Total		
Type	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*n*
SBHC	23.81	4.86	31	23.03	5.98	31	23.42	5.42	62
tSBHC	21.55	5.07	31	23.10	5.93	31	22.32	5.52	62
Total	22.68	5.05	62	23.06	5.90	62			

Note. Type = Type of School-Based Health Program; SBHC = Onsite School-Based Health Clinic; tSBHC = Telehealth School-Based Health Clinic.

To test the assumptions of normality, outliers were checked, and none were found. The pre-analysis was run, and Shapiro-Wilk statistics and histograms were examined for each group. The skewness and kurtosis values were within the 1.0 and -1.0 range for the four groups. The Shapiro-Wilk test was used to assess normality for the four groups (0-3 years/SBHC, $p = .074$; 0-3 years/tSBHC, $p = .456$; 4 years or more/SBHC, $p = .230$; 4 years or more/tSBHC, $p = .651$). No groups violated normality. Levine's test of equality of variance was conducted within the ANOVA, and the test indicated that homogeneity of variances across the groups could be assumed, $F(3, 120) = 0.67$, $p = .572$; therefore, this assumption was not violated. The results of the ANOVA are displayed in Table 7.

Table 7

Factorial Analysis of Variance Results for ProQOL Secondary Traumatic Stress Scores

as a Function of Years of Teaching Experience and Type of School-Based Health Center

Source	SS	df	MS	F	p	ES
YrsTExp	4.65	1	4.65	0.15	.695	0.001
Type	37.29	1	37.29	1.24	.267	0.010
YrsTExp*Type	41.81	1	41.81	1.39	.240	0.011
Error	3604.88	120	30.04			

Note. YrsTExp = Years Teaching Experience; Type = Type of School-Based Health

Program.

Results of the factorial ANOVA indicated no significant interaction effect between years of teaching experience and type of SBHC, $F(1, 120) = 1.39$, $p = .240$, $ES = 0.011$, which is a small effect size. Years of teaching experience and the type of SBHC did not significantly affect secondary traumatic stress of teachers, and the null hypothesis was affirmed. The main effect of each variable was examined independently given that a significant interaction did not exist between years of teaching experience and the type of SBHC. The main effect for years of teaching experience was not significant, $F(1, 120) = 0.15$, $p = .695$, $ES = 0.001$, which is a small effect size. Similarly, the main effect for the type of SBHC was not significant, $F(1, 120) = 1.24$, $p = .267$, $ES = 0.010$, which is a small effect size. The means for secondary traumatic stress scores as a function of years of teaching experience and the type of SBHC are displayed in Figure 4.

Estimated Marginal Means of Secondary Traumatic Stress
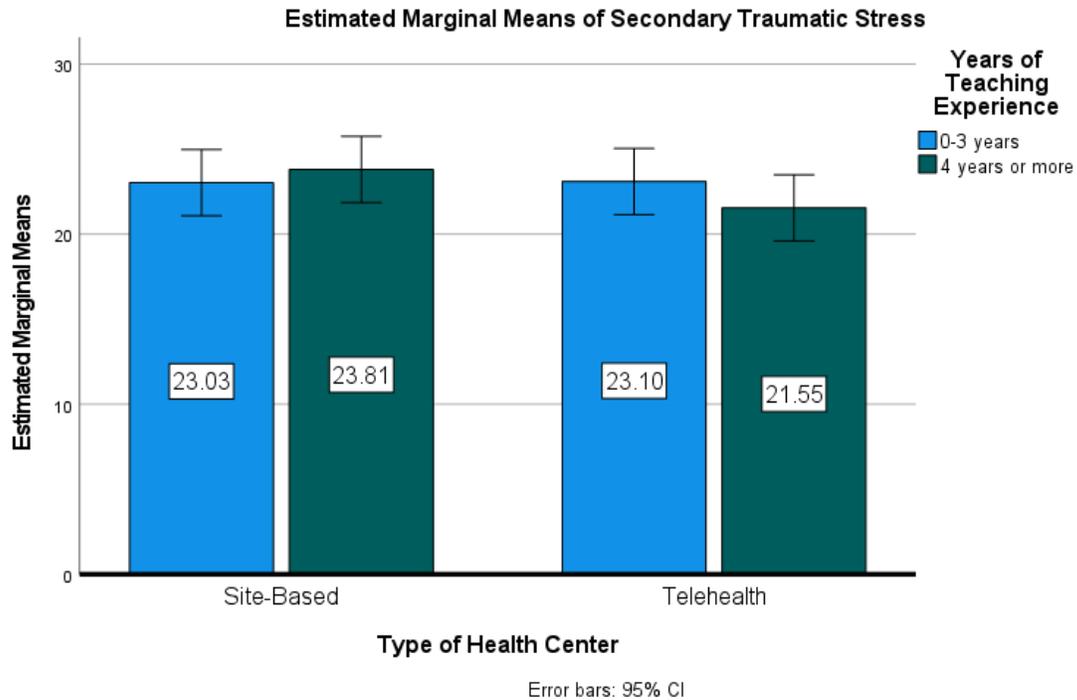
Figure 4. Means for burnout as a function of years of teaching experience and type of school-based health center for teachers in Arkansas.

Regarding years of teaching experience, no significant difference was found on secondary traumatic stress between the experienced teachers' mean ($M = 22.68$, $SD = 5.05$) and the novice teachers' mean ($M = 23.06$, $SD = 5.90$). Similarly, no significant difference was found on burnout between the SBHC group's mean ($M = 23.42$, $SD = 5.42$) and tSBHC group's mean ($M = 22.32$, $SD = 5.52$). The two pairs of groups scored, on average, the same on secondary traumatic stress. Therefore, the null hypotheses for the interaction effect and the two main effects for years of experience and type of health center were retained.

Summary

The purpose of this study was to determine by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to

a tSBHC only on compassion satisfaction, burnout, and secondary traumatic stress measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts. Table 8 summarizes the results of the interaction and main effects of the three hypotheses.

Table 8

Summary of Statistical Significance of Years of Teaching Experience and Type of School-Based Health Center on Compassion Fatigue, Burnout, and Secondary Traumatic Stress by Hypothesis

Variables by H_0	H1	H2	H3
Years of Teaching Experience	.015	.007	.695
Type of Health Center	.615	.293	.267
Experience*Health Center	.156	.414	.240

Overall, the three hypotheses had no interaction effect for years of teaching experience and type of school-based health center. Therefore, teaching experience and type of school-based health center did not combine to significantly affect compassion fatigue, burnout, or secondary traumatic stress. Similarly, the main effect of the type of health center was not significant for all three hypotheses and did not affect the dependent variables. Conversely, the main effect of years of teaching experience for Hypotheses 1 and 2 were significant. When analyzing compassion fatigue by years of teaching experience, the novice teachers' mean was significantly lower than the mean for experienced teachers. Similarly, when analyzing burnout by years of teaching experience, novice teachers' mean was significantly lower than experienced teachers. The effect sizes

of both were small. Chapter V discusses the findings for each hypothesis, implications

within the larger context of the literature, and recommendations for practice and future

research.

CHAPTER V

DISCUSSION

A variety of factors affect how educators feel about the work they do. The professional quality of life encompasses the positive and negative feelings workers have regarding their occupations, including situations and relationships within the workplace. According to Yao et al. (2015), many reasons are responsible for how teachers feel about their work. Due to the nature of their practice, teachers may be at an increased risk of developing compassion fatigue symptoms: burnout or secondary traumatic stress. School-based health programs, including telehealth, that generally focus on the needs of students are in a unique position to help mitigate the effects of compassion fatigue among the teaching population.

This research study was conducted to determine the effects by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on compassion satisfaction, burnout, and secondary traumatic stress as measured by the Professional Quality of Life Scale (ProQOL) among kindergarten through 12th-grade teachers in nine Arkansas school districts. Further, this chapter summarizes the study's findings and implications for the relationship between school-based health programs and modes of service delivery on teachers' professional quality of life. Finally, recommendations are made for educational leadership, primary

care, and mental health care providers to consider when implementing school-based

health centers (SBHCs) and school-based telehealth centers (tSBHCs) in school districts.

Findings and Implications

This study was conducted to determine the effects by years of teaching experience

between teachers who have access to an onsite SBHC versus teachers who have access to

a tSBHC only on compassion satisfaction, burnout, and compassion fatigue as measured

by the ProQOL. Three 2 x 2 factorial ANOVAs were run using survey data for the three

hypotheses. The independent variables for the three hypotheses were years of teaching

experience (novice or experienced) and type of school-based health program (SBHC or

tSBHC). The dependent variable for Hypothesis 1 was compassion satisfaction,

Hypothesis 2 was burnout, and Hypothesis 3 was secondary traumatic stress. Dependent

variables were measured using the ProQOL.

Compassion Satisfaction

Hypothesis 1 stated that no significant difference will exist by years of teaching

experience between teachers who have access to an onsite SBHC versus teachers who

have access to a tSBHC only on compassion satisfaction measured by the Professional

Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas

school districts. For Hypothesis 1, years of teaching experience and type of school-based

health program did not combine to significantly affect levels of compassion fatigue

among public school teachers. The findings also indicated that the type of school-based

health program did not affect teachers' level of compassion satisfaction. However, years

of teaching experience affected teachers' compassion satisfaction as experienced teachers

had a significantly higher level of compassion satisfaction than novice teachers. High

levels of compassion satisfaction indicate that the worker has a sense of satisfaction or positive feelings about their work. Low compassion fatigue levels are interpreted as the worker's negative emotions or discontentment regarding their work.

Low compassion satisfaction results among novice teachers could be the result of a variety of factors. Gavish and Friedman (2010) noted that teachers endure their most trying years during the novice phase of their careers. The researchers further purported that the "distress and disappointment" (p. 146) novice teachers feel during their first years of teaching is the exacerbation of a condition, burnout, which took root during their preparation training. These factors may relate to previous research that stated the attrition rate of novice teachers was higher than that of experienced teachers (Chesak et al., 2019; Haydon et al., 2018). The author of this research study noted that collecting the sample of novice teachers for this study proved difficult due to the minimal number of novice teachers participating school districts had on staff. On the other hand, high compassion satisfaction results among experienced teachers may be attributed to the fact that they have been in the field longer; therefore, they may be more likely to adjust to changes in the school environment, added duties and tasks, and challenging student behavior than those who are in their first years of teaching. Research on the compassion satisfaction levels of experienced teachers was insufficient at the time of this study.

Burnout

Hypothesis 2 stated that no significant difference will exist by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on burnout measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas school districts.

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Findings for Hypothesis 2 indicated that years of teaching experience and type of school-based health program did not combine to significantly affect levels of burnout among public school teachers. According to the data, no significant finding that the type of school-based health program affected burnout in teachers. However, years of teaching experience were connected to significantly higher levels of burnout for experienced teachers than for their novice colleagues.

The condition of burnout is not instantaneous. These findings lend validity to Alarcon's (2011) and Rodriguez-Mantilla and Fernandez-Diaz's (2017) research, which noted that the condition of burnout was the result of a progression of symptoms over time. Experienced teachers are more susceptible to the work-related stressors that cause burnout simply because they have worked in the field longer than novice teachers. However, Yong and Yue (2007) and Gavish and Friedman (2010) proposed that, although time is a significant factor in the outcome of burnout, the onset of the condition might begin during teacher preparation programs. In other words, novice teachers may be coming into the field already experiencing some symptoms of burnout. Previous research stated that higher levels of compassion satisfaction might allay the negative effects of compassion fatigue (Audin et al., 2018; Conrad & Kellar-Guenther, 2006). Lower levels of burnout among experienced teachers were not observed in this study.

Secondary Traumatic Stress

Hypothesis 3 stated that no significant difference will exist by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on secondary traumatic stress measured by the Professional Quality of Life Scale among kindergarten through 12th-grade teachers in nine Arkansas

school districts. Hypothesis 3 findings indicated that neither years of teaching experience nor type of school-based health program combined significantly affected secondary traumatic stress among teachers. Neither years of teaching experience nor type of school-based health program had a significant main effect on the secondary traumatic stress of teachers. Although Christian-Brandt et al. (2020) asserted that secondary traumatic stress might contribute to teacher turnover rates, the results of this study did not support their claim. This outcome may be because teachers are unfamiliar with secondary traumatic stress and do not know how to identify the condition. Also, as teachers continue to be inundated with implementing trauma-informed practices, they might be so focused on identifying and mitigating trauma in their students that they fail to identify the condition in themselves. Scant research existed about how students' traumatic experiences affected their teachers at the time of this study.

Recommendations

Potential for Practice and Policy

This study investigated the effects by the type of SBHC and years of teaching experience on the professional quality of life of teachers in Arkansas school districts. Although the findings revealed that the type of SBHC did not affect any facet of the professional quality of life of teachers, years of teaching experience did affect compassion satisfaction and burnout levels of participating teachers. The following recommendations are given based on the findings of this study to assist in guiding future state and federal initiatives, practices, and policies regarding the intersection of primary health care, mental health care, and education.

Teachers are at high risk for stress. Johnson et al. (2005) compared the work of teachers to that of others associated with high stress, such as paramedics and social workers. Schools that implement SBHCs or tSBHCs have the opportunity to focus on teachers as target recipients of services that promote health and wellness. Leadership at district, state, and national levels should closely examine SBHC and tSBHC initiatives to ensure that teachers' primary and mental health is included in the main scope of services provided.

Novice teachers should come into the field better prepared to deal with non-academic issues. Dicke et al. (2015) claimed that the knowledge with which novice teachers began their careers was inadequate when measured against the realities they face in the classroom. Although many classrooms and school climate expectations can be addressed in teacher preparation courses, they proved insufficient when implemented. Pre-service teachers should receive adequate training on childhood trauma to include the specifics of students' physiological reactions to trauma (Essary et al., 2020) and the behaviors that may develop, as well as how to protect themselves from developing compassion fatigue.

Combatting compassion fatigue should be considered a shared responsibility between school-based health programs, school administration, and teachers. First, school-based health programs are positioned to provide literature and implement programs that promote self-care strategies and activities for teachers in school districts that provide services, including mental health care. Additionally, district administration could work with teachers to create environments that foster collegial support and implement research-based intervention programs that promote resiliency and well-being (Chesak et

al., 2019). Finally, teachers should take a personal interest in prioritizing self-care routines. These routines may include personal health and wellness activities, spending adequate time with family and friends, and supporting each other in the school environment.

Future Research Considerations

The findings of this study determined no significant interaction effect between the type of school-based health program and years of teaching experience on the professional quality of life of public school teachers. A significant main effect existed for years of teaching experience on compassion satisfaction: experienced teachers had a higher level of compassion satisfaction than novice teachers. Years of teaching experience on burnout also had a significant main effect, as experienced teachers had a higher burnout level than novice teachers. Compassion satisfaction, burnout, and secondary traumatic stress were measured by the ProQOL Scale (Stamm, 2010). The following recommendations are made regarding future research:

1. Additional research could be conducted using the ProQOL, or a comparable measure, for public school teachers as a benchmark to determine future health care needs and practices.

2. Research could focus on the types of SBHC and tSBHC services teachers use to include knowledge on how to access those services for themselves and their students.

3. Research could examine teaching as a helping profession and explore practices to identify, prevent, and mitigate compassion fatigue (Essary et al., 2020).

4. Research could analyze compassion satisfaction and compassion fatigue by gender, grade level taught, and subject area taught.

5. Research could examine teacher training programs and their potential to minimize or counteract compassion fatigue before a teacher's first year of teaching (Essary et al., 2020).

Conclusion

Schools and community-based health care clinics have begun partnering to bridge the health care gap in rural areas to provide health care services to students who might not otherwise be able to access them. School-based health programs, specifically brick-and-mortar SBHCs, have been implemented across Arkansas in more than 40 public school districts since 2010 (Division of Elementary and Secondary Education, 2021b) through a competitive grant process. These centers, along with telehealth delivery services, have the potential to radically change the school environment for teachers and staff by promoting health and wellness programs, positive mental health practices, and establishing a referral process for teachers to use for eligible students in their classrooms.

As evidenced in the literature review, helping occupations have often been the focus of compassion satisfaction and compassion fatigue research. Teaching is a profession in which educators are responsible for guiding their students' thought processes through engaging and interactive relationships, a practice that Johnson et al. (2005) referenced as emotion work. If teaching is viewed through the lens of emotion work, the act of teaching may come with a risk of general and mental health impairment for novice and experienced teachers. SBHCs and tSBHCs are perfectly positioned to help assuage the detrimental effects of compassion fatigue on members of the teaching

profession. Teachers are essential to the foundation and continuation of services provided by public schools; however, many teachers are leaving the field before gaining the experience that might assist them in navigating and sustaining their tenure in education. The attrition rate at which novice teachers leave the profession is considerably higher than that of teachers with more than 5 years of teaching experience (Chesak et al., 2019; Haydon et al., 2018). If this trend continues, experienced teachers will retire from education, with few teachers left behind to carry on the profession. This study was conducted to determine the effects by years of teaching experience between teachers who have access to an onsite SBHC versus teachers who have access to a tSBHC only on compassion satisfaction, burnout, and compassion fatigue as measured by the ProQOL. The survey was given to K-12 public school teachers in nine districts across Arkansas. Years of teaching experience and type of school-based health program did not affect secondary traumatic stress levels of teachers; however, years of teaching experience did affect compassion satisfaction and burnout levels of teachers. Of importance to note, this study took place during the COVID-19 pandemic. Regardless of that limitation, school-based health programs should include teachers and school staff as a priority in their scope of practice.

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