THE EMOTIONAL TOLL OF TEACHING: AN EXPLORATION OF TEACHER PERCEPTIONS OF EMPATHY-BASED STRESS AND POSSIBLE INTERVENTIONS

A Capstone Project

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by

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Abstract

This qualitative case study explored the personal and professional impacts of empathy-based stress (EBS) among teachers at Woodlawn High School, a Title I school in the mid-Atlantic region. As rates of student trauma and systemic challenges have intensified following the COVID-19 pandemic (Diliberti et al., 2021; Fitzgerald et al., 2021), teachers increasingly navigate heightened emotional demands with limited institutional support (Lawson et al., 2019). Grounded in Constructivist Self-Development Theory (McCann & Pearlman, 1990a), this study sought to answer two research questions: (1) How are teachers at Woodlawn High School experiencing and being impacted by empathy-based stress in their personal and professional lives, and (2) How does targeted trauma-informed professional development influence teachers' understanding and management of empathy-based stress? Data collection occurred in two phases, including pre- and post-surveys administered during a trauma-informed professional development session, followed by semi-structured interviews. Findings indicated that teachers experienced significant emotional exhaustion, with many describing a tension between the desire to support students and the reality of their own unmet needs. Participants generally found the professional development session validating and informative, with several noting that strategies such as mindfulness and self-care practices were helpful in managing emotional overload. However, results also suggest that isolated professional development opportunities are insufficient without broader systemic change. This study contributes to the emerging literature on teacher well-being by amplifying educator voices and highlighting the importance of sustained, trauma-informed supports to promote both personal resilience and professional efficacy.

Keywords: empathy-based stress, teacher well-being, trauma-informed professional development, mindfulness, emotional resilience

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DEDICATION

To Richard, the love of my life, and to Walter and Franklin, my loyal companions. You three are the antidote to my own empathy-based stress.

ACKNOWLEDGEMENTS

As it turns out, it takes a village to raise a child and to complete a capstone. I would like to take this opportunity to thank my village.

To my advisor, Tish Jennings, thank you for opening my eyes to the importance of teacher well-being. You gave me the words and strategies to empower myself and other educators to remain in the classroom. I am deeply grateful for your willingness to engage in thoughtful conversations and for your steadfast support throughout my five years at UVA. This learning experience will forever shape my path as an educator.

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Chapter 1

Introduction

Statement of the Problem

Even before the COVID-19 pandemic, teacher attrition was a serious concern, with approximately 50% of teachers leaving the profession within 5 years (Ingersoll & Smith, 2003). Carver-Thomas and Darling-Hammond's (2017) analysis of the nationally representative 2012 Schools and Staffing Survey (SASS) revealed that factors such as class size, facilities, resources, and school safety play a crucial role in teacher retention. Unfortunately, working conditions have continued to deteriorate due to the COVID-19 Pandemic and the resulting economic and social unrest (Diliberti et al., 2021; Lieberman, 2021; US Department of Education, 2021).

In a 2021 report, the US Department of Education revealed that students have greater social-emotional, academic, and economic needs than before the pandemic (US Department of Education, 2021). Not only are teachers having to adapt to meet growing academic deficits, but these increased social-emotional needs often manifest themselves in maladaptive student behaviors that teachers must mitigate. The issue of increased student need is compounded by a decrease in available teaching staff. In the fall of 2021, when many schools were beginning to return to in-person instruction, 40% of district leaders and administrators in the United States described their staff shortages as "severe" or "very severe," with only 5% of administrators reporting no staffing concerns (Lieberman, 2021). In 2021, a survey of 1,000 former public school teachers revealed that stress was the number one reason teachers chose to leave the profession before retirement (Diliberti et al., 2021). Results also indicated that stress levels have only been exacerbated by the pandemic, and over 50% of the teachers who left after 2020 indicated they left because of the COVID-19 pandemic (Diliberti et al., 2021).

Moreover, exposure to continuous stress can have a negative impact on a teacher's personal and professional well-being. In addition to increasing the likelihood of teachers leaving the profession (Diliberti et al., 2021), high levels of teacher stress lead to a decrease in efficacy in teaching both content and social-emotional competencies (Brown et al., 2023; Greenberg et al., 2016; Jennings & Greenberg, 2009). Furthermore, when a person perceives a physical or psychological threat, their body undergoes a stress response. While this response evolved to protect humans from danger, frequent or persistent activation can lead to significant negative health outcomes, including but not limited to cardiovascular stress, elevated blood pressure, and increased anxiety (Jennings, 2015; Jennings & Greenberg, 2009).

Further, everyone's experience of stress is unique, and people process their reactions to stress differently. The National Network for Youth (2022) defined these individual emotional responses to stressful events as trauma. Due to the subjectivity of experiences, some individuals may perceive a situation as traumatic, while others may view it as temporarily stressful. Additionally, trauma can be acute, resulting from a single incident, such as a death, or chronic if the exposure is repeated or prolonged, such as the COVID-19 pandemic. In addition to their stress and trauma, teachers are in a vulnerable position to experience vicarious trauma, or trauma that results from empathic engagement with their students who may be experiencing trauma (National Network for Youth, 2022). Empathy-based stress (EBS) is a condition caused by exposure to secondary trauma, intensified by empathy and emotional distress, resulting in post-traumatic stress symptoms and reduced engagement in work and caregiving behaviors (Rauvola et al., 2019).

While there is a robust literature on teacher burnout and attrition, research on the role trauma exposure has on teachers' personal and professional lives is in its nascent stages. Post-

pandemic, as workloads and student needs increase and the number of teachers decreases, it is more important than ever to better understand how to support teachers in coping with empathy-based stress.

Problem of Practice

While this phenomenon impacts teachers throughout the United States, this capstone focused on a specific public school struggling with teacher overwhelm, burnout, and trauma exposure. In the spring of 2022, 35 staff members at "Woodlawn High School"[1] completed the well-being section of the Panorama survey. The Panorama survey, created in conjunction with the school district and Panorama Education, is administered biannually to staff, students, and families to capture perspectives on the school community, engagement, and overall school climate. Results from the Spring 2022 survey indicated that during the previous week, 91% of staff felt exhausted, 85% felt overwhelmed, and only 41% reported feeling happy frequently.

In the spring of 2023, teachers at Woodlawn High School were given an optional survey to assess their needs and experiences with stress and trauma (Gottlieb, 2023). Although only 33% of teachers responded, the results showed that teachers were experiencing empathy-based stress. Over 80% believed student trauma had increased since the COVID-19 pandemic. Additionally, 86.7% reported that this stress affected their personal and professional lives, with many spending time outside of school thinking about their students' traumas (Gottlieb, 2023). Despite the prevalence of empathy-based stress, only 50% of respondents indicated they had attended helpful professional development opportunities about the impact of trauma on educators (Gottlieb, 2023).

[1] Woodlawn is a pseudonym

Purpose of the Study

Although these results are disheartening, they are consistent with trends in public school teachers nationwide (Diliberti et al., 2021). Using these data as a starting point (Gottlieb, 2023), this investigation sought to understand teacher experiences with EBS in the workplace and evaluate the impact of a targeted trauma-informed professional development session. By amplifying the voices of educators who have been grappling with heightened stress since the COVID-19 pandemic, this research aimed to provide meaningful insights into the experiences of teachers within a specific school site. Additionally, this study had the potential to positively impact teacher support by evaluating the perceived impact of a targeted professional development to identify best practices and future teacher needs.

Research Questions

Given teacher emotional well-being is an integral part of a productive classroom environment (Brown et al., 2023; Diliberti et al., 2021; Greenberg et al., 2016; Jennings & Greenberg, 2009), it is essential to understand both teacher experiences and their perception of specific interventions developed to mitigate empathy-based stress. This case study sought to answer the following research questions:

- RQ1: How are teachers at Woodlawn High School experiencing and being impacted by empathy-based stress in their personal and professional lives?
- RQ 2: How does targeted trauma-informed professional development for teachers at Woodlawn High School appear to impact their understanding and management of empathy-based stress?

Overview of Previous Research

The literature, which will be explored in greater depth in Chapter 2, consistently highlights that teachers are at risk of developing empathy-based stress (Borntrager et al., 2012; Brunzell et al., 2015; Merrick et al., 2018; Sizemore, 2016), which can result in complex and severe symptoms (Figley, 1995; Gentry et al., 2002; Perrigrini, 2019; Saakvitne & Pearlman, 1996; & Sizemore, 2016). This risk has been exacerbated by the COVID-19 pandemic and its associated social and economic disruptions, leading to increased student trauma and heightened stress among educators (Fitzgerald et al., 2021; Diliberti et al., 2021). However, despite these challenges, many schools and districts fail to provide sufficient support for their staff (Lawson et al., 2019).

Recent research points to the potential of targeted interventions, such as trauma-informed practices (TIPs), self-care strategies, and mindfulness-based interventions (MBIs), to alleviate EBS and enhance teacher well-being (Brown et al., 2023; Castro Schepers & Young, 2022; Csaszar et al., 2018; Jennings et al., 2017; Preston et al., 2021). Studies in healthcare and social services demonstrate the effectiveness of these approaches, and emerging evidence suggests that similar strategies could benefit educators (Dutton et al., 2017; Keesler, 2020; Salloum et al., 2015; Sprang et al., 2021). Additionally, mindfulness-based programs, such as Cultivating Awareness and Resilience in Education (CARE) and Loving-Kindness Meditations, have demonstrated potential in enhancing social-emotional competencies (Csaszar et al., 2018; Jennings et al., 2017; Brown et al., 2023), which are theorized to serve as possible strategies to mitigate EBS in educators (Jennings & Min, 2023)

Significance of Study

While previous research has explored the impact of EBS and possible interventions, this study differed in several important aspects. First, the research on EBS is heavily focused on healthcare and social service workers (Dutton et al., 2017; Keesler, 2020; Salloum et al., 2015; Sprang et al., 2021); however, given the growing evidence of EBS in educators, it is increasingly important to understand the impacts of EBS within the educational context. Secondly, while there have been other empirical studies on EBS in educators, this study focused specifically on a single school site where teachers had identified an increase in stress since the COVID-19 Pandemic. Lastly, given the recency of COVID-19, there is a gap in the literature around the impact of the pandemic on teacher well-being and support needs.

Therefore, this study aimed to gather data on teachers' experiences with EBS to contribute to the expansion of the body of knowledge on teacher perceptions and well-being. Further, this study centered teacher voices with the aim of developing supports that are authentic and meaningful to community stakeholders.

Overview of Methodology

This qualitative case study was designed to examine experiences of teachers at Woodlawn High School, specifically around their perceptions and management of EBS. This study design enabled an in-depth understanding of participants' perspectives on this phenomenon and potential interventions within their school context. By employing a case study framework, this research investigated a bounded system, Woodlawn High School, through detailed data collection and analysis. A brief description of the study methodology is below, with a more exhaustive description available in Chapter 3. Additionally, the theoretical and conceptual

frameworks used to inform the study questions and methods are introduced, with detailed rationales and figures available in Chapter 2.

Research Site and Participants

The site for this case study was Woodlawn High School, a Title 1 high school in the Mid-Atlantic region. This location was primarily chosen because of my role as an educator there for the past thirteen years. Additionally, data from the spring of 2023 indicated that teachers were experiencing some level of EBS (Gottlieb, 2023). In this study, teachers served as the primary participants because their close, daily interactions with students place them at the greatest risk of experiencing EBS (Sizemore, 2016) and position them as the group most likely to benefit from the proposed interventions when compared to other school-based staff. Thus, to capture these experiences and increase the likelihood of teacher participation, a combination of purposive and convenience sampling was employed, with the goal of achieving at least 25% educator participation.

Data Collection

Case studies aim to examine a specific phenomenon, in this case EBS, within a unique context. Therefore, this study employed a two-phase data collection strategy to explore EBS and teachers' perceptions of a targeted intervention at Woodlawn High School. Phase one included a professional development session accompanied by a pre and post-participant survey, while phase two involved conducting semi-structured interviews with teachers to gain deeper insights. Phase two occurred two weeks to a month following the professional development to allow teachers time to implement the presented strategies. Following data collection, a qualitative coding approach was utilized to identify patterns or trends within the data.

Basis in Theory

To position this study within the broader body of research, it was essential to identify a theoretical framework that would guide and integrate all aspects of the research (Ravitch & Riggan, 2011). The complex, multi-faceted relationships between teachers, their working conditions, personal histories, training, student interactions, and exposure to trauma can be effectively understood through Constructivist Self-Development Theory (CSDT; McCann & Pearlman, 1990a). CSDT aligns well with the current study by recognizing that each individual's experience with empathy-based stress is unique. Specifically, it emphasizes that traumatic experiences are understood through the individual's personal meaning-making process (McCann & Pearlman, 1992). This framework highlights that each teacher at Woodlawn High School brings their own unique schemas and experiences, which influence how they interpret and respond to trauma exposure within a common context.

While Constructivist Self-Development Theory offers a useful foundation for this study, it does not fully capture the nuances and variables of Woodlawn High School's particular challenge. Furthermore, it broadly addresses individuals experiencing EBS (often referred to as Vicarious Trauma in relation to CSDT; McCann & Pearlman, 1990), rather than focusing on educators and the unique elements of their experiences. Therefore, to highlight the various factors influencing teacher personal and professional well-being, I developed a conceptual framework (Chapter 2, Figure 2.1). This framework guided my understanding of the problem of practice and helped shape the methods used to address the research questions.

Key Terms and Definitions

This section outlines key terms central to the understanding of this study.

Compassion: feeling concerned and trying to assist someone who is suffering (Klimecki and Singer, 2011; Klimecki and Singer; 2014).

Compassion Satisfaction: the sense of fulfillment and effectiveness a person feels when they help others (Darawsheh, 2023). Studies suggest that feeling compassion and satisfaction can help protect against stress caused by caring for others. However, most of the research on this topic has focused on healthcare workers and mental health professionals (e.g., Collins & Long, 2003; Ray et al., 2013).

Continuing Professional Development: ongoing learning opportunities that help professionals expand their knowledge and enhance their skills, ultimately leading to improved student outcomes (Maryland State Department of Education, n.d.). The term is often used interchangeably with other phrases like professional development, professional education, continuing education, and staff development (Gallagher, 2007).

Empathy: the ability to share another's feelings (Klimecki and Singer, 2011; 2014).

Empathy-Based Stress (EBS): the stress resulting from exposure to secondary trauma combined with empathy and distress, leading to post-traumatic stress symptoms that decrease engagement and caring behaviors (Rauvola et al., 2019). Historically, the terms vicarious trauma (VT), compassion fatigue (CF), and secondary traumatic stress (STS) have been used interchangeably (Kim et al., 2021; Jennings & Min, 2023); however, to avoid confusion throughout the study, I will use the overarching term of empathy-based stress (EBS) to report on these constructs.

Loving-Kindness Meditations: A widely practiced form of compassion training is loving-kindness meditation, a Buddhist tradition (Chödrön, 2017). This practice encourages individuals to cultivate compassion for others, emphasizing the understanding of the interconnectedness of all people.

Mindfulness-Based Interventions: strategies that use mindfulness techniques, like meditation and paying close attention to the present moment, to improve mental health. These practices help people manage stress, better control their emotions, and reduce feelings of anxiety, depression, and other mental health challenges (Jennings et al., 2017: Kabat-Zinn, 1990).

Schemas: mental structures people form based on their past experiences. These structures help them organize information and understand future events (McCann & Pearlman, 1992).

Secondary Traumatic Stress: indirect experiences of suffering as a result of engaging with individuals who have experienced trauma (National Network for Youth, 2023)

Trauma-Informed Self-Care: involves recognizing and understanding your emotional responses when engaging with individuals who have experienced trauma, and intentionally creating effective coping strategies to manage these emotions (Salloum et al., 2015). TISC activities may involve, but are not limited to, participating in training on secondary trauma, collaborating with a team, maintaining a manageable workload, seeking additional support, and ensuring a healthy work-life balance (Salloum et al., 2015).

Trauma Literacy or Trauma Informed Practices (TIPs): a set of practices that address the impact of trauma, acknowledge the signs and symptoms of trauma, and seek to avoid retraumatization to create a safe and caring environment (Substance Abuse and Mental Health Services Administration, 2014)

Vicarious Trauma: indirect experiences of suffering as a result of engaging with individuals who have experienced trauma (World Health Organization, 2013).

Chapter 2

Literature Review

Since the emotional well-being of teachers is crucial for fostering a productive classroom atmosphere (Brown et al., 2023; Diliberti et al., 2021; Greenberg et al., 2016; Jennings & Greenberg, 2009), it was important to explore existing literature on the impact of empathy-based stress, as well as strategies aimed at alleviating empathy-related stress. Therefore, in May 2024 and September 2024, I conducted a systematic search for relevant articles by using term combinations listed in Table 2.1. I utilized ERIC, Google Scholar, and PsychINFO databases, employing the 'in abstract' search function in ERIC and PsychINFO. The search included literature published between September 1980 and August 2024, with a focus on articles from the last ten years. Additionally, I included books cited in peer-reviewed articles to supplement information, particularly related to symptoms of trauma, which are widely accepted within the literature. The search was limited to English-language peer-reviewed studies, resulting in an initial yield of 4,464 articles. However, after adding tertiary terms, the search was narrowed down to 868 articles.

Table 2.1

Search Term Combinations

Primary search term	Secondary search term	Tertiary search term
Intervention	Secondary Trauma	School Staff
Professional Development	Vicarious Trauma	Covid-19
Strategies	Empathy-Based Stress	Educators
Treatment	Compassion Fatigue	Teachers
Therapy		Instructors
Management		Helping Profession
Mitigate Impact		

Introduction

Given the extensive scope of the literature and the emphasis on understanding the experience of EBS within the teaching profession, the subsequent literature review focuses on the unique challenges teachers face, taking shifts as a result of COVID-19 into account. It is widely recognized that the teaching profession is among the most stressful, with the recent COVID-19 pandemic exacerbating both trauma exposure and rates of attrition (Greenberg et al., 2017; Ingersoll & Smith, 2003; Lieberman, 2021). In addition to high rates of attrition, elevated stress levels can lead to a decreased capacity to teach both content and social-emotional competencies (Brown et al., 2023; Greenberg et al., 2016; Jennings et al., 2017; Jennings & Greenberg, 2009). However, while the impacts of stress on teacher performance have been investigated, research is just beginning to explore the role of vicarious trauma in teachers' personal and professional lives. Historically, the terms vicarious trauma (VT), compassion fatigue (CF), and secondary traumatic stress (STS) have been used interchangeably (Kim et al., 2021; Jennings & Min, 2023). There is now an emerging debate over whether each of these phenomena presents different symptoms (Kim et al., 2021); however, to avoid confusion throughout the review, I will use the overarching term of empathy-based stress (EBS) to report on these constructs.

This literature review brings together empirical research on EBS and related interventions, helping to refine and clarify the research questions utilized in this study. The first section of the literature review focuses on definitions, risk factors, and symptoms of empathy-based stress. The second section explores current interventions being utilized to increase understanding and management of the effects of EBS. The third section discusses professional

development, adult learning, and implications for teacher support. Finally, the fourth section of the review culminates in an explanation of the theoretical underpinnings of the current study.

Definition and Risk Factors for Empathy-Based Stress

In order to develop effective intervention strategies, it is important to have a clear understanding of the definition, risk factors, and symptoms of EBS. The World Health Organization (2013) defines vicarious trauma as indirect experiences of suffering as a result of engaging with individuals who have experienced trauma. Similarly, the National Child Traumatic Stress Network (NTCTS) describes STS as an emotional burden that arises when someone is exposed to another person's direct experiences of trauma. Furthermore, Rauvola et al. (2019) introduced the term empathy-based stress (EBS), which is defined as the stress resulting from exposure to secondary trauma combined with empathy and distress, leading to post-traumatic stress symptoms that result in disengagement in work and caring behaviors.

While this phenomenon is often examined among healthcare and social service workers (Kim et al., 2021), the relationship between teacher and student is often close due to the frequency and duration of classes, placing teachers in a vulnerable position to be exposed to their students' traumatic experiences (Sizemore, 2016). Additionally, teachers are frequently expected to fill the void left by challenging home lives and inadequate mental health care (Brunzell et al., 2015), putting them at a higher risk for EBS. Further, students who have experienced trauma often exhibit behavioral or academic difficulties that necessitate additional support from their teachers (Jennings, 2018; US Department of Education, 2021), intensifying teacher stress in an already demanding environment. Finally, individuals with their own history of trauma are more susceptible to EBS (Hensel et al., 2015).

Moreover, in 2018 the NCTSN estimated that over ten million children experience at least one traumatic event per year. This is supported by Merrick et al.'s (2018) estimate that over half of all individuals will experience some form of trauma before reaching adulthood. Given the prevalence of trauma students likely experience, it is highly probable that all educators have some level of trauma exposure. For instance, in their (2012) systematic study of 229 school staff members at six different schools, Borntrager et al. (2012) found that the majority of subjects reported very high levels of EBS. Interestingly though, staff job satisfaction was still found to be in line with the national average (Borntrager et al., 2012).

Effects and Symptoms of Empathy-Based Stress

A first step to mitigating the negative consequences of EBS is to recognize the symptoms. Regrettably, exposure to trauma on both the primary and secondary levels affects everyone differently and can impact almost every domain of life (Figley, 1995). Workers in helping professions have been found to have symptoms that are highly variable, not unlike those of primary trauma victims (Figley, 1995). These symptoms can include confusion, anxiety, feelings of helplessness, declines in both physical and mental health, difficulty sleeping, loss of creativity, irritability, feelings of disconnectedness, and disruptions of previously held world views and identity (Figley, 1995; Perrigrini, 2019; Saakvitne & Pearlman, 1996; & Sizemore, 2016). Gentry et al. (2002) posit that symptoms of EBS can mirror PTSD and include feelings of depression, a decreased sense of purpose, difficulty maintaining friendships, and an overall decrease in productivity. Similarly, Blair and Ramones (1996) assert that EBS can lead to flashbacks and bodily symptoms like those experienced by individuals with PTSD. Additionally, these psychological and physical symptoms have been linked to increased mortality risk for those in helping professions (Beaton & Murphy, 1995). In addition to physical and physiological

symptoms, stress leads to increased teacher burnout (Diliberti et al., 2021) and decreases teacher effectiveness in both academic and social-emotional instruction (Greenberg et al., 2016; Jennings & Greenberg, 2009).

Impact of COVID-19

Unfortunately, levels of student trauma and the subsequent EBS experienced by teachers have increased dramatically since the COVID-19 pandemic (US Department of Education, 2021). Fitzgerald et al.'s (2021) study highlighted the child-specific traumas and losses experienced during COVID-19 that included but were not limited to a disruption in normal schedules, increased child abuse, increased loss of loved ones, decrease in parental work, loss of routine, loss of autonomy, and loss of perceived safety. While these impacts began during the pandemic (Fitzgerald et al., 2021), the longer-term impacts of trauma exposure will likely continue to affect their behavior and academic performance for years to come (US Department of Education, 2021).

As students faced new traumas, teachers experienced heightened personal stress due to their growing concern for students' mental health (Brunzell et al., 2021). This stress was exacerbated by rising student disengagement from virtual or hybrid learning, as Yang et al. (2021) found that teachers' efforts to engage students during this period led to increased emotional burnout symptoms. Additionally, Carver-Thomas et al.'s (2021) study exploring important aspects of teacher supply and demand found that teachers of students who suffered deaths in the family struggled with this increase in trauma exposure and felt they lacked sufficient trauma training. While anecdotal accounts of teacher and student trauma exist and record numbers of teachers left the profession as a result of the negative impact of COVID-19 (Diliberti et al., 2021), very little peer-reviewed research exists on the continued impact the

COVID-19 pandemic has had on teacher personal and professional lives as it relates to EBS (Fitzgerald et al., 2021; Yang et al., 2021).

Possible Interventions

Although schools are increasingly working to incorporate social-emotional learning (SEL) curricula and trauma-informed practices for students, very few focus on the needs of teachers who are responsible for delivering said curricula to their students (Lawson et al., 2019). Therefore, the majority of current research on empathy-based stress interventions is focused on healthcare and helping professions (e.g., social workers, child welfare employees, etc). Although teaching differs from healthcare and social work, the literature establishes that the proximity of teachers to students and the considerable time spent with students places them in a vulnerable position to experience EBS (Borntrager et al., 2012; Brunzell et al., 2015; Sizemore, 2016) and consequently they will likely benefit from similar interventions.

Trauma Literacy

Increasing trauma literacy has the potential to mitigate the negative effects of Empathy-Based Stress (EBS; Castro Schepers & Young, 2022; Keesler, 2020; Sprang et al., 2021). In a large-scale longitudinal study looking at 2,345 mental health professionals, Sprang et al. (2021) collected data through surveys administered over multiple time points, analyzing the changes in EBS levels in relation to the levels of organizational support and intervention strategies. One-way ANOVAs showed significant improvements in organizational support, EBS, and quality of life scores over time ($p < .05$). Linear mixed models indicated that decreases in EBS scores were strongly linked to improvements in organizational support scores ($p < .001$) after accounting for factors like age, gender, time, and level of program implementation.

These survey results suggest that when organizations make targeted attempts to teach employees about EBS, it can reduce employee distress (Sprang et al., 2021). Results also indicate that intentional focus on trauma and EBS in the workplace can lead to positive individual and organizational outcomes (Sprang et al., 2021).

Similarly, Keesler (2020) utilized a mixed-methods approach to investigate the impact of a trauma-informed organizational culture on 380 individuals working with people with intellectual and developmental disabilities. Surveys were given to collect quantitative data on fatigue and job satisfaction in conjunction with qualitative interviews with a sample of service professionals. Data were analyzed using stepwise regression to understand the connection between trauma-informed organizational culture and professional quality of life (including satisfaction, burnout, and secondary traumatic stress). The results showed that a trauma-informed organizational culture was linked to better psychological wellness for direct support professionals (Keesler, 2020). This study provides preliminary evidence that when organizations promote a trauma-informed culture, their employees have reduced burnout and improved emotional well-being (Keesler, 2020).

Looking specifically at teachers, Castro Schepers and Young (2022) conducted a pilot study for preservice teachers to explore the efficacy of TIP seminars in reducing EBS among preservice teachers. Pre- and post-survey data focused on stress levels and well-being were collected from 34 preservice teachers enrolled in a teacher prep program. Preliminary survey results indicate a causal relationship between an increase in TIP seminars and a reduction in EBS in pre-service teachers (Castro Schepers & Young, 2022).

Another pilot study of educators demonstrated the protective value of building teacher trauma literacy, even through a single professional development session (Koenig et al., 2018).

Seventy-four teachers voluntarily attended an hour and forty-minute session focused on teacher labor, EBS, and burnout. Sixty-four of the teachers proceeded to individually complete pre- and post-session questionnaires. Participant questionnaire responses conveyed that post-session teachers were better able to recognize and understand the connection between EBS and signs of burnout ($p < .001$, 95% confidence interval; Koenig et al., 2018). These interventions suggest that, similar to other helping professions, building trauma literacy in teachers may have the potential to mitigate EBS.

Further, there appears to be an interplay between individual and organizational components when reducing EBS and subsequent burnout through trauma literacy. Through a cross-sectional online survey, Mercer et al. (2023a) explored the impact of adverse childhood experiences (ACES) on staff working with individuals with intellectual disabilities. Using correlation, regression, mediation, and moderation analysis, they found that of the 109 participants who completed the cross-sectional online survey, 81.7% reported experiencing at least one ACE (Mercer et al., 2023a). This suggests that staff working with people with intellectual disabilities are likely to have previously experienced trauma. A second finding was that individuals working in trauma-informed organizational climates and those with higher personal resilience had lower levels of EBS (Mercer et al., 2023a). Therefore, both organizational and individual factors can potentially protect against EBS.

Similarly, Mercer et al. (2023b) performed a systematic review of 1,764 papers looking at the prevalence and impact of ACES on health care and social workers. Only studies utilizing the Felitti et al. (1998) ACE questionnaire were reviewed, leaving 17 articles relevant for inclusion. The literature review found that health and social care workers experienced more ACES than the general population. This is significant, and organizations should be aware of this trend, as

individuals with their own trauma histories are at higher risk for experiencing EBS (Hensel et al., 2015). Although the literature review on the impact of ACES does not focus on educators, the research is increasingly drawing parallels between teaching and other helping professions (Sizemore, 2016), and it would be informative for future research to explore the prevalence of ACES among educators.

Individual Teacher Compassion Satisfaction

Research suggests that the effectiveness of trauma-informed practices in schools depends, in part, on individual teacher characteristics (Christian-Brandt et al., 2020; Tatum, 2023). A possible but under-investigated mitigation factor is compassion satisfaction. Compassion satisfaction refers to an individual's feelings of self-efficacy and satisfaction when helping others (Darawsheh, 2023). Research has identified that compassion satisfaction may protect against empathy-based stress; however, research in this area is predominantly focused on healthcare professionals and mental health practitioners (e.g., Collins & Long, 2003; Ray et al., 2013).

Christian-Brandt et al. (2020) examined how individual teacher characteristics relate to their perceptions of the effectiveness of trauma-informed practices in schools and their intent to leave the profession. A correlational analysis of survey data from 163 elementary school teachers working in underserved schools with high populations of low-income and English language learning students showed a relationship between compassion satisfaction, empathy-based stress, burnout, and teachers' perceptions of the effectiveness of TIPs (Christian-Brandt et al., 2020). Specifically, lower levels of compassion satisfaction ($\beta = -.05$, $p = .001$) and higher burnout ($\beta = .09$, $p = .001$) were associated with an increased likelihood of intent to leave the profession (Christian-Brandt et al., 2020).

Similarly, Tatum (2023) conducted a case study to explore levels of compassion

satisfaction and EBS, as well as the types of support that might help alleviate the negative impacts of EBS. Using a mixed-methods approach, Tatum surveyed 20 public school teachers in the mid-Atlantic region, followed by interviews with three volunteer participants selected based on their interest in the study. Notably, one of the interviews was a researcher interview conducted by a peer. The interviews focused primarily on understanding the effects of the pandemic on teachers, students, and the overall work environment.

Tatum (2023) combined the Professional Quality of Life (ProQOL) scores with thematic analysis and phenomenology to interpret the findings. Unsurprisingly, teachers reported that the pandemic, particularly its disproportionate impact on students of color, contributed to increased EBS and lower levels of compassion satisfaction (Tatum, 2023). Teachers also identified several key supports that helped improve their well-being, including having a supportive team at work, seeking external support like therapy and religion, and having opportunities to discuss their experiences and wellness (Tatum, 2023). Another important implication of the study is that individual teacher levels of EBS and compassion satisfaction can vary over time, suggesting that monitoring these factors could help determine who may need additional support (Tatum, 2023). While difficult to draw overarching conclusions due to the small sample size and limited scale of the study, the findings, when considered alongside research from other helping professions, suggest that compassion satisfaction may have the potential to reduce burnout and EBS. Therefore, the connection between compassion satisfaction and EBS warrants further investigation within the field of education.

Self-Care

In addition to an increased awareness of trauma literacy, there are steps individuals can take to reduce EBS and improve compassion satisfaction through self-care. Trauma-informed

self-care (TISC) is the practice of recognizing and understanding your emotional reactions when interacting with individuals who have experienced trauma and actively developing healthy coping strategies to manage those emotions (Salloum et al., 2015). These TISC activities can include but are not limited to attending training on secondary trauma, working with a team, having a balanced workload, requesting additional support, and having a work-life balance (Salloum et al., 2015). Through hierarchical multiple regression analysis in their study surveying 104 recruited child welfare workers, Salloum et al. (2015) found a connection between self-care, increased compassion satisfaction, and reduced risk of burnout. Specifically, survey data highlight that workers practicing higher levels of TISC reported experiencing greater compassion satisfaction ($r = .35$, $p < .001$) and reduced burnout ($r = -.42$, $p < .001$; Salloum et al., 2015). Interestingly, survey data did not find a relationship between TISC and EBS (Salloum et al., 2015), suggesting TISC alone may not be a sufficient intervention for EBS.

Moreover, Preston et al. (2021) explored the health impact of professional quality of life and self-care on 559 student service professionals (faculty, staff, and students) serving student populations at 22 universities identified as being disproportionately prone to experiencing trauma. Participant survey results revealed that health-related quality of life was positively associated with mindful self-care, particularly in the areas of supportive structures and mindful awareness (Preston et al., 2021). However, in the limitations, the authors recognize that half of study participants were white, heterosexual, and female, and thus their findings may not be generalizable to all college campuses (Preston et al., 2021).

In addition to mindful self-care, physical self-care emerged in the literature as a means of burnout prevention. Physical self-care can include a focus on nutrition, hydration, health and fitness, and sleep (Kuebel, 2019; Posluns & Gall, 2020). Although not specifically focused on

educators, both applied research and literature reviews have identified active lifestyles and healthy diets as protective factors for care professionals and educators susceptible to EBS (Kuebel, 2019; Lever et al., 2017; Posluns & Gall, 2020). In their (2020) literature review, Posluns and Gall explore how self-care contributes to the well-being of mental health professionals. Within the review, a connection was identified in the literature between sleep hygiene (e.g., restful sleep environment, regular bedtimes, etc.) and burnout reduction (Posluns & Gall, 2020).

Although self-care practices have been linked to increased well-being and decreased burnout (Posluns & Gall, 2020; Preston et al., 2021; Salloum et al., 2015), criticisms and barriers to implementation exist (Clement et al., 2015; Cordova et al., 2023; Crowe et al., 2015; Figley, 2002). For example, Clement et al. (2015) performed a systematic review of both qualitative and quantitative studies to explore the effect stigma has on preventing people from completing help-seeking behavior. Through a meta-synthesis that included three narrative summaries and subgroup analyses, the review identified 144 studies with a total of 90,189 participants who met the inclusion criteria (Clement et al., 2015). This synthesis revealed stigma and disclosure concerns as the fourth-highest barriers to seeking help. Moreover, stigma can be especially problematic in helping professions where resilience in staff is highly valued. Using focus-group interviews of first responders (n=7) and non-first responders (n=10), Crowe et al. (2015) revealed that mental health stigma and a fear of a loss in status were much larger concerns for first responders than the general population, suggesting profession-specific pressures that may increase stigma.

A second criticism is that self-care places the burden on individuals rather than the system (Cordova et al., 2023). Often self-care is promoted through email or professional

development, placing the responsibility on teachers and making it seem like another item on a teacher's already full agenda (Cordova et al., 2023). This frustration may be exacerbated by the feeling that self-care is being used as a tool to ignore the underlying systemic causes of exhaustion, such as staff shortages, student mental health concerns, demanding workloads, and insufficient compensation (Cordova et al., 2023). Therefore, these authors argue that the work to help teachers cope with the current stressors of the educational system should not fall solely on the individual, and self-care should occur in tandem with community and system-wide efforts to promote teacher well-being.

Mindfulness-Based Interventions

Another possible effort could be the introduction of mindfulness-based interventions on the school or district level, as self-care and individual compassion satisfaction are not inherent traits but ones that can be fostered through intentional practices and interventions (Dutton et al., 2017; Jennings, 2018; Jennings & Min, 2023; Kim et al., 2021). Specifically, the literature indicates that targeted interventions addressing individual stress responses may be effective in reducing EBS (Dutton et al., 2017; Jennings, 2018; Kim et al., 2021). In an open-trial study of 18 female lawyers, advocates, and counselors working with trauma survivors, Dutton et al. (2017) explored the impact of a Joyful Heart Foundation (JHF) mindfulness retreat on improving well-being and building resilience.

Taking inspiration from Roger's (1951) person-centered framework and practices of Native communities, the JHF Holistic Healing Retreat included activities such as discussions on trauma and secondary trauma exposure, body resourcing, physical challenges, cultivating present-moment awareness, body awareness and relaxation exercises, expressive movement and art, self-care through movement, and group sharing (Dutton et al., 2017). Data were collected

using both quantitative self-report measures and qualitative audio journaling, with self-reports completed four times: two weeks before the retreat, two weeks after, and at 3-month and 6-month follow-ups. Dutton et al.'s (2017) qualitative findings revealed that post-retreat, participants experienced reduced EBS symptoms, less self-criticism, and increased self-acceptance, with effects lasting up to three months. Additionally, scaled T-test scores showed statistically significant pre-post retreat improvements (Dutton et al., 2017). While promising, the small sample size and lack of a control group leave room for future investigations on the efficacy of mindfulness retreats.

In a theoretical article, Jennings and Min (2023) suggest that professional learning focused on compassion may help prevent EBS and reduce teacher burnout. Currently, most SEL interventions presented for reducing traumatic stress are student-focused (Jennings, 2018), leaving a gap in support for teachers trying to navigate both their students' and their own trauma. Furthermore, as social and emotional competencies are context-specific (Jennings & Greenberg, 2009), even teachers with high levels of social-emotional competencies prior to the COVID-19 pandemic may need additional support and training to manage the changes related to the pandemic. As a result of this gap in support, Jennings and Min (2023) argue that professional learning involving compassion practices (described below) may be necessary to improve teacher SEC, well-being, and prosocial classroom behavior.

Essential to this recommendation is an understanding of Klimecki and Singer's (2011; 2014) research distinguishing between empathy (the ability to share another's feelings) and compassion (feeling concerned and trying to assist someone who is suffering). Their work revealed that feeling empathy towards someone who is suffering can result in increased distress, disengagement, and activation of brain regions associated with pain, whereas feeling compassion

towards someone's suffering can lead to positive feelings, increased altruism, and activation of brain regions associated with reward or pleasure (Klimecki & Singer, 2011; 2014). Fortunately, compassion is a skill that can be built and strengthened over time and may serve as a buffer against EBS and burnout (Jennings & Min, 2023; Klimecki & Singer, 2011; 2014).

One of the most traditional forms of compassion training is a Buddhist practice commonly referred to as loving-kindness meditation (Chödrön, 2017). This practice teaches individuals to foster feelings of compassion towards others with the understanding of the interconnectedness between people. Multiple empirical studies (Klimecki et al., 2013; 2014; Leiberg et al., 2011;) demonstrate that compassion training in the form of loving-kindness meditation led to increases in helping behavior, neutralized feelings of burnout, and increased positive affect.

Moreover, when looking specifically at teachers, Csaszar et al.'s (2018) study explored the impact of Loving Kindness Meditation (LKM) on teachers' reported levels of stress and empathy. 70 student teachers volunteered for participation and were split into two groups: Intervention Group A (n=36), and Control Group B (n=34). Students in the intervention group received materials about the benefits of meditation, as well as LKMs to be performed once daily. Questionnaire data was analyzed using repeated measures ANOVA, revealing that preservice teachers who received compassion training in the form of LKM reported significantly less stress over a twelve-week period than those in the control group. This preliminary data suggests that infusing compassion-focused mindfulness into teacher training may have the potential to mitigate the negative effects of EBS.

One such mindfulness-based intervention is the Cultivating Awareness and Resilience in Education (CARE) program (Jennings et al., 2017). CARE is a mindfulness-based professional

development program focused on building teachers' social-emotional competencies and improving classroom interactions (Jennings et al., 2017). To evaluate the program's effectiveness, Jennings et al. (2017) performed a cluster randomized trial involving 36 urban elementary schools and 224 teachers. For those randomly assigned to the experimental group, the program included 30 hours of interactive in-person mindfulness training along with phone coaching between sessions. Teachers completed self-reports and student assessments before and after the intervention, while classroom observations were made using the Classroom Assessment Scoring System (CLASS). Primary study outcomes were analyzed using two-level Hierarchical Linear Models which revealed that the program significantly improved teachers' emotion regulation, mindfulness, psychological distress, and time management (Jennings et al., 2017). The analysis also revealed positive effects on the supportiveness of classroom interactions as measured by CLASS (Jennings et al., 2017). These findings suggest that the CARE for Teachers program is effective in boosting teachers' social emotional competencies and enhancing the quality of their classroom culture.

Further, while mindfulness-based interventions have documented benefits for teachers and classroom culture (Jennings et al., 2017; Jennings, 2019), there is new literature demonstrating that mindfulness-based interventions for teachers also have positive effects on children in both academics and engagement (Brown et al., 2023). As a part of the same study (Jennings et al., 2017) reported at a different time, Brown et al. (2023) investigated the direct and indirect impact of the CARE program on eight child outcomes related to academics and social-emotional skills. This cluster-randomized trial explored the direct and moderated ways in which 5,200 children were affected by the CARE program. Teacher-completed student assessments revealed that students of teachers in the CARE program had significantly higher post-test scores

in reading competence, motivation, and engagement, demonstrating the positive effect of increased teacher social-emotional competencies (Brown et al., 2023). It is important to note that these data are teacher reports on students, and thus it would be important to measure similar interventions from additional perspectives to reduce possible biases as a result of positive expectancies of the teachers involved in the program (Brown et al., 2023). In addition to academic gains, teachers in the intervention group of the CARE program showed improved classroom interactions between teachers and students (Jennings et al., 2017). When compared to control group teachers who showed diminishing emotional support throughout the course of a school year, teachers in the intervention group had higher levels of emotional support as measured by independent raters using the Classroom Assessment Scoring System (CLASS; Jennings et al., 2017). These combined results indicate the potential the CARE program, a specific MBI, has at mitigating EBS and improving classroom performance and functioning.

Moreover, Brown et al.'s (2023) study revealed the counterintuitive finding that students in the CARE intervention group showed significantly higher levels of post-test student-teacher relational conflict. While several reasons were provided (e.g., increased teacher awareness), this is a potential negative impact that should be explored in future mindfulness-based intervention-focused research. Nevertheless, current research provides substantial evidence that teacher social-emotional competencies play a significant role in instruction, classroom environment, and classroom interactions (Brown et al., 2023; Greenberg et al., 2016; Jennings & Greenberg, 2009; Jennings et al., 2017). Additionally, mindfulness-based interventions can be an effective way to improve teacher social-emotional competencies and may possibly reduce EBS (Brown et al., 2023; Csaszar et al.'s, 2018; Dutton et al., 2017; Jennings et al., 2017; Jennings, 2019; Jennings & Min, 2023).

Further, teachers dealing with disruptive student behavior and those facing social and emotional challenges would likely benefit from mindfulness-based interventions, as their students tend to exhibit lower on-task and academic engagement (Marzano et al., 2003). It is also possible that EBS may exacerbate "the burnout cascade" in which teachers with low social-emotional competencies and high levels of student disruption have increased burnout (Jennings & Greenberg, 2009; Jennings & Min, 2023) and thus improving social-emotional competencies through mindfulness-based interventions has the potential to reduce attrition. Additionally, as was previously mentioned, interventions to mitigate EBS and improve well-being are increasingly important since COVID-19, as social-emotional competencies are context-specific, and even teachers skilled with emotional regulation strategies may need increased support navigating the new landscape of teaching since the pandemic (Jennings & Min, 2023; Jennings & Greenberg, 2009).

Professional Development

Since the current study focuses on teacher-facing professional development, it was essential to explore the literature on continuing professional development and adult learning theory. While pedagogy addresses the teaching methods for children, Malcolm Knowles introduced Andragogy, or adult learning theory, to highlight the differences between adult and child learners (Rohlwing & Spelman, 2014). Continuing professional development (CPD) refers to ongoing learning opportunities that help professionals deepen their knowledge and improve their practice, ultimately leading to better student learning outcomes (Maryland State Department of Education, n.d.). The term continuing professional development is commonly used synonymously with other terms such as professional development, professional education, continued education, and staff development (Gallagher, 2007). Additionally, preliminary

research reveals that trauma-informed professional development has the potential to build and strengthen teacher's social-emotional competencies, as well as improve student learning outcomes (Brown et al., 2023).

Key Components of Adult Learning

Within the literature, there are several principles that can inform the creation of adult professional development. Knowles's Adult Learning Theory identifies five assumptions for adult learning that must be respected: a) adult learners are self-directed and need autonomy, b) adults bring their previous life experiences into new learning experiences, c) learning is best when participants find it relevant, d) adults are more problem-centered than subject-centered, and e) intrinsic factors motivate adults more than external factors. Rohlwing and Spelman (2014) echo the finding that adults are more intrinsically motivated and add that adult learners do best when there is trust and a shared purpose. Conversely, Cox (2015) asserts that low buy-in leads to decreased motivation to learn. More recently, there have been critics such as Holyoke and Larson (2009), who suggest that all adults should not be lumped into a single category as there may be generational differences. However, while the study identified unique learning characteristics based on the teacher's generation, these findings contribute to a more detailed understanding of Adult Learning Theory by adding depth and specificity.

Application of Adult Learning Theory to Teacher Training on EBS Management

With Adult Learning Theory as the framework, CPD facilitators must recognize that adult learners bring their own experiences and mindsets to professional development and will thus have unique needs (Knowles, 1980; Rohlwing & Spellman, 2014). To honor these differences, professional development experiences should be relevant to participant needs and address real problems being faced in order to increase buy-in (Knowles, 1980; Cox, 2015).

Further, providing ample opportunities for self-directed learning, autonomy, and self-reflection increases engagement and allows participants to make meaning of their experiences (Knowles, 1980; Rohlwing & Spellman, 2014).

In the wake of COVID-19 and subsequent teacher shortages, it is increasingly important to provide continued professional development, particularly in the domain of teacher psychosocial well-being as classroom culture is highly dependent on teacher well-being (Brown et al., 2023; Jennings et al., 2017) . Although trauma-related teacher training does currently exist, it most commonly focuses on subsequent student outcomes rather than teacher well-being (Thomas et al., 2019). Despite the robust literature on teacher burnout (Diliberti et al., 2021; Jennings, 2015; Jennings & Greenberg, 2009; Lieberman, 2021) and exploration of EBS interventions in other professions (Figley, 1995; 2002; Gallagher, 2007; Hensel et al., 2015; Jennings, 2017; Keesler, 2020), there is very little that has been investigated in the realm of EBS in teachers and how best to support them professionally and personally through CPD.

Implications for Teacher Support

Overall, the literature consistently demonstrates that teachers are at high risk of developing empathy-based stress (Borntrager et al., 2012; Brunzell et al., 2015; Merrick et al., 2018; Sizemore, 2016) that can lead to multi-faceted and even severe symptoms (Figley, 1995; Gentry et al., 2002; Perrigrini, 2019; Saakvitne & Pearlman, 1996; & Sizemore, 2016). Unfortunately, both student trauma and the subsequent EBS teachers experience have escalated significantly as a result of the COVID-19 pandemic and the related social and economic upheaval (Fitzgerald et al., 2021; Diliberti et al., 2021). Despite these findings, few schools and districts provide their staff with adequate support (Lawson et al., 2019).

Fortunately, recent studies reveal that several interventions (e.g., TIPs, self-care, MBIs) show promise in reducing EBS and promoting personal and professional well-being (Brown et al., 2023; Castro Schepers & Young, 2022; Csaszar et al., 2018; Jennings et al., 2017; Preston et al., 2021). Given the efficacy of targeted interventions in the fields of healthcare and social services (Dutton et al., 2017; Keesler, 2020; Salloum et al., 2015; Sprang et al., 2021), similar approaches could be utilized to provide teachers with the tools necessary to manage EBS more effectively. Additionally, several interventional studies of mindfulness-based programs (e.g., CARE, LKM) highlight the potential benefits of mindfulness-based interventions in mitigating the impacts of EBS and promoting social-emotional competencies (Brown et al., 2023; Csaszar et al., 2018; Jennings et al., 2017). Furthermore, educator-facing professional development should be structured based on adult learning principles such as autonomy, relevancy, and self-reflection to meaningfully engage and meet the specific needs of individual teachers (Knowles, 1980; Rohlwing & Spelman, 2014).

Ultimately, while the reviewed interventions may help mitigate the negative impacts of emotional burnout and stress, teaching will likely remain unsustainable until systemic barriers—such as excessive workloads, inadequate support, low compensation, and limited autonomy—and the root causes of burnout are effectively addressed. Thus, schools and districts must recognize that mitigating EBS is a systemic responsibility rather than an individual responsibility. Institutional support, such as mindfulness and trauma literacy training, can help build a more resilient teacher workforce that can support students and maintain personal well-being. Future research could explore the long-term impacts of EBS interventions on teacher well-being, retention, professional efficacy, and student outcomes to better understand how to support teachers facing ongoing challenges in education.

Theoretical Framework

While focused on a particular school site, this study is situated within a larger context of classroom teachers experiencing empathy-based stress that impacts their personal and professional lives (Borntrager et al., 2012; Brunzell et al., 2015; Figley, 1995; Gentry et al., 2002; Merrick et al., 2018; Perrigrini, 2019; Saakvitne & Pearlman, 1996; Sizemore, 2016). In order to situate this study within the existing research in the field, it was necessary to identify a theoretical framework that guided and unified all aspects of the study (Ravitch & Riggan, 2011).

A study's theoretical framework often grows out of a literature review where the researcher synthesizes the key concepts, theories, and ideas in order to arrive at a particular lens to frame the study (Ravitch & Riggan, 2011). After a broad review of the literature on EBS, Constructivist Self-Development Theory (CSDT; McCann & Pearlman, 1990a) emerged as the most useful theoretical framework in framing this particular study.

Constructivist Self-Development Theory

The complex relationship between teachers, working conditions, personal histories, training, student relationships, and trauma exposure can better be understood through Constructivist Self-Development Theory. CSDT developed from a desire to understand why some trauma survivors are deeply affected by their experiences while others are able to keep going and persevere (McCann & Pearlman, 1992). CSDT embodies the constructivist perspective that humans actively create their own realities and assign meaning to experiences (Mahoney, 1982; McCann & Pearlman, 1992), thus shaping their understanding of the world through their interactions (McCann & Pearlman, 1990a). Therefore, within this framework is the understanding that traumatic experiences can only be understood within a victim's unique meaning-making system (McCann & Pearlman, 1992). While the initial exploration of CSDT was developed in reference to primary trauma, it was soon expanded to better understand the

psychological impacts of working with those affected by trauma (McCann & Pearlman, 1990b).

Moreover, personal needs and schemas are integral to CSDT as they shape individual behavior (McCann & Pearlman, 1992; Pearlman & Saakvitne, 1995). Schemas are mental frameworks that people create because of past experiences that are used to organize information and interpret future events (McCann & Pearlman, 1992). When individuals acquire new information or experiences, a process called accommodation occurs where schemas change to incorporate the novel experiences and information (Cohen & Collens, 2013). Conversely, when information or experiences contradict existing cognitive schemas, the original schema is disrupted (McCann & Pearlman, 1990b). Additionally, Epstein (1989) asserts that the following four schemas are disrupted by trauma exposure: the world is benign, the world is meaningful, the self is worthy, and people are trustworthy.

McCann and Pearlman (1990b) expand this initial understanding by demonstrating that those exposed to others' traumas, referred to as helpers, may also experience shifts in their cognitive schemas. These schematic shifts, and subsequent changes in behavior and emotional responses, can be small or significant depending on the variability between the helper's existing schemas and the client's traumatic experiences (McCann and Pearlman, 1990b). Further, CSDT emphasizes that psychological needs motivate and change behavior. Specifically, the need for safety, trust, self-worth, intimacy, and a sense of control are impacted by both primary and secondary trauma exposure. (McCann & Pearlman, 1990a; McCann & Pearlman, 1990b; McCann & Pearlman, 1992; Pearlman & Saakvitne, 1995).

Rationale

The Constructivist Self-Development Theory (McCann & Pearlman, 1990a) fits nicely with the current study as it acknowledges that everyone's experience with EBS is unique.

Specifically, this framework recognizes that traumatic experiences can only be comprehended through the individual meaning-making process of the victim (McCann &Pearlman, 1992). Using this framework, it became clear that all teachers at Woodlawn High School have their own schemas and experiences that shape how they process and react to trauma exposure within a shared context. Additionally, CSDT provided a useful framework to explore how teachers' schemas accommodated or contradicted information provided in trauma-informed professional development.

Further, the CSDT model directly aligns with and supports my two research questions. For RQ1 exploring teachers' individual experiences with EBS in their personal and professional lives, the lens of CSDT recognizes that individuals create their own realities based on experiences (Mahoney, 1982; McCann & Pearlman, 1992). This aligns with the reality that teachers at Woodlawn High School have diverse experiences with EBS and varying levels of personal and professional impact, based on their needs, previous experiences, and mental schemas. Moreover, this framework posits that experiences can only be interpreted through the individual meaning-making system (McCann & Pearlman, 1992). The second research question, RQ2, explored how individual teacher's understandings and management of EBS were impacted by a trauma-informed professional development. Consistent with the CSDT framework, all teachers in this study had different understanding of and management of EBS, despite all attending the same training.

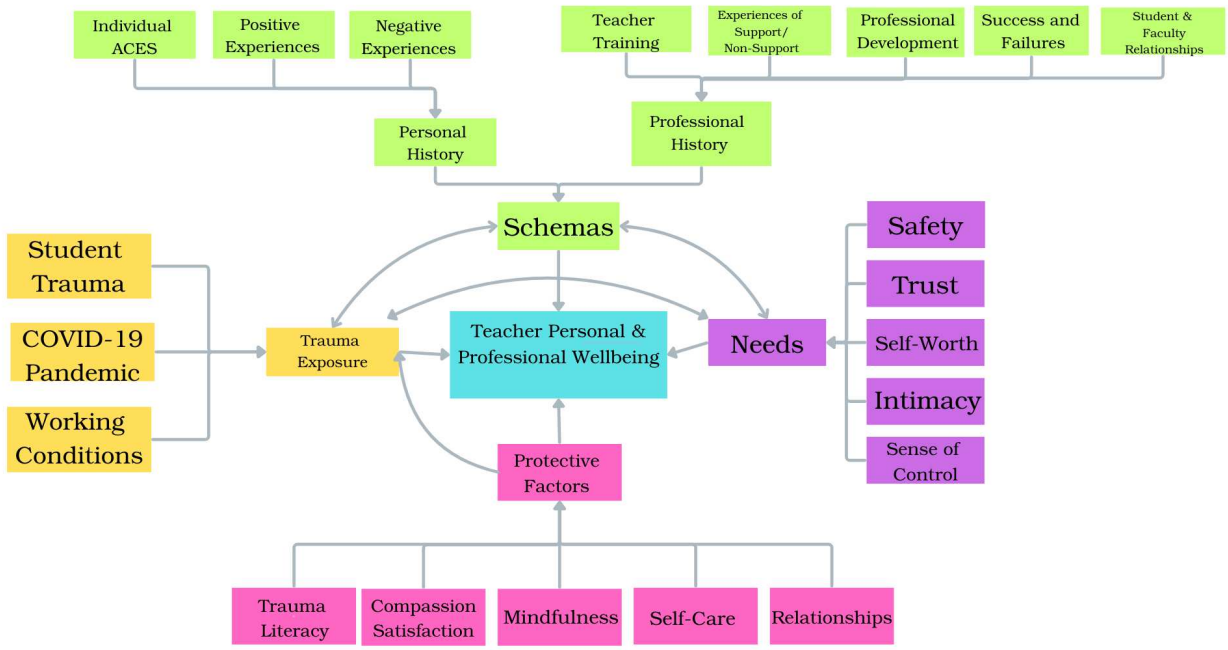
Conceptual Framework

Although Constructivist Self-Development Theory provides a valuable framework for this study, it does not address the unique aspects of Woodlawn High School's problem of practice. Additionally, it speaks generally to those experiencing EBS (although the term

Vicarious Trauma is most commonly used in conjunction with CSDT; McCann & Pearlman, 1990) and not specifically to educators and the distinctive elements of their experience. Therefore, I developed the conceptual framework below (Figure 2.1) to illustrate the different components impacting a teacher's personal and professional well-being. This framework informed my thinking about the problem of practice, as well as the development of the methods to answer the research questions.

Figure 2.1

Conceptual Framework



Schemas

A key principle of this framework is that every teacher entered the study with their own unique schemas. McCann and Pearlman (1990b) suggest that individuals' schemas are the assumptions they hold about themselves, others, and the world, shaped by their experiences. These schemas influence their future behaviors and beliefs. Within this framework (Figure 2.1), a teacher's schemas not only affect their personal and professional well-being but are also

informed by personal and professional history, trauma exposure, and individual needs. As the primary researcher in this study, it was important to ensure that my own schemas did not bias my analysis of other teachers' experiences with EBS.

In addition to the CSDT conception of mental schemas, this model was also informed by research on the development of emotional schemas. Izard (2010, p. 1) defines emotional schemas as "dynamic emotion-cognition interactions that may consist of momentary/situational responding or enduring traits of personality that emerge over developmental time." These emotional schemas are shaped not only by childhood experiences and relationships (Greenberg, 2004; Young et al., 2003) but by the surrounding environment, culture, and society (Mesquita & Frijda, 1992). Further, what may be considered maladaptive by some cultures can be seen as adaptive by others (Mesquita, 2022), and thus a culturally sensitive lens must be used when investigating emotional schemas.

Although emotional schemas have been investigated thoroughly in the area of parent-child relationships (England-Mason et al., 2023), there is limited research on the relationship between educator emotional schemas and their social-emotional practices. Recently, Jennings et al. (2024) hypothesized that educators' emotional schemas impact their teaching abilities and psychological well-being. Further, when considering emotional schemas in the classroom, these schemas are thought to shape how educators express and regulate their own emotions, as well as how they perceive and respond to their students' emotions (Dunsmore & Halberstadt, 1997; Katz et al., 2012). As rates of teacher stress continue to escalate (Diliberti et al., 2021; Fitzgerald et al., 2021), it is worthwhile for future research to investigate how educators' emotional schemas influence their social-emotional competence, well-being, burnout, and their students' learning outcomes (Jennings et al., 2024).

Interplay of Trauma Exposure, Needs, and Protective Factors

Within the conceptual framework, there is an arrow connecting trauma exposure and needs to indicate how the two factors are inextricably linked. Educators who experience EBS due to trauma exposure often struggle with stress, anxiety, and emotional exhaustion, which can significantly impede their ability to support their students effectively (Figley, 1995; Jennings et al., 2024; Jennings & Greenberg, 2009; Perrigrini, 2019; Saakvitne & Pearlman, 1996; Sizemore, 2016). Furthermore, meeting or not meeting teachers' needs (e.g., the desire for autonomy, safety, support, and connections within the school community) can both mitigate and exacerbate EBS symptoms. Additionally, the arrows in the framework between schemas, trauma exposure, and needs indicate that an individual's previous experiences contribute to their meaning-making and processing of traumatic experiences.

Moreover, the framework includes an arrow between protective factors, such as mindfulness and self-care, and trauma exposure, indicating that specific strategies have the potential to help mitigate the effects of EBS and enhance teachers' social-emotional competencies (Castro Schepers & Young, 2022; Dutton et al., 2017; Jennings, 2018; Jennings & Min, 2023; Kim et al., 2021; Preston et al., 2021; Salloum et al., 2015). The arrow is placed between trauma exposure and teacher personal and professional well-being to show that protective factors influence responses to trauma exposure. These responses, in turn, affect teacher schemas and needs, as indicated by the arrows.This complex and connected system emphasizes the importance of recognizing and addressing the diverse experiences, schemas, and needs of educators in order to improve teacher's personal and professional well-being.

Conclusion

Overall, Constructivist Self-Development Theory, combined with my conceptual

framework, highlights the intricate factors that influence teacher well-being. The framework attempts to describe and illustrate the reality that all teachers at Woodlawn High School have had different experiences with EBS before the intervention, and they responded to and understood the CPD session in varied ways based on their individual backgrounds and interpretations. Despite these differences, it was possible to identify common patterns or themes that can possibly help individuals engage with EBS in a more sustainable way.

Chapter 3

Methods

Teacher emotional well-being is foundational in creating and maintaining a productive and effective classroom environment (Brown et al., 2023; Diliberti et al., 2021; Greenberg et al., 2016; Jennings & Greenberg, 2009; Jennings et al., 2017). When emotionally well-supported, teachers are better equipped to foster positive relationships with students, manage classroom dynamics effectively, and deliver high-quality instruction (Brown et al., 2023; Jennings et al., 2017). However, the growing demands of the teaching profession (Diliberti et al., 2021; Lieberman, 2021; US Department of Education, 2021), coupled with the emotional toll of working closely with students, often lead to empathy-based stress, a phenomenon where the emotional burdens of understanding and supporting others begin to take a personal toll.

To address this issue, it is critical to explore teachers' lived experiences with empathy-based stress and how they perceive interventions designed to alleviate this challenge. Understanding these perspectives can provide valuable insights into the effectiveness of strategies aimed at improving teacher well-being and, by extension, enhancing classroom outcomes.

The following research questions guided this case study:

- RQ1: How are teachers at Woodlawn High School experiencing and being impacted by empathy-based stress in their personal and professional lives?
- RQ 2: How does targeted trauma-informed professional development for teachers at Woodlawn High School appear to impact their understanding and management of empathy-based stress?

Chapter 1 provided an overview of the current problem of practice that led to the development and exploration of the research questions presented in this study. Chapter 2 provided a synthesis of current empirical research about empathy-based stress. Specifically, the review focused on the symptoms and risk factors of EBS, the implications of the COVID-19 Pandemic, and the potential efficacy of EBS interventions such as trauma literacy, self-care, and mindfulness. The literature review also positioned the current study within a broader theoretical framework.

The Constructivist Self-Development Theory (McCann & Pearlman, 1990a; 1990b; 1992) provides a framework for understanding how the complex interplay of teachers' working conditions, personal histories, training, student relationships, and trauma exposure can lead to empathy-based stress, altering their core beliefs, self-perception, and worldview through the individual meaning-making processes. To illustrate my approach to addressing the problem of practice, I developed a conceptual framework (see Figure 2.1) that highlights the various components influencing teachers' personal and professional well-being. This conceptual framework shaped my understanding of the problem and guided the creation of methods to address the research questions.

This chapter outlines the study's methodology and provides a detailed explanation of the research design. It includes a description of the research site, participants, and sampling methods, along with an overview of the data collection and analysis procedures. Additionally, it addresses the study’s trustworthiness and ethical considerations and discusses its delimitations and limitations.

Research Design

A qualitative exploratory case study approach was employed to examine the experiences of empathy-based stress and potential mitigating factors among teachers at Woodlawn High

School. According to Hancock and Algozzine, case studies are particularly suited for "gain[ing] in-depth understanding of situations and meaning for those involved" (p. 10), such as a particular school site and subset of teachers. This method was developed using baseline survey data collected at Woodlawn High School in the spring of 2022 (Gottlieb, 2023), which suggested that empathy-based stress may be present among teachers. By employing qualitative methods within an exploratory case study framework, this study was able to examine teachers' experiences and perspectives on the causes and impacts of EBS in a more in-depth manner. Moreover, Merriam (2001) emphasizes that information gathered through case studies can inform practices, policies, and future investigations. Thus, this case study aimed to collect valuable information on teacher experiences that can guide future decisions around teacher support at Woodlawn High School.

Furthermore, case study research examines a specific context "bounded by space and time" (Hancock & Algozzine, 2017, p. 9). As such, this was the appropriate format to investigate a specific school and the teachers' experiences of EBS following the COVID-19 pandemic. To illustrate the complexity of this problem of practice, a case study approach allowed for the use of rich and detailed descriptions of data collected from multiple sources of information (Hancock & Algozzine, 2017). The purpose of this case study was not to be comparative or predictive, but rather to serve as an attempt to better understand and describe the phenomenon of EBS and its impacts on teachers at Woodlawn High School.

Case

The educational setting for this study was Woodlawn High School, a Title I high school in the Mid-Atlantic Region. Woodlawn High School is located in Ward X, where 74,720 people reside (DC Health Matters, 2024). The community is predominantly Black or African American (88.67%), with a median income of $49,814 (DC Health Matters, 2024). Additionally, 18.43% of

families with children under 18 report living below the poverty level, which is significantly higher than the regional average of 8.66% (Redacted Health Matters, 2024).

During the 2023-24 school year, 544 students were enrolled at Woodlawn High School. Of the 544 students enrolled, 94% were Black or African American, 80% were classified as at risk (meaning they were experiencing homelessness, residing in foster care, or are eligible to receive Temporary Assistance for Needy Families), and 25% received special education services (Redacted School District, 2022). During the 2024-25 school year, Woodlawn High School had nine school leaders and 48 teachers (Redacted School Report Card Woodlawn High School, 2024). Of the teachers employed at Woodlawn High School, 62.5% have taught for ten years or more (Redacted School Report Card, Woodlawn High School, 2024).

While 82.1% of all students graduate from Woodlawn High School within four years, the school faces numerous unique challenges (Redacted District Report Card, Woodlawn High School, 2024). During the 2023-24 school year, 79.2% of students were chronically absent, which means they missed ten or more school days. Additionally, only 11% and 1.3% of students achieved proficiency in English and math, respectively, as measured by the district's standardized yearly assessment. Further, 23.1% of students received at least one out-of-school suspension, with 19.1% receiving discipline for violent incidents. Despite these struggles, Woodlawn students continue to progress, as evidenced by 33.1% of students approaching, meeting, or exceeding expectations in ELA and 13.6% of students doing so in math on the DC CAPE. Woodlawn also has a strong community legacy in athletics, with storied varsity basketball and football records.

Participants and Sampling

When selecting participants in case study research, it is essential to identify "key participants in the situation whose knowledge and opinions may provide important insights regarding the research questions" (Hancock & Algozzine, 2017, p. 46). In this case, teachers were the key participants as they spend the most time with the students and are thus at the most significant risk of EBS (Sizemore, 2016) and most likely to benefit from any proposed interventions. Therefore, purposive sampling was employed for the initial survey distribution, with all teachers at Woodlawn High School invited to participate, and all other school staff excluded. Yin's (2018) crucial participant selection process was employed to make this decision, ensuring that all teachers in the building possessed the necessary characteristics and experiences to provide valuable insights into their experiences with EBS. The goal was to survey at least 25% of the school staff (12 educators) to gain a somewhat representative sample of the entire school. This goal was achieved with 13 participants completing the pre- and post-surveys in March 2025. See Table 3.1 below for an overview of participant characteristics.

Table 3.1

Participant Demographics

Baseline Characteristics	n	%
Gender		
Female	11	79%
Male	3	21%
Nonbinary	0	0%
Nondisclosure	0	0%
Age Range (Years)		
18-25	0	0%
26-35	5	36%
36-45	2	14%
46-55	6	43%
56%	1	7%

Years of Experience		
20 Years or More	5	36%
11-20 Years	6	43%
4-10 Years	2	14%
1-3 Years	1	7%
Less than 1 Year	0	0%

Note. n=14. One participant completed the pre- but not the post-survey portion of the study.

Next, to triangulate the data and add depth to the study, participant interviews occurred two weeks to one month following the initial survey and PD participation. This sub-group of participants was selected through a combination of convenience sampling and those who had expressed a willingness to participate in a more extended post-PD interview. At the same time, efforts were made to balance experiences and demographics. Participant data and characteristics are presented in Table 3.2 below.

Table 3.2

Interview Participant Data

Pseudonym	Race	Gender	Approximate Years Teaching	Years at Woodlawn
Aster	White	Female	11-20	9
Cassia	White	Female	11-20	2
Daisy	Black or African American	Female	20+	9
Lupin	Black or African American	Male	4-10	1
Lilly	Black or African American	Female	20+	5

Data Collection

The purpose of a case study is to attempt to gain a detailed understanding of a specific phenomenon within a particular context. To conduct an in-depth investigation of EBS and

teacher impressions regarding a specific intervention, a two-phase data collection approach was employed. The first phase involved a professional development session with an embedded participant survey, and the second phase consisted of semi-structured follow-up teacher interviews. This combined approach gave me a big-picture perspective of the phenomenon and a more detailed understanding of individual teacher perspectives.

Phase 1: Survey and Professional Development

The first data collection phase was a teacher survey embedded in an asynchronous professional development program (see Appendix A). A pre- and post-survey design was utilized to capture teachers' potential shifts in understanding of EBS due to the professional development session. This format was heavily influenced by CSDT framework, which acknowledges that individuals construct their realities through their experiences (Mahoney, 1982; McCann & Pearlman, 1992). As a result, questions were created to explore teacher shifts in understanding based on pre-existing schemas. The survey was not modeled after an existing measure but was designed to incorporate key constructs from the literature by assessing participants' familiarity with EBS, its perceived impact on their profession, and current coping strategies.

Additionally, adult professional learning theories emphasize the importance of relevance, engagement, and reflection in professional development (Knowles, 1980; Rohlwing & Spellman, 2014). To align with these principles, the survey assessed participants' pre-existing knowledge, the effectiveness of the professional development session in enhancing understanding, and its applicability to their roles. Open-ended questions were added to encourage reflection on personal experiences and professional practices, a critical aspect of adult learning.

The professional development session was designed to be asynchronous, accommodating teachers' busy schedules. The session lasted approximately 30 minutes, with an additional 10

minutes (five minutes pre- and five minutes post) allocated for survey responses. The session was developed based on the current literature on understanding and potential mitigation strategies for EBS (see Chapter 2). Recorded using Teams, the session incorporated interactive questions through Microsoft Forms and Microsoft Stream. Details of the professional development plan are available in Appendix B. The survey and professional development were emailed to teachers in March of 2025. In addition to the survey link, teachers were presented with a landing page that outlined the study's purpose and emphasized that participation was completely confidential and voluntary (see Appendix D). Teachers had the opportunity to complete the survey throughout March 2025, providing ample response time.

Phase 2: Semi-structured Teacher Interviews

Two to four weeks following the survey completion, semi-structured interviews were conducted with a subset of participants. Participants were five individuals who indicated interest in a follow-up interview during Phase 1 of data collection. Grounded in the literature on Empathy-Based Stress (EBS), the survey questions were designed to explore teachers' personal experiences, coping mechanisms, and the emotional demands of their profession. To align with Constructivist Self-Development Theory (McCann & Pearlman, 1992), the interview allowed teachers a more in-depth opportunity to discuss their interpretations of EBS and the impact of professional development on their understanding and management of EBS. Additionally, questions were developed to align with the conceptual framework, explicitly addressing the needs of teachers and individual schemas. These interviews provided an opportunity to collect more in-depth data about teacher experiences with EBS and their understanding and management of EBS following the professional development session. Semi-structured interviews allowed for flexibility when participants had a particular area they felt passionate about or wanted to discuss

in greater depth. The interview also allowed for member checks to ensure that the survey findings accurately reflected the participants' experiences.

Although the interviews were conducted in person, they were recorded and transcribed via Microsoft Teams. Before beginning the interviews, the pre-interview script was recited to ensure participants understood the purpose of the study and the steps taken to protect participant confidentiality (see Appendix C), and signed consent was obtained. Field notes were taken directly following the interviews to note any observations made during the interview (see Appendix F, Appendix H).

Data Analysis

Merriam and Tisdell (2015) assert that data analysis is the process of making meaning from the collected data. Moreover, they state that "making sense out of data involves consolidating, reducing, and interpreting what people have said and what the researcher has seen and read—it is the process of making meaning" (Merriam & Tisdell, 2015, p. 202). Therefore, the following steps were taken to interpret the different data points and determine the meaning of teacher responses.

Phase 1: Survey Analysis

The first step in the data review process was to complete descriptive statistics for all survey questions that involved a Likert scale (see Appendix K). I then organized the data so that all responses to a single question were grouped. Then, during my first data review, I analyzed the responses holistically to see if any noticeable or surprising patterns emerged. Upon my second review of the data, I analyzed individual sections of the data that pertained to specific research questions. The short response questions were then moved into an Excel spreadsheet to organize,

group, and code the data. The data was coded utilizing the *a-priori* codes outlined in Table 3.3 and the same protocol outlined below.

Phase 2: Interview Analysis

Microsoft Teams was utilized to record and transcribe the semi-structured interviews. Following the transcription, I reviewed the video and made any corrections in the transcription. To ensure further accuracy, the transcript was provided to participants to confirm that the interview accurately reflected their sentiments. ***After*** cleaning the data, I organized the information in an Excel spreadsheet. Each paragraph was entered into an individual cell with a corresponding cell indicating where the excerpt could be found in the original interview.

After organizing the data, I read through the dataset in its entirety three times. The first two reads were used to assign a priori codes, with the third read reserved to look for patterns or themes not previously accounted for in the a priori codes. I created a predefined set of codes based on the main elements of my conceptual framework (see Figure 2.1) and the supporting literature associated with each component (see Chapter 2). These a priori codes, organized by construct, are outlined in Table 3.3 below. In addition to these a priori codes, the code of emotional detachment or dissociation emerged from within the data. Appendix I includes a codebook outlining the names, definitions, and criteria for inclusion and exclusion. Additionally, a sample of the coded data used in the analysis is available in Appendix J to illustrate how the codebook was applied to the dataset.

Table 3.3

Construct from Conceptual Framework:	Codes Developed from the Literature:
Schemas	Personal History Professional History
Trauma Exposure	Student Experiences Working Conditions COVID-19
Needs	Safety Trust Self-Worth Intimacy Sense of Control
Protective Factors	Compassion Satisfaction Trauma Literacy Self-Care Mindfulness Relationships

Once the data were coded, I reviewed the emerging themes to determine how they aligned with each research question. For Research Question 1: *How are teachers at Woodlawn High School experiencing and being impacted by empathy-based stress in their personal and professional lives?,* I drew from the survey responses and interviews, as each allowed teachers to share their experiences in their own words.

Conversely, for Research Question 2: *How does targeted trauma-informed professional development for teachers at Woodlawn High School appear to impact their understanding and management of empathy-based stress?,* the data were limited to responses provided after viewing the PD. These included post-survey data, gathered immediately after the session, and interview data collected two weeks to one month later. Together, these sources captured both the immediate and delayed reflections on the PD's impact. Further, to reduce confusion, all quotes presented in the findings are attributed to their original data source: either interview, pre-survey, or post-survey.

Trustworthiness

An essential component of qualitative research is establishing trustworthiness (Lincoln & Guba, 1985*)*. Lincoln and Guba's (1985) seminal work on inquiry asserts that trustworthiness can be established through transferability, credibility, dependability, and confirmability. These four components were essential in shaping the methodological framework of this study.

Transferability

The transferability of a study refers to the extent to which the study findings can be applied to a different context or setting. However, transferability within qualitative case-study research differs from traditional quantitative studies because it depends on how the data is presented and interpreted (Lincoln & Guba, 1985). Lincoln and Guba (1985) assert that detailed, rich descriptions of the case's context and findings allow readers to decide whether the findings may be transferable to their settings. This study made considerable efforts to provide a comprehensive account of the case, study methods, and findings.

Credibility

Credibility is defined as the extent to which the results truly reflect the participant's experience (Lincoln & Guba, 1985). Credibility can be established through both member checking and triangulation (Lincoln & Guba, 1985).

Member Checking. Member checking involves sharing the findings, interpretations, or raw data with the participants to confirm that what is being presented in the research accurately reflects their experience. Throughout this study, several opportunities for member checking were available. Before conducting the semi-structured interviews, I presented my interpretation of the survey data to the participants to ensure an accurate representation. Additionally, following data analysis, I provided participants with the opportunity to review the findings again. If a participant disagreed with my interpretation of their experience, I collaborated with them until I could capture a more accurate understanding.

Additionally, the observations functioned as a secondary method of member checking. After each interview, I completed a detailed observation sheet (see Appendices F and H). I then reviewed my notes with each participant to confirm that I had accurately captured their emotions and accurately interpreted their experiences. This collaborative process helped strengthen the credibility and reduce the bias of the findings by ensuring alignment between participant perspectives and my interpretations.

Triangulation. Triangulation is the process of relying on multiple data points, methods, theories, and investigators to reduce bias in a study and generate rich findings. This study relied primarily on data, method, and theoretical triangulation. In this study, I collected three types of data: survey, interview, and observation data through the methods of semi-structured interviews,

survey administration, and researcher observation notes (see Appendices F and H). Additionally, intentional efforts were taken to collect data from multiple, diverse perspectives. Furthermore, I relied heavily on CSDT framework and the conceptual framework (see Figure 2.1) to encourage critical reflection and mitigate the risk of bias that would arise from relying solely on my perspective. The goal of this triangulation was to consolidate data from multiple sources and perspectives, thereby enhancing credibility and creating a more balanced interpretation of the findings.

Confirmability

Confirmability refers to the level of confidence that the findings are based on participant narratives rather than possible researcher bias. Lincoln and Guba (1985) and Holmes (2020) recommend maintaining an audit trail to enhance transparency and promote frequent self-reflection throughout the data analysis process.

Reflexivity

Researchers can employ several strategies to take a reflexive approach to their research (Lincoln & Guba, 1985). The first step is to create an audit trail that documents methodological choices, participant interactions, and the researcher's thought processes (Lincoln & Guba, 1985). Therefore, throughout the data analysis process, I built in regular opportunities for self-reflection at the end of every data analysis session. The questions I used to guide my reflection throughout the process are listed in Appendix E.

Positionality

Another critical component of reflexivity is considering the positionality of a study's researcher to acknowledge and reflect on the ways their identity influences the research process. While I served primarily as a practitioner-researcher for this proposed study, many other facets

of my identity impacted my orientation toward the problem of practice. First and foremost, I have been a special educator at Woodlawn High School for 13 years. I also serve as the chair of the special education department. Although this is a teacher leader position, I have no role in teacher evaluation or staffing decisions, so I do not believe this influenced participant responses.

Additionally, I bring my own experiences and perspectives to this study. It cannot be ignored that my role as an educator, both before and after the pandemic, has shaped my thinking about teacher well-being. I, too, am vulnerable to experiencing EBS and can personally recount many of the traumatic experiences my students have shared with me and the subsequent feelings and reactions that occurred within me. It was essential to remember and reflect on this throughout the process, as my experience with EBS may vastly differ from that of my colleagues.

Moreover, during the study, I worked to be especially cognizant of my privilege as a white woman working within a predominantly Black community. Through my reflexive process, I committed to exploring any potential biases I brought into the study, particularly regarding my perceptions of what should or should not be considered traumatic. I engaged closely with the community to ensure that I accurately reflected the experiences of community members. Further, I recognized that my privilege has protected me from many of the challenges my school community has faced, especially in the aftermath of the pandemic. With this awareness, I strove to take the necessary steps to improve objectivity and ethical integrity by avoiding misrepresentation in my findings.

Ethical Considerations

Any study with human participants must strive to maintain ethical integrity. Lincoln and Guba (1985) succinctly state, "The researcher’s primary ethical obligation is to minimize the

potential for harm and maximize the benefits to participants and society." To minimize the potential for harm, I worked to be completely transparent and upfront with participants about the purpose and steps of the research (as outlined in Appendix D). Moreover, I prioritized taking the necessary steps to protect participant privacy and ensure confidentiality by using pseudonyms and data anonymization. Lastly, I acted only within the protocols approved by the University of Virginia's Institutional Review Board (IRB) for Social and Behavioral Sciences.

Delimitations and Limitations

Furthermore, this study includes intentional delimitations and limitations that may potentially impact the scope of the research, external validity, and future recommendations.

Delimitations

Delimitations are boundaries researchers intentionally set to narrow the focus of the research. As this study focuses on gaining a deeper understanding of and managing EBS among teachers at Woodlawn High School, intentional sampling decisions were made. Specifically, only classroom teachers were included in the data collection process. While administrators and related service providers likely have their own experiences with EBS, they were not included because they are not with students in the same concentrated fashion, both in terms of number and time, as classroom teachers.

Limitations

Limitations refer to factors that restrict the research process, thereby affecting the scope, results, and generalizability of the research. Four key limitations emerged throughout the study. The first concerns sample size, which was impacted by challenges in recruiting participants. As the PD session took almost 40 minutes, some teachers were hesitant or unwilling to give up their planning or personal time. Therefore, the data may be biased toward individuals with particularly

strong feelings about the subject or those with a strong personal connection to me. This limitation was further compounded by the second constraint, the study's timing. Data collection occurred about one month before Spring Break. At this point in the year, teachers had not had any meaningful breaks since December, and many described feeling overwhelmed. During the interviews, several teachers mentioned difficulty remembering or applying concepts from the professional development due to the stressful nature of the time of year.

A third limitation involves my positionality as a researcher, which may have influenced how participants responded and engaged with the study. Having been at Woodlawn High School for 13 years, I am deeply ingrained in the community and have strong relationships with many of my colleagues. This may have influenced both who participated in the study and what perspectives they shared. Additionally, my previous impressions of colleagues could have affected my interpretation of the data. However, as previously mentioned, I employed mitigation measures to reduce the impact of my positionality on the analysis and presentation of findings.

The final limitation of the study is the limited generalizability. Since the research focused on a specific school site, the findings may not be applicable to all teaching environments. Specifically, school culture, student demographics, administrative support, and availability of resources heavily influenced teacher responses. Therefore, it is crucial for those looking to replicate the study to understand the unique components of Woodlawn’s environment that may have heightened teachers’ susceptibility to empathy-based stress.

Conclusion

Overall, this chapter outlines the methods used in this qualitative case study, which explored the understanding and management of EBS among teachers at Woodlawn High School. Additionally, it outlines the steps taken to mitigate bias and enhance study reliability and

trustworthiness. As protocols were revised throughout the study, this section was updated to provide a comprehensive and accurate description of the study methodology.

Chapter 4

Findings

The purpose of this case study was to investigate teacher experiences with empathy-based stress and a supportive professional development through the exploration of the following research questions:

- RQ1: How are teachers at Woodlawn High School experiencing and being impacted by empathy-based stress in their personal and professional lives?
- RQ 2: How does targeted trauma-informed professional development for teachers at Woodlawn High School appear to impact their understanding and management of empathy-based stress?

Constructivist Self-Development theory and my conceptual framework guided my exploration and analysis of these questions. Specifically, I focused on individual teacher meaning-making and understanding of empathy-based stress, as well as the possible mitigating impact of a supportive professional development experience.

Analysis of survey, interview, and observation data elucidated the following themes, which align with RQ1 and identified constructs from my conceptual framework.

- Finding 1: Woodlawn teachers reported that they often internalize student trauma and experience emotional overload.
- Finding 2: Woodlawn teachers reported a lack of systemic or school-based EBS support structures.
- Finding 3: Woodlawn teachers discussed the necessity of developing coping strategies, setting boundaries, or emotionally detaching to protect their well-being.

- Finding 4: Woodlawn teachers' responses indicated that their previous experiences, both personal and professional, have a significant influence on how they perceive, process, and respond to empathy-based stress.

The final identified themes align with RQ 2 and focus specifically on protective factors identified in the conceptual framework. The professional development that the teachers viewed was designed to increase trauma literacy, self-care, and mindfulness, which are all potentially protective factors that may buffer the impacts of trauma exposure.

- Finding 5: Woodlawn teachers reported that they found it helpful to recognize the empathy-based stress they were experiencing and generally described the professional development as both validating and informative.
- Finding 6: Some Woodlawn teachers expressed a desire for more community-based elements in their professional development experience.
- Finding 7: Although the PD appeared to have improved participant understanding of EBS, the impact on EBS management was mixed.

The remainder of Chapter 4 will explore the above findings. Analysis will be split between the two questions to allow for more precise analysis of the results for each inquiry. Each of the two sections culminates in a discussion synthesizing the significant findings. This synthesis is prepared in anticipation of the commendations and recommendations presented in Chapter 5.

Findings for Research Question 1

To answer Research Question 1: *How do teachers at Woodlawn High School experience and perceive empathy-based stress in their personal and professional lives?,* it was essential to explore the lived experiences of teachers. Through both survey and interview responses, participants had the opportunity to share their perspectives on empathy-based stress and its

potential impact on their personal and professional lives. From these data, four significant findings emerged. Together, these findings offer a nuanced and detailed picture of the teacher experience with EBS at Woodlawn High School.

Finding 1: Woodlawn teachers reported that they often internalize student trauma and experience emotional overload.

This finding supports RQ1, as all teachers in the study, through both surveys and interviews, described experiencing EBS and reported varying levels of emotional overwhelm from internalizing their students' trauma. Specifically, teachers felt emotionally burdened by student experiences and struggled to separate their work life from their personal life.

Emotional Burden

Survey and interview results highlight the substantial emotional burden of teaching at Woodlawn High School. Notably, teacher responses indicate that this burden was a result of empathic engagement and secondary trauma. The following quote from a pre-survey respondent highlights this phenomenon:

> I find myself constantly trying to understand their situations, feeling their frustrations, and wanting to help them succeed despite the obstacles in their way. It can be emotionally draining, as their trauma is often expressed in the classroom through outbursts, fighting, lack of engagement, etc. Oftentimes, the academics take a back seat because of the trauma the students are bringing into the classroom. The constant need to provide not only academic support but emotional guidance takes a toll on my own well-being. (Pre-survey, Row 6)

This response indicates that it is not just the trauma exposure that impacts teachers, but the subsequent student behaviors that occur as a result of the trauma they encounter. Additionally,

the word "constantly" suggests that this phenomenon is prevalent and a regular aspect of a teacher's workday. Moreover, the phrases "emotionally draining," "feeling their frustrations," and "takes a toll on my well-being" showcase the negative impact EBS has on teacher well-being.

Unfortunately, this experience was not isolated to a single participant but instead reflected a broader trend among respondents. In response to the survey question, *"Briefly describe any challenges you face in managing empathy-based stress in your role,"* all thirteen participants reported difficulties managing this form of stress. Additionally, 80% indicated that empathy-based stress impacts educators in the field "a great deal," while the remaining 20% reported that it affects them "somewhat" or "a little." Notably, no respondents selected "not at all." The following quotes in response to the survey question reflect a representative sample of participant experiences and were selected for their clarity and specificity. They illustrate the deep emotional toll of empathy-based stress and its wide-reaching impact on educators. One participant explained:

> With their experiences and trauma, a teacher can be their "safe person" which can mean they let their emotions out on us. My role as a teacher is blurred because I'm supposed to teach-- but also, be a counselor, a parent, social worker, a psychologist, etc. We have love for the kids so we will extend ourselves to our detriment. (Pre-survey, Row 9)

This response highlights how educators often take on multiple roles beyond instruction—roles that stretch their emotional boundaries in unsustainable ways. Another participant echoed the personal cost of this emotional labor, sharing that they are "emotionally and physically tired all the time," have "no motivation," and experience "mood swings and constant snacking" (Pre-survey, Row 13). These reflections underscore a common theme: the weight of supporting students through trauma often comes at the expense of teachers' own well-being. The overlap

between professional expectations and emotional caregiving not only blurs boundaries but also results in both psychological strain and physical symptoms for many educators.

Given the extended format of the interview, teachers were able to provide a more detailed description of their emotional burden. As mentioned in Chapter 3, all quotes in the findings are labeled by source: interview, pre-survey, or post-survey. Table 4.1 below showcases interview responses that highlight emotional burden.

Table 4.1

Emotional Burden in Interview Responses

Participant:	Remarks:
Aster	There are a lot of different examples that I could think of where [EBS] it really comes to mind. Like times when students have passed away and other students are, you know, trying to emotionally cope with it, and I feel overwhelmed with the prospect of trying to help all the other students cope, as I also cope. (Interview, Row 5)
Lilly	And so while I'm putting on a good front in front of everybody. It's tearing me apart…" (Interview, Row 12)
Daisy	It's like every day. I mean it honestly, it really is every day. I would say that a lot of times, what hits me hardest with these kiddos is when I learned that they have lost their mother. That, for me, is deep. So I embrace the scholars and I like, I tell them that I'll be their mom here at school. It's hard. I mean it really is trauma, it's every day. It's when I say, and I said this before in the first answer, that it is taxing to your spirit. It really is. (Interview, Row 6).
Cassia	So I would describe like well, one thing that I've definitely noticed in this school is there are more students with extreme situations. One thing I wish I had that makes it more stressful for me as a teacher is that I don't always know about them. (Interview, Row 2)
Lupin	I feel emotionally overwhelmed every day. Every day. (Interview, Row 7)

These responses highlight the widespread presence of empathy-based stress and trauma exposure among educators at Woodlawn High School. The references to student and parent death

underscore the intensity of trauma affecting the school community. Notably, two of the five participants reported experiencing these feelings daily, emphasizing the persistent and pervasive nature of EBS. Collectively, these reflections reveal a deep emotional toll, not only on the students but also on the educators who care for them. Moreover, the comments illustrate the ongoing struggle teachers face in balancing their well-being with the emotional demands of supporting their students.

Accumulated Effect of Trauma Exposure

Another notable trend in the data regarding emotional burden and overwhelm was the finding that there may be a cumulative component of trauma exposure. Many teachers reflected on how empathy-based stress has built over the years, tied both to the length of time in the classroom and repeated exposure to trauma. In her interview, Aster partially attributed her levels of EBS to the length of her career.

> I'm definitely experiencing empathy-based stress as a teacher right now. I think that it probably has to do with the amount of time that I've been teaching. With the length of time that's been, you know, 12 years. (Interview, Aster, Row 2)

This comment speaks to the cumulative impact of trauma exposure over her twelve years as an educator. Another participant discussed how they have learned over the years how to direct their energy to potentially mitigate EBS:

> And so I've learned that I can't carry. I can't carry it on. You know, I have to pick and choose what I'm going to get involved with. And so that's how I've been able to survive for the last 30 years. Living by that strategy. Picking and choosing my battles. (Interview, Lilly, Row 3)

Lilly's revelation that she has been able to remain in education for so long, primarily due to her ability to choose her battles, highlights the frequency with which teachers are exposed to challenging teaching situations throughout their careers. Furthermore, her comment that she has "survived for the last 30 years" emphasizes the rarity of such longevity, as well as alluding to the demanding environment within which she has been able to survive.

Interestingly, this trend was also present in teachers who had been teaching for fewer than 10 years, suggesting that it is not just long-term educators facing the cumulative impacts of EBS. When asked about the ways they are currently managing EBS, the following is a response from a teacher who has spent between 4-10 years in the classroom:

> I do not manage it [EBS] well-- I've been burnt out for years. I need to disassociate to deal with the stress, yet that isn't healthy, nor does it benefit my personal life. (Pre-survey,
>
> Row 24)

This admission that she has been burnt out for years, despite the relatively short length of her career, demonstrates the compounding effect of continuous trauma exposure.

Work-Life Separation

Teacher responses indicate that, unfortunately, the EBS teachers experience not only impacts them professionally but also spills into their personal lives. Another subtheme that emerged across responses was the inability to compartmentalize, with 7 of the 13 survey respondents explicitly expressing concerns for student well-being that extend beyond the school day. The following quote from a survey participant best illustrates this:

> The largest challenge is having trouble separating my personal and professional stress. I I am "responsible" for kids from 8 am-3:30 pm every day, so within those hours, I tend to

> invest deeply in their wellbeing- so much so that it can feel like they're my own kids. When 3:30 hits, I am unable to just turn this mindset off. I think and worry about their well-being into the evening and on weekends. (Post-survey, Row 38)

By expressing how the students feel like "their own kids," this educator demonstrates the depth of their investment in their students' well-being. This depth of care makes it difficult to "turn off" the concern after work hours, blurring the boundary between professional responsibility and personal time.

Moreover, when teachers expend a great deal of their empathy and patience on students throughout the day, they often find themselves with little left for their loved ones. This not only affects their capacity to be present with family but also creates guilt or frustration over their diminished emotional availability. Aster clearly describes the impact her profession has on her role as a mother:

> It is hard and sometimes when I have a particularly difficult day, I find that my patience is spent and when I leave work and I go home and spend time with my nephew and my son, I am very exhausted. I'm exhausted and I don't have as much patience with them, which I think I would have on a normal day. (Interview, Aster, Row 35)

Moreover, Daisy discusses her unwillingness to discuss her day when she gets home after work:

> I have a spouse at home who wants to talk about my day. I don't want to talk about my day and it's not because I don't want his friendship, because he's my best friend. But it's been that much. I can't. (Interview, Daisy, Row 14)

Both quotes showcase the ongoing emotional exhaustion that results from constant emotional engagement with students throughout the school day. Another participant mentioned "trying not to bring my situations at work home with me to my family," as the significant challenge they

face when managing work-related EBS. This final quote really gets at something so many educators feel: no matter how hard they try to leave work at work, the stress follows them home. It builds up, day after day, until it starts to spill over into their personal lives. For many teachers, empathy-based stress doesn't stop when the last bell rings. It creeps into their evenings, relationships, and ability to rest and truly reset.

Finding 2: Woodlawn teachers reported a lack of systemic or school-based EBS support structures.

In both the survey and interview components of the study, teachers had the opportunity to reflect on the support they receive at their school site. This question directly relates to RQ1 because the level and quality of support impact how teachers experience EBS. Additionally, this question relates to both teacher needs and protective factors identified in the conceptual framework (Figure 2.1). These two elements interact with trauma exposure to ultimately shape a teacher's sense of personal and professional well-being. Table 4.2 captures a representative sample of teacher remarks describing the systems and support at Woodlawn designed to help teachers deal with EBS:

Table 4.2

Teacher Perceptions of Support

Participant:	Remark:
Survey Respondent	I think the most ironic part of teaching is how much teachers, administrators, and district-centered leadership focus on protecting the 'whole child' while placing little time on the importance of the teachers and staff who work with them every day. (Pre-survey, Row 29)
Aster	I think there's no support. I would say there is nothing in place that has helped me. When anything is brought to an administrator, their response is usually one of nonchalance. (Interview, Row 16)

Lilly	I don't think they addressed it at all at my school, and I don't think they addressed any of our needs here, as we're in survival mode. (Interview, Row 34)
Daisy	I think we wrap our arms around the scholar so much we forget about the adults. Our building this year has had so much trauma with the adults not even having to deal with the children. Oh, and I would say this year and last year, the last couple of years we've had so many staff members who have dealt with things in their personal lives that they never get an opportunity to get that embrace. Here at work, no one checks on us. They don't. You get a mindful moment, whatever that looks like to meditate. I don't go because I just. I have all these other things to do, but you have to basically figure out for yourself how to get that sense of peace. (Interview, Row 16)
Lupin	I will say that I did not receive enough resources. At the school, I already thought I knew what I was going to get myself into, to say the least. But I didn't know it was this much. (Interview, Row 12)
Cassia	I don't even think I can think of anything at all to say. (Interview, Row 20)

Collectively, these quotes highlight a contradiction at Woodlawn High School: while teachers and staff work to support the 'whole child,' they often feel that their own needs are overlooked as individuals and educators. A common theme connecting these remarks is the belief that teachers are left to fend for themselves due to an absence of support structures to help with EBS management. While Aster's comment suggests that administration is explicitly ignoring teacher concerns and responding with "nonchalance," the other comments are less clear as to whether this neglect is intentional or accidental. Regardless, these responses reflect that teachers are feeling unseen and unsupported, both emotionally and professionally.

Several comments in Table 4.2 reflect a shared sense among teachers of being surrounded by trauma, not only from their students but also from colleagues and their own experiences. Despite the emotional weight described, the only form of support mentioned was an optional "mindful moment" offered by the school psychologist a few times throughout the year. As Daisy

notes, this practice is neither consistent nor integrated into the school culture, and it falls short of meeting teachers' ongoing needs. In fact, the teacher who referenced it pointed out that the offering feels disconnected from her day-to-day responsibilities, as she lacks the time and space to engage with it meaningfully. These responses underscore the absence of a systemic, school-wide approach to supporting teacher well-being.

Additionally, these participant responses suggest both disappointment and disillusionment. For example, Lupin's responses show that while he was expecting some level of challenge, he was surprised by the extreme lack of support given the immense challenges. Moreover, the fact that all five interview participants expressed a lack of support demonstrates the pervasiveness of the feeling that teachers are on their own when it comes to managing student trauma and the subsequent EBS.

Individual Burden

Survey and interview responses from Woodlawn teachers reveal that educators carry a disproportionate personal burden due to the absence of meaningful systemic support. In particular, pre-survey results indicate that only 53% of teachers have received any training on empathy-based stress (EBS), and all interviewees expressed a desire for more support in managing it. Without adequate administrative backing or district-level initiatives to promote teacher well-being, participants report having to navigate the emotional and instructional demands of their roles primarily on their own. This burden arises not only from the intensity of their responsibilities but also from the lack of institutional structures designed to alleviate them. The quote below captures how this burden manifests in daily practice:

> Working in [redacted district], I often experience empathy-based stress… The constant need to provide not only academic support but also emotional guidance takes a toll on my

> own well-being. As I try to be there for them, I sometimes carry their burdens with me, feeling the weight of their stress and fear. (Pre-survey, Row 2)

This response suggests the teacher feels personally responsible for managing both their students' emotional needs and their academic progress, without the assistance of external support systems. The phrase "carry their burdens with *me*" illustrates how this emotional weight becomes internalized, exacerbating the already demanding nature of the job.

Beyond the lack of practical support, teachers also noted an absence of acknowledgment from leadership that empathy-based stress is a real and pressing issue. During her interview, Aster expressed frustration with this lack of recognition:

> I definitely think so, because I think there isn't even an acknowledgement of the fact that we are experiencing any empathy-based stress, you know? I think that if there were even an acknowledgement it would help. It's very hard to work here. (Interview, Aster, Row 25)

Her response underscores how even a simple acknowledgment from school leadership could help alleviate the sense that teachers must shoulder this burden alone. Similarly, Cassia reflected on the complete absence of training or professional development related to EBS:

> So I'll be totally honest. I never even heard of empathy-based stress. No training on empathy-based stress. Never. And I've gone to a million PDs but it never comes up. It's like that's not something that we ever talk about or had any strategies for. So I didn't know anything about it or have any strategies for it. (Interview, Cassia, Row 28)

Cassia's quote points to a systemic gap in teacher preparation and ongoing development. Despite extensive participation in professional learning (i.e., a million PDs), she has never encountered information or tools related to empathy-based stress, compassion fatigue, or vicarious trauma.

Her repetition of the words “never” and her admission that it is “not something we ever talked about” emphasize how teacher well-being has been overlooked as a component of educator development for approximately half of the teachers interviewed. As a result, teachers are left to navigate emotionally demanding work without the necessary strategies, vocabulary, or support, deepening the personal burden they carry each day.

Lack of Recovery Time

Another recurring issue identified in the survey and interview responses is the lack of protected time for teachers to process emotions or even complete designated professional tasks without interruption. As a result, teachers at Woodlawn reported using personal time before or during the school day to manage stress and complete all their assignments. This added time is a clear indication that there are no systems in place to support teachers’ needs adequately.

During the pre-survey, one teacher described how their empathy for students prevents them from creating boundaries during their only built-in break time:

> I allow students to spend time in my room during lunch… Lunch is designed to be ‘me time,’ but my empathy… prevents me from drawing that boundary… I can leave work feeling like a ‘punching bag,’ for lack of a better phrase. (Pre-survey, Row 2)

This vivid description of feeling like a punching bag effectively conveys the overwhelming sensation of emotional exhaustion. This feeling is exacerbated when teachers, such as this respondent, sacrifice their personal time and weaken their boundaries to better meet students' social-emotional needs. Essentially, this teacher is working overtime during her lunch, eliminating what little time is available for a brief break.

Other teachers echo this sentiment by discussing how they rely on utilizing their personal time to better prepare for the day’s emotional and mental workload.

> I get to work quite early… I like to get paperwork/grading/prep-work done before kids and staff arrive. I tend to arrive 30–45 minutes before we are required. (Pre-survey, Row 6)

This teacher's response suggests that it is not possible to complete the full range of teaching responsibilities within the limits of contract hours. Similarly, during an interview, Lupin shared, "Strategies that could improve [the situation] for me definitely are having more me time as an educator" (Interview, Lupin, Row 28). In addition to the comments above, 6 of the 13 participants described feeling tension between managing emotions, either their students' or their own, and fulfilling their professional responsibilities. Taken together, these responses emphasize a shared concern: teachers often feel they lack the time necessary to meet both the emotional and instructional demands of their role. As a result, teachers are forced to use their own free time or compromise their boundaries to complete what they perceive as their job obligations.

Finding 3: Woodlawn teachers discussed the necessity of developing coping strategies, setting boundaries, or emotionally detaching to protect their well-being.

While Finding 2 identified a lack of administrative and district support related to EBS, evidence of teacher-created coping strategies emerged within the data. This relates to RQ1 because educators have had to develop coping strategies to reduce the impact of EBS on their personal and professional lives. Additionally, this finding connects to three elements of the conceptual framework: protective factors, personal history, and professional history. Teacher experiences, in both their personal and professional lives, influence how they develop their own coping strategies or protective factors against EBS.

Specifically, in the face of the emotional labor that is prevalent in their job, teachers expressed three patterns in the domain of protective factors: developing coping strategies, setting

boundaries, and emotionally detaching. While the efficacy of these approaches is mixed, most educators surveyed and interviewed expressed some level of personal problem-solving. These responses reveal how, in the absence of systemic support, educators are left to manage intense emotional demands by creating individual strategies for emotional regulation and recovery.

Coping Strategies

Teacher surveys and interview responses showcase how Woodlawn teachers have developed diverse and multifaceted strategies to enhance their social-emotional well-being as they navigate their challenging roles as educators. For some, these strategies involve prioritizing non-work time and taking mindful breaks throughout the day:

> Spending some lunch time simply eating and not doing any work-related tasks, having discussions with colleagues, reading, listening to music, exercise, and spending time at home doing anything that is not related to work. (Pre-survey, Row 22)

This response indicates that the teacher made a deliberate decision to use lunch as an opportunity to step away from the stress of work. Although still in the building, they've carved out an intentional break to protect their well-being. This participant utilizes a multi-step approach to EBS management, which includes a combination of chosen habits (e.g., exercise and spending time with others) and setting intentional boundaries. Together, these strategies fit under the larger category of self-care within the study's conceptual framework to possibly serve as buffers against the impacts of trauma exposure.

Similarly, several other educators recognized the need to integrate self-care routines into the workday. During her interview, Daisy pointed to the SmartBoard that had a YouTube video playing calming LoFi music and a picturesque landscape about which she remarked, "I found that I need to listen to things like this (gestures to SmartBoard). I need these peaceful scenes"

(Interview, Daisy, Row 45). Daisy discusses how she intentionally creates a calming environment for herself and her students throughout the day by playing soothing music and showing peaceful images. Although this is a minor shift in the environment, Daisy emphasizes the importance of such choices in reducing her stress.

Moreover, another educator discussed the self-imposed strategies utilized at school to reduce stress:

> Professionally, I focus on what I can control, creating a safe, structured, and encouraging environment for my students. I seek collaboration with colleagues to share insights and challenges, ensuring I'm not carrying the emotional weight alone. Additionally, I practice mindfulness and reflection to process difficult situations without becoming overwhelmed. Maintaining a sense of purpose and celebrating small victories helps me stay resilient in a demanding environment. (Pre-survey, Row 26)

This teacher employs various strategies throughout the day, including reflection and goal-setting, to enhance their compassion satisfaction and maintain a sense of purpose. Additionally, this educator explicitly mentions collaboration and shared emotional labor, which may be a possible way to reduce the feelings of individual burden. This sentiment was reinforced by another participant who stated the following: "I lean on my support system—whether it's venting to a trusted colleague who understands the struggles" (Pre-survey, Row 25). Having trusted colleagues and strong relationships is identified within both the literature and the conceptual framework as a possible mitigating factor for EBS. This teacher's use of the words "trusted" and "understands the struggles" showcases the importance of being able to lean on others who connect with your experiences.

While some teachers emphasized the value of collegial support, others described coping strategies that centered more on their personal lives. Teachers discussed how structure and routines added to a perceived sense of control. The following comment reflects the structures a teacher has put in place: “I prioritize maintaining regular sleep patterns, exercise, and healthy eating habits with a focus on my family (Pre-survey, Row 23). This quote reveals a focus on structure and routine to maintain physical health. Additionally, the explicit focus on family appears to be an intentional strategy to separate their work from their personal life and focus on family while at home. The following statement reveals that Aster also relies heavily on routines as a coping strategy:

> I'm trying to spend more time praying each day. I have created a designated space for myself in my apartment and that really is helpful because I have a little cushion that I sit on and have a candle that I light. I like having a dedicated space for prayer… (Interview, Aster, Row 26)

Aster’s quote shows how intentional she is in structuring both her time and space at home to improve her well-being. The creation of a prayer area allows her to perform a daily ritual that grounds her and brings her peace after a long or trying day.

Interestingly, the most popular coping strategy implemented was regular physical activity. The figure below includes several teacher comments from both the interviews and surveys that reveal the prevalence and importance of exercise as a self-care practice and stress-management technique.

Table 4.3

Exercise as a Coping Mechanism

Participant:	Remark:
Survey Participant	Personally, I engage in regular physical activity, such as working out and walking, to release stress and maintain balance. (Pre-survey, Row 26)
Survey Participant	For personal stress management, my biggest system is exercise. I commit to exercising in the morning before the day gets away from me. I almost always leave work feeling exhausted and my afternoon workouts suffer. By doing it in the morning, I fully allow myself to have "me-time" and I have more energy for the rest of the day. (Pre-survey, Row 29)
Cassia	Exercise is nonnegotiable because that's the best thing you can do for anything. It's non-negotiable. (Interview, Row 29)
Survey Participant	I also try to engage in activities that bring me peace, like listening to music, going for a walk, or just having quiet time to reset. (Pre-survey, Row 25)

Each of these participants discusses exercise as the foundational or most important strategy that helps them manage the arduous demands of teaching. Instead of discussing exercise as an option, comments such as “non-negotiable,” “I commit to exercising,” and “regular physical activity,” indicate that these routines are not optional or reactive, but are instead intentional habits created to increase both physical and emotional wellness.

In addition to physical fitness, these comments reveal the impact that exercise has on teachers’ emotional well-being. For example, the teacher who exercises in the morning (Pre-survey, Row 29) reveals that she anticipates a draining day and preemptively works to create personal time. Her framing with the words “me-time” shows that her morning ritual energizes her and prepares her for the day ahead. This may be the one time all day that this teacher gets to focus on her own needs. Moreover, the comment from another participant (Pre-survey, Row 26)

highlights how exercise can be used to relieve stress and stabilize oneself after a long day. Overall, while this commitment to exercising may seem small, it appears to serve as a powerful strategy to decrease stress and regulate the nervous system.

Setting Boundaries

While many teachers discuss successful strategies to maintain boundaries between their personal and professional lives, many responses reveal how difficult it is to maintain boundaries in practice. Their responses also reveal the impact that their empathy and sense of responsibility towards their students have on their ability to establish and enforce personal boundaries. The following quote directly showcases the internal struggle when it comes to boundary setting:

> I also allow students to spend time in my room during lunch. Often times, I spend the 45-minutes working through issues with students or listening to them discuss their own personal issues. Lunch is designed to be "me time," but my empathy (and knowledge of these kids- I know they'd rather be in a quiet space than the cafeteria) prevents me from drawing that boundary. Most days I love having kids in the room, but there are certainly days when I would rather be alone in a quiet/adult-only space. This can lead to increased stress or feelings of exhaustion at the end of the day. (Pre-survey, Row 14)

While this teacher recognizes that their lunch time should be protected, they emotionally are unable to create that boundary because they “know these kids” and have “empathy” for them. This sense of internal struggle is mirrored in the following teacher’s response:

> I am definitely still developing strategies. I would argue that most teachers, especially special educators get into this role because we are naturally empathetic. It can be difficult to determine where the empathy needs to stop in order to maintain our own mental health. (Pre-survey, Row 29)

This quote emphasizes how tough it is to care deeply for your students without burning yourself out. When they say “where the empathy needs to stop,” they are pointing out that there is a very blurry line that exists between being a supportive teacher and taking on too much of an emotional burden. Additionally, the remark that they are “still developing strategies” suggests that setting boundaries is not something teachers are taught but instead a skill they must develop on their own.

Although developing boundaries can be challenging, some teachers appear to have developed effective boundary-setting skills. In a quite succinct phrase, a participant expressed the following, “I feel that I am typically pretty successful at leaving work issues and stressors behind when I come home” (Pre-survey, Row 23). Without going into much detail, his admission suggests that they are either particularly skilled at compartmentalizing or have established systems that facilitate a smoother transition from work to home. Another teacher mentions the explicit steps they take to maintain boundaries between work life and home:

> Professionally, I set clear boundaries to protect my mental and emotional energy. That means not checking emails late at night, limiting how much I take on beyond my responsibilities, and reminding myself that I can’t fix everything. (Pre-survey, Row 25)

This teacher’s response showcases the power of both behavioral boundaries and shifts in mindset. Not only do they take intentional actions such as “not checking emails,” but they also work to remind themselves that they do not have the power to “fix everything.” Releasing this burden allows this teacher to “protect [their] mental and emotional energy.” Of all the responses, this teacher provided the most specific details about the systems put in place to create boundaries that support their well-being.

Emotionally Detaching

Although establishing boundaries can be helpful for emotional health and self-preservation in challenging situations, some participants reported feelings of emotional detachment rather than healthy boundaries. Several educators discussed emotional detachment and compartmentalizing as a survival mechanism: “Although this is probably not a good thing, I have learned to compartmentalize. I can now usually leave work at work” (Pre-survey, Row 17). Unlike the participant from Row 23, who speaks of proactively leaving work-related stresses behind, this teacher describes compartmentalizing as a learned reaction to EBS. Similarly, another teacher spoke of intentionally compartmentalizing their work and home life as a management strategy:

> Personally, I try to compartmentalize my life. Any empathy-based stress in my private life, stays there, in my private life. It doesn't come to work with me. At work, if I see there is an issue with a student, I will call a Social Worker or a Related Service Provider. Whichever is appropriate for the situation. (Pre-survey, Row 19)

These reflections highlight various techniques that teachers have developed to alleviate some of the daily stressors by offloading emotions or transferring part of the emotional load to specialists, such as social workers. In the first comment, there is some awareness that compartmentalizing isn’t always “a good thing,” but it appears to be necessary for survival. These comments reflect an ability to manage and contain work-related stress to conserve energy for themselves and their families outside of school.

While some participants were able to strike a productive boundary with their detachment, many spoke of emotional numbing and dissociation that have negative implications for their

well-being. Table 4.4 presents a selection of teacher responses that indicate a sense of emotional numbness or detachment resulting from empathy-based stress.

Table 4.4

Emotional Numbing and Dissociation

Participant:	Remark:
Survey Participant	I do not manage it well-- I've been burnt out for years. I need to disassociate to deal with the stress, yet that isn't healthy nor benefits my personal life. (Pre-survey, Row 24)
Survey Participant	And sometimes I feel callous and frustrated. (Interview, Aster, Row 43)
Cassia	...and we just don't even talk about that [EBS], so, yeah, I feel like it is a badge of honor that you would be like, “I'm fine.” (Interview, Row 41)
Daisy	And when I say this, it's all day long and there are days when I leave out of here and I’m just like done with everything and it makes you not want to do anything at home. (Interview, Row 14)

Although several teachers discussed intentional compartmentalization as a coping strategy, dissociation is when a person feels disconnected from their thoughts, feelings, memories, or surroundings. It can be a way the mind copes with stress or trauma, ranging from mild "zoning out" to feeling completely detached from oneself or reality (American Psychiatric Association, 2022). One teacher (Pre-survey, Row 24) acknowledges that while dissociation helps at work to deal with stress, it has unhealthy implications for their personal life. Their statement that “they have been burnt out for years,” leading to this dissociation, speaks to the costs of long-term exposure to stress and trauma without appropriate training and support.

Moreover, several educators discussed how emotional detachment has almost become a social norm among educators in a high-needs environment. Aster’s admission of feeling

“callous” and “frustrated” suggests that prolonged exposure to stress without meaningful support or solutions leads to a kind of numbness. Furthermore, Cassia underscores that within the school culture, it is a “badge of honor” to act as though the stress and trauma of the working environment do not impact you. This culture of nonchalance may make it increasingly difficult for teachers to recognize their emotional distress or seek help.

Not only do teachers experience numbness, but Daisy’s quote also speaks to emotional depletion. She articulates that after a day at work, she feels like she is “done with everything” and has nothing to give at home. This response again demonstrates that detachment is not always a strategy, but rather a reaction to empathy-based stress. Daisy’s comment reveals that stress from work can not only bring about a callousness at work but also a decrease in the energy needed to build joy, connection, and engagement at home. Overall, this collection of teacher quotes demonstrates that compartmentalizing can be both an intentional choice and a reaction to a stressful work environment. Whether as a conscious effort to separate work from home, a response to workplace culture, or a reaction to prolonged stress, many participants recognize that this separation harms their emotional well-being, personal relationships, and ability to remain emotionally open.

Finding 4: Woodlawn teachers' responses indicated that their previous experiences, both personal and professional, have a significant influence on how they perceive, process, and respond to empathy-based stress.

Participant responses demonstrate that empathy-based stress does not occur in a vacuum but is shaped by lived experiences. Teacher responses correspond to the conceptual framework, indicating that teachers’ personal and professional histories lead to schemas that impact how teachers experience, process, and respond to EBS. The data clearly show how teacher

experiences, whether childhood or ongoing, shape their responses to emotionally charged situations in their classrooms and school environments. The following four sub-themes emerged most strongly from the data, illustrating the multifaceted ways in which teachers are shaped by their personal and professional histories.

Professional Identity

Several educators view teaching not only as a profession but also as a calling or identity that defines who they are as individuals. Specifically, their identities as a specific content teacher or a teacher in a high-needs environment shape their perception of both themselves and their experiences. This sentiment was especially evident among special education teachers, with 6 of the 13 explicitly describing how their role intersects with student trauma and empathy-based stress. The following comment illustrates this connection: “As a special education teacher, managing empathy-based stress is almost part of the job. You’re always thinking about how to support kids who are struggling” (Pre-survey, Row 8). Another teacher shared a similar belief and experience: “In my role as a special education teacher in a self-contained setting, it’s difficult not to internalize the emotional toll students carry in with them” (Pre-survey, Row 9). Both responses indicate the high importance these teachers place on supporting their students who are "struggling" or burdened with an "emotional toll." These comments also reveal these educators’ high awareness of their students’ needs. Although this deep commitment to their students is admirable, it places educators at a higher risk for EBS. These remarks also suggest that they view EBS as an inevitable part of their job, rather than an unfortunate side effect to be addressed.

Backgrounds and Values Shaping Empathic Engagement

During the extended interviews, participants reflected on how their backgrounds and identities influenced their responses to students. All five interviewees described how their professional, personal, or combined life experiences shape their approach to teaching. Among them, the quotes below most clearly demonstrate the powerful role that background and family values play in how educators connect with and support students. For Aster, her family's emphasis on service played a pivotal role in her development as an educator:

> Coming from the background of how my parents raised me…I think that I was always encouraged to always try and help other people all the time, you know, and to try to show other people love and acceptance. So I think that that information informs me like how I respond 'cause I want to have a response of help, that response of like putting the wall up and ignoring. (Interview, Aster, Row 23)

This response highlights how Aster's upbringing, which focused on service, love, and acceptance, shaped her into a teacher who tries to respond to students' needs with help and connection rather than detachment. This suggests that her responses are not only informed by her experiences as an educator but are also deeply rooted in her personal history. Similarly, Daisy's familial relationships shape how she responds to student crises:

> I would say when a lot of times what hits me hardest with these kiddos is when I learned that they have lost their mother. That for me is deep. It's hard. It's so much because I cannot imagine how that would actually feel. I'm really close to my mother and I am an only child with her and that. She's just all I know. I mean, she worries about me to this day, like, every day. (Interview, Daisy, Row 6)

Daisy's response demonstrates how deeply teachers can connect with students' losses based on their own life experiences. However, while this may build connection, the emotional

internalization of student grief makes these events more challenging for teachers. Furthermore, both Aster and Daisy's responses illustrate how family history and values influence their responses to student trauma. In both cases, these experiences appear to heighten their feelings of connection and their desire to be there to support their students. This increased empathy can be a gift for their students, but it can also be detrimental to teachers, especially if the student's situation mirrors or triggers something from a teacher's personal life.

Parenting Deepens Empathic Response

Furthermore, educators' responses to student trauma may be shaped not only by their familial histories but also by their current roles as parents. Among the five interview participants, three are currently raising children. While all three referenced their own children, two described in detail how their experiences as parents influence the way they interact with and respond to their students. Specifically, Cassia addresses how being a mother has helped her to engage with her students emotionally:

> I would say being a mom…I mean, I have boys, so not that boys aren't emotional, but it has definitely helped. I don't think I would be as good at this before I was a mother because I just would not naturally like that. (Interview, Cassia, Row 15)

In this response, Cassia discusses how prior to having children, she was not "naturally" as empathetic, but her experiences parenting have helped her to engage empathically with her students. On the other hand, Daisy discusses how complex it is to be a parent while simultaneously working with students who are struggling:

> And as a mother of girls, first and foremost…I'm just like, wow, this is, this is a lot. And then I just think about them also, you know, I want to give you as much as I can while

> you are here in my space that I can provide for them. But I can't give you, but so much. (Interview, Daisy, Row 10)

Her comment highlights the difficult balancing act a parent-educator must navigate. While her role as an educator strengthens her desire to protect her students, it also intensifies the emotional burden she carries. Moreover, while it may be helpful to draw comparisons to their own children in order to respond empathetically to students, this deep personalization can also leave teachers drained. This sentiment is showcased in Daisy's remark that she can only give "but so much."

Impact of History on Coping Mechanisms

Not only do teachers' history and experiences impact how they respond to student emotions, but they also shape how teachers respond to their own emotions and experiences with EBS. Some teachers feel they can process their emotions, while others have been taught to "power through." Cassia's quote speaks to how her family history shaped her resilience and response to emotional distress:

> Then I come from a military family and we all do that. Yeah, like everyone in our family. My kids. Whatever. Like our whole thing is power through like, get up, put your clothes on and go to work. (Interview, Cassia, Row 41)

Cassia's description of her military family is a perfect example of a "power through" mentality in which emotional vulnerability is not encouraged. This mirrors the previously discussed workplace culture of maintaining composure in the face of discomfort. This mindset can be productive in that it leads to increased functioning and efficiency; however, it can also lead to the ignoring of feelings and an increase in internal distress. In a later quote, Cassia goes on to explain how this approach does not work for everyone and members of her family have suffered from anxiety.

Moreover, these behaviors can be inherited from family, but can also be developed through professional history and work experience, as is seen in the following quote:

> And so I've learned that I can't carry it. I can't carry it on. You know, I have to pick and choose what I'm gonna get involved with. What I'm not going to get involved with. And then everything else. I have to let it fall by the wayside. (Interview, Lilly, Row 4)

This quote reveals that this educator relies heavily on compartmentalization to manage empathy-based stress by picking what to address and what to let "fall by the wayside." Specifically, she has learned through her years of teaching that it is unsustainable to carry all of the emotional burdens. This response also reveals that while families can condition educators to process or suppress emotions, teacher work experiences can lead to a similar conditioning. The pairing of these two quotes suggests that the strategy of emotional distancing can be developed from both upbringing and culture, as well as through professional expectations.

Discussion

This inquiry arose from a problem of practice at Woodlawn High School, where many teachers reported feeling stress and burnout. The first research question aimed to investigate how teachers at Woodlawn High School experience and are impacted by empathy-based stress in their personal and professional lives. The findings of this case study demonstrate that EBS is not an isolated or incidental challenge. Instead, it is a pervasive and deeply personal reality that significantly shapes the daily lives of educators at Woodlawn High School. Findings 1-4 from both survey and interview data demonstrate that EBS is deeply informed by educators' personal and professional experiences.

Like their students, educators are whole people who bring their experiences and perceptions with them into their classrooms. These experiences not only impact how they

interact with students but also how they navigate their own responses to emotional trauma and EBS. These findings highlight that the experience of EBS is not uniform at Woodlawn High School but is heavily influenced by teacher schemas that have been built throughout their lives. However, while each educator's experience with EBS is unique, several key patterns emerged in the data. Specifically, the evidence suggests that EBS most often manifests as an emotional overload that is exacerbated by a lack of support. This experience often causes teachers to develop their own coping strategies. Additionally, teacher reactions, responses, and coping strategies are heavily informed by their personal and professional backgrounds.

Finding 1 illustrates the heavy emotional toll EBS takes on teachers' personal and professional lives. In both the survey and interviews, teachers referred to the constant or everyday nature of trauma exposure and empathic engagement, suggesting that this is a prevalent and unavoidable component of their work experience. While these encounters occur at work, the impacts of EBS are far-reaching, and participants report that they are emotionally and physically affected throughout the day, extending beyond their workday. Although the impacts are different among participants, for example, some mentioned chronic exhaustion while others felt disengaged at home, all study participants indicated some level of emotional distress as a result of empathic engagement with their students. Many teachers also spoke of their inability to separate their work and homelife, finding it hard to draw boundaries that allow them to leave their work concerns at work. Taken together, their accounts indicate the pervasive and damaging impact of EBS at Woodlawn High School.

Subsequently, Finding 2 emphasizes how a lack of support exacerbates teachers' experiences and responses to EBS. A common sentiment shared among teachers was that while they work to validate and affirm the "whole-child," their needs as educators and human beings

are often neglected by both district and school-wide leadership. Specifically, many teachers spoke to a lack of support on the school level when it comes to dealing with difficult emotional situations. A common thread among responses is that this lack of support has left teachers feeling alone when carrying and responding to heavy emotional burdens. Additionally, respondents shared that they do not have time throughout the day to process their own emotions. Numerous teachers reported giving up their free time (e.g., lunch or morning block) to support their students or complete their work, suggesting the regular work hours do not provide enough time to complete their full range of duties while simultaneously supporting students and processing their own emotions. Cumulatively, this data paints a picture of teachers struggling to manage their EBS without appropriate resources, time, or recognition.

In response to this absence of support, Finding 3 examines the strategies teachers have developed to cope with EBS. Many teachers described utilizing proactive approaches such as exercise, engaging with supportive communities, and setting healthy boundaries. However, some teachers reported strategies that are more reactive and can have possible negative impacts on their well-being. The most common of these reactive strategies teachers mentioned was emotional detachment as a survival mechanism. Teacher responses revealed that while this strategy can serve them at times, it also can leave them feeling detached and disconnected in their personal lives. The range of stress management techniques in the data demonstrates the thin line that exists between adaptive and maladaptive coping strategies. Collectively, this suggests that individual coping strategies are insufficient to mitigate EBS and that teachers would benefit from structural and systemic support to manage EBS effectively.

Lastly, finding 4 provides an explanation for the diversity in teacher responses to stress by demonstrating the impact a teacher's personal and professional history has on their responses

to EBS. For some, their formative years and family values shaped how they respond to students in need. Another pattern that emerged from the data was the powerful impact that becoming a parent has on how teachers engage with their students. Further, participants also discussed how their specific job role, most often as a special educator, impacts the way they respond to trauma. Taken together, these insights reveal that EBS is not experienced uniformly but is filtered through schemas built from childhood, family culture, personal loss, and teaching experiences.

Altogether, Findings 1 through 4, grounded in teacher voices across survey and interview data, reveal the complexity and prevalence of EBS and how it interacts with both systemic structures and individual histories. Therefore, in response to RQ 1, the evidence suggests that teachers at Woodlawn High School are experiencing EBS as emotional overload that is exacerbated by a lack of systemic support. To fill this void, teachers have implemented a range of coping strategies that are heavily influenced by their personal histories and individual schemas.

Findings for Research Question 2

Chapter 2's literature review highlights the factors that make teachers particularly vulnerable to empathy-based stress, as well as potential strategies for addressing it. Building on this foundation, Chapter 3 described how several evidence-based strategies were embedded into a professional development video designed for teachers working in high-needs school environments. Research Question 2 aimed to explore whether this supportive PD influenced teachers' understanding and management of EBS. Teachers had two opportunities to respond: first, immediately after viewing the video, and later, when five participants reflected on their experiences two weeks to one month after the initial viewing in a semi-structured interview.

Analysis of both data sets revealed three major themes related to the reception and impact of the trauma-informed professional development.

Finding 5: Woodlawn teachers reported that they found it helpful to recognize the empathy-based stress they were experiencing and generally described the professional development as both validating and informative.

This finding directly connects to RQ2, as it describes teachers' perceptions of professional development. While teachers had diverse reactions to the video-based professional development, the majority of the data reflected that educators had a positive and validating experience with the professional development. In particular, teachers described an increased awareness and identification of EBS, validation of feelings and experiences, and an appreciation for mindfulness strategies and other supportive tools.

Increased Awareness of EBS

Although educators entered the professional development with varying levels of prior knowledge about empathy-based stress, 100% of survey participants reported that the session increased their understanding of the topic. For some, this was their first exposure to the concept, including both its terminology and impact. One participant reflected:

> Honestly, I had never heard of empathy-based stress. In previous PDs in another school district we had many sessions on how to address the trauma our students were experiencing during and after COVID, but it was not focused on teachers and staff. (Post-survey, Row 35)

This comment highlights a systemic gap: while trauma-informed practices for students are common, professional development rarely addresses the emotional toll on educators themselves. This is corroborated by current literature suggesting that the majority of training on social-

emotional learning is student-focused (Lawson et al., 2019). Another participant echoed this absence of support for teacher well-being:

> So I'll be totally honest. I never even heard of empathy-based stress. No training on empathy-based stress. Never. And I've gone to a million PDS but it never comes up. It's like that's not something that we ever talk about or had any strategies for. (Interview, Cassia, Row 28)

Cassia's descriptive reflection reinforces the idea that teacher well-being has long been overlooked in traditional PD spaces. Her words suggest that this session finally provided the vocabulary and strategies to name and address an issue that has, until now, remained undiscussed in the teacher professional development spaces she has experienced.

Additionally, another teacher's survey response shows a clear shift in pre- and post-PD awareness of EBS: "Empathy-based stress is a term I haven't used so much before, and I'm more likely to notice when it's happening now that I've spent this time thinking about it" (Post survey, Row 3). This teacher describes their new metacognitive ability to "notice when it's happening." Another educator discussed how the PD allowed them to recognize their previously unacknowledged daily stress:

> What was helpful, this PD brought awareness. It opened my eyes to realize the stress I/we teachers encounter daily at school. At work, my day is so busy and at times very chaotic, I don't give myself the opportunity to decompress. (Post survey, Row 12)

This comment suggests that before this professional development, these teachers' "eyes were closed" to the stressors of the day, and they took them as an unavoidable part of the profession. Their realization that they do not give themselves enough time to decompress shows that they are becoming aware of how deeply embedded and unexamined the impact of EBS is in their lives.

Moreover, another participant discussed how this increased awareness helps lead to action: “This [PD] improved my ability to identify the phenomenon in real time and to have quick strategies to use as needed” (Post survey, Row 30). This quote shows that the participant not only recognizes the signs of EBS but also feels more prepared to implement research-based strategies for self-regulation. Overall, these responses suggest increased ability to recognize, understand, and respond to EBS.

Validation of Feelings and Experiences

In addition to increasing awareness, another theme that emerged from the data was that teachers felt that both their feelings and experiences were validated. For some, this PD provided straightforward emotional validation: “The session validated my feelings and gave greater insight into empathy-based stress” (Post-survey, Row 10). This response demonstrates that the educator not only gained a deeper understanding of EBS but also had their feelings validated, indicating both intellectual and emotional engagement with the professional development. Another participant discussed how the visuals from the PD spoke to their experience as an educator:

> I loved the visual at the beginning of the PD where the teacher was wearing all of the hats (mediator, decorator, facilitator) because it is so true. Teachers are increasingly held to Such impossible academic standards with no acknowledgement of everything else going on. And it was especially impactful that the PD was facilitated by a teacher who is still IN the classroom. (Post-survey, Row 55)

Moreover, their statement that the impossible pressure on teachers is “never acknowledged” highlights how rare it is for teachers to be affirmed for the “impossible” work they do daily.

Similarly, in her interview, Daisy expresses appreciation for her ability to dialogue about

teacher stress as it is not a common experience: “I appreciate being able to speak on it, and I appreciate this study… Like I am a relic, a dinosaur in this. Like this [staying in the classroom] is unheard of” (Interview, Daisy, Row 37). Daisy’s reflection suggests that she rarely has opportunities to discuss her stress and burnout, and that simply being given the chance to speak about it is beneficial. Additionally, her remark about “being a relic” emphasizes how uncommon and isolating it feels for her to persist in a profession where others constantly leave due to a lack of support.

Along with validating their emotions, participants shared that the PD challenged their previous assumptions about teacher burnout and introduced new perspectives on the issue. A common response was that teachers believed that EBS was an inherent part of the teaching profession:

> I kind of assumed empathy-based stress or "compassion fatigue" was something that came inherently with teaching. I have never thought too hard about what to do about it. This PD legitimized the concept, and I appreciate how seriously it took the topic. It is causing teachers to leave classrooms in droves, and it should be addressed explicitly. (Post-survey, Row 40)

This comment represents a shift in perspective from viewing EBS as an inevitable part of the profession to acknowledging it as a serious issue contributing to attrition. While this realization is sobering, this comment also reveals a shift from thinking EBS is unavoidable to instead viewing it as a challenge that can be “addressed explicitly” to keep teachers in the classroom.

Another educator described an “eye-opening” moment during the PD that challenged their previous thinking:

> One of the reflection prompts was "Think of a time you felt emotionally drained at

> work/what helped you cope?" I immediately thought of about 100 scenarios that made me feel drained. However, when I thought of strategies for coping, I could barely think of one. I have strategies that help me cope AFTER work, but I couldn't think of ANY that could help me cope in the moment. That was really powerful and eye-opening for me. It highlighted that I need to identify some in-the-moment coping strategies (like a quick loving-kindness thought) in order to be sustainable in the classroom. (Post-survey, Row 13)

Again, this response demonstrates a powerful shift in mindset from enduring emotionally draining scenarios to addressing them more proactively with in-the-moment coping strategies. After the PD, this participant is beginning to acknowledge that in order for teaching to be sustainable, they need to build in real-time strategies for emotional regulation. This insight demonstrates how the PD helped reframe EBS as a manageable challenge rather than an inevitable part of the job.

Mindfulness Strategies and Supportive Tools

In addition to learning more about EBS, participant responses demonstrate an appreciation for the mindfulness practices embedded in the professional development. The remarks from the interviews and the post-survey collectively support the idea that participants found the mindfulness practices helpful and relevant to their roles as educators. Specifically, multiple participants reported that the guided loving-kindness meditation was beneficial. One participant stated that it was “beautifully led and very relevant,” suggesting that there was both an emotional reaction and a positive alignment with their context as an educator (Post-survey, Row 2). Another participant mentioned that while meditation is typically difficult for them, they enjoyed this particular experience (Post-survey, Row 10), suggesting that they found this specific

format of mindfulness more accessible than previous attempts.

Moreover, several educators reflected on how they could incorporate mindfulness practice into their day-to-day teaching practices. In her interview, Aster discussed the benefits of practicing mindfulness before her most challenging class: “I did it right before my third period, which is probably my most challenging class. I did feel like it helped my mindset for going into that class” (Interview, Aster, Row 48). This comment highlights how quickly these strategies can be incorporated into a teacher’s real-time classroom practices. Her statement also highlights the benefits that mindfulness can have in terms of emotional regulation. Another teacher discussed that she hoped to utilize similar mindfulness strategies with her students: “I think it would be great to offer suggestions on how teachers could implement guided meditation in their own classrooms with their students!” (Post-survey, Row 21). This survey response suggests that participants were actively considering how to integrate these practices into their teaching. Collectively, these comments demonstrate that educators found utility in the loving-kindness meditation and could see themselves using it moving forward.

Finding 6: Some Woodlawn teachers expressed a desire for more community-based elements in their professional development experience.

When asked how to improve professional development for future implementation, five teachers expressed a desire for a more community-based approach. One teacher’s post-survey response indicated that the session would have been more effective if it had involved “small group, in-person facilitation” (Post-survey, Row 22). Aster echoes this sentiment in her interview by describing how it would have been beneficial to “debrief together” after each individual viewed the video. Both of these comments highlight the perceived benefits of being

able to process a shared phenomenon together with members of a community experiencing the same struggles.

Furthermore, Cassia's interview also reinforced the importance of community building within the PD structure. She expressed that, "it would have been nice to have it delivered to a group of teachers…I always learn from like other people's experiences" (Interview, Cassia, Row 44). This quote suggests that, in addition to alleviating individual burden, a communal experience would enable teachers to learn from the experiences and expertise of their colleagues. She further elaborates on the benefits of group professional development: "That would be good because then people feel heard, too, as opposed to you being by yourself. I think that I think doing something communally might be more effective" (Interview, Cassia, Row 44). Her focus on the emotional validation that comes from being "heard" suggests that this may be a powerful tool to combat the feelings of disconnection that teachers struggling with EBS may experience. Additionally, teacher communal activities can model the mutual empathy and trauma-informed practices that could be utilized in the classroom. Taken together, these participant remarks suggest that while the PD was successful in validating individual experiences, a more interactive community-based approach may have provided a more impactful PD experience.

Finding 7: Although the PD appears to have improved participant understanding of EBS, the impact on EBS management was mixed.

To ascertain if there were lasting impacts of the PD on EBS management, five participants were asked to reflect on their PD experience two weeks to one month following the initial PD experience. Although the majority of participants expressed that the PD offered valuable tools and opportunities for reflection, the extent to which they felt these strategies led to long-term emotional relief and behavioral changes to manage EBS was less clear.

EBS Strategy Usage

The diverse interview responses indicate that, while the PD successfully introduced new strategies for EBS management (see Finding 5), this did not always lead to consistent behavioral changes. Aster expressed her perception that the PD had a long-lasting impact because it "gave [her] new strategies and tools that [she] could use on her own." While her comments suggest she perceives an acquisition of new tools for emotional regulation, she also acknowledges the difficulties of implementing these strategies, stating, "Have I done it more as I should?" This suggests that she has had difficulty incorporating these new strategies into her daily routines. Her response indicates that a gap may exist between knowledge and practice in the domain of EBS management, where individuals are aware of possible strategies but struggle to apply them. These comments also suggest that there is a need for follow-up and structural support to effectively implement the strategies.

This need for systematic follow-up is reflected in the comments of several participants who expressed difficulty remembering the PD, despite the passage of only a few weeks. When asked about key takeaways, Lilly stated the following: "I don't remember much about the video, but I do recall thinking to myself that I thought it was very thorough" (Interview, Lilly, Row 43). It is evident from this remark that Lilly had a positive association with the PD video but was unable to retain or apply what she learned, even over a relatively short period. Throughout her interview, she kept referring to a traumatic situation with one of her students that is "tearing her apart" and making it difficult for her to focus on anything else (Interview, Lilly, Row 12). Other participants remarked on the difficulty of this particular time of year: "Yeah, it's like this is the time of the year where everyone's exhausted" (Interview, Cassia, Row 37). Taken together, these comments suggest that teacher exhaustion makes it difficult to recall and apply new strategies,

even if they would be beneficial to the teacher and the classroom.

Persistence of Environmental Stressors

Finding 2 revealed that teachers often lacked supportive systems to help manage EBS. Building on this, Finding 7 illustrates how persistent stressors and the continued absence of systemic support further limit their ability to implement effective coping strategies. Despite participating in professional development, none of the five interviewees reported a meaningful shift in their emotional state or ability to manage stress over the two- to four-week period that followed. The interview format offered participants an opportunity to elaborate on these ongoing challenges, particularly the stressful working conditions at Woodlawn. For instance, Cassia described feeling overwhelmed on a daily basis:

> Walking down the halls is not peaceful. And because I'm in five different classrooms, I'm always walking everywhere. So it's just so loud. I think the part that I find most stressful is just the loudness. The students are shouting obscenities at each other all the time, and we don't address that as a school. I find that one of the most stressful things is that we don't create a culture where there is the expectation of humanity. (Interview, Cassia, Row 37)

This comment illustrates that, despite the implementation of new strategies, the immense environmental chaos continues to have a profoundly overwhelming impact on Cassia's emotional state. Her use of the word "humanity" further highlights the damage EBS and stress have, going so far as to suggest it can be dehumanizing.

Other teacher comments reflected their ongoing feelings of stress and overwhelm due to a lack of support or systemic change. For example, Aster remarks on the city's lack of support, "I am definitely experiencing empathy-based stress as a teacher right now…it's also because of the

population that I work with and the lack of support that our city has" (Interview, Aster, Row 2). Aster's comment demonstrates that individual coping strategies are insufficient to combat EBS; instead, there needs to be larger systemic changes and increased support at the city level. Likewise, Daisy discusses that her management of EBS has been limited due to a lack of support on the school level:

> And I know that our colleagues have said things to people in power who could make a difference, but it doesn't seem like they care because they don't show it. They don't do anything that shows me that you care about me as a person, when it really comes down to it. (Interview, Daisy, Row 17)

Again, like Cassia's remark in row 37, Daisy also speaks to a feeling of dehumanization that arises from a lack of support in combating trauma and EBS. This comment also demonstrates that teachers often feel isolated from administration and other educational leadership when trying to support both themselves and students.

Together, these comments suggest that an individual-focused PD alone is not sufficient to fully address teachers' experiences with EBS in deeply trauma-impacted schools. When the broader school culture fails to reinforce emotional safety and trauma-informed practices at the systemic level, and the city does not provide schools with sufficient resources to implement such interventions, individual EBS mitigation strategies become difficult to enact. These teacher experiences emphasize the importance of pairing systemic change (i.e., ongoing coaching on management strategies, more professional development, increased administrative support, and additional work time) with trauma-informed professional development to create working conditions in which teachers are realistically able to utilize EBS management strategies. The data suggest that until broad-scale systemic changes are implemented to create more sustainable

teaching environments, teacher well-being will continue to be impacted, despite individual efforts to establish emotional regulation and self-care.

Discussion

The purpose of RQ2 was to examine how a targeted trauma-informed professional development impacts Woodlawn High School teachers' understanding and management of EBS. Taken together, findings 5-7 indicated that while the PD was successful in improving teacher understanding of EBS, the effects on long-term management of EBS were more varied and nuanced. Overall, the data suggest that the PD was an important first step in EBS management; however, teachers discussed their continued EBS symptoms and the systemic and environmental barriers that limited their abilities to implement their new strategies.

Finding 5 demonstrates the positive impact that the professional development had on validating individual teacher experiences and understanding of EBS. Participants expressed appreciation for the increased awareness of EBS and possible mitigation strategies, as well as the validation the PD provided of their lived experiences as teachers in a high-needs environment. Moreover, 100% of the participants expressed an increase in knowledge about EBS, highlighting a structural gap in teacher professional development and preparation that exists in the domain of emotional regulation and trauma-informed practices. Further, many teachers described feeling validated by the PD, further suggesting a gap in trauma-informed PD, which many participants mentioned typically focuses solely on students and neglects teacher well-being.

Additionally, a desire for community-based elements in the PD emerged from the data. Specifically, participants emphasized the value of dialogue and reflection, suggesting that a more interactive and communal approach to PD could help shift the responsibility for managing EBS away from individual teachers. By fostering collective learning and shared strategies, this

approach may reduce the pressure on educators to navigate emotional stressors alone and instead promote a more supportive, team-based response to the challenges of teaching. Therefore, while Finding 5 showcased the positive impact that PD had on expanding the understanding of EBS, Finding 6 suggests that future PDs would be enhanced by incorporating opportunities for connection among teachers experiencing similar difficulties.

Finally, Finding 7 emphasized the difficulty of making meaningful changes to EBS management through an individual-level trauma-informed PD. Participant remarks reflect an appreciation for new mindfulness practices, but they also highlight a difficulty in implementing them with fidelity in meaningful ways. Teacher data also reflect the structural and environmental barriers that leave teachers feeling overwhelmed despite individual attempts to practice mindfulness and self-care. Specifically, teachers like Aster, Cassia, and Daisy spoke about the pervasive emotional toll of working in an environment where they do not feel emotionally safe or valued as individuals due to a lack of support on the school or community level. Again, these insights reinforce that individual-level interventions must be coupled with broader systemic changes to support teachers' emotional well-being in an impactful way.

Overall, the findings for Research Question 2 suggest that an individual trauma-informed PD can have a meaningful impact on teacher understanding of empathy-based stress. However, while the PD validated their lived experience and provided practical strategies, it did not lead to improvements in EBS management, as teachers struggled to consistently implement these strategies due to systemic barriers, chaotic environments, and a lack of continued support. As a whole, the data suggest that without larger structural shifts, even well-designed PD interventions will likely fall short in mitigating the profound, ongoing impact of empathy-based stress among educators.

Chapter 5

Commendations and Recommendations

This study began with the problem of practice at Woodlawn High School: teachers reported experiencing burnout and empathy-based stress, yet they did not receive meaningful professional development or support. In response to the identified problem of practice, this study was developed to understand this phenomenon further and evaluate a possible intervention by exploring the following research questions:

- RQ1: How are teachers at Woodlawn High School experiencing and being impacted by empathy-based stress in their personal and professional lives?
- RQ 2: How does targeted trauma-informed professional development for teachers at Woodlawn High School appear to impact their understanding and management of empathy-based stress?

A qualitative case study approach was employed to answer these questions through survey responses and semi-structured interviews. After careful review of the data, several prominent themes emerged and were described in depth during Chapter 4. Paired with the literature reviewed in Chapter 2, these findings allowed me to identify strengths and weaknesses in EBS management that currently exist at Woodlawn High School. To better support Woodlawn in reducing teacher burnout, the following commendations and recommendations were developed:

- Commendation 1: The teachers at Woodlawn collectively demonstrate a strong commitment to their students, despite facing significant challenges.
- Commendation 2: The Woodlawn teachers' responses demonstrate a high level of teacher resilience and adaptability.

- Recommendation 1: Future trauma-informed PDs should incorporate community-based, peer-driven components.
- Recommendation 2: In addition to receiving individualized, targeted professional development, teachers should receive ongoing, structured support for implementing strategies.
- Recommendation 3: Targeted PDs should be paired with systemic changes in school culture and collective utilization of trauma-informed practices.

The remainder of this chapter concludes the study by elaborating on the above commendations and recommendations.

Commendations

While analyzing interviews and survey responses, the strongest through line that emerged was the dedication, care, and perseverance demonstrated by the teachers despite extremely challenging situations. Instead of expressing hopelessness or self-pity, the majority of teacher responses were student-centered, reflecting a desire among educators to manage their own EBS in order to better "wrap their arms" around students (Interview, Daisy, 15). Two particular areas arose as areas of teacher strength and have thus been identified as commendations: teacher dedication and teacher resilience.

Commendation 1: The teachers at Woodlawn collectively demonstrate a strong commitment to their students, despite facing significant challenges.

My findings revealed that while every teacher spoke of their struggles with EBS, they all prioritized their students. For some teachers, managing their own EBS was seen as essential to effectively supporting and serving their students. For others, it was about mastering mindfulness techniques to teach them to their students. Even though many described the emotional toll

trauma exposure had on their spirit, not a single teacher mentioned any plans to leave the profession. Although teacher responses indicate that they are struggling with EBS, they continue to prioritize their students' needs.

Moreover, the majority of survey and interview participants discussed how their role as a teacher included much more than simply imparting knowledge and grade-level curriculum. Several teachers indicated that they gave up their time, such as lunch or morning block, to either support students in their classrooms or prepare for the many demands of the day. In addition to giving up their time, many teachers reported that they often feel like they are working as a social worker, counselor, and even a punching bag for their students. These diverse roles suggest that teachers at Woodlawn are going above and beyond what is expected of a classroom teacher to support their students. Despite struggles to maintain healthy boundaries and a significant impact on their personal lives, teacher dedication to their students persists.

Commendation 2: The Woodlawn teachers' responses demonstrate a high level of teacher resilience and adaptability.

Furthermore, teachers' continued investment through their emotional labor, steadfast support, and developed coping strategies showcase the high level of resilience and adaptability that teachers at Woodlawn demonstrate within their deeply challenging environment. For example, many teachers discussed self-developed coping strategies to persist in the face of EBS. The most common self-care strategy discussed by study participants was exercise, which was seen as essential for maintaining both physical and mental health. In addition to exercise, teachers mentioned other self-care strategies such as journaling, practicing mindfulness, and listening to soothing music. Additionally, despite a lack of systemic support, teachers were resourceful in creating teacher networks, where they could cope and problem-solve with others.

Moreover, many participants mentioned modifying their emotional engagement to preserve their stamina over time, which suggests a high level of adaptability. For some, such as Lilly and Aster, this included a "pick your battles" approach, in which they intentionally compartmentalized their emotions, allowing them to persist in an environment that presented new challenges daily. For others, such as Daisy, there is a full recognition that their job as an educator is emotionally taxing. Despite her expressed exhaustion, Daisy's responses showcase a resilience and desire to regularly show up for her students. Additionally, teachers' histories and schemas, such as navigating parenthood or growing up in “tough-it-out” households, shaped their abilities to both show compassion and set boundaries. While all participants acknowledged the difficulties of teaching at Woodlawn, their ability to adjust their practices, support others emotionally, and build connections with their students demonstrated a high level of resilience that should be commended.

Recommendations

The following recommendations were developed based on the findings in Chapter 4 and the literature reviewed in Chapter 2. They were also inevitably informed by my orientation towards this problem of practice, as many different recommendations could emerge from the dataset.

Recommendation 1: Future trauma-informed PDs should incorporate community-based and peer-driven components.

Teachers repeatedly expressed, through both surveys and interviews, that they felt a significant lack of systemic support at Woodlawn High School. Given this, it is recommended that future professional development programs incorporate opportunities for community engagement and peer-driven components. Findings frequently identified that teachers'

experiences of EBS, as a result of exposure to others' trauma, were exacerbated by a lack of administrative and district-level support. Teachers such as Aster and Daisy spoke of feeling as though teachers were alone in carrying their emotional burdens. On a broader level, teachers like Cassia spoke of a lack of dialogue or training on EBS. In the absence of systemic support, many teachers discussed leaning on trusted colleagues for support and problem-solving. These relationships and support systems suggest that community and connection are essential to teacher well-being. Additionally, much of the post-PD feedback was centered on a desire to engage with peers or develop strategies for combating EBS in a supportive communal space. Future PDs should incorporate opportunities for small group collaboration and reflection to increase feelings of support.

Moreover, this recommendation is supported by the research. Current literature suggests that trauma-informed organizations with shared values, mutual support, and a sense of community experience lower rates of burnout among working professionals (Keesler, 2020; Sprang et al., 2021). Mercer et al.'s (2023a) study further emphasizes the value of EBS interventions at the organizational level in meeting employees' needs. Furthermore, Adult Learning Theory posits that adults learn most effectively through a problem-centered approach that fosters autonomy and reflection (Knowles, 1980; Rohlwing & Spelman, 2014). Therefore, a peer-driven or communal PD will honor these principles by allowing teachers to reflect on shared experiences and develop coping strategies for addressing fundamental problems in their community. Lastly, research indicates that trauma-informed organizations that promote peer support lead to increased compassion satisfaction, or an individual's ability to find purpose and satisfaction in their work (Christian-Brandt et al., 2020; Tatum, 2023). Overall, the findings and

literature suggest that a more communal approach would assist with long-term changes in EBS management.

Recommendation 2: In addition to receiving individualized, targeted professional development, teachers should receive ongoing, structured support for implementing strategies.

Given the reported prevalence in EBS among educators at Woodlawn and the limited impact of a single trauma-informed PD, it stands to reason that future support should be ongoing, with more structured support for teachers in EBS mitigation strategy implementation. Although teachers initially found the professional development helpful and emotionally validating, it did not produce perceived changes in their emotional state or an increase in the implementation of strategies for EBS management. Although many teachers reported an appreciation for and increased knowledge of management strategies, almost all teachers spoke about the difficulty in implementing them into their daily routines, which hindered any real change in their experiences with EBS. Some teachers also expressed a desire for more structured, regular support to help them implement strategies and manage their emotional well-being. These findings suggest that without continued support, new strategies are unlikely to be implemented due to several variables, including teacher burnout and stressful work environments.

Furthermore, several recent studies have shown that sustained, integrated interventions can significantly improve teachers' long-term management of empathy-based stress (Brown et al., 2023; Jennings & Greenberg, 2009). Additionally, Adult Learning Theory highlights the importance of application, reflection, feedback, and revision in the adult learning process (Knowles, 1980; Rohlwing & Spelman, 2014). A more structured, long-term approach to professional learning would provide opportunities to incorporate these principles and enhance learning and application. Moreover, interventions in other helping professions have demonstrated

that ongoing organizational support is strongly correlated with reductions in EBS and burnout (Sprang et al., 2021; Keesler, 2020). When considered together, the research and findings suggest that without structured opportunities to revisit, reflect on, and refine mitigation strategies, individual PD efforts are unlikely to have a lasting impact.

Recommendation 3: Targeted PDs should be paired with systemic changes in school culture and collective utilization of trauma-informed practices.

Findings from Woodlawn teachers demonstrate the limitations of a single PD without concurrent system-level changes in school culture and administrative support. Although the majority of participants experienced improved teacher understanding of EBS and validated feelings, this did not result in a long-term reduction in EBS. Many teachers' responses highlighted the lack of administrative support, dialogue, and training on teacher well-being and EBS management. Specifically, teachers such as Daisy and Aster noted that a lack of acknowledgement or support from school leadership exacerbated the emotional burden they faced. Others, such as Cassia, spoke to the chaotic nature of the school, where even walking down the hall provokes stress due to a lack of consistency and shared expectations. Taken together, these comments suggest that without a change in the school-wide culture, the impact of individual PDs will be diminished and provide little to no benefit to educators at Woodlawn.

Therefore, future efforts should involve school leadership in an attempt to embed trauma-informed practices into the school culture, hopefully leading to a more collective responsibility for emotional wellness, rather than placing the burden on teachers. This could include offering administrators training in trauma-informed leadership to help them model and encourage practices that support staff well-being. School leaders might also consider creating consistent opportunities for teachers to engage in dialogue about EBS, share coping strategies, and foster

peer support. Incorporating wellness check-ins into staff meetings, providing time for reflection or planning, and promoting consistent behavioral expectations throughout the building may also help reduce day-to-day stress. By creating a culture of shared responsibility, school leadership could make EBS management a priority and a more realistic practice for educators.

Furthermore, the literature demonstrates that organizational shifts are beneficial in reducing empathy-based stress. For example, studies by Sprang et al. (2021) and Keesler (2020) credit improvements in EBS levels to trauma-informed organizational culture rather than individual knowledge gains. While trauma literacy and self-care are essential steps, their effects are magnified or diminished by the surrounding culture, organizational values, and practices (Sprang et al., 2021; Keesler, 2020). Additionally, Tatum's (2023) study found that just as teachers track and respond to student data throughout the year, school leaders should collect well-being data on teachers to improve support and teacher emotional health. Together, the findings and literature suggest that future trauma-informed PDs would be much more effective when paired with schoolwide efforts to become trauma-informed and communally focused on improving teacher well-being.

Conclusion

Overall, the data paint a nuanced picture of a community of teachers struggling to support students while simultaneously trying to preserve their emotional well-being. I commend these educators for their unwavering dedication to their students, despite a perceived lack of support or appreciation. Their ability to continuously show up and adapt to the growing challenges is truly admirable. Additionally, to better support these educators, I recommend that future professional development opportunities be presented in a group setting and include ongoing support and regular check-ins, specifically around the implementation of strategies. Lastly, and perhaps most

importantly, future professional development should be paired with school or district-wide initiatives to improve school climate and cultivate a trauma-informed organizational culture. Without these adjustments, the data suggest that individual teacher actions will not be enough to mitigate the negative impact of EBS on educators' personal and professional lives.

Despite the study's limited scope, this research may have practical application to schools beyond Woodlawn. The phenomenon of increased EBS is not unique to Woodlawn, as there has been a demonstrated increase in student need, both academically and social-emotionally, since the COVID-19 Pandemic (US Department of Education, 2021). In addition to increased student needs, numerous studies indicate a decline in working conditions for educators, stemming from the trauma of COVID-19 and the resulting economic and social struggles faced by many in the United States (Diliberti et al., 2021; Lieberman, 2021; US Department of Education, 2021). Furthermore, schools and districts must address this ongoing stress as it has been shown to harm teachers' well-being, increase attrition (Diliberti et al., 2021), and reduce effectiveness in teaching academics and social-emotional skills (Brown et al., 2023; Greenberg et al., 2016; Jennings & Greenberg, 2009).

This study concludes by reinforcing the critical importance of prioritizing teacher well-being. Specifically, the findings reaffirm that supporting teachers in managing empathy-based stress requires a collective and systemic approach to have a tangible impact. Schools and districts should make intentional efforts to support teacher well-being through training, validation, increased time, and open dialogue about the struggles teachers encounter daily in their post-COVID-19 classrooms. It is only through collective and sustained efforts that empathy-based stress can be effectively managed, enabling educators to support their students fully without compromising their own well-being.

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Appendix A

Professional Development Survey

Section 1: Demographic Information

1. What is your age range?
    a) 18–25
    b) 26–35
    c) 36–45
    d) 46–55
    e) 56+

2. How many years of experience do you have in your current field?
    a) Less than 1 year
    b) 1–3 years
    c) 4–10 years
    d) 11–20 years
    e) 20+ years

3. What gender do you most identify with?
    a) Male
    b) Female
    c) Nonbinary
    d) A gender not listed here

4. Have you attended any previous training related to stress management or empathy-based stress?
    a) Yes
    b) No

Section 2: Pre-Professional Development Understanding of Empathy-Based Stress

5. How familiar are you with the concept of empathy-based stress?
    a) Not familiar at all
    b) Somewhat familiar
    c) Familiar
    d) Very familiar

Definition of Empathy-Based Stress: the stress resulting from exposure to secondary trauma combined with empathy and distress, leading to post-traumatic stress symptoms that decrease engagement and caring behaviors

6. To what extent do you believe empathy-based stress affects professionals in your field?
   a) Not at all
   b) A little
   c) Somewhat
   d) A great deal

7. Briefly describe any challenges you face in managing empathy-based stress in your role.

8. Briefly describe the strategies you currently use to manage empathy-based stress both personally and professionally.

Section 3: Post-Professional Development Survey

9. How engaging did you find the PD session?
   a) Not engaging
   b) Slightly engaging
   c) Engaging
   d) Very engaging

10. How relevant was the content of the PD to your professional role?
   a) Not relevant
   b) Slightly relevant
   c) Relevant
   d) Very relevant

10. To what extent do you feel the PD increased your understanding of empathy-based stress?
   a) Not at all
   b) A little
   c) Somewhat
   d) A great deal

11. What aspects of the PD session did you find most helpful?

12. What aspects of the PD session could be improved?

13. How did this PD confirm or go against your previous understandings and beliefs about empathy-based stress?

14. How satisfied are you with the overall quality of the PD session?
   a) Very dissatisfied

b) Dissatisfied
c) Satisfied
d) Very satisfied

14. Would you recommend this PD to others in your field?
    a) Yes
    b) No
    c) Not sure

15. Would you be willing to participate in a follow-up interview?
    a) Yes
    b) No
    c) Not sure but would like more information

16. Please share any additional comments about your experience or feedback for the facilitator.

Appendix B - Professional Development Materials

Professional Development Lesson Plan and Script

<table>
<tr><th colspan="3">Stage 1 – Desired Results</th></tr>
<tr><td rowspan="6">ESTABLISHED GOALS

Educators will define empathy-based stress and identify possible symptoms

Educators will understand strategies for EBS management

Educators will participate in a loving-kindness meditation to model a possible EBS mitigator</td><td colspan="2">Transfer</td></tr>
<tr><td colspan="2">Teachers will be able to independently use their learning to…
better understand empathy-based stress (EBS) and potential management strategies</td></tr>
<tr><td colspan="2">Meaning</td></tr>
<tr><td>UNDERSTANDINGS
Teachers will understand EBS can impact a teacher’s physical and mental well-being.

Students will understand several strategies with the potential to reduce EBS.</td><td>ESSENTIAL QUESTIONS

How might empathy-based stress be impacting teachers personal and professional lives?:

What interventions may mitigate the negative impacts of EBS?</td></tr>
<tr><td colspan="2">Acquisition</td></tr>
<tr><td>Teachers will know how to perform the loving-kindness meditation.

Teachers will know the definition and symptoms of EBS.</td><td>Teachers will be skilled at identifying possible signs and manifestations of EBS.

Teachers will increase awareness of several possible EBS management strategies</td></tr>
<tr><th colspan="3">Stage 2 – Evidence and Assessment</th></tr>
<tr><td>Evaluative Criteria</td><td colspan="2">Assessment Evidence</td></tr>
<tr><td rowspan="2">Teachers will be evaluated based on pre and post survey data

The PD will also be evaluated through teacher survey answers

A subset of teachers will be interviewed</td><td colspan="2">PERFORMANCE TASK(S):

During the professional learning experience, teachers will complete the following performance tasks:
● Participation in a loving-kindness meditation
● Pre and post-survey completion

Two weeks to one month after the session, a subset of teachers will be given semi-structured interviews to better ascertain their experiences with EBS, as well as their understanding and utilization of the strategies presented during the PD</td></tr>
<tr><td colspan="2">OTHER EVIDENCE;
Observations during semi-structured interviews</td></tr>
</table>

following the initial PD	

Stage 3 – Learning Plan

Summary of Key Learning Events and Instruction

The PD will be provided as an optional session during a school-wide PD day.

Pre-PD Survey:
- Teachers complete Pre-PD survey questions

Introduction:
- Provide context on EBS (definitions, symptoms, and risk factors)

Strategies Discussion:
- Describe the following strategies:
  - Trauma Literacy/Trauma Practices
  - Self-Care
  - Compassion Satisfaction
  - Mindfulness

Intervention Demonstration:
- Provide definitions of empathy and compassion
- Engage in Loving-Kindness Meditation

Post-PD Survey:
- Teachers complete Post-PD survey questions

Facilitator Speech for Professional Development on Teacher Well-being

Hello, everyone. My name is Sasha Gottlieb, and I am both a full-time special education teacher and a doctoral student at the University of Virginia.

Thank you for taking the time to participate in this professional development session. I recognize that each of you has a unique set of experiences, strengths, and challenges that you bring into your work. Today, our focus is on nurturing your well-being, an essential element that enables you to effectively support your students and colleagues.

The questions both pre and post professional development are designed to collect authentic teacher voices on their experiences in the classroom.

Today's session will begin with a brief reflection, followed by a brief explanation of empathy-based stress, next we will discuss trauma literacy, self-care practices, and compassion satisfaction. The session will close with a brief loving-kindness meditation and an opportunity for reflection. There will also be a few survey questions for you to answer after viewing the session. Thank you in advance for your participation and thoughtful feedback!

To begin, take a moment to reflect: How are you feeling today? If you'd like, jot down a word or phrase that describes your current state of well-being. Hold onto it as we move through the session, and we'll return to it later.

Even before the COVID-19 pandemic, teacher attrition was a serious concern in the education system, with nearly 50% of teachers leaving the profession within just five years. Unfortunately, the pandemic exacerbated this issue, leading to deteriorating working conditions. Reports indicate that many teachers are now facing greater social-emotional, academic, and economic demands from their students—demands that have risen sharply since the onset of the pandemic.

At the same time, our schools are facing severe staff shortages. This overwhelming environment puts enormous stress on teachers, with many citing stress as the primary reason for leaving the profession. Research shows that high levels of stress not only lead teachers to exit the field but also reduce their efficacy in teaching. Stress creates a ripple effect, impacting not only the teachers' personal and professional well-being but also the students they are striving to support.

To frame our session, I invite you to consider this: Your well-being is not just a personal matter; it's a professional responsibility. By prioritizing self-care and emotional balance, you create a ripple effect that positively impacts your students, your colleagues, and the broader school community.

Research shows that educators, like professionals in other helping fields, are at risk of experiencing empathy-based stress (EBS) and burnout due to the emotional demands of the job.

Empathy-based stress is a relatively new term that encapsulates the emotional strain that teachers feel due to their empathic engagement with students who are themselves experiencing trauma. It can lead to post-traumatic stress symptoms and a disengagement from work or helping behaviors. Other terms used to describe this phenomenon that you may be familiar with are

compassion fatigue or vicarious trauma, but for the purposes of this study, we will utilize the term empathy-based stress. Our goal today is to explore strategies to mitigate these challenges while cultivating resilience and emotional well-being.

Historically, research on EBS has most often focused on medical and mental health professionals. However, there is now a substantive body of research demonstrating that teachers are uniquely situated to experience EBS. Borntrager et al., 2012; Brunzell et al., 2015; Merrick et al., 2018; Sizemore, 2016; US Dept of Ed, 2021 all highlight the risks of working in close proximity to students who have experienced trauma. Specifically, Sizemore (2016) emphasized that the frequency and duration of classes position teachers to be at risk of trauma exposure. Additionally, Merrick et al. 2018 estimate that over half of all individuals will experience at least one trauma before adulthood, therefore given the prominence of trauma it is likely that all teachers have some level of trauma exposure. Lastly, Hensel et al. 2015 shared that those with their own history of personal trauma are more likely to experience EBS.

Symptoms of EBS are different in both type and severity for each individual but they can include a combination of the following: confusion, anxiety, feeling helpless, difficulty sleeping, declining physical or mental health, increased irritability, feeling disconnected, and even feeling a loss of identity and purpose

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Possible Interventions

Let’s begin with some context. Research suggests that teachers often experience EBS because of the close and sustained interactions they have with students who may have experienced trauma. While the teaching profession has unique demands, there are valuable lessons we can draw from trauma-informed practices used in healthcare and social work.

Building trauma literacy—the ability to recognize and understand the impact of trauma—is a proven strategy for reducing EBS. Studies have shown that teachers who receive professional development in trauma-informed practices feel more equipped to manage their stress and are less likely to burn out.

Now that you have learned about empathy-based stress and its potential side effects, you will be better able to assess if you or any of your colleagues may be experiencing it. Now that we've learned more about the impacts of trauma, we can focus on some potential solutions to help manage. These solutions can be singularly focused such as building personal resilience tools, or communal such as fostering a supportive working environment.

Take a moment to reflect: When was a time you felt emotionally drained at work? What helped you cope? Jot down a few thoughts.

It is very possible that the coping strategy you wrote down is something known as self-care.

Self-care is more than just an individual responsibility; it’s a foundational practice that sustains your ability to teach and lead effectively. Trauma-informed self-care involves recognizing your own emotional responses to the challenges of the job and actively developing strategies to

support your well-being.

Examples of self-care include:

- Prioritizing sleep and nutrition.
- Setting boundaries to maintain work-life balance.
- Seeking peer support and professional counseling when needed.
- Engaging in regular physical activity or mindfulness practices.
- Creating daily rituals that help you reset and recharge.

Pause for reflection: What is one self-care practice you currently use that works well for you? What is one you'd like to incorporate into your routine? Write down your thoughts

Now, think about the obstacles to self-care in your daily routine. What is one challenge that makes self-care difficult? What is one potential solution that may make self-care more sustainable?

Since this presentation is asynchronous we cannot problem solve together but I wanted to present a few ways that you can make self-care more sustainable:

- **Micro-Moments of Self-Care** – Incorporate small, intentional breaks throughout the day, such as deep breathing between classes, stretching while grading, or sipping tea mindfully.
- **Scheduled Non-Negotiable Time** – Set aside dedicated self-care time, even if brief, like a 10-minute morning meditation or an evening walk, and treat it as an unmissable appointment.
- **Integrating Joy into the Workday** – Play calming music while prepping materials, decorate the classroom with inspiring quotes, or start class with a gratitude moment to infuse self-care into the work itself.
- **Prioritizing Sleep & Nutrition** – Small adjustments, like meal prepping healthy snacks or maintaining a consistent sleep routine, can have a big impact on energy levels and overall well-being.

The next possible buffer to empathy-based stress is compassion satisfaction, the fulfillment you feel when helping others. It's a protective factor against burnout and EBS and can be nurtured through intentional practices, such as mindfulness and self-care.

Pause and reflect: What aspects of your work bring you the most joy or fulfillment? Jot down a brief thought and keep it in mind as we continue.

Compassion satisfaction, the joy and fulfillment derived from helping others, can counteract the effects of stress and burnout. Research highlights that teachers with high levels of compassion satisfaction report greater resilience and job satisfaction.

To nurture compassion satisfaction:

- Reflect on moments of success and positive impact in your teaching.
- Celebrate small wins and the growth you see in your students.

- Create a gratitude practice, acknowledging the meaningful connections in your work.

Take a moment to reflect: Think of a specific moment in your teaching career that brought you joy or a sense of accomplishment. What made that moment meaningful? How can you intentionally create more opportunities for such experiences? Jot down your responses. I'd recommend putting your plan to create intentional opportunities on a post-it and place It somewhere in your classroom you are likely to see as a daily reminder.

Mindfulness Based Interventions

Before we learn about the next possible strategy, it is important to understand the distinction between empathy and compassion. Empathy is the ability to share another's feelings whereas compassion is when you feel concerned AND you try to assist someone who is suffering. The difference is that empathy towards suffering can lead to personal suffering and disengagement but compassion can lead to increased positive feelings and increased altruism. Fortunately, compassion is a skill that can be strengthened over time

One of the most traditional forms of compassion training is Buddhist practice of Loving-Kindness Meditation (Chödrön, 2017)and multiple empirical studies (Leiberg et al., 2011; Klimecki et al., 2013; Klimecki et al, 2014) have demonstrated that compassion trainings for LKM lead to increases in helping behavior, neutralized feelings of burnout, and increased positive affect.

We'll now transition into a guided loving-kindness meditation. This practice encourages you to cultivate compassion for yourself and others, fostering a sense of connection and emotional balance.

Begin by getting yourself comfortable. You may close your eyes if you feel comfortable doing so, or soften your gaze.

Take a deep breath in…and out. Allow yourself to settle into this moment. Allow yourself to switch from your usual mode of doing to non-doing, to simply being. Connect with your body and bring your attention to your breathing.

Follow your breath as it comes in, and then out of your body, without trying to change it. Simply be aware of it, and any feelings associated with it. Give full attention to each in breath and then to each out breath.

Being present here in each moment with each breath. If distracting thoughts arise, acknowledge them without becoming involved and return to the practice.

Take a moment now to consciously set an intention for this practice, some examples are: "to open my heart", " to cultivate loving-kindness", " to care for myself" (Sharpio & Carlson, 2009)

Bring to mind a person or a pet for whom you are happy to see and have deep feelings of love. Imagine or sense this person or pet, noticing the feelings you have for them arise in your body. It

may be a smile that spreads across your face it may be a warmth in your body. Whatever it is, allow it to be felt. Then think to yourself:

- May they be safe
-May they be happy
-May they be healthy
-May they live in peace, no matter what I am given
-May their heart be filled with love and kindness.

Let go of this person or pet and continue to keep in awareness the feelings that have arisen. Bring to mind now, and see if you can offer loving kindness to yourself, by letting these feelings become your words:

- May I be safe
-May I be happy
-May I be healthy
-May I live in peace, no matter what I am given
-May my heart be filled with love and kindness.

Notice the feelings and sensations that arise and let them be. Now try offering loving kindness to someone who supports you.

Bring that person to mind and let these words become your words:

-May you be safe
-May you be happy
-May you be healthy
-May you live in peace, no matter what you are given
-May your heart be filled with love and kindness.

Notice the feelings and sensations that arise and let them be. Once feelings for a loved one flow easily, turn your attention to someone with whom you have difficulty. It is best not to start with the most difficult person, but someone who brings up feelings of slight annoyance or irritation. See if you can let these words become your words as you keep this person in awareness.

-May you be safe
-May you be happy
-May you be healthy May you live in peace, no matter what you are given
-May your heart be filled with love and kindness

Notice the feelings and sensations that arise, and see if you can just allow them, and let them be.

Now bring to mind the broader community of which you are a part of. Imagine your family, your colleagues, your neighbours: fan out your attention until you include yourself in this offering of lovingkindness as you let these words become your words:

-May we be safe
-May we be happy

-May we be healthy
-May we live in peace, no matter what we are given
-May our hearts be filled with love and kindness.

Notice the sensations and feelings that arise within you. Sit with them for a few moments until you are ready to end the practice. When you are ready, take one more deep breath and then open your eyes.

Thank you so much for giving that a go. I invite you to take a moment to notice how you feel—physically, mentally, and emotionally. There's no right or wrong way to feel after this practice; simply observe any changes or insights that may have come up.

Loving-kindness meditation encourages us to cultivate warmth, compassion, and connection—first toward ourselves, then expanding outward. For some, this practice brings an immediate sense of peace and joy, while for others, it may stir unexpected emotions. All of this is natural. If any resistance or difficulty arose, know that this is part of the process, and with practice, it often becomes easier.

As you go about your day, I invite you to carry this sense of kindness with you—perhaps by offering yourself a moment of self-compassion or extending a small act of kindness to someone else. Even a simple smile or a kind thought can create a ripple effect.

Before we close, take a minute to reflect on the presented questions. There is no need to write your answers down, just take a moment to ponder. Remember, this is a practice, and like anything, it grows stronger with time.

Thank you for engaging in today's session and for your openness during the meditation. I encourage you to carry the themes of compassion and self-care into your daily routines. Remember, your well-being is vital to the important work you do.

Before we conclude, revisit the word or phrase you wrote at the beginning of the session. Has it changed? If so, in what way?Write down one insight or practice you'd like to implement moving forward.

Thank you again so much for your participation in this study. Your commitment to both your personal and professional growth is inspiring. Thank you for all that you do for your students, your colleagues, and your communities.

There will be a brief set of survey questions for you to complete following this slide. Your input is valued and it is my hope that teacher voices will help teaching to become a more sustainable profession. Thank you again and have a great day!

Appendix C - Interview Materials

Pre-Interview Script:

Hello, as you know, my name is Sasha Gottlieb and I really appreciate your willingness to participate in this interview exploring empathy-based stress in teachers at Woodlawn. During this interview, I want to focus and directly respond to your questions without taking extensive notes, so I would like to audio record you. Do I have permission to make an audio recording of this interview?

This study is for my capstone research project through my doctoral program at the University of Virginia. I want to let you know that this interview will remain confidential, and I have taken steps to protect your identity. I will be the only person with access to the raw data, and your name will appear as a pseudonym in the final report. If, at any point during this interview, you feel uncomfortable or would prefer not to answer a question, that is always an option. Also, if at any point you would like to end the interview, you can just let me know. I anticipate that this interview will take between 30-45 minutes.

Do you have any questions about this process before we begin? If not, please take a moment to read and sign the provided consent form.

Confidential Interview Agreement and Signature Sheet

Research Project Title: The Emotional Toll of Teaching
Principal Investigator: Sasha Gottlieb
Institution: University of Virginia
Contact Information: sdgottlieb@gmail.com, 206-371-1145

Confidentiality Assurance

Your responses will remain confidential. Your name and any identifying information will not be included in any reports or publications resulting from this study. The data collected will be stored securely and accessible only to the research team. If direct quotes are used, they will be anonymized to protect your identity.

Voluntary Participation

Your participation in this study is entirely voluntary. You have the right to decline participation or withdraw at any time without any consequences. If you choose to withdraw, your data will be removed from the study and not used in any analysis.

Potential Risks and Benefits

There are no known risks associated with participating in this study beyond those encountered in daily life. While there are no direct benefits, your insights may contribute to valuable research findings. Additionally, many steps will be taken to ensure data is presented in a confidential matter.

Consent Statement

By signing this form, you acknowledge that you have read and understood the purpose of this study, the confidentiality terms, and your rights as a participant. You agree to participate in a confidential interview for this research project.

Participant Information and Consent

Participant Name: _____

Signature: _____

Date: _____

Researcher's Name: _____

Researcher's Signature: _____

Date: _____

Interview Questions for Teachers After Professional Development on Empathy-Based Stress

Personal Reflection:

1) How would you describe your current experience with empathy-based stress as a teacher?
    a) Potential follow-up: What does "empathy-based stress" mean to you, and how do you think it impacts your teaching and overall well-being?

2) Can you share an example of a time when you felt emotionally overwhelmed by the needs of your students? What were the circumstances, and how did you cope?
    a) Potential follow-up: Are there specific aspects of your teaching that tend to trigger more empathy-based stress? (e.g., working with students with trauma, high emotional needs, or challenging behaviors)
    b) Potential follow-up: How do you think your personal experiences, background, or teaching philosophy influence how you respond to students' emotional needs?
    c) Potential follow-up: In your opinion, how well do the resources and support systems at your school address teacher well-being and the emotional challenges of teaching?

3) How do you typically manage your emotional responses to your students' struggles? Do you find it challenging to balance empathy with your own well-being?

Reflection on Professional Development:

4) What were some key takeaways from the professional development on empathy-based stress? Were there any ideas or strategies that stood out to you as particularly relevant to your teaching experience?
    a) Potential follow-up: Did it provide any new insights or ways of thinking about your own emotional responses to students?

5) Has your understanding of empathy-based stress changed after attending the PD? In what ways has your perspective shifted?
    a) Potential follow-up: Have you identified any new strategies or tools that you plan to implement in your classroom to better manage empathy-based stress moving forward?

6) Do you feel any difference in your emotional state or stress levels since attending the PD?
    a) Potential follow-up: Have the strategies discussed in the session helped you manage or reduce feelings of stress or emotional overload?

    b) Potential follow-up: If you have not utilized any of the discussed strategies, what is your hesitation or barrier in doing so?

7) How well did the PD session address the challenges you face as a teacher experiencing empathy-based stress? Was the content practical, relevant, and aligned with your own experiences?

8) Was there anything that the PD session could have done differently or more effectively to support teachers dealing with empathy-based stress?
    a) Potential follow-up: Would you recommend this PD to other teachers? Why or why not?

9) Moving forward, how do you plan to continue working on your own emotional well-being as a teacher? What additional resources or support might be helpful in your ongoing growth?
    a) Potential follow-up: What would you like to see more of in terms of teacher well-being support in the future?

Appendix D - Electronic Study Information Page

Study Title: The Emotional Toll of Teaching
Protocol #: 7294

Please read this study information sheet carefully before you decide to participate in the study.

Purpose of the research study: The study aims to learn more about your experiences with empathy-based stress. Additionally, this study explores your understanding and management of empathy-based stress following targeted professional development.

What you will do in the study: You will complete a pre-and post-survey after receiving an asynchronous professional development session on empathy-based stress. Additionally, if willing, a semi-structured interview will occur approximately 2 weeks to 1 month following the professional development. Both the survey and semi-structured interview will focus on your experiences with empathy-based stress and your understanding and management of empathy-based stress following professional development.

Time required: The asynchronous professional development will take approximately 40 minutes to complete. Optional interviews will take between 30-45 minutes.

Risks: To prevent the risk of identification, all data from the survey will be presented in aggregate, and any responses that might identify individual teachers will be left out of the final report. Additionally, steps will be taken to maintain the confidentiality of interview participants, such as utilizing pseudonyms and excluding any identifying features or comments from the report. While a few of the questions ask for personal information, the anticipated risk of potential harm is very minimal. You are welcome to skip any questions you do not wish to answer throughout both the survey and interview process.

Benefits: Through professional development, you may benefit from exposure to strategies with the potential to mitigate empathy-based stress. Additionally, this study may help to understand teachers' understanding of empathy-based stress better in order to improve teacher support.

Confidentiality: The information that you give in the study will be confidential. Because of the nature of the data, it may be possible to deduce your identity; however, there will be no attempt to do so, and your data will be reported in a way that will not identify you.

Voluntary participation: Your participation in the study is completely voluntary. Not participating will not affect your employment.

Right to withdraw from the study: You have the right to withdraw from the study at any time without penalty.

How to withdraw from the study: You have the option not to complete the survey. If you want to withdraw from the study, simply do not complete the survey and do not volunteer for the interview. There is no penalty for withdrawing. If you wish to withdraw after the survey or interview, contact the principal investigator (Sasha Gottlieb) via email, phone, or an in-person meeting.

Payment: You will receive no payment for participating in the study.

Using data beyond this study: The data will primarily be collected for a graduate capstone project. The data you provide in this study will be kept in a secure manner by the researcher for five years upon which it will be destroyed.

If you feel that you are experiencing empathy-based stress and would like to seek help, please visit the following resources:

DCPS Employee Assistance Program
https://dcps.dc.gov/page/employee-assistance-program-00

Empathy-Based Stress for Educators
https://www.nctsn.org/resources/secondary-traumatic-stress-educators

If you have questions about the study, contact:
Sasha Gottlieb
Curriculum and Instruction
University of Virginia, Charlottesville, VA 22903.
Telephone: 206-371-1145
Email address: sg3bfz@virginia.edu

Dr. Patricia Jennings
Professor and Program Director
Curriculum and Instruction
University of Virginia, Charlottesville, VA 22903.
Telephone: 434-924-1279
Email address: paj9m@virginia.edu

To obtain more information about the study, ask questions about the research procedures, express concerns about your participation, or report illness, injury or other problems, please contact:
Tonya R. Moon, Ph.D.
Chair, Institutional Review Board for the Social and Behavioral Sciences
One Morton Dr Suite 400
University of Virginia, P.O. Box 800392

Charlottesville, VA 22908-0392
Telephone: (434) 924-5999
Email: irbsbshelp@virginia.edu
Website: https://research.virginia.edu/irb-sbs
Website for Research Participants: https://research.virginia.edu/research-participants

UVA IRB-SBS #7294

You may print a copy of this consent for your records.

Appendix E - Reflexive Memo Questions

1. How does my identity (subcategories below) influence my thinking on this topic and my participants?
    a. Gender
    b. Social Class
    c. Ethnicity
    d. Gender

2. How has my personal interest led me to this topic? How is my personal interest supported or disconfirmed by participant narratives?

3. Where is the power located in relation to my research project? Where am I in the power structure?

Appendix F - Case Study Observation Sheet

Participant Information:

- Participant ID: _____
- Date of Interview: _____
- Interviewer: _____

Participant Affect:

- ☐ Engaged
- ☐ Neutral
- ☐ Hesitant
- ☐ Emotional
- ☐ Distracted
- Notes on affect: _____

Key Themes (Check all that apply):

- ☐ Positive experiences
- ☐ Challenges faced
- ☐ Unexpected insights
- ☐ Contradictions in responses
- ☐ Emotional responses to specific topics
- ☐ Other: _____

Nonverbal Cues:

- ☐ Smiling/enthusiastic
- ☐ Neutral expressions
- ☐ Avoiding eye contact
- ☐ Fidgeting/nervous
- ☐ Other: _____

General Notes:

- Key quotes or observations: _____
- Follow-up areas: _____

Observer's Signature: _____
Date: _____

Appendix G - Recruitment Email

Dear Woodlawn Teachers,

I hope this message finds you well. My name is Sasha Gottlieb, and I am a doctoral candidate at the University of Virginia. I am conducting a research study approved by the University's Institutional Review Board for Social and Behavioral Sciences (IRB-SBS #7294) on teacher stress and their perceptions of a professional development session on stress and well-being. I am reaching out to invite you to participate in this study.

The study involves:

- Completing a brief, asynchronous professional development presentation that includes embedded pre- and post-questions.
- Optionally participating in a follow-up interview to share additional insights (if interested).

Your participation is entirely voluntary, and all information you provide will be kept strictly confidential. The professional development session is designed to be flexible and completed at your convenience, taking approximately 40 minutes.

Your input would be incredibly valuable in helping to better understand the challenges teachers face and explore interventions that may support educators like you.

If you are interested in participating or would like to learn more about the study, please feel free to reply to this email or contact me directly sdgottlieb@gmail.com. I would be happy to answer any questions you may have.

Thank you for considering this opportunity to contribute to research that aims to benefit teachers and the field of education as a whole.

Warm regards,

Sasha Gottlieb

Doctoral Candidate, University of Virginia
(206) 371-1145
sdgottlieb@gmail.com

Appendix H - Sample Excerpts of Field Notes

Aster (4/3/2025)

Aster seemed relaxed during the interview process and was lounging in a comfortable chair. She readily offered teaching anecdotes, even ones that were sensitive in nature. The only time she seemed uncomfortable was when she was discussing her frustration with the lack of systems and supports at the school and district level. During the rest of the interview she seemed relatively emotionally distant.

Aster seemed very cognizant of the impact EBS has on her life, especially in regards to the spillover into her personal life and parenting bandwidth. She was also able to identify triggers and situations that left her emotionally charged.

A few initial takeaways:

- There may be a compounding or cumulative impact of EBS overtime.
- Support plays a large role in the teacher experience of EBS.
- Aster is aware of the negative impact of EBS on her own life, as well as her professional efficacy.
- Personal relationships and support are helpful in EBS mitigation.
- Mindfulness practice was helpful prior to teaching in a stressful situation.

Appendix I - Inclusionary and Exclusionary Criteria

Code Name	Definition	Inclusionary Criteria	Exclusionary Criteria	Example
Schemas				
Personal History	Individual's past experiences outside of work	Includes any information about a teacher's previous life experience outside of work.	Does not include previous work experiences.	"Yeah, absolutely. Then I come from a military family and we all do that" (Interview, Cassia, Row 41).
Professional History	Individual's past professional experiences	Includes any information about a teacher's previous work experience.	Does not include experiences outside of work.	"Moreover, IEP case management adds another layer of stress. Navigating the complexities of legal requirements, paperwork…" (Pre-survey, Row 10)
Trauma Exposure				
Student Experiences	Teacher reports of events experienced by their students	Includes any information about past traumatic or difficult student experiences.	Does not include information about personal traumatic experiences.	"Working in [redacted], I often experience empathy-based stress. The students I work with face numerous challenges, from financial struggles to lack of access to basic resources,

				and it's hard not to internalize their struggles" (Pre-survey, Row 2)
Working Conditions	The various conditions that make up the school environment	Includes any information about class sizes, support, compensation, or resources.	Does not include personal lifestyle factors.	"there's so much stuff that goes on and just even walking down the halls is like, so not peaceful" (Interview, Cassia, Row 37).
COVID-19	The global pandemic	Includes information about direct and indirect impacts of the pandemic on students and teachers.	Does not include working issues not linked to the pandemic.	"In years past (particularly during Covid), I used meditation heavily" (Pre-survey, Row 37).
Needs				
Safety	Comments related to a physical, psychological, or emotional sense of security.	Includes mentions of feeling physically, mentally, or emotionally insecure.	Does not include general stress or anxiety not related to safety concerns.	"It can be emotionally draining, as their trauma is often expressed in the classroom through outbursts, fighting, lack of engagement, etc." (Pre-survey, Row 2).
Trust	Mentions of confidence in the reliability of individuals within the workplace.	Includes comments about trusting staff, students, or administrators.	Does not include general claims of dissatisfaction unrelated to integrity.	"I seek collaboration with colleagues to share insights and challenges, ensuring I'm not carrying the emotional weight alone"

				(Pre-survey, Row 26).
Self-Worth	References to an individual's sense of self-value	Includes statements about feeling valued or devalued by self, leadership, colleagues, or students.	Does not include general emotional states (e.g., feeling tired, anxious, overwhelmed) not tied to self-perception.	"People don't care about teachers" (Interview, Daisy, Row 39).
Intimacy	Personal or professional relationships where individuals feel trust or support	Includes descriptions of deep connections with students, colleagues, or mentors that go beyond surface-level interactions.	Does not include general positive working relationships or teamwork that lack emotional depth.	"I need to talk things through with colleagues and I ask for a lot of help" (Pre-survey, Row 18).
Sense of Control	An individual's perceived ability to influence their environment	Includes mentions of having or lacking autonomy.	Does not include general expressions of stress or pressure without reference to control or autonomy.	"Professionally I focus on what I can control, creating a safe, structured, and encouraging environment for my students" (Pre-survey, Row 26).
Protective Factors				
Compassion Satisfaction	Positive emotional and professional fulfillment	Includes expressions of joy, pride, or purpose from supporting, teaching, or caring for others.	Does not include general job satisfaction unrelated to caregiving or helping (e.g., liking the schedule or pay).	" I keep a collection of positive notes from students and moments of success to look back on when things feel overwhelming—it's my reminder

				of why I do what I do" (Pre-survey, Row 25).
Trauma-Literacy	The knowledge and application of knowledge about trauma and how it impacts students and self	Includes reflections on how trauma impacts student behavior, trauma-informed strategies, or personal impact.	Does not include general mentions of stress, mental health, or emotional regulation not linked to trauma knowledge.	"Understanding signs of trauma which helps foster a conducive learning environment" (Post-survey, Row 5).
Self-Care	Intentional actions or strategies to increase physical, mental, or emotional well-being	Includes descriptions of routines or practices used to manage stress (e.g., exercise, meditation, setting boundaries, hobbies, therapy).	Does not include support from others in stress management.	"I also try to spend time praying, reading, exercising, and with family and friends" (Pre-survey, Row 17).
Mindfulness	The practice of purposefully focusing attention on the present moment with openness, curiosity, and without judgment	Includes descriptions of using mindfulness practices (e.g., breathing exercises, body scans, guided meditations) and/or how it has helped with stress management.	Does not include general stress relief or self-care practices that do not involve intentional, present-focused awareness.	"Meditation is something that is usually difficult for me but I liked the love and kindness guided meditation" (Post-survey, Row 10).
Relationships	References to interpersonal connections and dynamics between individuals in a	Includes descriptions of positive or negative relationships with students,	Does not include individual self-care or mindfulness practices that are not relational in	"I prioritize maintaining regular sleep patterns, exercise, and healthy eating

	professional or educational setting	colleagues, administrators, or families.	nature.	habits with a focus on my family" (Pre-survey, Row 23).

Emergent Codes

Code Name	Definition	Inclusionary Criteria	Exclusionary Criteria	Example
Emergent Codes				
Dissociation/ Emotionally Withdrawing	References to psychological distancing, emotional numbing, or mentally "checking out" in response to stress, overwhelm, or trauma	Includes statements about feeling disconnected from emotions, students, or the work itself. As well as comments about "shutting-down" or "toughing it out."	Does not include general fatigue, burnout, or emotional overwhelm without mention of detachment or numbing.	"Although this is probably not a good thing, I have learned to compartmentaliz e. I can now usually leave work at work" (Pre-survey, Row 17).

Appendix J - Survey Coded Excerpt

Data Set:	Participant Number:	Question Number:	Briefly describe the strategies you currently use to manage empathy-based stress both personally and professionally.				
Presurvey	2	8	Although this is probably not a good thing, I have learned to compartmentalize. I can now usually leave work at work. I also try to spend time praying, reading, exercising, and with family and friends.	self-care	relationships	dissociating/compartmentalizing	
Presurvey	3	8	I need to talk things through with colleagues and I ask for a lot of help.	relationship			
Presurvey	4	8	Personally, I try to compartmentalize my life. Any empathy-based stress in my private life, stays there, in my private life. It doesn't come to work with me. At work, if I see there is an issue with a student, I will call a Social Worker or a Related Service Provider, whichever is appropriate for the situation. It's difficult because when your students walk into you classroom you have about 10 seconds to figure out what kind of mood they're in. In a Special Education classroom, you can have 15 students and 45 personalities easily. Once you've figured out if there are any emotional issues you need to deal with, you have about another 10 seconds to decide if you are going to try and handle it yourself or call a support person. You always have to keep in mind that the CLASS is the priority and not the individual. Sometimes, you have to send them to the Related Service Provider so you can move on with the lesson. It has nothing to do with not being empathetic but, sometimes it's the call you have to make.	sense of control	trauma literacy	dissociating/compartmentalizing	
Presurvey	6	8	Leaving work issues at work or debriefing with coworkers after hours at our favorite spot.	relationship	dissociating/compartmentalizing		
Presurvey	8	8	meditation	mindfulness			
Presurvey	9	8	Spending some lunch time simply eating and not doing any work-related tasks, having discussions with colleagues, reading, listening to music, exercise, and spending time at home doing anything that is not related to work.	mindfulness	self-care		
Presurvey	10	8	I feel that I am typically pretty successful at leaving work issues and stressors behind when I come home and have learned the value of compartmentalizing. I prioritize maintaining regular sleep patterns, exercise, and healthy eating habits with a focus on my family.	dissociating/compartmentalizing	self-care	relationships	
Presurvey	11	8	I've heard about mindfulness, but I struggle to do that or meditation. Professionally, I set a time (typically lunch) where I am without students to have a breath. Also, I lean on my co-worker friends to vent and relate to my experience. I do not manage it well-- I've been burnt out for years. I need need to disassociate to deal with the stress, yet that isn't healthy nor benefits my personal life.	mindfulness	relationships	dissociating/compartmentalizing	self-care
Presurvey	12	8	To manage empathy-based stress, I've had to be intentional about setting boundaries and prioritizing self-care—both in and out of the classroom. Personally, I make sure to create space for myself outside of work. I lean on my support system—whether it's venting to a trusted colleague who understands the struggles or spending time with family and friends to mentally disconnect. I also try to engage in activities that bring me peace, like listening to music, going for a walk, or just having quiet time to reset. Journaling helps me process my emotions without carrying everything with me all day. And when needed, I remind myself that I can't pour from an empty cup—I have to take care of myself to be effective for my students. Professionally, I set clear boundaries to protect my mental and emotional energy. That means not checking emails late at night, limiting how much I take on beyond my responsibilities, and reminding myself that I can't fix everything. I also focus on perspective-shifting—instead of internalizing my students' struggles, I reframe my thinking to celebrate small wins, even if they seem minor. Seeing progress, no matter how slow, keeps me going. I also rely on collaboration and humor to lighten the load. My coworkers and I check in with each other, share strategies, and sometimes just crack jokes to get through tough days. It's a reminder that I'm not in this alone. Finally, I keep a collection of positive notes from students and moments of success to look back on when things feel overwhelming—it's my reminder of why I do what I do	self-care	boundaries	relationships	compassion satisfaction

Presurvey	13	8	To manage empathy-based stress, I prioritize self-care and establish emotional boundaries. Personally, I engage in regular physical activity, such as working out and walking, to release stress and maintain balance. I also rely on close friends, family, and mentors for emotional support and perspective. Professionally I focus on what I can control, creating a safe, structured, and encouraging environment for my students. I seek collaboration with colleagues to share insights and challenges, ensuring I'm not carrying the emotional weight alone. Additionally, I practice mindfulness and reflection to process difficult situations without becoming overwhelmed. Maintaining a sense of purpose and celebrating small victories helps me stay resilient in a demanding environment.	self-care	boundaries	sense-of-control	relationships	compassion satisfaction
Presurvey	14	8	focusing on locus of control	sense-of-control				
Presurvey	15	8	I try to limit the amount of time when dealing with my stressful issues	boundaries				
Presurvey	16	8	I am definitely still developing strategies. I would argue that most teachers, especially special educators, get into this role because we are naturally empathetic. It can be difficult to determine where the empathy needs to stop in order to maintain our own mental health. For personal stress management, my biggest system is exercise. I commit to exercising in the morning before the day gets away from me. I almost always leave work feeling exhausted and my afternoon workouts suffer. By doing it in the morning, I fully allow myself to have "me-time" and I have more energy for the rest of the day. In years past (particularly during Covid), I used meditation heavily. I don't meditate as much anymore because I have trouble finding time during the day- which I'm realizing now is pretty ironic. For professional stress management, I get to work quite early. I know that each day requires such emotional labor, I like to get paperwork/grading/prep-work done before kids and staff arrive. I tend to arrive 30-45 minutes before we are required.	trauma literacy	self-care	mindfulness		

Note: This data appears as a series of screenshots in order to represent the excel spreadsheet clearly.

Appendix K - Survey Tables

Table 4.5

Pre-survey Survey Data

Questions and Response Choices	n	%
Have you attended any previous training related to stress management or empathy-based stress?		
Yes	7	50%
No	7	50%
How familiar are you with the concept of empathy-based stress?		
Not familiar	3	21.4%
Somewhat familiar	8	57.1%
Familiar	2	14.3%
Very familiar	1	7.1%
To what extent do you believe empathy-based stress affects professionals in your field?		
Not at all	0	0%
A little	1	7.1%
Somewhat	1	7.1%
A great deal	12	85.7%

Table 4.6

Post-survey Data

Questions and Response Choices	n	%
How engaging did you find the PD session?		
Not engaging	0	0%
Slightly engaging	1	8%
Engaging	4	31%
Very engaging	8	62%
How relevant was the content of the PD to your professional role?		
Not relevant	0	0%
Slightly relevant	0	0%
Relevant	3	23%
Very relevant	10	77%
To what extent do you feel the PD increased your understanding of empathy-based stress?		
Not at all	0	0%
A little	0	0%
Somewhat	0	0%
A great deal	13	100%
How satisfied are you with the overall quality of the PD session?		
Very dissatisfied	0	0%
Dissatisfied	0	0%
Satisfied	2	15%
Very satisfied	11	85%
Would you recommend this PD to others in your field?		
Yes	13	100%
No	0	0%
Not sure	0	0%