2023

Kentucky Teacher Social-Emotional Competence, Burnout, and School Climate

Monica Mundy
University of Kentucky, monica.mundy@uky.edu
Author ORCID Identifier:
https://orcid.org/0009-0005-1997-124X
Digital Object Identifier: https://doi.org/10.13023/etd.2023.465

STUDENT AGREEMENT:

I represent that my thesis or dissertation and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

REVIEW, APPROVAL AND ACCEPTANCE

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's thesis including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Monica Mundy, Student

Melinda Ickes, Major Professor

Haley Bergstrom, Director of Graduate Studies

KENTUCKY TEACHER SOCIAL-EMOTIONAL COMPETENCE, BURNOUT, AND SCHOOL CLIMATE

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College of Education
at the University of Kentucky

By
Monica Elaine Mundy
Lexington, Kentucky
Director: Dr. Melinda Ickes Professor of Kinesiology and Health Promotion
Lexington, Kentucky
2023

https://orcid.org/0009-0005-1997-124X

ABSTRACT OF DISSERTATION

KENTUCKY TEACHER SOCIAL-EMOTIONAL COMPETENCE, BURNOUT, AND SCHOOL CLIMATE

Teachers are tasked with supporting student learning and academic achievement. Teachers must establish social-emotional competence within themselves to support students' social-emotional learning. Increased teachers' social-emotional competence could lead to favorable student social, emotional, and academic outcomes. To effectively do so, school officials, parents, and community members should support teachers' social-emotional competence equally.

This study examined the relationship between Kentucky teachers' social-emotional competence, burnout, and school climate. The prosocial classroom model provided the theoretical framework for this study, including the five dimensions of social-emotional competence (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making), teacher burnout, and school climate. The hypothesis is that 1) there will be a relationship between social-emotional competence, burnout, and school climate, 2) teachers who report lower levels of burnout will present higher with social-emotional competence, and 3) teachers reporting a favorable school climate will report less burnout and higher social-emotional competence.

Data were collected from 256 teachers using an online anonymous survey distributed via electronic methods, including listservs and social media. Certified Kentucky teachers between 18-75 years of age were eligible to participate. The measures used were The Social-Emotional Competence scale, Maslach Burnout Inventory: Emotional Exhaustion subscale, and Organizational Climate Inventory.

Two studies were conducted to examine the data collected. First was a confirmatory factor analysis of the social-emotional competence survey items. The survey demonstrated a moderate model fit. For the Pearson correlation coefficients: A significant negative correlation was observed between social-emotional competence and burnout, at -.18, indicating a small effect size ($p = .016$, 95% CI = [-.30, -.06]). Also, a significant negative correlation was observed between self-management and burnout, at -.33, indicating a moderate effect size ($p < .001$, 95% CI = [-.44, -.22]). For the linear regression model: The data analysis revealed a significant relationship between burnout and social-emotional competence, $F(1,254) = 8.89$, $p = .003$, $R2 = .03$). Overall, the model accounted for approximately 3.38% of the variance in the outcome. An additional linear regression model was performed. A relationship was also found between burnout and self-management, $F(1,254) = 32.00$, $p < .001$, $R2 = .11$). Overall, the model

accounted for approximately 11.19% of the variance in the outcome. The second study, the Pearson correlation coefficients were calculated. A significant negative correlation was observed between collegial leadership and burnout, at -.36, indicating a moderate effect size ($p < .001$, 95% CI = [-.46, -.25]). A significant positive correlation was observed between institutional vulnerability and burnout at .21, indicating a small effect size ($p = .011$, 95% CI = [.09, .33]). A linear regression model was calculated. A significant relationship between institutional vulnerability and collegial leadership and burnout, $F(2,253) = 22.96$, $p < .001$, $R2 = .15$. Overall, the model accounted for approximately 15.36% of the variance in the outcome.

This study determined a relationship between overall social-emotional competence and burnout, as well as self-management and burnout. These findings highlight the crucial impact of improving social-emotional competence and reducing burnout among educators. Based on the study's conclusions, there is a need to formulate evidence-based policies and strategies for teachers to reduce burnout and foster increased support from school leadership and the community. This could include policies that prioritize and invest in professional development, mental health resources, and supportive work environments. Finally, recommendations for future research involve revising the social-emotional competence survey based on the confirmatory factor analysis.

KEYWORDS: K-12, Teacher, Social-Emotional Competence, Burnout, School Climate

Monica Elaine Mundy

(Name of Student)

11/17/2023

Date

KENTUCKY TEACHER SOCIAL-EMOTIONAL COMPETENCE, BURNOUT, AND SCHOOL CLIMATE

By
Monica Elaine Mundy

Melinda Ickes
Director of Dissertation

Haley Bergstrom
Director of Graduate Studies

11/17/2023
Date

DEDICATION

To my family, this is as much yours as mine. I wouldn't have been able to write a single word without your love and support. Thank you. I love you.

ACKNOWLEDGMENTS

I completed this journey with the help of many people along the way. First, I want to thank Dr. Melinda Ickes. You are a shining example of the researcher I want to be. Your mentorship and guidance mean the world to me. Thank you to Dr. Ellen Hahn. Many years ago, you allowed me to intern with you and your team and see the impact public health can have on a community. I know I am one of many you have mentored, guided, and prepared to protect public health. To Dr. Stephanie Bennett, Dr. Molly Fisher, and Dr. David Royster. Thank you for agreeing to serve on my committee and providing your feedback and guidance. It only made my dissertation stronger, and I have learned so much along the way.

Thank you to my current and former colleagues UK, Tobacco Prevention and Cessation Program, and EKU—for your support and encouraging words throughout this process. To Kathy and Amanda, your friendship and support means the world to me. I have learned so much from both of you.

None of this would be possible without my family. My heart is with my family that isn't here with me today but in spirit, including my mom, Elaine, and son Cory. To my sister, Jessica, thank you for always believing in me. Your constant support and mom would be so proud of all we both have accomplished. Mrs. Mundy, thank you for being my second mom and caring for Tori and Cornell.

Most importantly, to my husband Thomas, thank you for all your support. Words cannot express how much I love you. You have been there with me every step of the way. I couldn't have done this without you. To my kiddos Tori and Cornell, I love you both. You can be anything you want to be. Shoot for the moon and stars, and you can have it.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 INTRODUCTION

1.1 Background

Teachers are the pillar of learning for students and have a lasting impact beyond the classroom. While teachers are tasked with helping students learn, their impact transcends academic outcomes (Ing Foundation, 2010). Eighty-eight percent of Americans said that they had a teacher who positively impacted their life, whereas 98% of the Americans believed that teachers could change the course of a student's life (Ing Foundation, 2010).

Teachers are often compelled to go beyond just teaching and supporting students' social and emotional well-being. However, in several scenarios, the welfare of teachers is often not addressed, consequently affecting their ability to achieve their objectives effectively. Therefore, it is essential to understand teachers' needs and formulate ways to aid their social and emotional development. Existing literature posits that when a teacher's social and emotional well-being is supported, it leads to better management of the daily stressors of teaching (Jennings et al., 2011; O'Brennan et al., 2017), effective classroom management (Jennings et al., 2011), and supportive and caring relationships with students (Poulou, 2017).

According to Hart et al. (2020) and Payton et al. (2008), teachers should address their social and emotional needs for students to achieve their full potential in school. A student's relationship with a teacher could influence their academic achievement; a healthy student-teacher relationship leads to higher academic achievement (Gehlbach et al., 2016). Oberle and Schonert-Reichl (2016) found a positive correlation between teachers who reported experiencing burnout and increased students' cortisol levels.

Students taught by teachers without burnout were more likely to perform well than those taught by teachers experiencing burnout. Similarly, Hoglund et al. (2015) found a positive correlation between teacher burnout and student behavior in the classroom.

While teachers' influence is wide-reaching, teaching is still their primary job and profession. There have been stark changes to the teaching profession in recent years. Since the late 1980s, there has been a steady increase in teachers entering the workforce, but not at the speed needed to replace the retiring baby boomer's generation (Ingersoll et al., 2018). While there has been a growth in the teachers entering the workforce, an estimated 44% of the new teachers leave the profession within five years (Ingersoll et al., 2018). For those still in the profession, 18% of public-school teachers supplemented their income with a job outside the school system in the 2017-18 school year (Wilhelm & Lewis, 2021).

Unfortunately, the emergence of COVID-19 and its accompanying adverse effects on the teacher's work environment greatly affected the general teacher's well-being inside and outside the classroom. Due to the unfavorable effects arising from the pandemic, nearly one in four teachers were likely to resign from their jobs at the end of the 2020-2021 school year (Steiner & Woo, 2021). Nonetheless, the environment in which teachers work could be stressful and lead to burnout. The job demands of teachers are high, with the average educator spending over 50 hours working in a week (Ed Week Research Center, 2022). Teachers are also more likely to report burnout if they work in an environment with poor working conditions, excessive job demands, lack of training, and lack of administrative support (Blazer, 2010).

In recent years, the need to address the well-being of teachers has significantly attracted increased attention. Different studies revealed a positive correlation between the well-being of teachers and improved school climate (Abiodullah & Aslam, 2020; Jennings, 2011; Poulou, 2017). Furthermore, teachers are tasked with ensuring quality education and a good learning environment in their school settings. Therefore, ensuring a teacher's well-being should be a continued priority, as an essential aspect in providing a high-quality education and an appropriate learning environment.

To provide students with the necessary skills and the best environment to thrive, school administrators should also provide teachers with the same supportive work environment (Berg & Smith, 2018). Research by Ferguson et al. (2012) demonstrated the negative impact of burnout among teachers, including the inability to achieve their objectives, high demotivation rates, increased absenteeism, and poor relationships with the students. According to Pressley (2021) and Sokal et al. (2020), the negative impacts of COVID-19 pandemic continue to affect the teachers' social and emotional well-being, consequently upsetting the delivery of quality services to students. In addition, stress negatively affects a teacher's physical health (Souza et al., 2012), leading to a stress spill-over effect into the classroom environment, resulting in adverse student outcomes and academic performance (Becker et al., 2014; Hoglund et al., 2015). Although researchers have given significant attention to teacher burnout (Chang, 2009), and general well-being (Mercer & Gregersen, 2020; Spilt et al., 2011), the inclusion of adult social-emotional competence is an emerging research area.

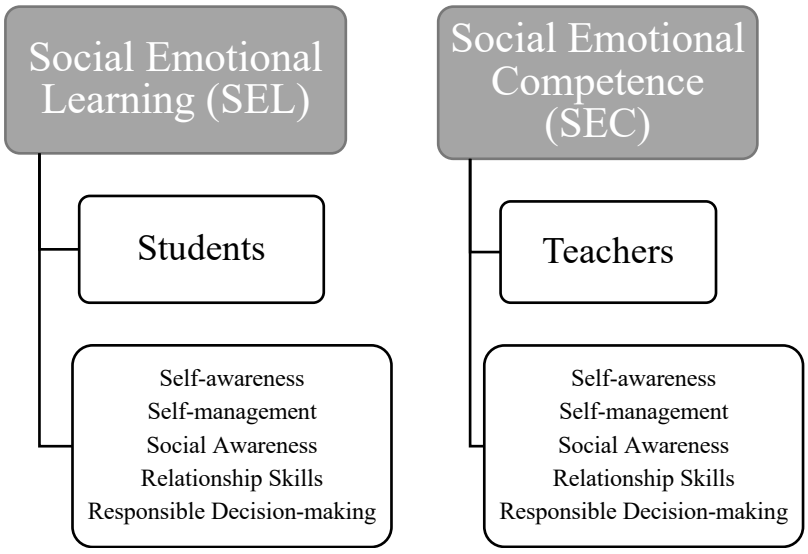
Teachers are often called upon to support students' social and emotional well-being, as illustrated by the social-emotional learning model. Accordingly, social-

emotional learning is the process of supporting students by developing their social and emotional skills to improve their health and healthy relationships with others (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2022). Social-emotional learning concept is a widely accepted framework in the United States to address students' social and emotional needs within their school settings (Weissberg et al., 2015). The Kentucky Department for Education's Safe Schools Team encourages using the social-emotional learning paradigm to advance educational equity through multilevel partnerships from family to the community to support student well-being and academic achievement (Kentucky Department of Education, 2022).

In addition, student social-emotional learning is a topic of interest to a growing number of researchers (Bierman et al., 2010; Durlak et al., 2011; West et al., 2020; Zins, 2004). However, while schools are encouraged to include social-emotional learning principles for students, there is less emphasis on supporting the emotional well-being of teachers, which entails the educators' social-emotional competence. Jennings et al. (2011) defined social-emotional competence as "a broad construct viewed as an outcome of social-emotional learning" (p. 1). On the other hand, Weinert (2001) denoted social-emotional-competence as acquired skills and knowledge to manage, regulate, and navigate emotional situations.

Figure 1.1 provides an illustration of social-emotional competence and social-emotional learning. While social-emotional learning (SEL) and social-emotional competence might seem similar, SEL references the student's social-emotional well-being whereas social-emotional competence refers to a teachers' social-emotional well-being.

Figure 1.1 Social Emotional Learning and Social Emotional Competence



Teachers should establish social-emotional competence within themselves to support students' social-emotional learning. To explore social-emotional competence, first, there is a need to understand what makes up a socially and emotionally competent teacher. Social-emotional competency comprises of five elements: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Jennings & Greenberg, 2009). To be consistent with the prosocial classroom model and the Jennings and Greenburg (2009) model, this study uses the term social-emotional competence throughout the study.

There are no published peer-reviewed articles focused on Kentucky teachers' social-emotional competence using the collaborative for academic, social, and emotional learning (CASEL) framework. Therefore, this study addresses the continued need to explore the well-being of teachers through a social-emotional competence lens in light of challenging academic times.

1.2 Statement of the Problem

The current relationship between teacher social-emotional competence and well-being factors such as burnout, and school climate is a problem of interest. Schools should focus on not only students' but also teachers' social and emotional well-being (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2022; Mansfield et al., 2016). Jennings and Greenberg (2009) emphasized the need for schools that strive for student success to focus on developing teachers' social-emotional competencies. This concept entails the act of teachers using acquired skills and knowledge to manage, regulate, and navigate emotional situations (Weinert, 2001). There is a need to better understand teachers' social-emotional competence and well-being and the relationship with student performance.

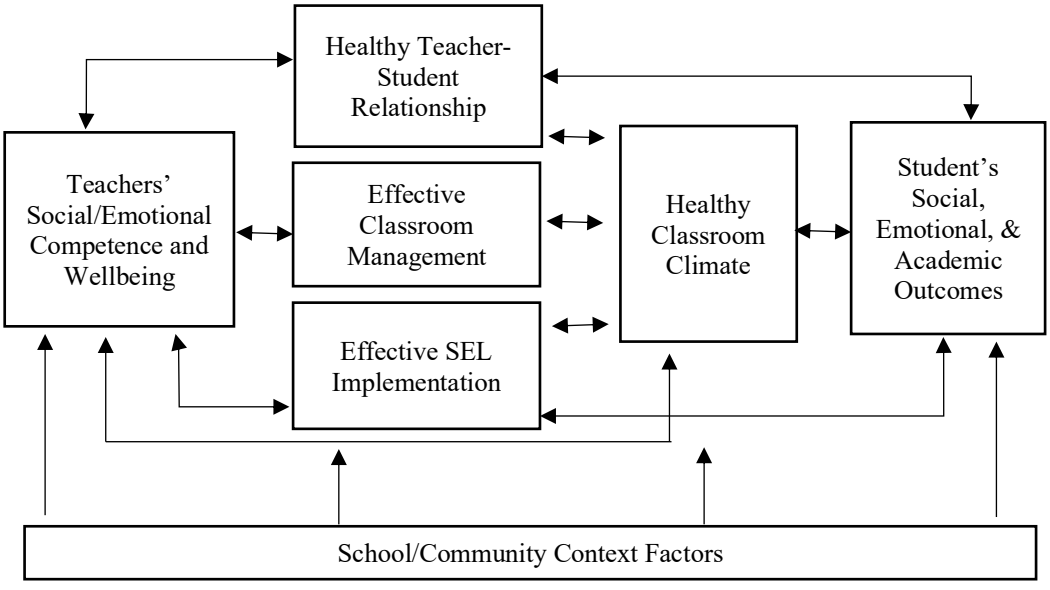
Though school climate is a widely researched topic, there is room for additional research focusing on the relationship between school climate and teacher social-emotional competence and well-being. According to Collie and Perry (2019), it remains imperative to understand how school climate and social-emotional competence influence teacher experiences, including how school instructors experience pressures related to their work. Moreover, Simon and Johnson (2015) noted an association between school climate, teacher turnover, school culture, and student achievement. However, the literature indicates a further need to understand the school climate and social-emotional competence.

1.3 Theoretical Framework

1.3.1 Prosocial Classroom Model

The prosocial classroom model (Figure 1.2) served as the theoretical framework for this study. In line with the framework, Jennings and Greenberg (2009) posited that teachers' social-emotional competence influences the prosocial classroom environment elements, leading to favorable student social, emotional, and academic outcomes. The primary constructs of the model are teachers' social-emotional competence and well-being, healthy teacher-student relationships, effective classroom management, effective social-emotional learning implementation, healthy classroom environment, students' social-emotional well-being, academic outcomes, and school/community context factors. This study focused on teacher's social-emotional competence, burnout, and school/community context factors, specifically school climate.

Figure 1.2 The Prosocial Classroom Model



Source: Jennings and Greenberg (2009)

1.3.2 Social-Emotional Competence

Jennings et al. (2011) defined social-emotional competence as a broad construct arising from social-emotional learning (SEL). Therefore, understanding social-emotional competence requires knowledge about the concept of social-emotional learning. Reasonably, while establishing the definition of social-emotional competence, Jennings et al. (2011) mentioned SEL as one of its constituents. The Collaborative for Academic, Social, and Emotional Learning (CASEL, 2022) defined social-emotional learning as:

> The process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel, and show empathy for others, establish, and maintain supportive relationships, and make responsible, caring decisions—field.

CASEL is an organization focused on advancing all students' academic, social, and emotional competence (CASEL, 2022). The body views social-emotional learning for students as an outcome of teachers' social-emotional competence.

In addition to social-emotional competence, Jennings and Greenburg (2009) discussed well-being. The relationship between social-emotional competence and burnout is explored within the prosocial classroom model when addressing the five constructs of social-emotional competence (self-awareness, self-management, social awareness, relationship skills, and responsible decision making) and the two constructs of teacher-burnout (Jennings & Greenberg, 2009). For example, Jennings and Greenburg (2009) that teacher's demonstration of social-emotional competence in a specific classroom environment could be influenced by the school climate and the level of support provided by administrators. This aspect warrants additional exploration of the concepts and how they influence each other. As seen in Figure 1.2, teacher social-emotional competence and well-being are often referred to in tandem in the prosocial classroom model.

Nevertheless, to properly understand burnout, there is a need to also explore each of the factors of teacher well-being including stressors that the educators face. In this study, the researcher primarily focused on burnout, but also examined research regarding teacher well-being and stress to fully understand the relationship between the constructs, and the influence they have on teacher social-emotional competence.

There are different benefits to teaching and student learning when teachers possess high levels of social-emotional competence. Jennings and Greenberg (2009) described social-emotionally competent teachers as highly self-aware, respectful of others, taking responsibility for their actions, managing their emotions and relationships, and demonstrating mastery in addressing their social and emotional challenges. Teachers could also form relationships with parents, particularly those who are more challenging and demanding, maintain professional relationships with colleagues and school leadership, and become better equipped to handle disruptive and difficult student behaviors. Conversely, teachers lacking social-emotional competence experience challenges in the classroom, such as psychological distress and burnout (Jennings & Greenberg, 2009). While interventions exist to address these challenges, such as mindfulness (Dorman, 2015), it is still needed to better understand the relationship between social-emotional competence, burnout, and solutions to support teachers.

1.3.3 School Climate

The school/community context factors include community culture, co-teacher support, school district in-service opportunists and values, local and federal education demands and policy, school norms and climate, and principal and district leadership , (Jennings & Greenberg, 2009). Nonetheless, Jennings and Greenberg (2009) noted a

literature gap due to the little research examining social and community contextual factors and social-emotional competence.

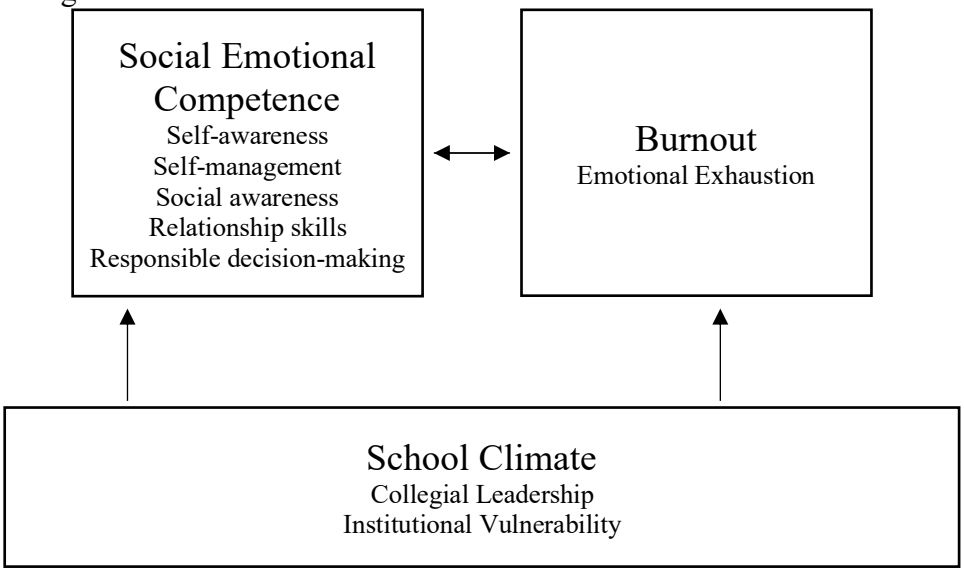
To explore school/community context factors, this study focused on the school climate. Thapa et al. (2013) identified five dimensions of school climate: safety, relationships, teaching and learning, institutional environment, and the school improvement process. However, despite these five domains being specified, the most important one remains unclear. Hence, Thapa et al. (2013) recommend focusing on pre-existing reliable measures for school climate. While Thapa et al. (2013) provides these five dimensions, they do recommend using a preexisting measure for school climate. For the purpose of this study, we will be examining school climate using the Organizational Climate Index, specifically institutional vulnerability and collegial leadership. Both domains focus on the institutional environment. Therefore, to fill the existing literature gap, this study included an existing reliable measure for school climate (Hoy et al., 2002).

1.4 Problem Statement

The purpose of this quantitative study was to explore the social-emotional competence and burnout of Kentucky teachers. Understanding a teacher's social-emotional competence is an essential first step in learning to assist teachers in delivering social-emotional learning content to students. At the same time, some school districts opt to use private companies to administer proprietary surveys to understand their teachers' social-emotional competence. However, no peer-reviewed surveys or studies examined teachers' social-emotional competence by measuring the five components that make up the construct. Furthermore, from a social-emotional competence perspective, understanding the implications of school climate is a critical, but lesser-studied area of

the prosocial classroom model. Figure 1.3 demonstrates the relationship between the main constructs for this study.

Figure 1.3 Teacher Social-Emotional Competence, Burnout, and School Climate Study Design



1.5 Research Questions

Chapter IV and Chapter V consist of two resulting manuscripts from the dissertation study. Below are the research questions for each manuscript.

1.5.1 Manuscript 1 (Chapter 4)

RQ1: Does the five-factor model (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making) for the social-emotional competence fit the data?

RQ2: What is the relationship between overall social-emotional competence, social-emotional competence constructs (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making), and burnout in teachers?

1.5.2 Manuscript 2 (Chapter 5)

RQ1: What is the relationship between school climate, burnout, overall social-emotional competence, and social-emotional competence constructs (self-awareness, self-management, social awareness, relationship skills, responsible decision-making) in teachers?

1.6 Significance of the Study

According to The Coalition for National Health Education Organizations (2007), health education aims to "positively influence the health behaviors of individuals and communities and the living and working conditions that influence their health." While the focus is often placed on teachers providing health education to students, time be equally taken to ensure that favorable working conditions for the teachers are created. This study further supports understanding teacher social-emotional competence and burnout while exploring additional school/community context factors, a construct of the prosocial classroom model. By exploring these constructs, the findings of this study could inform school districts and administrators about the needs of teachers to provide support and resources to their workforce.

As the United States Department of Education reported, in the 2019-20 school year, Kentucky experienced a critical teacher shortage in 45 identified areas across 228 districts (Kentucky Department of Education, 2022). In Kentucky, there have been several high-profile issues concerning teachers both in and outside the classroom (e.g., the teacher pension system crisis of 2019 leading to teacher protests and walkouts). Therefore, a proper understanding of social-emotional competence and teacher burnout provides a clear picture of specific concerns that may exist. In addition, understanding

these concerns could aid in teacher recruitment and retention. The proposed study uniquely adds to the existing literature as no studies have explicitly focused on Kentucky teachers' social-emotional competence. Furthermore, this study's findings might guide the development of evidence-based mental health interventions to provide educators with the support they need at the individual and organizational levels to cope with the stressors they face during their work. The findings could also influence health education, program planning, intervention design, and implementation.

Organizational support of teachers is essential to provide them with the necessary support, training, and resources needed to deliver high-quality learning environments for students. Therefore, there is a need to focus on teacher health and well-being. Schools should provide a supportive environment for teachers who promote student learning by boosting their social and emotional well-being (CASEL 2021). Likewise, the National Commission on Social, Emotional, and Academic Development recommended that administrators encourage the development of adult practice to support student's social, emotional, and academic development (Jones & Kahn, 2018). Finally, the Rand Corporation (2021) suggested that school district leaders should collect data regarding teacher work conditions and the related impact to their well-being. This data collection could help identify areas where administrators and school districts could help improve adult social-emotional competence by providing training, resources, and learning opportunities and recognizing the support services school administrators and leadership could provide.

Although Jennings and Greenberg (2009) presented the broad construct of social-emotional competence and shared the construct's importance, there was no quantitative,

peer-reviewed validated measure for each of the five elements of social-emotional competence, presenting a gap in the literature. Smetana (2020) provided an instrument in their dissertation for the first quantitative instrument to measure all five constructs of social-emotional competence. For this study, the same instrument as Smetana (2020) applied was used to conduct proper statistical testing to determine the reliability and validity of the measures with Kentucky public school teachers. It is critical to continue to provide validated quantitative measures for reliable and consistent measurement of tested constructs. Given that the instrument was tested in this study, it could add to the literature base in a future peer-reviewed journal article.

1.7 Delimitation

Researchers create delimitations through their choices and decisions regarding the study's parameters. Delimitations are within the researcher control and are imposed to ensure that the research study is manageable (Dimitrov, 2008). There are three delimitations observed in this study. The first delimitation was that the study only focused on teachers in public schools in Kentucky. While this study could have been expanded to include teachers in other states, the decision to limit it to the state of Kentucky provided a manageable pool of potential study participants creating an available sample size.

The second delimitation was that the study only focused on teachers when other school staff could also provide supportive roles to students. The impact of social-emotional competence could be an essential factor in implementing social-emotional competency strategies in a school setting in Kentucky. Due to limited quantitative publicly available survey instruments, focusing on teachers alone provided the

opportunity to further validate pre-existing survey instruments within the chosen population.

The third delimitation was that the study focused only on two components of the prosocial classroom model although the framework contains multiple additional constructs. These constructs interact with one another in unique ways. To maintain a manageable scope for this research project, only social-emotional competence, well-being, and school climate were assessed in reference to the Kentucky teachers.

1.8 Limitations

Limitations are aspects of the study outside the researcher's control that might impact the study's methods and data analysis (Simon, 2011). This study has several identified limitations. First, the research relied on cross-sectional design, with convenience sampling methods, and explains the constructs at one point in time only. Second, using convenience and snowball sampling might not be generalizable to the population. Various school districts that chose to examine teachers' social-emotional learning usually conducted a survey themselves or used a private firm. Preliminary conversations with state school officials and school district administrators did not result in any interest in participating in the study. While more rigorous methods might be used later, due to the lack of interest in specific school districts participating in the study, a cross-sectional design utilizing snowball sampling was used for this study. An additional limitation involves the scope of the measure used for school climate. Organizational Climate Index (OCI) consists of four subscales and only two are used in this study. While the subscales are relational to the prosocial classroom model, they do not cover all

aspects of the school/community context factors. Therefore, the limited scope of the measure is a limitation in this study.

Third, there was a lack of a single validated, peer-reviewed, and publicly available measure for social-emotional competence for teachers using the prosocial classroom model. While there are a few pre-existing measures for social-emotional competence, such as the Test of Regulation in and Understanding of Social Situations in Teaching (TRUST; Aldrup et al., 2020), the instruments do not use the prosocial classroom model as the theoretical framework, therefore focusing on different constructs (i.e., emotional regulation and relationship management).

1.9 Assumptions

The following assumptions were made for this research:

- It was assumed that participants would be able to complete an online survey, meaning that they had access to an electronic device (computer, smartphone, tablet) and an internet connection.
- It was assumed that the participants would spend the necessary time reviewing survey questions and answering the them honestly.

1.10 Operational Definitions

The key terms listed below provide consistency throughout the study.

1. Social-Emotional Competence: Using acquired skills and knowledge to manage, regulate, and navigate emotional situations (Weinert, 2001). It consists of the subscales: relationship skills, responsible decision-making, self-awareness, self-management, and social awareness (Smetana, 2020).

2. Self-awareness: The ability to understand one's emotions, thoughts, and values and how they influence their behavior (Borowski, 2019). It is a subscale of social-emotional competence measured by the Social-Emotional Competence scale (Smetana, 2020).
3. Responsible Decision-making: A teacher's ability to make constructive and compassionate choices about personal behavior and social interactions across diverse situations (Borowski, 2019). It is a subscale of social-emotional competence measured by the Social-Emotional Competence scale (Smetana, 2020).
4. Relationship Skills: The ability to establish and maintain healthy and supportive relationships (Borowski, 2019). Relationship skills are a subscale of social-emotional competence measured by the Social-Emotional Competence scale (Smetana, 2020).
5. Self-management: The ability to manage one’s emotions and behaviors effectively in any situation field (Borowski, 2019). It is a subscale of social-emotional competence measured by the Social-Emotional Competence scale (Smetana, 2020).
6. Social Awareness: The ability to recognize and acknowledge the perspective of and empathize with others, including those from diverse backgrounds and different cultures (Borowski, 2019). It is a subscale of social-emotional competence measured by the Social-Emotional Competence Scale (Smetana, 2020).

7. Burnout: A prolonged exposure to interpersonal stressors on the job (Maslach & Leiter, 2016), leading to feelings of emotional exhaustion (Maslach & Jackson 1984). It is measured using the Maslach Burnout Inventory Emotional Exhaustion subscale (Maslach et al., 1997).
8. School Climate: students, school staff, and parents experience all aspects of school life (Thapa et al., 2013). It is measured using the Organization Climate Index, which consists of four subscales: Collegial Leadership, Professional Teacher Behavior, Achievement Press, and Institutional Vulnerability (Hoy et al., 2002).
9. Well-being: Teachers' response to the physical, environmental, and social events that shape their interactions with students and colleagues (Graham & Truscott, 2020). Well-being consists of burnout and is consistent with the prosocial classroom model (Jennings & Greenberg, 2009).

1.11 Organization of the Study

This study focused on teachers' social-emotional competence, burnout, and school climate. The quantitative study aimed to determine the relationship between social-emotional competence, burnout, and school climate. To assess these relationships, this study investigated teachers' self-report of social-emotional competence and their school climate. Chapter one presents the introduction and theoretical framework used for this study. Chapter two reviews the comparative literature to the constructs presented in the chapter, with significant sections for each social-emotional competence, burnout, and school climate. Chapter three summarizes the methodological procedures, measurements, and data analysis. Chapter four provides the first manuscript focused on the relationship

between social-emotional competence and burnout. Chapter five encompasses the manuscript expanding beyond the relationship between social-emotional competence, burnout, and also explores the relationship between both constructs and school climate. Finally, chapter six synthesizes the overall findings and implications of the study for future research and the profession.

1.12 Conclusion

To provide teachers with the necessary support and training to educate students in a better way and implement social-emotional learning competencies, there is a need to explore and understand teachers' social and emotional well-being. Different factors influence teachers' social and emotional well-being, including school climate. Therefore, understanding the implications of the social environment and teachers' social-emotional competence and well-being is an essential step in developing programs and resources to better support teachers.

2 REVIEW OF LITERATURE

2.1 Introduction

This quantitative study aimed to determine the relationship between social-emotional competence, burnout, and school climate in Kentucky K-12 public school teachers. To investigate these relationships, this study reviewed quantitative instruments to measure teacher social-emotional competence overall and each sub-competency defined by the prosocial classroom model. Chapter 2 summarizes the existing literature on the prosocial classroom model as the bases of the theoretical framework for this study, as well as teachers' social-emotional competence, burnout, and school climate that teachers work. The literature review provides overview the prosocial classroom model, clearly defining social-emotional competence, burnout, and school climate, along with explaining each sub-competencies of the aforementioned constructs. An in-depth discussion of the prosocial classroom model construct of school/community context and description how the school climate could be used to measure the construct are covered in this chapter. Finally, the gaps in the current literature and how this study would address the identified dearth of research is explored extensively.

2.2 Methods

Databases such as PubMed, ERIC, and Academic Search Premier were used to access peer-reviewed journal articles. Search terms used in the selected databases included “teacher,” “social-emotional competence,” “burnout,”, and “school climate.” Interlibrary loan and Google Scholar were used to access journal articles that could not be accessed through the abovementioned databases. Other websites were utilized in the literature review. A review of the reference sections of journal articles drawn from the

research articles gathered from the search was also conducted with the relevant articles being reviewed.

The prosocial classroom model (Figure 2.1) served as the theoretical framework for this study. According to the prosocial classroom model, teachers' social-emotional competence influences the prosocial classroom environment elements, leading to favorable student social, emotional, and academic outcomes (Jennings & Greenberg, 2009). Prior to the development of this model in 2009, there were several other models, which also addressed teachers' social and emotional well-being. These earlier frameworks included: the emotional regulation process model (Gross, 1998), as well as two emotional intelligence models (Bar-On, 2007; Mayeret al., 2002). While these theories were beneficial to the field at the time, Jennings and Greenburg (2009) decided that they were not expansive enough and decided to go beyond emotional regulation and intelligence to establish social-emotional competence. Unlike the previous models, social-emotional competence takes both emotional regulation and intelligence and also incorporates the social skills and environment needed to thrive (Jennings & Greenberg, 2009; Lozano-Peña et al., 2021).

Since the introduction of the model, researchers have used prosocial classroom model to explore teacher social-emotional competence and its influence on the classroom (Collie et al., 2011, 2012; Jennings et al., 2011, 2017; Pokrzywinski, 2022). The primary constructs of the model are teachers' social-emotional competence and well-being, healthy teacher-student relationships, effective classroom management, effective social-emotional learning implementation, healthy classroom environment, students' social-emotional well-being, academic outcomes, and school/community context factors

(Jennings & Greenberg, 2009). For this study, the researcher focused on teacher social-emotional competence burnout and school/community context factors, specifically school climate.

2.3 Social-Emotional Competence

Jennings et al. (2011) defined social-emotional competence as "a broad construct viewed as an outcome of social-emotional learning" (p.1). To understand social-emotional competence, the origins of the construct should be examined. This move includes exploring the concept of social-emotional learning. When establishing the prosocial classroom model, Jennings and Greenburg (2009) referenced the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2022) work surrounding social-emotional learning in students. CASEL (2022) defined social-emotional learning as:

> The process through which all young people and adults acquire and apply the knowledge, skills, and attitudes to develop healthy identities, manage emotions and achieve personal and collective goals, feel, and show empathy for others, establish, and maintain supportive relationships, and make responsible, caring decisions.

As an organization, CASEL advances students' academic, social, and emotional competence by promoting collaborative efforts between schools, the community, and policy development (CASEL, 2022). Its goal is to provide a supportive school environment where students feel connected to their teachers and other adults, leading to personal and academic success. CASEL views teachers' social-emotional competence as an outcome of social-emotional learning for students. With this connection, it is important for teachers to exabit social-emotional competence to continue to support the development of students' social-emotional learning.

Jennings and Greenburg (2009) noted that using the constructs set by CASEL (2022) for social-emotional learning provides the model with the berth to focus on not

only the emotional competency of teachers but also their decision-making and behavior. Social-emotional competency consists of five elements: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Jennings & Greenberg, 2009). Consistent with the Jennings and Greenburg's (2009) proposed prosocial classroom model, the term social-emotional competence is used throughout the study. The following section defines each of the five domains and the characteristics that lead to socially and emotionally competent teachers.

2.3.1 Self-awareness

The first domain of social-emotional competence is self-awareness. It is a teacher's ability to identify and understand their feelings, thoughts, and beliefs and how they influence behavior (Borowski, 2019). Furthermore, educators with a high degree of self-awareness possess the ability to discern their areas of strength, as well as areas in need of improvement (Jennings & Greenberg, 2009). This aspect includes identifying their feelings, experiencing self-efficacy, expressing honesty and integrity, and examining prodigious and biased (Collaborative for Academic, Social, and Emotional Learning (CASEL; 2022).

Lower levels of self-awareness could lead to trouble navigating issues with parents and other teachers (Collie & Perry, 2019). Teacher self-efficacy is a predictor of teachers' mental well-being, job satisfaction, physical health, and quitting intentions (Wang et al., 2016). Mindfulness is a commonly used practice to increase self-awareness among teachers. Multiple studies found that increasing mindfulness among teachers could reduce stress (Dorman, 2015) and psychological distress (Jennings et al., 2017).

2.3.2 Self-management

The second domain is self-management, which is a teacher's ability to manage one's emotions and behaviors effectively in any field (Borowski, 2019). To manage one's emotions, the individual should be able to identify and use stress management techniques, show self-motivation and self-discipline, and take personal and collective agency (Collaborative for Academic, Social, and Emotional Learning (CASEL; 2022).

Teachers who are able to control their emotions manage student behaviors better (Smetana, 2020). Skura and Swiderka (2022) found that educators who reported difficulty working with students with moderate to several special educational needs showed lower social competence and emotional intelligence results. However, teachers with higher emotional intelligence experiences fewer difficulties when working with students with moderate to severe special educational needs and mental illness (Collie & Perry, 2019). Caballero (2022) found that teachers who use stress management techniques felt that using these practices positively influenced their teaching.

2.3.3 Social Awareness

Social awareness is a teacher's ability to recognize and acknowledge the perspective of and empathize with others, including those from diverse backgrounds and different cultures (Borowski, 2019). Teachers who exhibit high social awareness take others' viewpoints into account, show empathy and compassion, take note of social norms, and have an understanding of how organizational influence could impact systems' behavior (Collaborative for Academic, Social, and Emotional Learning (CASEL; 2022). Equally, school instructors with high levels of social-emotional competence could better manage their classrooms (Carstensen & Klusmann, 2021; Poulou et al., 2022). While

teachers' negative emotions did not relate to classroom management and student behavior, positive teacher emotions were associated with high levels of student social competence (Poulou et al., 2022). Carstensen and Klusmann (2021) found that early career teachers were more likely to succeed when faced with challenges if they had positive social-emotional competence principles, such as social competence and social awareness.

2.3.4 Relationship Skills

Relationship skills is a teacher's ability to form and sustain healthy and supportive relationships (Borowski, 2019). Social-emotionally competent teachers consider other cultures, develop positive relationships, and seek support from others when needed (Collaborative for Academic, Social, and Emotional Learning (CASEL; 2022). Teacher social-emotional competence has a direct impact on students. For example, teachers experiencing burnout could lead to an opposing learning environment for students (Grayson & Alvarez, 2008).

2.3.5 Responsible Decision-making

Responsible decision making is a teacher's ability to make empathetic and impactful choices about personal behavior and social interactions across diverse situations (Borowski, 2019). This competence allows teachers to evaluate the benefits and consequences of various actions and analyze the impact at personal, interpersonal, community, and institutional levels (Collaborative for Academic, Social, and Emotional Learning (CASEL; 2022).

2.4 Well-being and Burnout

Well-being is a teacher's response to the physical, environmental, and social events that shape their interactions with students and colleagues (Graham & Truscott, 2020). Jennings and Greenburg (2009) postulated that teacher social-emotional competence relates to emotional burnout. It is important to note that the terms stress and burnout are often interchangeable (Brasfield et al., 2019), but for the literature review, each is discussed separately. For the purposes of this study, teacher burnout is primarily related to their well-being.

2.4.1 Burnout

Burnout is defined as the prolonged exposure to interpersonal stressors on the job (Maslach & Leiter, 2016), leading to feelings of emotional exhaustion (Maslach & Jackson, 1984). Different factors could lead to emotional exhaustion and burnout. For instance, the lack of coping skills among teachers (Maslach et al., 1997) and the demands of the teaching profession and job stressors (Llorens-Gumbau & Salanova-Soria, 2014). Lack of job satisfaction could also lead to emotional exhaustion and is a motivation for teachers to choose to leave the profession (Skaalvik & Skaalvik, 2020).

Several studies have validated the use of burnout measures in educational settings (Grayson & Alvarez, 2008; Maslach et al., 1997). Maslach et al. (1997) stated that there were three constructs to measure burnout in an educational setting: emotional exhaustion, depersonalization, and personal accomplishment. Additionally, studies have suggested that emotional exhaustion might be the first evidence and core component of measuring teacher burnout (Grayson & Alvarez, 2008). It is the feeling of being emotionally

exhausted and overextended by one's work. Brouwers and Tomic (2000) found that emotional exhaustion was a predictor of self-efficacy.

In another study, Grayson and Alvarez (2008) revealed that of the three constructs of Maslach Burnout Inventory (MBI), emotional exhaustion was the most vital contributor to teacher burnout. Due to these findings, for this study, the emotional exhaustion construct is viewed using the Maslach Burnout Inventory lens as a measure (Maslach et al., 1997). Stressors that teachers experience contribute to burnout. This realization calls for a comprehensive look burnout by examining stress.

2.4.1.1 Stress

Stress in a school setting could be attributed to three specific factors: legislation, vocational influences, and personal characteristics (Brasfield et al., 2019). However, interventions to increase the social awareness of teachers and provide coping skills have been explored. A popular strategy to increase coping skills is mindfulness (Hirshberg et al., 2020; Jennings et al., 2017; Schussler et al., 2018). According to Bishop et al. (2004), mindfulness brings a person's attention to the present moment. It provides the individual with a focus on their own experiences leading to openness and acceptance. Additionally, mindfulness has been found to improve classroom outcomes (Hirshberg et al., 2020), decrease teacher burnout (Kim et al., 2021), and create a positive school environment (Jennings et al., 2019). Ramsey-Tolliver (2019) conducted a qualitative study in rural Alabama to examine how stress affects teachers and how they cope with stress. The study established that that teachers in a positive and supportive work environment with effective communication were able to build coping strategies and reduce stress.

Social-emotional competence could be a resource for teachers at the beginning of their careers. For example, Carstensen and Klusmann (2021) found that positive social-emotional competence in early career teachers helped them navigate the social demands of teaching and preventing stressful experiences. Teachers should possess social-emotional competence skills to cope with the levels of stress that they face. For example, a study of 102 teachers and 1,450 students by Herman et al. (2020) examined stress and coping patterns in middle school teachers. The study found that teachers with high levels of stress and low coping skills were more likely to experience higher levels of burnout, student-reported depression, and lower levels of self-efficacy. Whereas teachers with lower stress and high levels of coping experienced lower levels of burnout, higher student prosocial skills, and more parent involvement in the classroom (Herman et al., 2020).

Illustratively, coping strategies are an essential component of creating highly social-emotionally competent teachers and aid teachers in dealing with stress (Jennings et al., 2011; Schäfer et al., 2020; Weiss, 2002). Teachers use coping strategies to help mitigate the stressful situations they face in the workplace (Schäfer et al., 2020; Weiss, 2002). In addition, focusing on active, positive, and supportive coping strategies could aid teachers in increasing their self-management (Schäfer et al., 2020). Furthermore, Schafer et al. (2020) also noted that teachers with high in self-management might have the ability to use adaptive coping strategies to meet their own needs.

2.5 School Climate

Jennings and Greenberg described school/community context factors as "co-teacher support, principal and district leadership, school climate and norms, school district values and in-service opportunists, community culture, and local and federal

education policy and demands" (Jennings & Greenberg, 2009, p.494). While there is much research on various of the topics concerning school/community context factors, Jennings and Greenberg (2009) noted that there remains a literature gap. Little research examining social and community contextual factors and social-emotional competence related to the prosocial classroom model creates scarcity of knowledge in the literature.

To explore school/community context factors, it is imperative to look at the concept of school climate, which includes the students, school staff, and parent experiences of all aspects of school life (Thapa et al., 2013). Throughout the years, school climate research has focused on various aspects of a teacher's environment. Furthermore, Thapa et al. (2013) identified five dimensions of school climate: safety, relationships, teaching and learning, institutional environment, and the school improvement process. However, despite these five dimensions being specified, the most important of them remains ambiguous. Subsequently, Thapa et al. (2013) recommend focusing on pre-existing reliable measures for school climate. Therefore, this study focused on the Organizational Climate Index (OCI) scale presented by Hoy et al. (2002) to explore school climate. According to the OCI scale, there are four sub-scales that make up organizational climate: Collegial Leadership, Professional Teacher Behavior, Achievement Press, and Institutional Vulnerability.

Collegial Leadership scale entails how principals treat teachers and address their social needs while working towards the goals of the school (Hoy et al., 2002). Teachers could cope with the stressors of teaching when given the support of administrators and coworkers (Trudel et al., 2020). Herman et al. (2021) found that during COVID-19 pandemic, collegial leadership and principal support of teachers' health were positive

predictors of coping and satisfaction. Schools that provided a collegial, just, and fair work environment before the pandemic showed more positive outcomes after the coronavirus scourge began.

Castro-Silva et al. (2017) conducted a study with 234 Portuguese teachers. The research found that the educators were more likely to become engaged in recreational and educational activities at the school if they perceived support from the institution's leadership through innovation and encouragement. Moreover, the teachers expressed more interest in collaborating with their peers if school support was extended through professional development encouraged by the school leadership.

Professional Teacher Behaviors scale focuses on colleagues' respect, support, cooperation, and commitment to the students (Hoy et al., 2002). A study found that a teacher's perceptions of the level of collaboration with colleagues were positively associated with stress management and teaching efficacy (Collie et al., 2012). Nevertheless, teachers' burnout level is directly related to the level of stress and fatigue among colleagues in their support system (Kaihoi et al., 2022).

On the other hand, Achievement Press subscale involves the academic standards and goals set for the school to achieve a high standard of learning and continuous school improvement (Hoy et al., 2002). Finally. the Institutional Vulnerability scale is concerned with how susceptible the teachers, principals, and school could be to outside parents and citizen groups who are vocal and critical of the school (Hoy et al., 2002). For example, Grayson and Alvarez (2008) found that emotional exhaustion was closely associated with parent/community relations, specifically when working with students and families in a

school environment. This relationship is essential since teachers are often the bridge between the school and parents.

2.6 Impact of Social-Emotional Competence, Burnout, and School Climate on Teachers

Teachers should establish social-emotional competence within themselves to support students' social-emotional learning (Schonert-Reichl, 2017). It is beneficial to teaching and student learning when teachers possess high levels of social-emotional competence. Teachers who are socially and emotionally competent, according to Jennings and Greenberg (2009), are extremely self-aware, courteous of others, accountable for their behaviors, adept at managing their relationships and emotions, and capable of handling their social and emotional difficulties. These instructors could also retain professional relationships with colleagues and school administration, build relationships with parents, especially the more demanding and tough ones, and become better prepared to deal with difficult and disruptive student behaviors. . Nonetheless, educators who lack the necessary social-emotional skills face difficulties in the classroom, including psychological strain and burnout.

2.6.1 Student-Teacher Relationships

Various studies have shown teachers with high social-emotional competence in the five social-emotional learning domains (Herman et al., 2018; Hoglund et al., 2015; Oberle et al., 2020; Yoon, 2002). For example, when looking at a teacher’s relationship skills with students, Hoglund et al. (2015) found that teachers who experience high-stress levels were likelier to have worse relationships with students. Additionally, Herman et al.

(2018) revealed that teachers with higher stress levels resulted in their students having lower levels of academic achievement.

Indeed, a teacher's low social-emotional competence directly impacts students. For instance, teachers with a low sense of personal accomplishment could diminish the student-teacher relationship (Yoon, 2002). Additionally, burnout experienced by teachers do not go unnoticed by their students. Previously, Oberle and Schonert-Reichl (2016) highlighted that when teachers experience higher levels of stress, students also face higher increased stress. Moving forward, Oberle et al. (2020) conducted a student investigation exploring the link between teacher burnout and student perceptions of teacher social-emotional competence. Over 600 elementary and middle school students were surveyed and rated their teacher's social-emotional competence. The study establishedthat higher levels of teacher burnout were associated with lower levels of students' rated social-emotional competence for teachers, while teachers who self-reported experiencing less burnout were rated higher by students.

2.6.2 Classroom and School Environment

Zinsser et al. (2016) conducted a research study on preschool setting to evaluate how implementing support for student SEL learning was related to teacher workplace experiences. They found that teachers who reported that students were more well-behaved in centers that implemented SEL principles experienced greater job satisfaction. In addition, teachers working in childcare centers that implemented additional SEL support for students felt less isolated at work. Instead, they perceived themselves as part of a team, leading to a more positive work climate. Lastly, the increase in support when managing students' behavior leads to a positive association with teachers feeling

supported within and between schools. Likewise, Cohen (2013) established that maintaining a positive school climate is associated with positive youth development, student learning, academic achievement, and teacher retention. Accordingly, Parveen and Bano (2019) stated that workplace-related stress due to workload and demands for teaching efficacy directly influenced teachers' job satisfaction.

School factors impact teachers' commitment to their school (Collie et al., 2011, 2012). For example, teachers were more comfortable teaching SEL principles when less stressed in the workplace. To support this finding, Collie et al. (2011) expounded that teachers reported a higher commitment to students and the school when working in a positive school climate. This practice included collaborating with other teachers and having positive relations with students.

Organizational conditions have a direct impact on classroom conditions. Classroom management is a long-studied area in education. The climate of a school could directly impact classroom management. A recent randomized trial by Sebastian et al. (2019) examined organizational conditions' impact on classroom management. This study found that high affiliation with the school for teachers is associated with positive student outcomes. At the same time, low to average affiliation was associated with effective classroom management strategies. These findings reiterate the importance of strong social-emotional competence as demonstrated through the prosocial classroom constructs that teachers could harness to impact student outcomes and learning positively.

2.7 COVID-19 Pandemic on Teacher Burnout

Due to COVID-19 pandemic, teachers need more support than ever (Sokal et al., 2020). A study conducted by Steiner and Woo (2021) for the Rand Corporation found

that teachers reported feeling more burnout than other working adults. However, the burnout was lower among educators in their mid-career, female, or Hispanic/Latinx. Teachers also expressed that the top source of stress in their work was supporting students' academic learning, as well as the poor work conditions during the pandemic.

Several studies have examined COVID-19 pandemic and its impact on teachers' social-emotional competence and burnout. For instance, Herman et al. (2021) surveyed 639 teachers pre-and post-Covid-19 pandemic. According to the study findings, when the pandemic first started, teachers reported lower levels of stress and higher levels of coping due to the online nature of learning and less stressful in-person interactions. Students were also able to carry forward grades from the start of the pandemic to the end of the year, giving them the option to opt out of classwork, thus lessening the burden on teachers and students. However, after the epidemic, teachers reported lower levels of student engagement and attendance in class.

Another study surveyed 454 teachers in New Orleans charter schools (Baker et al., 2021). This study found that educators who experienced more stressors while teaching during the pandemic reported lower mental health and found it harder to cope and teach. During COVID-19, teachers who encountered a higher number of stressors in their teaching environment had lower mental well-being and experienced greater difficulty in managing both their own well-being and teaching responsibilities.

2.8 Gaps in Literature and Need for Additional Research

Several areas need additional research. First, no published studies used the prosocial classroom model when exploring social-emotional competence and school

climate. Second, Jennings and Greenburg (2009) noted further research regarding school/community context factors was necessary.

Continued support is needed from schools and districts to motivate teachers. For example, Zinsser and Christensen (2015) found that preschool centers that implemented support programs for teachers, such as SEL strategies led to higher job satisfaction, a more positive view of the work environment, and teachers' self-reported feeling less depressed. Nonetheless, there was no peer-reviewed measure for social-emotional competence based on the prosocial classroom model. However, there are other measures for one or more of the five domains of social-emotional competence. For example, Aldrup et al. (2020) developed a situational test to measure teacher social-emotional competence, specifically decision-making. This is one of the only instruments whose participants were only teachers. While the instrument focused on teacher social-emotional competence, it did not use a prosocial classroom as the theoretical model; thus, only emotional regulation and relationship management were measured as constructs. Researchers could better understand a teacher's social-emotional competence using a measure that focuses on each of the five domains, with validity and reliability being calculated with a sample of only teachers. Therefore, there was a need for additional study anchored on prosocial classroom and verified measures to examine teachers social-emotional competence.

There has been broad research from all over the world focused on social-emotional competence. For instance, from Australia (Collie et al., 2012; Collie & Perry, 2019), Japan (Wang et al., 2016), and Canada (Oberle et al., 2020), to name a few. Collie et al. (2012) were instrumental in using the prosocial classroom model on teacher social-

emotional competence. However, there was a scarcity of research in the United States (Jennings et al., 2019), calling for an additional research. Also, there was a need for a research explicitly focused on teachers in the state of Kentucky. As stated by Oberle et al. (2020), teacher social-emotional competence is not an individual teacher issue, but one that should be addressed on a larger scale.

2.9 Conclusion

This current study used the prosocial classroom model to examine the relationship between burnout, and school climate on teacher social-emotional competence. By exploring teachers' social-emotional competence and burnout, past research has shown the benefits of socially emotionally-competent teachers for student learning and social-emotional competence. Apart from promoting teachers' job satisfaction, it also fostered student learning and academic achievement. The state of Kentucky will benefit because this study focused specifically on the region to understand educators' experiences and needed support in the school settings. The findings of this study will be shared at reginonal and state conferences, as well as future publications on the topic.

3 OVERALL DISSERTATION METHODS

3.1 Purpose

This study focused on the relationship between teacher social-emotional competence, burnout, and school climate in Kentucky. The study aimed to explore Kentucky teachers' social-emotional competence and burnout and investigate if school climate predicts aspects of a teacher's social-emotional competence and burnout. The contents of this chapter outline the study's research design, population, data collection procedures, measures, and data analysis plan to address the research questions.

3.2 Research Design

The study is a quantitative, non-experimental, cross-sectional design. Cross-sectional designs imply that data should collected at a single point in time (Salazar et al., 2015). Thus, since this study used an online survey administered at a single point in time, a cross-sectional design was appropriate. The design is beneficial because it involves low cost and is less time-consuming (Setia, 2016). Furthermore, it provided exploratory data that could be used in the future to build toward a case-control or cohort design study (Setia, 2016).

Given the cross-sectional design, the subsequent data analysis approach explored the relationship between the variables listed in Table 1. The study investigator asked teachers located in Kentucky to complete a series of questions that explored their feelings of burnout and school climate via an online survey. The survey's questions related to the teachers' demographics, social-emotional competence, along with the educators' feelings and attitudes towards burnout, and school climate including collegial leadership with their principal and institutional vulnerability to parent and community influence

(reference “Measures” section for descriptions of each question). The study used convenience sampling methods to recruit participants via online methods, such as social media, email, and listservs. The opportunity to receive an incentive was extended to eligible participants that completed the survey.

3.3 Study Population and Sample

According to the Kentucky Department of Education (2022) Kentucky has over 171 school districts and 1,477 public, employing over 42,000 teachers. Among the public-school teachers, 95% were white and 77% are female. Kentucky ranks 5th nationally for newly certified teachers in public schools and the average years of teaching experience per teacher is 11.92. Of the 1,477 public schools, 919 operate as Title I schools. Notably, Title I schools are eligible for federal funding to address student needs (e.g., free/reduced lunch) (US Department of Education, 2015). Data regarding the number of private school teachers in Kentucky is not readily available.

Those who participated in the study needed to be a certified teacher between the ages of 18 and 75. Study participants had to have worked in the state of Kentucky. Using G*Power, a power analysis was conducted. Assuming a desired power of .8, an effect size of .15, an alpha of .05, and 5 predictors for the multiple regression models, the minimum required sample size was 89. Therefore, the minimum target sample size for the study was at least 150 subjects to support the potential for missing data.

3.4 Measures

The measures for the study were selected based on past research, literature, and validated scales for the study population (Hair, 2009). There was no pre-existing, peer-reviewed, and validated measures for social-emotional competence. The following

sections cover the measures used to assess social-emotional competence, along with burnout. Other variables in the study included demographics and school climate.

3.4.1 Demographics

Demographic information related to age, education level, gender, race, and ethnicity was collected. Additionally, information concerning the grades and years the participant had taught, and the county they taught in was also collected. See Appendix 1 for the Qualtrics survey used for data collection.

3.4.2 Social-Emotional Competence

Social-emotional competence was measured using the Social-Emotional Competence scale (Appendix 1) developed by Smetana (2020). The measure consists of 44 questions measuring five subscales: self-awareness (9 questions), self-management (10 questions), social awareness (8 questions), relationship skills (8 questions), and decision-making (9 questions). The answers were presented on a 5-point Likert scale with the response choices of “always,” “sometimes,” “not sure,” “rarely,” and “never”. While Smetana (2020) used this measure, the instrument had yet to be published in a peer-reviewed journal by the time of this study. The reliability was calculated using Cronbach’s alpha. High levels of reliability were observed with the reliability scores for each subscale being self-awareness (.767), self-management (.878), social awareness (.892), relationship skills (.804), and decision-making (.750). While reliability has been established, the construct validity of the instrument should be evaluated as the study consisted of a small sample of teachers.

3.4.3 Burnout

Burnout was measured using Maslach Burnout Inventory Emotional Exhaustion subscale (MBI: EE). The MBI: EE is a nine-item subscale of Maslach Burnout Inventory Teacher Survey (MBI-ES) measuring burnout in teachers. Due to the copyright restrictions for the survey, the full nine-item scale is not included in the Appendix 1. While MBI:ES contains other subscales, multiple studies have noted that MIB: EE is the core subscale with the most consistent related reliability (Firoilli, 2017; Maslach, 1996). The measure includes statements such as "I feel emotionally drained from my work." The responses are offered in a seven-point scale ranging from "0" to indicate "never" and "6" to indicate "everyday." This is a proprietary measure that has been used in primary, secondary, and post-secondary settings. A higher score for the subscale indicates a higher degree of burnout. A Cronbach's alpha of .90 was found to be acceptable for emotional exhaustion (MBI Manual).

3.4.4 School Climate

School climate was measured using The Organizational Climate Index (OCI). The OCI was utilized to measure organizational climate within the school setting (Hoy et al., 2002). As Hoy et al. (2002) stated, the OCI (Appendix 1) is a descriptive measure designed specifically with the intention of measuring the atmosphere of a school. The scale consists of thirty items across four subscales. For the purpose of this study, only two of the four subscales were included in the survey. The two subscales and their definitions are summarized below:

- Collegial Leadership (CL): How principals treat teachers and address the social needs of faculty while working towards the goals for the school.

- Institutional Vulnerability (IV): How susceptible the teachers, principals, and school are to outside parents and citizen groups who are vocal and critical of the school.

These are the two subscales that most closely align with the description of school climate in the Prosocial Classroom Model.

Participants' responses were collected on a four-point scale ranging from "rarely occurs" to "very frequently occurs." Hoy et al. (2002) reported the following as relatively high-reliability scores: Collegial Leadership (.94), and Institutional Vulnerability (.87). Factor analysis was also performed showing strong loading for each dimension.

3.5 Data Collection Procedures

3.5.1 Recruitment

This study used non-probability sampling methods, including convenience and snowball sampling. Reviewed studies showed successful recruitment involved working directly with the school administrators or state and national departments (Collie et al., 2011, 2012; Oberle & Schonert-Reichl, 2016; Sokal et al., 2020; Zinsser et al., 2016) as well as through online recruitment (Pressley, 2021), and snowball sampling (Sokal et al., 2020). Convenience sampling was the most cost-effective sampling technique due to the large population size of Kentucky teachers. Participants were offered the opportunity to win a $25 Amazon gift card as an incentive for their participation. Twenty $25 Amazon gift cards were given away for a total of 20 winners.

The researcher recruited participants using various recruitment methods outside of school districts and Kentucky Department of Education, including social media, listservs, email, and snowball sampling. The social media platforms Facebook, LinkedIn, and

Twitter were utilized to promote the study by publicly sharing the IRB-approved flyer (Appendix 2- University of Kentucky IRB Approved Flyer) and related wording. Individuals and organizations were requested to share IRB-approved flyers and language in Facebook groups and pages, such as Teachers for Kentucky and Teachers Helping Teachers, with the consent of the groups' moderators. The study's principal investigator (PI) approached various associations, such as the Kentucky Education Association (KEA), Kentucky Association of Professional Teachers (KAPE), Kentucky SHAPE, Kentucky Science Teachers Association (KSTA), Kentucky Association for Health, Physical Education, Recreation, and Dance (KAHPERD), and other identified teacher organizations. One additional follow up was sent to those who did not respond to the initial request one week after the first request. With the assistance of study investigators, these organizations and associations were requested to share the IRB-approved flyer and language via their social media sites and email listservs.

Although there were over 42,000 public school teachers in Kentucky, reaching teachers outside the school setting might present a challenge. However, to mitigate this challenge, the study investigators introduced snowball sampling methods, whereby at the end of the survey, study participants were asked to share IRB-approved language regarding the study information and PI's contact information with potential participants. Various studies used online questionnaires and surveys to reach teachers (Collie et al., 2012; Pressley, 2021; Smith et al., 2016; Trudel et al., 2020). Likewise, snowball sampling has been used in various studies and dissertations to recruit teachers as a recruitment measure (Netro, 2021; Pressley, 2021). Due to the online and anonymous

nature of this survey, the PI did not have direct contact with snowball sample participants.

Study investigators administered the online survey using Qualtrics survey management software. Based on the given times to complete each survey scale and subscale, the estimated completion time of the survey was 20-30 minutes. The de-identified link to the survey provided anonymity to the participant. At the beginning of the online survey, screening questions determined eligibility to align with the inclusion criteria. The screening questions included:

- Are you a certified K-12 teacher? Yes/No
- Do you teach in the state of Kentucky? Yes/No
- Are you between the ages of 18 and 75 years? Yes/No

IRB approval was received on April 27, 2023 (Appendix 3 University of Kentucky IRB Approval Letter). Data collection took place between May 15, 2023 and June 4, 2023.

3.5.2 Human Subjects Protections

The Principal Investigator (PI) completed a formal application to the University of Kentucky Internal Review Board (IRB). A waiver of documentation for informed consent was approved due to the online nature of the study and that the research project presented no more than minimal risk to study participants. At the beginning of the online survey, the purpose of the study, duration, risks/benefits of participation, inclusion criteria to participate in the study, UK IRB contact information, as well as contact information for the study PI was shared with the participants (See Appendix 4 University of Kentucky IRB Approved Cover Letter). In line with UK IRB requirements, all study personnel maintained current Collaborative Institutional Training Initiative (CITI) training and

Responsible Conduct of Research (RCR) training throughout the duration of the study (Appendix 5).

3.5.3 Data Security

Necessary effort was made to keep the research data secure. At the time of survey participation, no identifying information was asked from the study participants (i.e., name, email address) from the main study survey. The giveaway survey was a separate one, optional, and only collected name and email address to send the winners gift card. Emails to giveaway winners were only sent from an official UK email address. The electronic survey data remains housed in the principal investigator's secure university account on a password-protected computer and server.

3.6 Limitations of Data Collection

There were several limitations of data collection due to the research design and data collection methods proposed for this study, including the following:

- Due to data collection occurring at a single point in time, relationships over a period of time were not observed and researchers were unable to identify the cause or effect of the findings.
- Self-selection bias might occur since study participants voluntarily choose to participate. This could lead to a non-representative sample of the population.
- Responses of study participants relied on accurate self-report to study questions. Therefore, relying on self-report could lead to inaccuracies in participant responses.

3.7 Data Cleaning

After data collection was concluded, all data was cleaned. First, any observations that did not meet the eligibility criteria were not included in the data analysis. Next, to

avoid fraudulent survey attempts, additional measures provided by Qualtrics were enabled to detect bots and duplicate responses. This included a reCaptcha option that provided a button for respondents to manually click to proceed to the survey. Additionally, the investigators looked at the amount of time it took each participant to complete the survey. Any responses completed too quickly were removed based on the score provided by Qualtrics. The Qualtrics tool also monitored for multiple/duplicate responses by observing the cookies and devices the survey was completed on. An additional question was asked ("What is the current year?") to distinguish bots from legitimate survey responses. Any responses that did not correctly identify the current year (2023) were removed from data analysis. Finally, the data set was analyzed for missing data (Ho, 2006). Observations with missing data for social-emotional competence, burnout, or school climate variables were removed from data analysis. In the end, after reviewing the data set for all the criteria mentioned above, 143 responses were removed leaving 256 responses.

3.8 Assumptions of Statistical Testing

For the regression analysis, the researcher checked for violations of OLS regression assumptions (Ho, 2006). The assumptions that were reviewed are multicollinearity, linear relationship, multicollinearity, heteroskedasticity, and independence of errors. Multicollinearity occurs when independent variables are correlated with one another. To test for multicollinearity, a test for variance inflation factors or VIF were conducted. A value of one showed no correlation between independent variables. Whereas, a value of 2-5 indicated a moderate correlation. A value above five indicated a critical level (Hair, 2009). Linear relationship was checked

visually using a scatterplot. The scatterplot showed the linear relationship as well as the presence of any outliers.

Heteroskedasticity is the assumption that the variance of error would be constant. This aspect was reviewed by examining a plot of residual values. The independence of error was reviewed visually by creating a histogram of residuals. A Shapiro-Wilks test was conducted to assess for the normal distribution of residuals. If the p-value of the test was non-significant ($p > .05$), the variable data was considered to be of a normal distribution (Hair, 2009).

3.9 Social-Emotional Competence Scale

To examine the social-emotional climate scale, a confirmatory factor analysis was conducted. This process examines whether the proposed model structure is consistent with the set of observed variables. For the purposes of this study, the model was not altered based on the results obtained.

3.9.1 Development of Social Emotional Competence Scale

The social emotional competence scale was developed by Sementa (2020). Two initial instruments were developed for both teachers and students. For this study, we will only focus on the teachers' survey. The survey went through a design and implementation process adapted from Czaja and Blair (2005) and Gray (2018 p. 239). This processed included nine key steps (development of research questions, deciding on data needed, review of literature, modifying the survey, expert panel review, survey design, conducting a pilot survey, additional survey modification, and prepare for survey distribution) (Sementa, 2020).

Sementa (2020) first reviewed existing social-emotional competency instruments. This comprehensive analysis found eight social emotional competence instruments. From these eight instruments and the social-emotional competence items were developed. In addition, survey items were developed from the Sustainable School-wide Social and Emotional Learning Implementation Guide and Toolkit developed my CASEL (Devancy, Utne, O'Brien, Resnik, Keister, & Weissberg, 2006).

Next a review of the survey took play by an expert panel. The teacher questionnaire was initially developed and then reviewed by two expert panels. The first panel, comprising three teachers and two students, provided feedback on item clarity, questionnaire length, and alignment with social-emotional constructs. The second panel, consisting of a University of Illinois professor and two graduate students experienced in questionnaire creation, provided feedback on item construction. Given that the initial items were crafted by content experts at CASEL, further review for alignment with social-emotional learning constructs was deemed unnecessary.

Following feedback from experts, the initial social-emotional competence survey was revised to eliminate jargon and rephrase leading items. The modified questionnaires underwent a pilot study. The pilot results were utilized to assess the instrument's reliability and validity. An open-ended question during the pilot identified a confusing item, leading to its removal.

Reliability was assessed using Cronbach's alpha. Cronbach's alpha was computed for each of the five social-emotional dimensions. The reliability coefficients for self-awareness (.767), self-management (.878), social awareness (.892), relationship skills

(.804), and decision making (.750). This confirms the high reliability of all five social-emotional constructs.

Next validity was assessed. First, content validity was established by utilizing survey items established by the CASEL, the validity of these items was further affirmed through the expert panels' review of each item's content. Construct validity was assessed using an exploratory factor analysis. After reviewing the results, five factors were identified which are the current five dimensions of the social-emotional competence scale. Any items that presented with a factor loading of less than .40 were removed.

3.9.2 Current Confirmatory Factor Analysis

For the current study, a confirmatory factor analysis was performed. With the previous testing preformed for the social-emotional competence scale and factors determined, an exploratory factor analysis was not needed. A confirmatory factor analysis was preformed to explore the relationship between the observed variables.

While instruments have been developed to measure teacher social-emotional competence, researchers have expressed the need of a non-proprietary instrument to measure all the five constructs of social-emotional competence (Jennings & Greenberg, 2009; Lozano-Peña et al., 2021). However, there is much debate about altering survey items based on the results for a given sample (Hurley et. al., 1997). It is believed that this is acceptable, while others view that altering survey items for additional analysis with the same sample could lead the results not being representative of the population, and the loss of the ability to replicate the study in the future. For this study, the results of the confirmatory factor analysis did not alter the 44-item survey during data analysis.

The assumptions of multivariate normality, multivariate outliers, and absence of multicollinearity were examined as discussed in section 3.8 Assumptions of Statistical Testing. "The "lavaan" package of R open-source statistical software was used to determine the validity of the five constructs: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making as well as the overall model fit for social-emotional competence.

Confirmatory factor analysis does require a larger sample size to construct repeatable and reliable factors. Nonetheless, there is a debate in the research community regarding the benchmark sample size. Some recommend an overall sample size number of at least 250-300 participants (Tabachnick et al., 2013). Others recommended a ratio of survey items and number of observations. This includes at least 5-10 observations per cases present (Bollen 1989). This would mean that for the 44-item survey, 220 to 440 observations would need to be collected to meet this threshold.

Overall model significance was evaluated using a χ^2 goodness-of-fit test and by examining the R^2 values between each indicator variable and its latent variable. Model fit statistics and R^2 values were assessed using the criteria detailed by Hooper et al. (2008). The χ^2 test was conducted at an alpha level of .05. A χ^2 statistic with a p-value less than the alpha indicates a poorly fitting model that does not adequately describe the data. The root mean square error of approximation (RMSEA), comparative fit index (CFI), Tucker-Lewis index (TLI), and standardized root mean square residual (SRMR) indices were examined as additional measures of model fit. Values of RMSEA less .10 indicate adequate model fit, while values less than .08 indicate excellent fit (Hooper et al., 2008). Values of CFI greater than .90 indicate acceptable fit, while those greater than .95

indicate good model fit (Hooper et al., 2008). Values of TLI greater than .90 represent an acceptable fit (Denovan et al., 2020), while .95 indicate good model fit (Hooper et al., 2008). Values of SRMR less than .08 indicate adequate model fit, while values less than .05 suggest excellent model fit (Hooper et al., 2008). Any indicator with an R^2 value less than .20 was interpreted as inadequately describing the latent variable and will be considered for removal. Appendix 6 contains the results of the confirmatory factor analysis.

The findings showed that the overall social-emotional competence model, three of the five fitness tests (chi-square, RMSEA, SRMR) were acceptable with an acceptable Cronbach's alpha. For this study, it was equally considered an appropriate model fit. The confirmatory factor analysis results are presented in this study (Appendix 6). While the sample size for this study met threshold upon completion of the test, it was determined that a manuscript could be created just for this portion of the study and would be completed at a future date.

3.10 Statistical Analysis by Research Question

IBM SPSS 27 for Mac is the statistical software used for data analysis. A variety of statistical tests were performed based on the given research questions. A significance level of 0.05 was utilized for all statistical testing. The given research questions, variables, and planned statistical analysis are exhibited in Tables 3.1 and 3.2. Various statistical methods are dependent on samples obtained during data collection and normality of data.

Table 3.1 Statistical Procedures to Answer Research Questions: Manuscript 1

Research Question	Variables, Independent Variables (IV), and Dependent Variables (DV)	Instrument of Measurement	Statistical Analysis
RQ1: Does the five-factor model (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making) for the social-emotional competence fit the data?	Self-awareness, self-management, social awareness, relationship skills, decision-making, overall social-emotional-competence score	Social-emotional Competence Scale	Confirmatory Factor Analysis
RQ2: What is the relationship between overall social-emotional competence, social-emotional competence constructs (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making), and burnout in teachers?	Self-awareness, self-management, social awareness, relationship skills, responsible decision-making, overall social-emotional competence score, burnout	Maslach Burnout Inventory Emotional Exhaustion subscale (MBI:EE); Social-emotional Competence Scale	Correlation
	DV self-awareness, self-management, social awareness, relationship skills, decision-making IV: burnout	Maslach Burnout Inventory Emotional Exhaustion subscale (MBI:EE); Social-Emotional Competence Scale	Linear Regression
	DV: overall social-emotional competence score IV: burnout	Maslach Burnout Inventory Emotional Exhaustion subscale (MBI:EE); Social Emotional Competence Scale	Linear Regression

Table 3.2. Statistical Procedures to Answer Research Questions: Manuscript 2

Research Question	Variables	Instrument of Measurement	Statistical Analysis
RQ1: What is the relationship between school climate, burnout, overall social-emotional competence, and social-emotional competence constructs (self-awareness, self-management, social awareness, relationship skills, responsible decision-making) in teachers?	Variables: social-emotional competence overall score, self-awareness, self-management, social awareness, relationship skills, responsible decision-making, burnout, collegial leadership, and institutional vulnerability	Social-Emotional Competence Scale; Maslach Burnout Inventory Emotional Exhaustion subscale (MBI:EE); Organizational Climate Index (OCI) Collegial Leadership and Institutional Vulnerability subscales)	Correlation
	DV: social-emotional competence IV: collegial leadership, and institutional vulnerability	Social-Emotional Competence Scale; Organizational Climate Index (OCI) Collegial Leadership and Institutional Vulnerability subscales)	Linear Regression
	DV: burnout IV: collegial leadership, and institutional vulnerability	Maslach Burnout Inventory Emotional Exhaustion subscale (MBI:EE); Organizational Climate Index (OCI) Collegial Leadership and Institutional Vulnerability subscales)	Linear Regression

3.11 Statistical Analysis by Univariate and Bivariate

Various statistical tests were performed based on each research question and resulting data. Statistical analysis completed included univariate analysis (see Table 3.3), including frequencies, means, and standard deviations to gain a description of the study population. For the social-emotional competence scale, the mean of each subscale was calculated and a summative overall social-emotional competence score computed.

Table 3.3 Statistical Plan for Univariate Analysis

Study Question or Considerations	Statistical Test	Exact Variables
Description of study population	Frequencies	Level of Education Age Gender Race Marital Status Ethnicity County Taught In
Social-emotional competence subscale scores for self-awareness, self-management, social awareness, relationship skills, decision-making	Mean	A calculated subscale score for each of the following social-emotional competence subscales (self-awareness, self-management, social awareness, relationship skills, decision-making)
Overall social-emotional competence score	Mean	A calculated score for overall social-emotional competence based on the subscale scores
School climate subscale scores (collegial leadership, and institutional vulnerability)	Mean	A calculated subscale score for each of the following school climate subscales (collegial leadership, and institutional vulnerability)

Bivariate and multivariate analyses were performed to address additional research questions (see table 3.4). Cohen's standard was used to evaluate the correlation coefficient using Spearman's *r* (Hair, 2009).

Table 3.4 Statistical Plans for Bivariate Analysis

Study Question	Statistical Test	Exact Variables
What is the correlation between overall social-emotional competence and the social-emotional competence subscale items self-awareness, self-management, social awareness, relationship skills, decision-making?	Correlation	Self-awareness (continuous)self-management (continuous) Social Awareness (continuous) Relationship Skills (continuous) Responsible Decision-making (continuous)
What is the correlation between social-emotional competence, burnout, and school climate for teachers?	Correlation	Overall social-emotional Competence (continuous) Burnout (continuous)
What amount of variable is explained between constructs of social-emotional competence (self-awareness, self-management, social awareness, relationship skills, decision-making)?	Linear Regression Model	Burnout (continuous) Vs Self-awareness (continuous) Self-management (continuous) Social Awareness (continuous) Relationship Skills (continuous) Decision-making (continuous)
What amount of variance is explained between burnout and overall social-emotional competence?		Burnout (continuous) Vs Overall Social-emotional Competence (continuous)
What is the correlation between social-emotional competence, burnout, and constructs of school climate for teachers (collegial leadership and institutional vulnerability)?	Correlation	Overall Social-emotional Competence (continuous) Burnout (continuous) Collegial Leadership (continuous) Institutional Vulnerability (continuous)
What amount of variance is explained between school climate (collegial leadership and institutional vulnerability), and teachers' social-emotional competence?	Linear regression model	Collegial Leadership (continuous) Institutional Vulnerability (continuous) Vs Overall Social-emotional Competence (continuous)
What amount of variance is explained between school climate (collegial leadership and institutional vulnerability), and teacher burnout?	Linear regression model	Collegial Leadership (continuous) Institutional Vulnerability (continuous) Vs Burnout (continuous)

3.12 Conclusion

A non-experimental, cross-sectional study was conducted of teachers in Kentucky. Data was collected in regard to social-emotional competence, burnout, and school climate, with the aim of addressing the study's research questions. Data were cleaned and assumptions of analysis conducted. Data analysis was conducted looking at univariate and bivariant statistics, as well as a confirmatory factor analysis for the social emotional competence scale.

THE RELATIONSHIP BETWEEN SOCIAL-EMOTIONAL COMPETENCE AND BURNOUT IN KENTUCKY TEACHERS

Proposed Journal: Education Researcher

4.1 Abstract

This study examined the relationship between teacher social-emotional competence and burnout. A sample of 256 Kentucky teachers participated in the study. Eligible teachers were certified, over the age of 18, and taught in in the state of Kentucky. A confirmatory factor analysis was conducted to assess factor loading and overall model fit. Results revealed that the overall social-emotional competence scale used provided an acceptable model fit. However, the results varied for each of the constructs of social-emotional competence. Burnout correlated with overall social-emotional competence (p = .016, 95.00% CI = [-.30, -.06]) and self-management ($p < .001$, 95.00% CI = [-.44, -.22]). Likewise, burnout was found have a significant relationship with overall social-emotional competence ($F(1,254) = 8.89$, $p = .003$, $R^2 = .03$), relationship skills ($F(1,254) = 3.99$, $p = .047$, $R^2 = .02$) and self-management ($F(1,254) = 32.00$, $p < .001$, $R^2 = .11$). This study examined the relationship between social-emotional competence, using the prosocial classroom model.

Keywords: K-12, Teacher, Social-Emotional Competence, Burnout, Emotional Exhaustion

4.2 Introduction

Teachers are vital figures in the lives of students, serving as educators, mentors, and role models. However, the prevalence of teacher burnout has become a pressing concern, negatively impacting both educators and students alike (Oberle et al, 2020). Throughout their careers, educators experience emotional demands that contribute to the burnout and stress they feel in the profession (Khan et al., 2014; Steinhardt et al., 2011; Travers, 2017; Zhang et al., 2023). The emotional and psychological stress of the teaching profession could lead to feelings of emotional exhaustion, dissatisfaction with working environment, and a lack of the sense of belonging (Skaalvik & Skaalvik, 2009). With COVID-19 pandemic, teachers' burnout, emotional exhaustion, and stress rose to intense and volatile levels (Collie, 2023; Gicheva, 2022; Klusmann et al., 2023; Sokal et al., 2020). To combat the prevailing high burnout and stress levels, teachers should develop resilience (Beltman et al., 2011), emotional intelligence, and social-emotional competence (Dorman, 2015).

Social-emotional competence is the ability to recognize, understand, and manage one's emotions effectively while fostering positive relationships with others (Lozano-Peña et al., 2021). Teacher social-emotional competence encompasses various skills and qualities that enable educators to effectively manage their emotions and form meaningful connections with students (Poulou, 2017) and colleagues (Hargreaves, 2001). These competencies contribute to creating a supportive and inclusive classroom environment, fostering positive student-teacher relationships, and enhancing teaching effectiveness (Duckworth et al., 2009).

Social-emotional competence has emerged as a crucial component of teachers' professional competencies. Teachers that possess higher levels of social-emotional competence, are less likely to experience burnout symptoms such as emotional exhaustion (Li, 2023). It is linked to teaching efficacy (Li, 2023; Poulou, 2017), increased classroom engagement (Abiodullah & Aslam, 2020), and academic achievement (Gehlbach et al., 2016). Teachers with increased social-emotional competence are better equipped to manage classroom dynamics, resolve conflicts, and establish trusting relationships with students (Jennings & Greenberg, 2009). Additionally, they demonstrate greater emotional resilience, adaptability, and effective stress management, which are crucial factors in preventing burnout (Dorman, 2015; Karing & Beelmann, 2019; Tan & Mahoney, 2022).

A teacher's social and emotional state could impact students. Oberle et al. (2020) found that students felt that teachers were not socially and emotionally supportive when they exhibited outward signs of burnout and emotional exhaustion. When teacher and student social-emotional wellbeing is supported in a school environment, the instructors feel a greater sense of commitment to the school (Collie et al., 2011).

4.3 Theoretical Framework

The theoretical framework for this study was the prosocial classroom model. According to the model, teachers' social-emotional competence influences the prosocial classroom environment elements, leading to favorable student social, emotional, and academic outcomes (Jennings & Greenberg, 2009). Components of social-emotional competence are self-awareness, social awareness, self-management, relationship skills, and responsible decision-making (Borowski, 2019; Jennings & Greenberg, 2009).

Even though there has been much interest in teacher social-emotional competence (Collie et al., 2012; Jennings, 2011) there remains a lack of an objective assessment tool specifically designed to cover the five constructs of teachers' social-emotional competence through the prosocial classroom framework lens (Lozano-Peña et al., 2021). While there was a lack of a readily available peer-reviewed comprehensive measure for social-emotional competence, burnout has been a long-studied topic (Maslach & Jackson, 1984). Jennings and Greenburg (2009) suggested that educators with higher levels of social-emotional competence could mitigate teacher burnout. Similarly, Mérida-López and Extremera (2017) posited that there was a connection between burnout and components of teacher social-emotional competence.

In accordance with Maslach and Jackson (1984), burnout comprises of three elements: emotional exhaustion, which pertains to feeling physically and emotionally overwhelmed; depersonalization, defined as adopting a distant stance towards students; and a diminished sense of self-assuredness and personal accomplishment. Burnout is related to several areas of teaching including job satisfaction (Skaalvik & Skaalvik, 2020). Furthermore, it impacts teacher retention (Fisher, 2011), health and well-being (Pillay et al., 2005).

4.4 Purpose and Research Aims

Without a comprehensive measurement tool, it is difficult to empirically investigate the impact of other theoretical factors (e.g., community and contextual factors, teacher-student relationships). Nevertheless, to better understand impact of the five constructs of social-emotional competence, it is important to explore the interactions between them future. The purpose of this study was to investigate the relationship

between teacher social-emotional competence and burnout in Kentucky teachers.

Methods

4.4.1 Participants

To be eligible for the study, participants were supposed to have been a certified K-12 teacher, teaching in Kentucky, and between the age of 18 and 75. The study participants included 256 Kentucky teachers (86% female and 11.7% male; 1.6% did not answer) drawn from over 45 Kentucky counties. Data was collected between May 15, 2023, and June 4, 2023. The study used convenience sampling methods to recruit participants via online methods. This aspect included county teacher association listservs and sharing via Facebook on teacher related Facebook groups and pages. The respondents were entered to win one of twenty $25 Amazon gift cards.

4.4.2 Measures

4.4.2.1 Demographic Questions

At the end of the survey, the participants were asked demographic specific questions. The questions included age, education level, gender, race, and ethnicity. Furthermore, they were also asked regarding their teaching background including the grades taught, years taught, and the Kentucky county they served.

4.4.2.2 Social-Emotional Competence

In this study, social-emotional competence was measured using the Social-Emotional Competence scale developed by Smetana (2020). The measure consists of 44 questions measuring five subscales, including: self-awareness (9 questions), self-management (10 questions), social awareness (8 questions), relationship skills (8 questions), and decision-making (9 questions). The answers are presented on a 5-point

Likert scale with the response choices of “always,” “sometimes,” “not sure,” “rarely,” and “never”. Teachers with higher scores will possess elevated levels of social-emotional competence. Cronbach's alpha is a statistical metric used to assess the internal coherence of a measurement scale. It signifies the extent to which all elements within the scale gauge the same underlying concept; scores of .70 or above are deemed acceptable (George & Mallery, 2018). Sementa’s (2020) study included both teachers and students as participants. The results for Cronbach’s alpha for the study was self-awareness (.62), self-management (.75), social awareness (.60). relationship skills (.58), responsible decision-making (.49). and overall social-emotional competence (.78).A confirmatory factor analysis was also preformed. The overall model was a moderate fit with

4.4.2.3 Burnout

Burnout was measured using Maslach Burnout Inventory Emotional Exhaustion (MBI: EE) subscale. The MBI: EE is a nine-item subscale of the larger Maslach Burnout Inventory Teacher Survey (MBI: TS) for measuring burnout in teachers. To shorten the length of the survey, multiple studies noted that MIB: EE is the central subscale with the most consistent related reliability (Firoilli, 2017; Maslach, 1996). The measure includes statements such as “I feel emotionally drained from my work.” The responses are offered in a seven-point scale ranging from “0” to indicate “never” and “6” to indicate “everyday.” This is a proprietary measure that has been used in primary, secondary, and post-secondary settings. A higher score for the subscale indicates a higher degree of burnout. Cronbach’s alpha of .90 was found to be acceptable for emotional exhaustion (Maslach et al., 1997).

4.4.3 Data Analysis

Approval to conduct this study was granted by the University of Kentucky Institutional Review Board (IRB) through an expedited review. Descriptive analysis, including frequency, distributions means, and standard deviations were used to summarize all variables. Relationships among each of the variables were assessed using Pearson's correlation. Linear regression models were used to evaluate the amount of variences explained between burnout and overall social-emotional competence or the five dimensions of social-emotional competence. Data analysis was conducted using SPSS 27 with an observed alpha level of .05.

4.5 Results

4.5.1 Descriptive Statistics

Firstly, descriptive analysis was run for the demographic variables. The frequency (*n* and percentage) is shown for gender, race, ethnicity, age, and work are in Table 4.1.

Table 4.1 Frequency Table for Gender, Race, Ethnicity, Age, and Work Area

Category	*n*	*%*
Gender		
Female	221	86.33
Male	30	11.72
Prefer not to answer	4	1.56
Non-binary / third gender	1	0.39
Race		
White/Caucasian	228	89.06
Black/African/Caribbean/Black British	18	7.03
Mixed/Multiple ethnic groups	7	2.73
Asian/Asian British	2	0.78
Other ethnic group	1	0.39

Table 4.2 (continued)

Category	*n*	%
Ethnicity		
Non-Hispanic or Latino	249	97.27
Hispanic or Latino	7	2.73
Age		
18-24	9	3.52
25-34	58	22.66
35-44	83	32.42
45-54	68	26.56
55-64	37	14.45
65 or older	1	0.39
Work Area		
Urban	197	76.95
Rural	54	21.09
No Answer	5	1.95

Table 4.2 provides the frequencies (*n* and percentage) for years taught, grade taught and degree. Grade taught was ask as a select all that apply so the sum is more than the total of participants.

Table 4.3 Frequency Table for Years Taught, Grade Taught, and Degree

Category	*n*	%	*M*	*SD*
Years Taught			4.90	1.56
This is my first year	7	2.73		
1-2 years	12	4.69		
3-5 years	31	12.11		
6-10 years	47	18.36		
11-15 years	55	21.48		
16-20 years	43	16.80		
More than 20 years	61	23.83		

Table 4.4 (continued)

Category	*n*	%	*M*	*SD*
Grade Taught				
Elementary	117	45.70		
Middle	62	24.22		
High	83	32.42		
Ungraded	8	3.12		
Degree				
At least one year of course work being a Bachelor's Degree but not a graduate degree	8	3.12		
Associate's degree	3	1.17		
Bachelor's degree	28	10.94		
Master's degree	178	69.53		
Completed a PhD, MD, or other advanced professional degree	38	14.84		
Missing	1	0.39		

Note. Due to rounding errors, percentages may not equal 100%.

Mean, standard deviations, *n*, minimum, maximum, skewness, and kurtosis for independent and dependent variables were calculated and are included in Table 4.3.

Table 4.5 Summary Statistics Table for Interval and Ratio Variables

Variable	*M*	*SD*	*n*	SE_M	Min	Max	Skewness	Kurtosis
Burnout	4.41	1.48	256	0.09	1.00	7.00	-0.13	-1.05
Social Awareness	4.59	0.31	256	0.02	2.75	5.00	-1.41	4.47
Self-awareness	4.55	0.29	256	0.02	3.00	5.00	-1.34	3.98
Relationship Skills	4.41	0.36	256	0.02	2.62	5.00	-1.22	3.21
Self-management	3.74	0.50	256	0.03	2.20	5.00	-0.21	-0.04
Reasonable Decision-Making	4.11	0.34	256	0.02	2.56	4.78	-0.71	1.26
Overall Social-Emotional Competence	4.28	0.27	256	0.02	2.86	4.91	-1.20	4.36

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

4.5.2 Correlation

A Pearson correlation analysis was conducted on overall social-emotional competence, relationship skills, self-awareness self-management, responsible decision-making, social awareness, and burnout. Cohen's standard was used to evaluate the strength of the relationships, where coefficients between .10 and .29 represent a small effect size, coefficients between .30 and .49 represent a moderate effect size, and coefficients above .50 indicate a large effect size (Cohen, 2013). The result of the correlations was examined using the Holm correction to adjust for multiple comparisons based on an alpha value of .05. A significant negative correlation was observed between social-emotional competence and burnout, with a correlation of -.18, indicating a small effect size (p = .016, 95.00% CI = [-.30, -.06]). This result suggests that as social-emotional competence increases, burnout tends to decrease. A significant negative correlation was observed between self-management and burnout, with a correlation of -.33, indicating a moderate effect size ($p < .001$, 95.00% CI = [-.44, -.22]). Thus, as self-management increases, burnout tends to decrease.

Table 4.6 Pearson Correlation Matrix Among overall Social-Emotional Competence, Relationship Skills, Self-Awareness, Self-Management, Decision-Making, Social Awareness, and Burnout

Variable	1	2	3	4	5	6	7
1. Overall SEC	-						
2. Relationship Skills	.77*	-					
3. Self Awareness	.72*	.46*	-				
4. Self Management	.78*	.42*	.48*	-			
5. Decision-Making	.70*	.39*	.39*	.41*	-		
6. Social Awareness	.76*	.63*	.47*	.38*	.45*	-	
7. Burnout	-.18*	-.12	-.09	-.33*	.00	-.03	-

Note. *$p < .05$.

4.5.3 Linear Regression Analysis for Burnout and Self-awareness, Social Awareness, and Responsible Decision-Making

The results of the liner regression model for burnout and self-awareness found a significant relationship ($F(1,254) = 2.28$, $p = .132$, $R^2 = .01$), social awareness ($F(1,254) = 0.22$, $p = .642$, $R^2 = .00$), and responsible decision-making ($F(1,254) = 0.01$, $p = .941$, $R^2 = .00$) were not significant.

4.5.4 Linear Regression Analysis for Burnout and Self-Management

The results of the linear regression model were significant, $F(1,254) = 32.00$, $p < .001$, $R^2 = .11$, indicating that approximately 11.19% of the variance in self-management is explainable by burnout. Burnout presented a significant relationship with self-management, $B = -0.11$, $t(254) = -5.66$, $p < .001$. This indicates that on average, a one-unit increase of burnout would decrease the value of self-management by 0.11 units. Table 4.6 summarizes the results of the regression model.

Table 4.7 Results for Linear Regression with Burnout and Self-Management

Variable	*B*	*SE*	95.00% CI	β	*t*	*p*
(Intercept)	4.24	0.09	[4.05, 4.42]	0.00	45.54	< .001
Burnout	-0.11	0.02	[-0.15, -0.07]	-0.33	-5.66	< .001

Note. Results: $F(1,254) = 32.00$, $p < .001$, $R^2 = .11$
Unstandardized Regression Equation: self-management = 4.24 - 0.11*burnout

4.5.5 Linear Regression Model for Burnout and Relationship Skills

The results of the linear regression model for burnout and relationship skills were significant, $F(1,254) = 3.99$, $p = .047$, $R^2 = .02$, indicating that approximately 1.55% of

the variance in relationship skills is explainable by burnout (B = -0.03, $t(254)$ = -2.00, p = .047). This statistics indicates that on average, a one-unit increase of burnout would decrease the value of relationship skills by 0.03 units. Table 4.8 summarizes the results of the regression model. Table 4.7 describes the results of the linear regression model.

Table 4.8 Linear Regression of Burnout and Relationship Skills

Variable	*B*	*SE*	95.00% CI	β	*t*	*p*
(Intercept)	4.54	0.07	[4.40, 4.68]	0.00	64.25	< .001
Burnout	-0.03	0.02	[-0.06, -0.0004]	-0.12	-2.00	.047

Note. Results: $F(1,254) = 3.99$, $p = .047$, $R^2 = .02$
Unstandardized Regression Equation: Relationship Skills = 4.54 - 0.03*Burnout

4.5.6 Linear Regression Analysis for Burnout and Overall Social-Emotional Competence

The results of the linear regression model were significant, $F(1,254) = 8.89$, $p = .003$, $R^2 = .03$, indicating that approximately 3.38% of the variance in overall social-emotional competence is explainable by burnout. In this case, burnout significantly predicted overall social-emotional competence, B = -0.03, $t(254)$ = -2.98, p = .003. This indicates that on average, a one-unit increase of Burnout would decrease the value of overall social-emotional competence by 0.03 units. Table 4.9 summarizes the results of the regression model. Table 4.7 describes the results of the linear regression model.

Table 4.9 Linear Regression of Burnout and Overall Social-Emotional Competence

Variable	*B*	*SE*	95.00% CI	β	*t*	*p*
(Intercept)	4.43	0.05	[4.32, 4.53]	0.00	85.02	< .001
Burnout	-0.03	0.01	[-0.06, -0.01]	-0.18	-2.98	.003

Note. Results: $F(1,254) = 8.89$, $p = .003$, $R^2 = .03$
Unstandardized Regression Equation: Overall social-emotional competence = 4.43 - 0.03*burnout

4.6 Discussion

The purpose of this study was to investigate the relationship between teacher social-emotional competence. This research provided an opportunity to continue building on the growing body of literature exploring teacher social-emotional competence and burnout (Collie & Perry, 2019; Dorman, 2015; Jennings, 2011). It offers an outlook for overall social-emotional competence. Although past research explored one or more constructs of social-emotional competencies, there has been limited systematic investigation into the advantages of teachers' overall social-emotional competence. With the current teaching climate, understanding the relationship between the teachers' emotions, how they interact with others, and the burnout is imperative. The findings of this study build on the growing body of literature that have found not only mediating, but moderating factors of social-emotional competence and burnout (Tian et. al., 2022).

4.6.1 Correlation between Overall Social-Emotional Competence and Burnout

The first manuscript research aim was to review the correlation between social-emotional competence, each of the five constructs, and burnout. The study concluded that

overall social-emotional competence and self-management were correlated with burnout. Past research also found a relationship between teacher overall social-emotional competence and burnout as they both involve understanding and managing emotions in oneself and others (Greyson & Alvares, 2008; Jennings & Greenburg, 2009). However, while there was a association between social-emotional competence and burnout, the effect size was considered to be small (-.18) (Cohen, 2013). The small effect size could be attributed to the moderate model fit for overall social-emotional competence. Nevertheless, self-management presented a moderate effect size (-.33) (Cohen, 2013).

In recognizing the pivotal role of self-management in mitigating burnout symptoms, it is imperative to delve deeper into the mechanisms that underlie this correlation. Abenavoli et al. (2013) and Karing and Beelmann (2019) underscored the profound impact of equipping teachers with the ability and skills to navigate their emotions, particularly through mindfulness practices. Mindfulness, with its emphasis on present-moment awareness and non-reactive observation of one's thoughts and feelings, has emerged as a potent tool in promoting emotional well-being and resilience. By cultivating mindfulness, teachers not only gain the capacity to respond more adeptly to the challenges and stressors inherent in their profession but also create a foundation for sustained well-being.

Given the compelling evidence presented, the imperative to support teachers through targeted professional development initiatives becomes evident. Investing in evidence-based strategies like mindfulness could serve as a linchpin in fortifying teachers' social-emotional competencies. Such endeavors stand to enhance individual teacher well-being, as well the potential to transform the overall educational landscape,

fostering environments conducive to both effective teaching and learning. In prioritizing the emotional health and competence of educators, teachers would be empowered in their roles while at the same time paving the way for enriched educational experiences for students. This aspect is consistent with past research, which found that when teachers possess the ability and skills to manager their emotions, for example, through mindfulness they are less likely to experience burnout symptoms (Abenavoli et al., 2013; Karing, & Beelmann, 2019). Given these findings it is important to support teachers through professional development programs to strengthen their social-emotional skills using evidence-based strategies, such as mindfulness.

4.6.2 Linear Regression Model: Burnout and Overall Social-Emotional Competence

The next we explored further the relationship between burnout and overall social-emotional competence or any of the five constructs. According to the study findings, there is a significant relationship between burnout and overall social-emotional competence, self-management, and relationship skills. These results are consistent with previous research, which demonstrated a link between higher levels of social-emotional competence and reduced burnout (Li, 2023). Brouwers and Tomic (2000) shed further light on this dynamic. Their findings indicated that burnout not only impacts a teacher's emotional state but also has positive ramifications for their self-efficacy. This idea suggests a reciprocal relationship between burnout and a teacher's confidence in their teaching capabilities, potentially leading to a self-reinforcing cycle.

Furthermore, the proposition put forth by Smith and Whitley (2023) regarding the enhancement of teacher skills to bolster social-emotional competence is noteworthy. This assertion highlights a proactive approach to addressing the well-being of educators. By

providing structured training and resources aimed at developing these crucial skills, schools and educational institutions have the potential to foster environments that support both the emotional health of teachers and the quality of instruction in the classroom. This notion underscores the practicality and significance of investing in professional development programs tailored to fortify social-emotional competence within the teaching profession.

4.7 Strengths and Limitations

There are several strengths presented in this study. The first strength is that the effective use of social media to recruit teachers. While many studies have recruited teachers with permission from leadership with a school or district, this study used social media and listservs for professional organizations. An additional strength is that the current theoretical framework provided the needed support to explore overall social-emotional competence. Although theoretical models might address one or more of the five constructs, none has so far accounted for all five constructs, and there is no present instrument to measure all of them. Lastly, the cross-sectional design of the study provided a more cost effective and time-efficient way to explore the study.

There are limitations that should be observed when reviewing the findings of this study. First, this is a non-experimental, cross-sectional design study only collecting data at one point in time. Additionally, Lazano-Pena et al. (2021) pointed out the absence of a peer-reviewed, validated metric for assessing overall social-emotional competence. They observed that although there have been various tools employed previously to examine teachers' social-emotional competence, none of them have encompassed all five

constructs. While this study began that process, the relationship between social-emotional competence and the long-standing measure for burnout was weak to moderate.

4.8 Implications for Research and Practice

There are several implications for this research. This study provides an insight into teacher social-emotional competence as it relates to the constructs of the prosocial classroom model. These findings are consistent with the theoretical framework, The prosocial classroom model presented by Jennings and Greenburg (2009). The theory suggests that teachers with higher social-emotional competence and possess more self-management skills would experience less burnout such as emotional exhaustion (Jennings & Greenburg, 2009). This realization is consistent with the findings of other studies are well (Herman et al., 2020; Poulou, 2017). While the relationship between overall social-emotional competence and burnout is clear from this study, future research is needed with a larger sample size to quantify the strength of the relationship, and the potential implications for teachers in various demographic groups (i.e., number of years teaching, gender).

Furthermore, continuing to explore the comprehensive social-emotional competence scale is imperative. The results of this current study could be used to reduce the number of survey items and shortening the survey. Once again, reviewing the validity of the instrument with a larger sample size is equally important in future studies.

There are also several implications for practice. First, understanding the significance of teacher social-emotional competence and its impact on burnout is crucial for designing effective interventions. Educational institutions could implement targeted professional development programs to enhance teachers' social-emotional skills, self-care

strategies, and stress management techniques. Additionally, school administrators and policymakers could also foster supportive work environments, encourage collaboration and mentorship, and provide resources to support teachers' social-emotional competence. By addressing the complex interplay between social-emotional competence and burnout, educational systems could promote healthier and more sustainable teaching practices, benefiting both teachers and students.

5 TEACHER SOCIAL-EMOTIONAL COMPETENCE, BURNOUT AND SCHOOL CLIMATE: A CROSS-SECTIONAL STUDY THROUGH A PROSOCIAL CLASSROOM LENS

Proposed Journal: Social Emotional Learning: Research, Practice, and Policy

5.1 Abstract

Purpose: Teachers are tasked with supporting student learning and academic achievement. To effectively do so, school officials, parents, and community members should equally support teachers' social-emotional competence. This study aimed to examine the relationship between teacher social-emotional competence, burnout, and school climate. Methods: An online cross-sectional study was conducted. The sample consisted of 256 certified Kentucky teachers over the age of 18. The measures for this study included overall social-emotional competence, burnout, and school climate (collegial leadership and institutional vulnerability. Results: The results found that burnout was correlated with both constructs of school climate: collegial leadership (r=-.36, CI=[-.46, -.25], p=<.001) and institutional vulnerability (r=.21, CI=[.09, .33], .011). Collegial leadership (B = -0.53, $t(253)$ = -5.69, p < .001) and institutional vulnerability (B = 0.31, $t(253)$ = 2.75, p = .006) presented a significant relationship with burnout. No significant results were found for overall social-emotional competence. Conclusion: It is important that school leadership continue to support teachers' social-emotional competence through continued training and professional development, as well as seeking policy solutions to create a long-term positive school climate

Keywords: K-12, Teacher, Social-Emotional Competence, Burnout, School Climate

5.2 Impact Statement

Teachers play a major role in supporting student learning and academic achievement. To achieve this vital mandate, teachers' social-emotional competence should also be supported. This study looked at the relationship between teacher social-emotional competence, burnout, and school climate. A better understanding this association could lead to for the formulation and implementation of evidence-based interventions to promote teacher social-emotional competence, as well as policy measures to provide long term solutions.

5.3 Introduction

The field of education is recognized as one of the most emotionally challenging occupations, potentially impacting mental health and overall well-being (Weissberg et al 2015). An estimated 44% of new teachers leave the profession within five years of starting their teaching career (Ingersoll et al., 2018). In another study in 2022, about 23% of teachers said they would leave the profession at the end of the 2022-23 school year (Doan et al., 2023). Eighteen percent of public-school teachers supplemented their income with a job outside the school system in the 2017-18 school year (Wilhelm & Lewis, 2021). Therefore, to be successful in this demanding field, teachers should be equipped emotionally to handle the daily stressors.

Social-emotional competence involves skillfully navigating one's own intrapersonal and interpersonal social and emotional experiences to promote personal and collective well-being. It is realized through individuals' fulfillment of their basic psychological needs, motivations, and behaviors in social and emotional contexts (Collie, 2019). High levels of teachers' social-emotional competence are seen as a safeguard

against stressful situations and provide the skills to cope with burnout (Oliveria et al, 2021; Puertas-Molero et al., 2019; Ray et al, 2016), while also fostering their overall well-being and enhancing their confidence in the classroom (Conroy et al., 2012). When teachers experience burnout, students' learning could be directly impacted adversely. Oberle and Schonert-Reichl (2016) found a positive correlation between teachers experiencing burnout and increased students' cortisol levels. However, existing literature posits that when a teacher's social and emotional state is supported, it could lead to better management of the daily stressors of teaching (Jennings et al., 2011; O'Brennan et al., 2017), effective classroom management (Jennings et al., 2011) and supportive and caring relationships with students (Collie 2016; Poulou, 2017). Consequently, these affirmative effects indirectly lead to improvements in students' academic performance (DeLay 2016).

School climate play an important role in creating a positive work atmosphere for teachers in stressful times. The job requirements for teachers are substantial, with an average weekly workload exceeding 50 hours (Merrick College, 2022). Moreover, teachers are more inclined to experience burnout in settings characterized by subpar working conditions, excessive job demands, insufficient training, and a dearth of administrative support (Blazer, 2010). The school environment could also be a place where teachers experience bullying and threatening situations from students and colleagues alike (Gregory et al., 2012).

Hoy et al. (2002) measured school climate in four different dimensions and two of those dimensions were explored in this study. That is, collegial leadership and institutional vulnerability. Collegial leadership entails the way principals treat teachers

and address their social needs while working towards the goals of the school. The leadership present in educational institutions offers a direct impact on the school environment. When teachers receive backing from administrators and colleagues, they are better equipped to handle the pressures of teaching (Sokal et al., 2020). Herman et al. (2021) found that amidst COVID-19 pandemic, the support provided by principals for teachers emerged as a positive factor in predicting educator's ability to cope with stress and experience satisfaction (Herman et al., 2021). The same study also found that schools that provided supportive leadership, just, and fair work environment before the coronavirus pandemic showed more positive outcomes after the pandemic began (Herman et al., 2021).

Additionally, leadership, specifically principals, plays an integral role in teachers' social-emotional wellbeing. When teachers perceive principals as supportive and actually receive their support, they are more engaged at work, develop more trust in the organization, and experience higher job satisfaction (Collie et al. 2016; Skaalvik & Skaalvik, 2009). Powell et al. (2015) found that teachers in their study experienced over 40% of their bullying experiences from school leadership, but found that a more positive organizational climate is associated with lower levels of bullying. Leadership within schools should acknowledge the impact of a teacher's social and emotional state on the learning environment, as well as on the execution of social and emotional learning initiatives, and the dynamics between teachers and students (Lozano-Peña et al., 2021). Leadership should also take steps to mitigate burnout for teachers by prioritizing programs to promote mental wellness (Barsfield et al, 2019).

The second dimension of school climate is institutional vulnerability. It describes how susceptibility of the teachers, principals, and school to outside parents and citizen groups who are vocal and critical of the school (Hoy et al., 2002). Managing the expectations of parents is one of the top work-demands of teachers face (Boldrini et al., 2019). Additionally, studies have found that teacher relations with parents, impact on their emotional wellbeing where conflict with parents has a positive correlation with emotional exhaustion (Sideridis 2023; Skaaluik 2007). Another study established that conflicts with parents were positively correlated with emotional exhaustion of homeroom teachers (Baeriswyl et al., 2021). Nonetheless, educators should provide additional social-emotional support to students with less parental involvement in their school life (Jennings & Geenburg, 2009). While there is literature focused on collegial leadership and institutional vulnerability and various constructs of social-emotional competence separately, more research is needed to explore both dimensions of school climate and social-emotional competence.

The current study is based on the theoretical framework provided by Jennings and Greenburg's (2009) prosocial classroom model. The framework holds that a teacher's social and emotional skills at the center of their job satisfaction, performance, and student support and achievement. The skills are self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Jennings & Greenburg, 2009). These five skills were developed under the collaborative for academic, social, and emotional learning (CASEL) model which focuses on emotional, cognitive, and behavioral skills originally designed to assess student social-emotional learning (CASE, 2022). While social-emotional learning and social-emotional competence appear similar,

the former focuses on a student's while the latter refers to a teachers' social-emotional well-being through the five dimensions. This study allowed the researcher to explore the impact that school climate has on all the five dimensions of social-emotional competence and well as burnout in the same study instrument.

These five dimensions are needed to create a positive climate and environment in the classroom (Jennings & Greenburg 2009), which could lead to positive student outcomes (Alzahrani et al., 2019). The aim of this study was to explore the relationship between teacher social-emotional competence, burnout, and school climate. The following is the research question that has guided this study: What is the relationship between school climate, burnout, overall social-emotional competence, and social-emotional competence constructs (self-awareness, self-management, social awareness, relationship skills, responsible decision-making) in teachers?

5.4 Methods

5.4.1 Participants

Participants were 259 teachers in the state of Kentucky. The majority of participants were female (86.22%), White (89.06%), and over the age of 35 (73.83%). Most of the participants (84.37%) reported a master's degree or higher educational level. In addition, 45.07%, 24.22%, and 32.12% of the participants taught at the elementary, middle, and high school levels respectively. On work settings, 76.95% of the participants worked in an urban with 21.09% operating in the rural environment.

5.4.2 Procedures

The teachers participating in the study completed an online survey. The online survey was shared via teacher-focused group pages in listservs and social media and

email through county-level teacher associations. Those who participated were entered in a chance to win a gift card. Approval to conduct this study was granted by the University of Kentucky Institutional Review Board (IRB) through an expedited review. Data were collected between May 15, 2023, and June 4, 2023.

5.4.3 Measures

Participants completed a self-report questionnaire that included sociodemographic questions, and measures of social-emotional competence, burnout, and school climate.

5.4.3.1 Social-Emotional Competence

Social-emotional competence was measured using the Social-Emotional Competence scale developed by Smetana (2020). The measure consists of 44 questions measuring five subscales: self-awareness (9 questions), self-management (10 questions), social awareness (8 questions), relationship skills (8 questions), and decision-making (9 questions). The answers are presented on a 5-point Likert scale with the response choices of "always," "sometimes," "not sure," "rarely," and "never". Cronbach's alpha for each subscale was: self-awareness (.62), self-management (.75), social awareness (.60). relationship skills (.58), and responsible decision-making (.49). Cronbach's alpha for the overall social-emotional competence scale was .78.

5.4.3.2 Burnout

Burnout was measured using Maslach Burnout Inventory scale (Maslach et al., 1997). Though Maslach Burnout Inventory has three subscales, only one subscale, Emotional Exhaustion (MBI: EE) was used in this study. Multiple studies have noted that MBI: EE is the widely used subscale due to its higher and consistent related reliability (Firoilli, 2017; Maslach et al., 1997). The MBI: EE scale is a nine-item subscale for

measuring burnout in teachers. The measure includes statements such as “I feel emotionally drained from my work.” The responses are offered in a seven-point scale ranging from “0” to indicate “never” and “6” to indicate “every day.” This is a proprietary measure that has been used in primary, secondary, and post-secondary settings. A higher score for the subscale indicates a higher degree of burnout. A Cronbach’s alpha of .94 was found for this study.

5.4.3.3 School Climate

School climate was measured using the Organizational Climate Index (OCI). Only two of the four subscales were included in the survey: collegial leadership and institutional vulnerability. According to Hoy et al. (2002), Collegial leadership reviews the way principals treat teachers and address the social needs of faculty while working towards the goals of the school. On the other hand, institutional vulnerability deals with the vulnerability of the teachers, principals, and school to external, but vocal and critical parents and community groups targeting the school. Responses were collected on a four-point scale ranging from “rarely occurs” to “very frequently occurs.” Cronbach’s alpha for this study was collegial leadership (.89), and institutional vulnerability (.69). To score each subscale, a mean will be calculated.

5.5 Data Analysis

Descriptive analysis, including frequency, distributions mean, and standard deviations were used to summarize all variables. Relationships among each of the variables were assessed using Pearson’s correlation. Linear regression models were preformed to evaluate if school climate dimensions\ of overall social-emotional

competence, the five dimensions of social-emotional competence, and burnout. Data analysis was conducted using SPSS 27 with an observed alpha level of .05.

5.6 Results

5.6.1 Descriptive Statistics

Mean, standard deviations, *n*, minimum, maximum, skewness, and kurtosis for independent and dependent variables were calculated for burnout, collegial leadership, institutional vulnerability, self-awareness, social awareness, relationship skills, self-management, and responsible decision-making. When the skewness is greater than 2 in absolute value, the variable is considered asymmetrical about its mean. When the kurtosis is greater than or equal to 3, then the variable's distribution is markedly different than a normal distribution in its tendency to produce outliers (Westfall & Henning, 2013). The results are included in Table 5.1.

Table 5.1 Summary Statistics Table for Interval and Ratio Variables

Variable	*M*	*SD*	*n*	SE_M	Min	Max	Skewness	Kurtosis
Burnout	4.41	1.48	256	0.09	1.00	7.00	-0.13	-1.05
Social Awareness	4.59	0.31	256	0.02	2.75	5.00	-1.41	4.47
Collegial Leadership	2.89	0.93	256	0.06	1.00	4.00	-0.34	-1.19
Institutional Vulnerability	2.72	0.78	256	0.05	1.00	4.00	-0.03	-0.86
Self-awareness	4.55	0.29	256	0.02	3.00	5.00	-1.34	3.98
Relationship Skills	4.41	0.36	256	0.02	2.62	5.00	-1.22	3.21
Self-Management	3.74	0.50	256	0.03	2.20	5.00	-0.21	-0.04
Reasonable Decision-Making	4.11	0.34	256	0.02	2.56	4.78	-0.71	1.26
Overall Social-Emotional Competence	4.28	0.27	256	0.02	2.86	4.91	-1.20	4.36

Note. '-' indicates the statistic is undefined due to constant data or an insufficient sample size.

5.6.2 Correlation

The result of the correlations was examined using the Holm correction to adjust for multiple comparisons based on an alpha value of .05. A significant positive correlation was observed between burnout and institutional vulnerability, with a correlation of .21, indicating a small effect size ($p = .011$, 95.00% CI = [.09, .33]). This suggests that as institutional vulnerability increases, burnout tends to increase. A significant negative correlation was observed between burnout and collegial leadership, with a correlation of -.36, indicating a moderate effect size ($p < .001$, 95.00% CI = [-.46, -.25]). This illustrates that as collegial leadership decreases, burnout tends to increase. A significant negative correlation was observed between burnout and self-management, with a correlation of -.33, indicating a moderate effect size ($p < .001$, 95.00% CI = [-.44, -.22]). This shows that as self-management decreases, burnout tends to increase. There were no other statistically significant correlations found. Table 5.2 shows the Pearson correlation matrix for all constructs.

Table 5.2 Pearson Correlation Matrix Among Burnout, Collegial Leadership, Institutional Vulnerability, Self-Awareness, Relationship Skills, Self-Management, Responsible Decision-Making, Social Awareness, and Overall Social-Emotional Competence

Variable	1	2	3	4	5	6	7	8	9
1. Burnout	-								
2. Collegial Leadership	-.36*	-							
3. Institutional Vulnerability	.21*	-.16	-						
4. Self-Awareness	-.09	.03	-.04	-					
5. Relationship Skills	-.12	.01	.03	.46*	-				
6. Self-Management	-.33*	.01	-.10	.48*	.42*	-			

Table 5.3 (continued)

Variable	1	2	3	4	5	6	7	8	9
7. Responsible Decision-Making	.00	-.04	-.04	.39*	.39*	.41*	-		
8. Social Awareness	-.03	-.02	-.03	.47*	.63*	.38*	.45*	-	
9. Overall Social-Emotional Competence	-.18	-.01	-.06	.72*	.77*	.78*	.70*	.76*	-

Note. * p

5.6.3 Linear Regression Model

The results of the linear regression model were significant, $F(2,253) = 22.96$, $p < .001$, $R^2 = .15$, indicating that approximately 15.36% of the variance in burnout is explainable by institutional vulnerability and collegial leadership ($B = 0.31$, $t(253) = 2.75$, $p = .006$). This indicates that on average, a one-unit increase of institutional vulnerability would increase the value of burnout by 0.31 units. On the other hand, collegial leadership significantly presented a significant relationship with burnout, $B = -0.53$, $t(253) = -5.69$, $p < .001$. This demonstrates that on average, a one-unit increase of collegial leadership would decrease the value of Burnout by 0.53 units. Table 5.3 summarizes the results of the regression model.

Table 5.3 Results for Linear Regression with Institutional Vulnerability and Collegial Leadership and Burnout

Variable	*B*	*SE*	95.00% CI	β	*t*	*p*
(Intercept)	5.11	0.45	[4.23, 5.98]	0.00	11.46	< .001
Institutional Vulnerability	0.31	0.11	[0.09, 0.53]	0.16	2.75	.006
Collegial Leadership	-0.53	0.09	[-0.72, -0.35]	-0.33	-5.69	< .001

Note. Results: $F(2,253) = 22.96$, $p < .001$, $R^2 = .15$
Unstandardized Regression Equation: Burnout = 5.11 + 0.31*Institutional Vulnerability - 0.53*Collegial Leadership

5.7 Discussion

The purpose of this study was to investigate teachers' social-emotional competence, burnout, and the influence of their school climate. The study explored the community context factors discussed in the prosocial classroom model as it related to school climate. Specifically, only two dimensions of school climate: collegial leadership (the support of school leadership for teachers) and the institutional vulnerability (influence of community members and parents) were considered in this study.

5.7.1 Correlation between Social-Emotional Competence, Burnout, and School Climate

The first research question focused on the correlation between school climate (collegial leadership and institutional vulnerability), burnout, overall social-emotional competence, and each of the five social-emotional competence constructs. This study found that there was a positive correlation between overall social-emotional competence across each of the five constructs (self-awareness, self-management, social awareness, responsible decision-making, relationship skills). This finding is consistent with the prosocial classroom model (Jennings & Greenburg 2009). However, the study did not find a correlation between school climate and social-emotional competence. Notably, this finding is not consistent with past research which found a correlation between school

climate and social-emotional competence (Collie & Martin 2012; Fiorilli et al., 2017), as well as that teachers' social-emotional competence plays a mediating role between the principal's transformational leadership and teachers' burnout (Tain et al., 2022).

In addition, there was a correlation between both school climate constructs, and burnout. A negative correlation was found between burnout and collegial leadership. The relationship between burnout and collegial leadership is a well documented research area (Boldrini et al., 2019; Collie & Martin, 2017; Fiorilli et al., 2017). Ford et al. (2019) noted that school leadership could not only leave teachers feeling burned out, but also influence their sense of belonging or commitment to the school, and their intent to leave.

A positive correlation was found between burnout and institutional vulnerability. Teachers are susceptible to the outside influence of parents. Likewise, Grayson and Alvarez (2008) found that burnout was associated with parent relations, specifically when working with students and families in a school environment. Furthermore, Pedditzi et al. (2021) revealed that teacher-student satisfaction was a predictor of teachers' sense of self-accomplishment, reinforcing the need to create positive teacher parent relationships.

Only one construct of social-emotional competence was found to have a correlation with burnout. There was a negative correlation between burnout and self-management. According to Borowski (2019), self-management is a teacher's ability to manage one's emotions and behaviors effectively in any field. The correlation between burnout and self-management is consistent with previous research. When teachers possess higher levels of social-emotional competence, they are better able to cope with burnout (Oliveria et al, 2021; Puertas-Molero et al., 2019; Ray et al, 2016). Oliveira et al. (2021) posited that providing social emotional competence training to teachers is a

mitigating factor of teacher burnout, especially emotional exhaustion. There are well documented strategies to improve self-management including self-care (Tan & Mahoney, 2022) and mindfulness practices (Dorman, 2015; Karing, & Beelmann, 2019).

5.7.2 School Climate Constructs and Social-Emotional Competence

The second research question asked if either construct of school climate (collegial leadership or institutional vulnerability) was a predictor of social-emotional competence. In the study analysis, no statistically significant relationship was found. However, the findings are not consistent with past research, which revealed a positive correlation between a teacher's emotional well-being and parental conflict (Sideridis 2023; Skaaluik 2007).

5.7.3 School Climate Constructs and Burnout

Finally we focused on if the constructs of school climate: collegial leadership and institutional vulnerability and there continued relationship with burnout. In line with the prosocial classroom model (Jennings & Greenburg, 2009), this study found that community contextual factors, particularly, collegial leadership, presented a significant relationship teacher burnout. The findings of this study show that as perceived collegial leadership increased burnout decreased. This is consistent with prior research from Collie and Martin (2017) who affirmed that support from principals could reduce teacher burnout. Additionally, Fiorilli et al. (2017) found that teacher satisfaction or dissatisfaction with their perceived social support was a predictor of teacher burnout. This reafirms that school leadership should continue to address teachers' social needs. A positive leadership approach could lead to better school outcomes (Boldrini et al., 2019).

Institutional vulnerability also presented a significant relationship with teacher burnout. The relationship between teachers, parents and other community groups are a vital part of the school environment. A conducive teacher's relationship with parents could mitigate experiences of burnout (Boldrini et al., 2019; Sideridis 2023; Skaaluik, 2009). Also, conflict with partents could lead to emotional exhaustion (Baeriswyl et al., 2021). Establishing sound communications plans between teachers and parents (Smith & Sheridan, 2019), as well as formulating rules and strategies to reduce student behavioral issues (Friedman, 1995) reduce teacher emotional exhaustion.

5.8 Strengths and Limitations

There were several strengths highlighted in this study. First, online recruitment methods were used as an effective recruitment tool for teachers. While some studies utilize online recruitment of teachers (Pressley, 2021), several researchers still recruit study participants through traditional school channels of communication (e.g., communications from school leadership). Reaching teachers through online means, such as social media provides a broad reach to a large pool of teachers. Moreover, this study used pre-existing and reliably tested insturments like Maslach Burnout Inventory (Maslach & Jackson, 1984) and Organizational Climate Index (Hoy, 2006).

Several limitations were identified from this study. First, the generalizability of the findings might be limited due to the population being specific to Kentucky and the nature of a convenience sample, allowing self-selection for participation. The study is of a cross sectional design and data were collected at only one period of time; therefore, the results might not allow for further generalizability. The survey was given in the spring, at the very end of the school year. This could be a time of increased stress and burnout of

educators due to testing, and end of the year responsibilities. An additional limitation is the use of a relatively new measure, The Social Emotional-Competence scale. While the scale provides a step towards providing a comprehensive measure for teacher social-emotional competence in the spirit of the prosocial classroom model (Jennings & Greenburg, 2009), it has only been tested with teachers and students (Smetana, 2020).

5.9 Implications for Research and Practice

The current study presents several implications for practice such as increasing opportunities to support teacher wellness in a school setting as previously recommended by Barsfield et al. (2019). While the current study did not find a relationship between teacher overall social-emotional competence and burnout, it found a correlation between burnout and self-management. Teachers who use stress management techniques felt that using these practices positively influenced their teaching (Caballero, 2022). Supporting teacher social-emotional competence has been shown to reduce burnout, and one of the evidence-based ways to achieve better results is through supporting teacher wellness programs (Curry & O'Brian, 2012).

Additionally, looking for policy solutions to increase teacher wellbeing could provide long-term solutions to the systemic issue of teacher burnout, especially in a post-COVID-19 environment. Principals, school district administrations, and school board leaders could adopt policies and social norms to support teacher professional development, planning time, while at the same time continuing to support student achievement expectations and needs. Also, as illustrated in this study, compressive measurements of teach social-emotional competence could be introduced at the policy

level and used to assess educational quality. This aspect could be achieved through a certification process in the United States (Lozano-Pena, 2021).

Suggestions for future research include further testing is needed for the social-emotional competence scale. The current scale is lengthy (44 items) and provides a moderate model fit. To improve the validity of the instrument, reviewing the responses from this study, evaluating the current instrument, and retesting with a larger sample size is recommended. Surveying teachers at multiple points in time during the school year would provide a more comprehensive picture of these constructs throughout the entire year. Another recommendation for future research is to explore additional community context factors as described by the prosocial classroom model. While the current study focused on a preexisting measure for school climate, there are other influences that could impact teacher social-emotional wellbeing and burnout that were not studied. Continued exploration of this theory construct is therefore recommended.

5.10 Conclusion

The current study explored the relationship between teacher social-emotional competence, burnout, and school climate. The constructs of social-emotional competence and the overall social-emotional competence scale were not found to be in correlation with school climate (i.e., collegial leadership and institutional vulnerably). However, they correlated with teacher burnout. To continue to uplift teachers in a school environment there is a need to provide support from the school leadership, and parents. Equally, professional development opportunities and long-term policy solutions should be provided to enhance teacher social-emotional competence.

5.11 Acknowledgements

Thank you to Dr. Kristin Smetana for allowing me to use the Social-Emotional Competence scale in this research study.

6 CONCLUSION AND RECOMMENDATIONS

The purpose of this quantitative study was to explore the social-emotional competence and burnout of Kentucky teachers. The prosocial classroom model (Jennings & Greenburg, 2009) served as the theoretical framework for this study. By using the previously created Social-Emotional Competence Survey and the long standing Maslach Burnout Inventory Emotional Exhaustion subscale this study explored social-emotional competence through a comprehensive survey aligned with the five constructs (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making) of the prosocial classroom model for the first time in teachers only.

6.1 Summary of Results

A self-report, online survey was distributed using online recruitment methods to a convenience sample of Kentucky teachers in late-May-early June 2023 via listservs and social media. Two hundred fifty-six teachers participated in the survey. The following sections provide a summary of results for the two manuscripts prepared for this dissertation.

6.1.1 Manuscript 1

For the first study, four research questions were explored:

RQ1: Does the confirmatory factor analysis model (self-awareness, self-management, social awareness, relationship skills, and responsible decision-making) for the social-emotional competence fit the data?

RQ2: What is the relationship between overall social-emotional competence, social-emotional competence constructs (self-awareness, self-management, social

awareness, relationship skills, and responsible decision-making), and burnout in teachers?

To address the first research question, a confirmatory factor analysis was performed on the Social-Emotional Competence Survey (n=156). This process analysis was done to assess the model fit. The overall model was a moderate fit with three of the five fit indices indicators being met at an acceptable level. The survey instrument was not edited for the current analysis based on these results to avoid overmanipulating the data and to preserve the ability for other researchers to replicate the study findings with the current data set in the future. Reviewing and editing the survey based on the loading factors of reach survey item and retesting with a large sample size is recommended for future studies.

The second research question explored the relationship between social-emotional competence, the five constructs of social-emotional competence, and burnout. Only two correlations were found: 1) overall social-emotional competence and burnout, and 2) self-management and burnout. While there was a significance correlation between overall social-emotional competence and burnout, the effect size was small. This suggests additional testing in the future is needed. Burnout and self-management presented with a moderate effect size. No other significant correlations were found between burnout and the remaining constructs of social-emotional competence.

Next, a linear regression model was performed for each of the five construct of social-emotional competence to future explore the relationship and identify the amount of variance. A significant relationship was found between burnout and self-management and relationship skills. An average of a one-unit increase of burnout would decrease the value

of self-management by 0.11 units and a one-unit upsurge of burnout would lessen the value of relationship skills by 0.03 units.

Lastly, we explored the relationship using a linear regression model between burnout and overall social-emotional competence. This analysis was significant with a one-unit increase of burnout decreasing the value of overall social-emotional competence by 0.03 units.

6.1.2 Manuscript 2

The second manuscript focused on following research question:

RQ1: What is the relationship between school climate, burnout, overall social-emotional competence, and social-emotional competence constructs (self-awareness, self-management, social awareness, relationship skills, responsible decision-making) in teachers?

The the correlation between the two school climate constructs, collegial leadership and institutional vulnerability, burnout, and social emotions competence and the five constructs was observed. Burnout and collegial leadership were correlated with a moderate effect size. However, burnout and institutional vulnerability were correlated with a small effect size. Similarly, burnout and self-management were correlated with a small effect size.

Next, the relationship between collegial leadership and institutional vulnerability and of overall-social-emotional competence was explored using a linear regression model and no significant results were found. The final analysis sought to understand the relationship between collegial leadership and institutional vulnerability and teacher burnout using a linear regression model. According to the study findings, both collegial

leadership and institutional vulnerability were found to be significant with a one-unit increase of institutional vulnerability increasing the value of burnout by 0.31 units. Equally, a one-unit increase of collegial leadership would decrease the value of burnout by 0.53 units. These findings are consistent with past research on collegial leadership (Collie & Martini, 2017; Fiorilli et al., 2017) and institutional vulnerability (Boldrini et al., 2019, Skaaluik 2007, 2009).

6.2 Strengths

This study provided several strengths. It demonstrated that social media could be an effective recruitment tool for reaching teachers. While a few studies had used online methods (Pressley, 2021) and snowball sampling (Sokal et al., 2020) to reach teachers, more research is needed on these recruitment methods. This study adds to the current literature base for the success of using social media as a recruitment tool. Unfortunately, before opting for the social media approach, several schools and school districts were approached to share the study and declined to do so. Partnering with teacher associations and unions provided a direct line to teachers outside of the school system; further providing a recruitment opportunity.

An additional strength is that the study looked at an area of the theoretical model that has been identified as needing further research (Jennings & Greenburg 2009). Social and community contextual factors in this study were studied by exploring school climate. While more research is still needed, the information provided in this study could aid in future instrumentation selection as researchers continue to explore the prosocial classroom model constructs. Lastly, cross-sectional studies are often more cost-effective

and time-efficient compared to longitudinal studies, making them a practical choice for this study given that data collection took place at the end of the school year.

6.3 Limitations

Limitations refer to factors in the study that are beyond the researcher's influence, but could affect the methods and data analysis of the study (Simon, 2011). Several limitations were present in the study. First, the convenience sampling methods used, primarily resulted to sharing the study via social media (i.e., Facebook) and regional teacher association groups, as well as via their listserv. Convenience sampling through social media platforms could lead to a potential bias towards a specific demographic or subset of educators who are actively engaged in online communities. This might inadvertently exclude a significant proportion of teachers who either do not participate in such platforms or have limited access to them in general and during the summer months. Consequently, the resulting sample might not be representative of the broader teaching population, potentially limiting the generalizability of the study's conclusions.

Another limitation is related to the study instrument. There was a lack of a peer review validated measure for social-emotional competence. Lazano-Pena et al. (2021) noted that while there are several instruments that have been used in the past to explore teacher social-emotional competence, none measured all the five constructs. However, although a social-emotional competence scale was given in the past to a small group of teachers (Sementa, 2020), confirmatory factor analysis was performed for the current study, establishing the model fit as moderate. Nonetheless, there is room for a reduction in the number of the instrument questions given that several ideas did not show significant loading for their intended construct.

An additional limitation is the sample size. Recommendations vary regarding the ideal sample size. Tabachnick et al. (2013) suggested an overall sample size of at least 250-300 participants. Alternatively, some experts advocated for a ratio of survey items to the number of observations, recommending a range of 5-10 cases (Bollen, 1989). For instance, with a 44-item survey, this would entail collecting between 220 to 440 observations to meet this criterion. While the sample size was larger than the g power amount calculated (89) and collected above the targeted amount (n=150), for the confirmatory factor analysis, the sample size was acceptable (N=259).

The last limitation involves the context and community factors examined. There is also the possibility that other community and contextual factors could have an influence on teacher's social-emotional competence and burnout. Future research should consider assessing additional factors that could directly relate to the constructs of social-emotional competence.

6.4 Implications for Research and Health Promotion Professionals

The current study provides several contributions to the health promotion professions. While the sample of Kentucky teachers might lessen the generalizability of the results, the work in teacher social-emotional competence and testing the measure provides an opportunity to schools and organizations to understand teacher social-emotional competence without having to use a proprietary instrument removing the cost barrier. This would provide health promotion professionals and researchers the opportunity to continue testing the social-emotional competence survey instrument.

For a more comprehensive grasp of teacher social-emotional competence, future research could explore several key initiatives. Firstly, this study showed that it remains

imperative to develop and rigorously test a more concise survey instrument designed to evaluate teacher social-emotional competence. This streamlined instrument should be adept at efficiently capturing the educators' emotional intelligence, empathy, and interpersonal skills, thereby affording researchers a more accurate and efficient measure.

In tandem with this study, it is crucial to delve into other salient aspects of the school climate that might potentially influence and, in some instances, impede teacher social-emotional competence. Factors such as administrative support, peer collaboration, and student-teacher relationships could all bear relevance in comprehending the broader ecological context in which educators operate. By scrutinizing these additional variables, researchers could furnish a more nuanced portrait of the multifaceted interplay between the school environment and teacher emotional state.

Moreover, the collection of data from a diverse sample population is paramount to the continued refinement of the social-emotional competence survey instrument. This ongoing evaluation would serve to validate the reliability and validity of the tool, ensuring its efficacy and applicability across various educational settings and demographic profiles. This iterative process would engender a robust and dependable metric that could reliably gauge teacher social-emotional competence, contributing to a more refined understanding of the factors that underpin effective teaching.

Lastly, in the pursuit of fostering meaningful change in the teaching profession, it is imperative to explore policy-driven solutions. Policies that prioritize and invest in professional development, mental health resources, and supportive work environments could play a pivotal role in cultivating a positive ecosystem that nurtures teacher social-emotional competence. These long-term systemic changes are essential in fortifying the

social and emotional state of educators, enhancing their capacity to provide high-quality instruction and support for their students. Through these concerted efforts, it would be possible to propel the teaching profession into a new era of excellence and effectiveness.

6.5 Conclusion

Teaching has historically been a profession known for being highly demanding, leading to heightened stress levels. Social-emotional competence could provide teachers with valuable tools for managing these pressures, not only within the classroom but also in their personal lives. The theoretical framework for this study, the prosocial classroom model, provided the bridge between teacher social-emotional competence, burnout, and key elements to succeed in the classroom, such as supporting student well-being and academic achievement (Jennings & Greenburg, 2009). Additionally, there are outside factors, including leadership within the school and parental interactions that could impact teachers' feelings of burnout and social-emotional competence. The results of this study provide a more comprehensive look at overall teacher social-emotional competence and the impact of burnout and school climate. The study took into account all the five constructs: self-awareness, self-management, social awareness, relationship skills, and responsible decision making that influence teacher social-emotional competence and provided one survey tool open for all to use. Researchers should use the findings of this study to refine the current social-emotional competence survey, and retest with a larger sample size to improve the validity of the instrument.

Incorporating a long standing evidenced based measure of teacher burnout led to several relationships between social-emotional competence constructs and social climate to be identified. Continuing to support teacher social-emotional competence thorough

current evidence-based methods is highly recommended. Furthermore, there is a need to formulate and implement long-term solutions, such as policy change and continued support from school leadership and parents to provide teachers with an environment to enhance their social and emotional state in a difficult school climate.

APPENDICES

APPENDIX 1. SURVEY ITEMS

Social-Emotional Competence

Self-awareness

For the following items, please indicate the degree to which you agree with each statement.

1. I am able to admit my mistakes to the class.
    a. Always
    b. Sometimes
    c. Not Sure
    d. Rarely
    e. Never
2. I recognize the link between my emotions and what I think, do, and say in the classroom.
3. When I receive negative feedback about myself from others, I do not get angry or defensive.
4. I welcome feedback about my performance from all members of my school community.
5. I welcome students' questions.
6. I reflect upon my teaching and learn from my experiences.
7. If I do not know the answer to a question, I will be honest with the students.
8. I feel confident in my ability to teach the content.
9. I accurately know my strengths and limitations as a teacher.

Self-management

For the following items, please indicate the degree to which you agree with each Statement.

1. If I am in a bad mood, I do not let it affect my teaching.
    a. Always
    b. Sometimes
    c. Not Sure
    d. Rarely
2. Never
    a. I stay calm and clear-headed in the classroom under high-stress situations.
3. I can juggle multiple demands in the classroom without losing focus or energy.
4. My mood impacts my students' experiences in class.
5. I approach situations in a positive way.
6. When I am teaching, my mood can change suddenly.
7. When I am in a bad mood, I take it out on my students.
8. I become easily flustered when multiple things are occurring in class.
9. I am easily annoyed with the students in my class.
10. I set measurable, challenging attainable goals each year.

Social awareness

For the following items, please indicate the degree to which you agree with each

statement.

1. I actively listen to my students.
    a. Always
    b. Sometimes
    c. Not Sure
    d. Rarely
    e. Never
2. I try to understand students' perspectives.
3. I learn about my students' backgrounds and interests.
4. I have a hard time relating to my students' interests.
5. I am capable of acknowledging differences in students' learning styles, capabilities, and special needs.
6. I try to understand how students feel and think.
7. I feel sorry for students who can't find a partner or a group of students to work with.
8. I foster an emotionally safe environment for my students.

Relationship skills

For the following items, please indicate the degree to which you agree with each statement.

1. I use negative reinforcement in my classroom.
    a. Always
    b. Sometimes
    c. Not Sure
    d. Rarely
    e. Never
2. I share personal experiences where and when appropriate.
3. When students argue or disagree, I try to help them resolve their conflict.
4. I acknowledge students when they do a good job.
5. I care about each of my students.
6. I expect all students to be successful in my class.
7. Students seek me out for advice or comfort when they are upset.
8. I do not know personal information about each of my students.

Decision-making

For the following items, please indicate the degree to which you agree with each statement.

1. If I have a problem, I try to think about different possible ways of solving it.
    a. Always
    b. Sometimes
    c. Not Sure
    d. Rarely
    e. Never
2. When I make a decision, I think about what might happen afterwards.
3. I ask for help from another teacher or my supervisor when I need it.
4. I tend to think before acting.
5. I seek input from my students before making a decision.
6. After making a decision, I change my mind.

7. I explain my rationale for making a decision with my students.
8. I make decisions without thinking about possible consequences.
9. Students are typically upset by my decisions.

Collegial Leadership

1. The principal exploring all sides of topics and admits that others' opinions exist.
2. The principal treats all faculty members as his or her equal.
3. The principal is friendly and approachable.
4. The principal lets faculty know what is expected of them.
5. The principal maintains definite standard of performance.
6. The principal puts suggestions made by the faculty into operation.
7. The principal is willing to make changes.

Institutional Vulnerability

1. A few vocal parents can change school policy.
2. Select citizens groups are influential with the board.
3. The principal responds to pressure from parents.
4. Teachers feel pressure from the community.
5. The school is vulnerable to outside pressure.

Demographic Question

APPENDIX 2. STUDY FLYER

UNIVERSITY OF KENTUCKY RESEARCH

Teachers Needed for Social and Emotional Well Being Study

Researchers at the University of Kentucky invite you to participate in a survey-based study to assess teacher social-emotional well-being, burnout, and school support.

You may be eligible to participate if you:

- Are between the ages of 18-75
- Are a certified teacher
- Teach in the state of Kentucky

Survey link: https://tinyurl.com/3hunwfzn

For more information, contact:
Monica Mundy, MPH, CHES
Monica.mundy@uky.edu

University of Kentucky
Research
An Equal Opportunity University

APPENDIX 3. IRB APPROVAL LETTER

University of Kentucky | Office of Research Integrity
IRB, IBDRC

Modification Review

Approval Ends:	IRB Number:
4/26/2024	75642

TO: Monica Mundy, MPH
Kinesiology - Health Promotion
PI phone #: 8594334539

PI email: monica.mundy@uky.edu

FROM: Chairperson/Vice Chairperson
Nonmedical Institutional Review Board (IRB)
SUBJECT: Approval of Modification Request
DATE: 5/24/2023

On 5/23/2023, the Nonmedical Institutional Review Board approved your request for modifications in your protocol entitled:

The Relationship Between Teacher Social-Emotional Competence, Stress, Burnout, and School Climate

If your modification request necessitated a change in your approved informed consent/assent form(s), the new IRB approved consent/assent form(s) to be used when enrolling subjects can be found on the approved application's landing page in E-IRB. [Note, subjects can only be enrolled using consent/assent forms which have a valid "IRB Approval" stamp unless special waiver has been obtained from the IRB.]

Note that at Continuation Review, you will be asked to submit a brief summary of any modifications approved by the IRB since initial review or the last continuation review, which may impact subject safety or welfare. Please take this approved modification into consideration when preparing your summary.

For information describing investigator responsibilities after obtaining IRB approval, download and read the document "PI Guidance to Responsibilities, Qualifications, Records and Documentation of Human Subjects Research" available in the online Office of Research Integrity's IRB Survival Handbook. Additional information regarding IRB review, federal regulations, and institutional policies may be found through ORI's web site. If you have questions, need additional information, or would like a paper copy of the above mentioned document, contact the Office of Research Integrity at 859-257-9428.

see blue.
405 Kinkead Hall | Lexington, KY 40506-0057 | P: 859-257-9428 | F: 859-257-8995 | www.research.uky.edu/ori

APPENDIX 4. COVER LETTER

IRB Approval
4/27/2023
IRB # 75642
NMED

Researchers at the University of Kentucky are inviting you to take part in a survey about the emotional well-being, burnout, and stress of teachers in the state of Kentucky and the support they receive from their school.

Although you may not get personal benefit from taking part in this research study, your responses may help us understand more about the well-being of teachers and the stressors they encounter in the organizational workplace. Some volunteers experience satisfaction from knowing they have contributed to research that may possibly benefit others in the future. At the end of the survey, you will have the option to enter to win a $25 Amazon gift card. You have an approximate 1 in 8 chance of winning.

To participate in the study, participants number be between the ages of 18-75, be a certified teacher, and teach in the state of Kentucky.

If you do not want to be in the study, there are no other choices except not to take part in the study.

The survey/questionnaire will take about 25-35 minutes to complete.

Although we have tried to minimize this, some questions may make you upset or feel uncomfortable and you may choose not to answer them. For example the survey asks "I feel emotionally drained from my work" and "Working with people directly puts too much stress on me". If some questions do upset you, we can tell you about some people who may be able to help you with these feelings.

Your response to the survey is anonymous which means no names, IP addresses, email addresses, or any other identifiable information will be collected with the survey responses. We will not know which responses are yours if you choose to participate.
Your information collected for this study will NOT be used or shared for future research studies.

We hope to receive completed questionnaires from about 150 people, so your answers are important to us. Of course, you have a choice about whether or not to complete the survey/questionnaire, but if you do participate, you are free to skip any questions or discontinue at any time. You will not be penalized in any way for skipping or discontinuing the survey.

Please be aware, while we make every effort to safeguard your data once received from the online survey company, given the nature of online surveys, as with anything involving the Internet, we can never guarantee the confidentiality of the data while still on the survey company's servers, or while en route to either them or us. It is also possible the raw data collected for research purposes will be used for marketing or reporting purposes by the survey/data gathering company after the research is concluded, depending on the company's Terms of Service and Privacy policies.

Please be aware, while we make every effort to safeguard your data once received on our servers via Qualtrics, given the nature of online surveys, as with anything involving the Internet, we can never guarantee the confidentiality of the data while still en route to us.

If you have questions about the study, please feel free to ask; my contact information is given below.

Thank you in advance for your assistance with this important project.

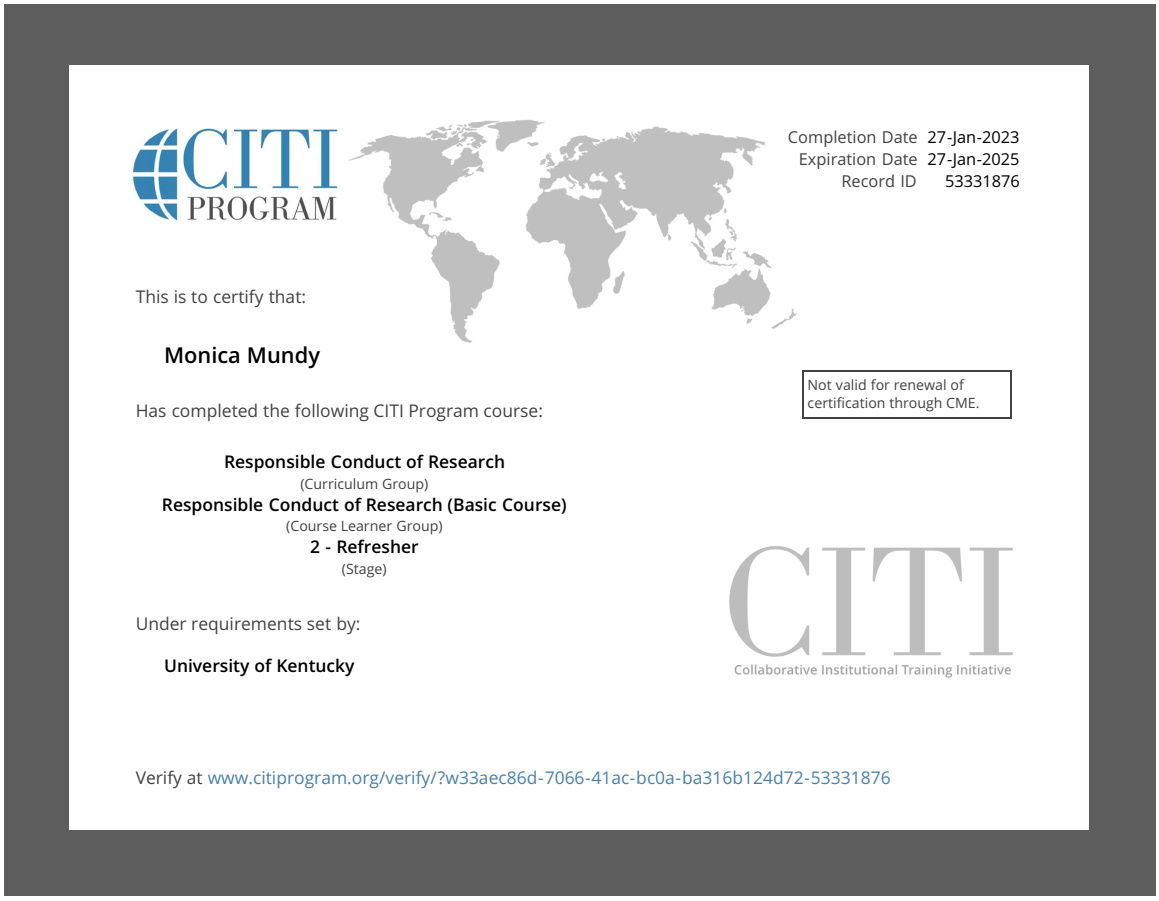
Sincerely,

Monica Mundy, MPH, CHES
Department of Kinesiology and Health Promotion, College of Education, University of Kentucky
E-MAIL: monica.mundy@uky.edu

Melinda Ickes, PhD
Department of Kinesiology and Health Promotion, College of Education, University of Kentucky
PHONE: 859-257-1625
E-MAIL: Melinda.ickes@uky.edu

If you have complaints, suggestions, or questions about your rights as a research volunteer, contact the staff in the University of Kentucky Office of Research Integrity at 859-257-9428 or toll-free at 1-866-400-9428.

APPENDIX 5. CITI TRAINING CERTIFICATE



CITI PROGRAM

Completion Date 27-Jan-2023
Expiration Date 27-Jan-2025
Record ID 53331876

This is to certify that:

Monica Mundy

Not valid for renewal of certification through CME.

Has completed the following CITI Program course:

Responsible Conduct of Research
(Curriculum Group)
Responsible Conduct of Research (Basic Course)
(Course Learner Group)
2 - Refresher
(Stage)

Under requirements set by:

University of Kentucky

CITI
Collaborative Institutional Training Initiative

Verify at www.citiprogram.org/verify/?w33aec86d-7066-41ac-bc0a-ba316b124d72-53331876

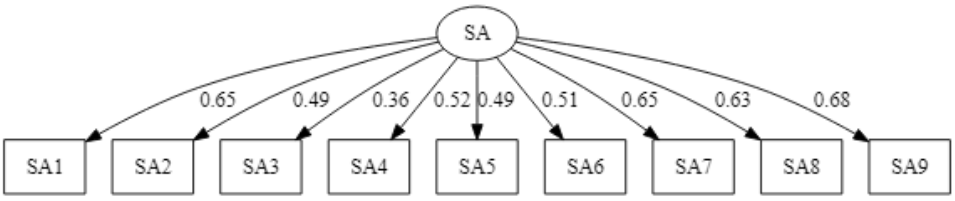
APPENDIX 6. CONFIRMATORY FACTOR ANALYSIS

Below are the results of the confirmatory factor analysis.

Self-Awareness

The TLI was less than .90, TLI = 0.799, which is indicative of a poor model fit. The CFI was less than .90, CFI = 0.849, suggesting that the model is indicative of a poor model fit. The RMSEA index was over .10, RMSEA = .109, which is indicative of a poor model fit. The SRMR was between .05 and .08, SRMR = 0.065, which implies that the model fits the data adequately.

Node Diagram for Self-awareness



Self-Management

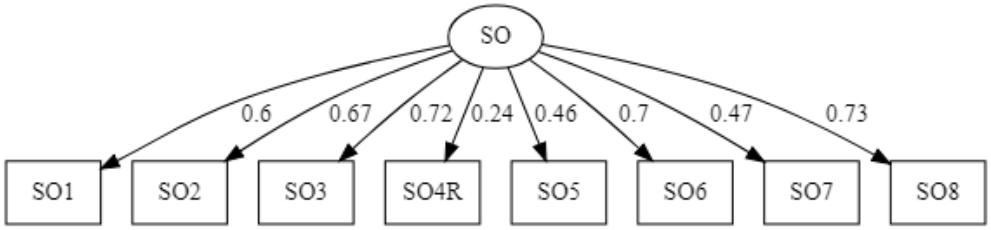
The Tucker-Lewis (TLI) was less than .90, TLI = 0.688, which is indicative of a poor model fit. The Comparative Fit Index (CFI) was less than .90, CFI = 0.758, suggesting that the model is indicative of a poor model fit. The Root Mean Square Error of Approximation (RMSEA) index was higher than .10, RMSEA = .113 which is indicative of a poor model fit. The Standardized Root Mean Square Residual (SRMR) was over .08, SRMR = 0.083, which implies that the model is an acceptable fit. Overall self-management was a poor model fit.

Node Diagram for Self-management

Social Awareness

The TLI was more than .90, TLI = .968, which is indicative of a good model fit. The CFI was more than .90, CFI = 0.977, suggesting that the model is indicative of a good model fit. The RMSEA index was below .05, RMSEA = .047 which is indicative of a good model fit. The SRMR was less than .08, SRMR = 0.038, which implies that the model fits the data adequately.

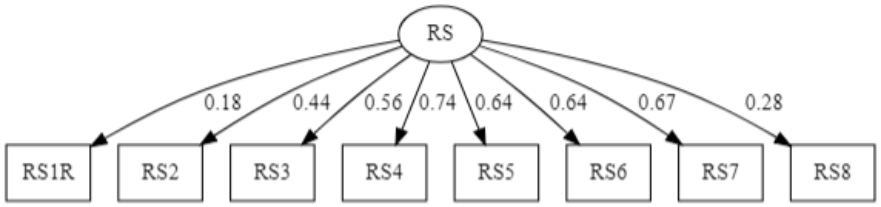
Node Diagram for Social Awareness



Relationship Skills

The TLI was less than .90, TLI = 0.921, which is indicative of a good model fit. The CFI was more than .90, CFI = 0.937, suggesting that the model is indicative of a good model fit. The RMSEA index was between less than .05 and .08, RMSEA = .070 which is indicative of an acceptable model fit. The SRMR was less than .08, SRMR = 0.044, which implies that the model fits the data adequately.

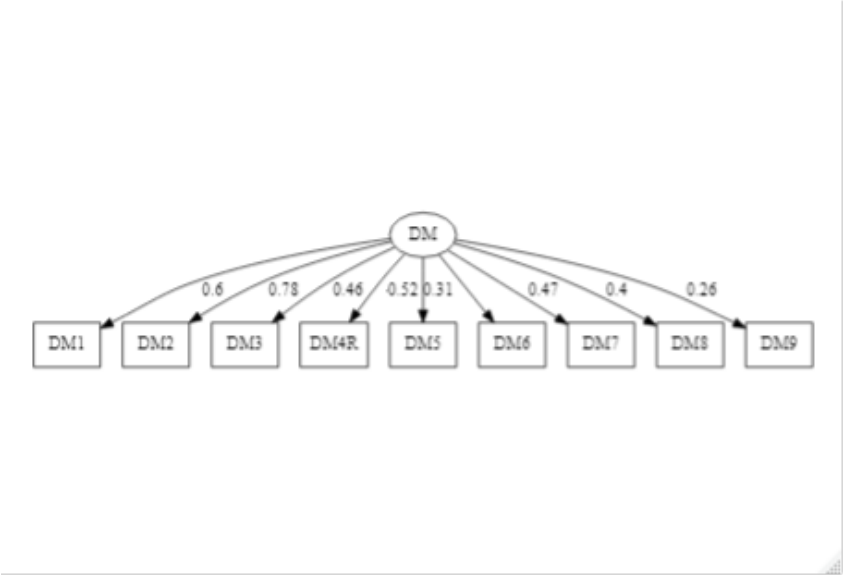
Node Diagram for Relationship Skills



Responsible Decision-making

The TLI was less than .90, TLI = 0.767, which is indicative of a poor model fit. The CFI was less than .90, CFI = 0.825, suggesting that the model is indicative of a poor model fit. The RMSEA index was between .08 and .10, RMSEA = .090, which is indicative of a marginal model fit. The SRMR was below .08, SRMR = 0.069, which implies that the model fits the data adequately.

Node Diagram for Responsible Decision-Making



Overall Social-Emotional Competence

The TLI was less than .90, TLI = 0.674, which is indicative of a poor model fit. The CFI was less than .90, CFI = 0.692, suggesting that the model is indicative of a poor model fit. The RMSEA index was between .05 and .08, RMSEA = .073, which is indicative of an acceptable model fit. The SRMR was below .08, SRMR = 0.076, which implies that the model fits the data adequately.

A Chi-square goodness of fit test was conducted to determine if the confirmatory factor analysis model fits the data adequately. It is standard practice for confirmatory factor analysis to include the Chi-square test. However, this test is sensitive to sample size, which causes the test to almost always reject the null hypothesis and indicate a poor model fit when the sample size is large (Hooper et al., 2008). The results of the Chi-square goodness of fit test were significant, $p < .001$.

Cronbach Alpha Coefficient

A Cronbach alpha coefficient was calculated for self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, and overall social-emotional competence. The Cronbach's alpha coefficient was evaluated using the guidelines suggested by George and Mallery (2018) where > .9 excellent, > .8 good, > .7 acceptable, > .6 questionable, > .5 poor, and ≤ .5 unacceptable.

Scale	No. of Items	α	Lower Bound	Upper Bound
Overall Social-Emotional Competence	44	.78	.75	.82
Self-awareness	9	.62	.56	.68
Self-management	10	.75	.72	.79
Social Awareness	8	.60	.54	.66
Relationship Skills	8	.58	.52	.65
Responsible Decision-Making	9	.49	.41	.57

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

REFERENCES

Abenavoli, R. M., Jennings, P. A., Greenberg, M. T., Harris, A. R., & Katz, D. A. (2013). The protective effects of mindfulness against burnout among educators. *Psychology of Education Review*, *37*(2), 57-69. https://www.researchgate.net/profile/Mark-Greenberg-3/publication/268146185_

Abiodullah, M., & Aslam, M. (2020). Emotional intelligence as a predictor of teacher engagement in classroom. *Bulletin of Education and Research, 42*(1), 127-140. confihttps://files.eric.ed.gov/fulltext/EJ1258049.pdf

Aldrup, K., Carstensen, B., Köller, M. M., & Klusmann, U. (2020). Measuring teachers' social-emotional competence: Development and validation of a situational judgment test. *Frontiers in Psychology, 11*, 892. https://doi.org/10.3389/fpsyg.2020.00892

Alzahrani, M., Alharbi, M., & Alodwani, A. (2019). The effect of social-emotional competence on children academic achievement and behavioral development. *International Education Studies*, *12*(12), 141-149. https://files.eric.ed.gov/fulltext/EJ1235885.pdf

Baeriswyl, S., Bratoljic, C., & Krause, A. (2021). How homeroom teachers cope with high demands: Effect of prolonging working hours on emotional exhaustion. *Journal of School Psychology, 85*, 125-139. https://doi.org/10.1016/j.jsp.2021.02.002

Baker, C. N., Peele, H., Daniels, M., Saybe, M., Whalen, K., Overstreet, S., & The New Orleans, T.-I. S. L. C. (2021). The experience of COVID-19 and its impact on

teachers' mental health, coping, and teaching. *School Psychology Review, 50*(4), 491–504. https://doi.org/10.1080/2372966X.2020.1855473

Bar-On, R. (2007). Bar-On model of emotional intelligence: A valid, robust, and applicable EI model. *Organisations and People*. https://www.psicothema.com/pdf/3271.pdf

Becker, E. S., Goetz, T., Morger, V., & Ranellucci, J. (2014). The importance of teachers' emotions and instructional behavior for their students' emotions–An experience sampling analysis. *Teaching and Teacher Education, 43*, 15–26. https://doi.org/10.1016/j.tate.2014.05.002

Beltman, S., Mansfield, C., & Price, A. (2011). Thriving not just surviving: A review of research on teacher resilience. *Educational Research Review, 6*(3), 185-207. https://doi.org/10.1016/j.edurev.2011.09.001

Berg, D. A., & Smith, L. F. (2018). The effect of school-based experience on preservice teachers' self-efficacy beliefs. *Issues in Educational Research, 28*(3), 530–544. https://search.informit.org/doi/epdf/10.3316/informit.863630975387371

Bierman, K. L., Coie, J. D., Dodge, K. A., Greenberg, M. T., Lochman, J. E., McMahon, R. J., & Pinderhughes, E. (2010). The effects of a multiyear universal social–emotional learning program: The role of student and school characteristics. *Journal of Consulting and Clinical Psychology, 78*(2), 156. https://psycnet.apa.org/doi/10.1037/a0018607

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., & Velting, D. (2004). Mindfulness: A proposed

operational definition. *Clinical Psychology: Science and Practice, 11*(3), 230. https://psycnet.apa.org/doi/10.1093/clipsy.bph077

Blazer, C. (2010). Teacher burnout. *Information Capsule.* Vol.1003. Research Services, Miami-Dade County Public Schools. https://files.eric.ed.gov/fulltext/ED536515.pdf

Boldrini, E., Sappa, V., & Aprea, C. (2019). Which difficulties and resources do vocational teachers perceive? An exploratory study setting the stage for investigating teachers' resilience in Switzerland. *Teachers and Teaching, 25*(1), 125-141. https://doi.org/10.1080/13540602.2018.1520086

Bollen, K. A., & Liang, J. (1988). Some properties of Hoelter's CN. *Sociological Methods & Research, 16*(4), 492-503. https://doi.org/10.1177/0049124188016004003

Borowski, T. (2019). CASEL's framework for systemic social and emotional learning. *Measuring SEL: Using Data to Inspire Practice*, *8*, 1-7. https://pdf4pro.com/cdn/casel-s-framework-for-systemic-social-and-emotional-69267e.pdf

Brasfield, M. W., Lancaster, C., & Xu, Y. J. (2019). Wellness as a mitigating factor for teacher burnout. *Journal of Education, 199*(3), 166–178. https://doi.org/10.1177/0022057419864525

Brouwers, A., & Tomic, W. (2000). A longitudinal study of teacher burnout and perceived self-efficacy in classroom management. *Teaching and Teacher Education, 16*(2), 239–253. https://doi.org/10.1016/S0742-051X(99)00057-8

Caballero, R. (2022). *Teacher's perceptions of stress management and their performance: A qualitative case study* (2022-62751-198; Issues 10-B) [ProQuest Information & Learning].

Carstensen, B., & Klusmann, U. (2021). Assertiveness and adaptation: Prospective teachers' social competence development and its significance for occupational well-being. *British Journal of Educational Psychology, 91*(1), 500–526. https://doi.org/10.1111/bjep.12377

Castro-Silva, J., Amante, L., & Morgado, J. (2017). School climate, principal support, and collaboration among Portuguese teachers. *European Journal of Teacher Education, 40*(4), 505–520. https://doi.org/10.1080/02619768.2017.1295445

Chang, M. L. (2009). An appraisal perspective of teacher burnout: Examining the emotional work of teachers. *Educational Psychology Review, 21*(3), 193–218. https://doi.org/10.1007/s10648-009-9106-y

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Academic press.

Collaborative for Academic, Social, and Emotional Learning (CASEL;2022, April 1). What Is the CASEL Framework? - CASEL. https://casel.org/fundamentals-of-sel/what-is-the-casel-framework/#interactive-casel-wheel

Collie, R. J. (2023). Job demands and resources, teachers' subjective vitality, and turnover intentions: an examination during COVID-19. *Educational Psychology, 43*(5), 452-471. https://doi.org/10.1080/01443410.2022.2036323

Collie, R. J., & Martin, A. J. (2017). Teachers' sense of adaptability: Examining links with perceived autonomy support, teachers' psychological functioning, and

students' numeracy achievement. *Learning and Individual Differences, 55*, 29-39. https://doi.org/10.1016/j.lindif.2017.03.003

Collie, R. J., & Perry, N. E. (2019). Cultivating teacher thriving through social–emotional competence and its development. *The Australian Educational Researcher, 46*(4), 699–714. https://doi.org/10.1007/s13384-019-00342-2

Collie, R. J., Shapka, J. D., & Perry, N. E. (2011). Predicting teacher commitment: The impact of school climate and social–emotional learning. *Psychology in the Schools, 48*(10), 1034–1048. https://doi.org/10.1002/pits.20611

Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social–emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology, 104*(4), 1189-1204. https://psycnet.apa.org/doi/10.1037/a0029356

Conroy, M. A., Sutherland, K. S., Algina, J. J., Wilson, R. E., Martinez, J. R., & Whalon, K. J. (2015). Measuring teacher implementation of the BEST in CLASS intervention program and corollary child outcomes. *Journal of Emotional and Behavioral Disorders*, *23*(3), 144-155. https://doi.org/10.1177/1063426614532949

Curry, J. R., & O'Brien, E. R. (2012). Shifting to a wellness paradigm in teacher education: A promising practice for fostering teacher stress reduction, burnout resilience, and promoting retention. *Ethical Human Psychology and Psychiatry, 14*(3), 178-191. https://doi.org/10.1891/1559-4343.14.3.178

DeLay, D., Zhang, L., Hanish, L. D., Miller, C. F., Fabes, R. A., Martin, C. L., & Updegraff, K. A. (2016). Peer influence on academic performance: A social

network analysis of social-emotional intervention effects. *Prevention Science*, *17*, 903-913. https://doi.org/10.1007/s11121-016-0678-8

Denovan, A., Dagnall, N., & Drinkwater, K. (2022). The ego resiliency scale-revised: Confirmatory factor analysis and Rasch models. *Journal of Psychoeducational Assessment, 40*(6), 707-721. https://doi.org/10.1177/07342829221090117

Devaney, E., O'Brien, M. U., Resnik, H., Keister, S., & Weissberg, R. P. (2006). Sustainable Schoolwide Social and Emotional Learning (SEL): Implementation Guide and Toolkit. *Collaborative for Academic, Social, and Emotional Learning (NJ3)*.

Dimitrov, D. M. (2008). *Quantitative research in education*. Whittier.

Doan, S., Steiner, E. D., Pandey, R., & Woo, A. (2023). Teacher Well-Being and Intentions to Leave: Finding from the 2023 State of the American Teacher Survey. American Educator Panels. Research Report. RR-A1108-8. *RAND Corporation*. https://www.rand.org/pubs/research_reports/RRA1108-8.html

Dorman, E. (2015). Building teachers' social-emotional competence through mindfulness practices. In D. J. Flinders & C. M. Moroye (Eds), *Curriculum & teaching dialogue,* Vol. 17 (p.103–120). IAP.

Duckworth, A. L., Quinn, P. D., & Seligman, M. E. (2009). Positive predictors of teacher effectiveness. *The Journal of Positive Psychology*, *4*(6), 540-547. https://doi.org/10.1080/17439760903157232

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-

analysis of school-based universal interventions. *Child Development, 82*(1), 405–432. https://doi.org/10.1111/j.1467-8624.2010.01564.x

Ferguson, K., Frost, L., & Hall, D. (2012). Predicting teacher anxiety, depression, and job satisfaction. *Journal of Teaching and Learning*, *8*(1). https://doi.org/10.22329/jtl.v8i1.2896

Fiorilli, C., De Stasio, S., Di Chiacchio, C., Pepe, A., & Salmela-Aro, K. (2017). School burnout, depressive symptoms, and engagement: Their combined effect on student achievement. *International Journal of Educational Research, 84*, 1-12. https://doi.org/10.1016/j.ijer.2017.04.001

Fisher, M. H. (2011). Factors influencing stress, burnout, and retention of secondary teachers. *Current Issues in Education, 14*(1). https://cie.asu.edu/ojs/index.php/cieatasu/article/view/658

Friedman, I. A. (1995). Student behavior patterns contributing to teacher burnout. *The Journal of Educational Research*, *88*(5), 281-289. https://doi.org/10.1080/00220671.1995.9941312

Gehlbach, H., Brinkworth, M. E., King, A. M., Hsu, L. M., McIntyre, J., & Rogers, T. (2016). Creating birds of similar feathers: Leveraging similarity to improve teacher–student relationships and academic achievement. *Journal of Educational Psychology, 108*(3), 342. https://psycnet.apa.org/doi/10.1037/edu0000042

Gicheva, D. (2022). Teachers' working hours during the COVID-19 pandemic. *Educational Researcher, 51*(1), 85-87. https://doi.org/10.3102/0013189X211056897

George, D., & Mallery, P. (2018). IBM SPSS Statistics 25 Step by Step. https://doi.org/10.4324/9781351033909

Graham, A., & Truscott, J. (2020). Meditation in the classroom: supporting both student and teacher wellbeing? *Education 3-13, 48*(7), 807-819. https://doi.org/10.1080/03004279.2019.1659385

Grayson, J. L., & Alvarez, H. K. (2008). School climate factors relating to teacher burnout: A mediator model. *Teaching and Teacher Education, 24*(5), 1349–1363. https://doi.org/10.1016/j.tate.2007.06.005

Gregory, A., Cornell, D., & Fan, X. (2012). Teacher safety and authoritative school climate in high schools. *American Journal of Education, 118*(4), 401–425. https://doi.org/10.1086/666362

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology, 2*(3), 271–299. https://doi.org/10.1037/1089-2680.2.3.271

Hair, J. F. (2009). *Multivariate data analysis.* Digital Commons. https://digitalcommons.kennesaw.edu/facpubs/2925/

Hargreaves, A. (2001). The emotional geographies of teachers' relations with colleagues. *International Journal of Educational Research, 35*(5), 503-527. https://doi.org/10.1016/S0883-0355(02)00006-X

Hart, S. C., DiPerna, J. C., Lei, P. W., & Cheng, W. (2020). Nothing lost, something gained? Impact of a universal social-emotional learning program on future state test performance. *Educational Researcher, 49*(1), 5-19. https://doi.org/10.3102/0013189X19898721

Herman, K. C., Hickmon-Rosa, J., & Reinke, W. M. (2018). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Journal of Positive Behavior Interventions, 20*(2), 90–100. https://doi.org/10.1177/1098300717732066

Herman, K. C., Prewett, S. L., Eddy, C. L., Savala, A., & Reinke, W. M. (2020). Profiles of middle school teacher stress and coping: Concurrent and prospective correlates. *Journal of School Psychology, 78*, 54–68. https://doi.org/10.1016/j.jsp.2019.11.003

Herman, K. C., Sebastian, J., Reinke, W. M., & Huang, F. L. (2021). Individual and school predictors of teacher stress, coping, and wellness during the COVID-19 pandemic. *School Psychology, 36*(6), 483. https://psycnet.apa.org/doi/10.1037/spq0000456

Hirshberg, M. J., Flook, L., Enright, R. D., & Davidson, R. J. (2020). Integrating mindfulness and connection practices into preservice teacher education improves classroom practices. *Learning and Instruction, 66*, 101298. https://doi.org/10.1016/j.learninstruc.2019.101298

Ho, R. (2006). *Handbook of univariate and multivariate data analysis and interpretation with SPSS.* Chapman and Hall/CRC.

Hoglund, W. L., Klingle, K. E., & Hosan, N. E. (2015). Classroom risks and resources: Teacher burnout, classroom quality and children's adjustment in high needs elementary schools. *Journal of School Psychology, 53*(5), 337–357. https://doi.org/10.1016/j.jsp.2015.06.002

Hooper, D., Coughlan, J., & Mullen, M. (2008). Structural equation modeling: Guidelines for determining model fit. *EJBRM, 6*: 53–60. https://academic-publishing.org/index.php/ejbrm/article/view/1224/1187

Hoy, W. K., Smith, P. A., & Sweetland, S. R. (2002). The development of the organizational climate index for high schools: Its measure and relationship to faculty trust. *The High School Journal, 86*(2), 38–49. https://www.jstor.org/stable/40364336

Hurley, A. E., Scandura, T. A., Schriesheim, C. A., Brannick, M. T., Seers, A., Vandenberg, R. J., & Williams, L. J. (1997). Exploratory and confirmatory factor analysis: Guidelines, issues, and alternatives. *Journal of Organizational Behavior*, 667-683. https://www.jstor.org/stable/3100253

Ingersoll, R. M., Merrill, E., Stuckey, D., & Collins, G. (2018). *Seven trends: The transformation of the teaching force–Updated October 2018.* https://repository.upenn.edu/handle/20.500.14332/8354

Jennings, P. A., Brown, J. L., Frank, J. L., Doyle, S., Oh, Y., Davis, R., Rasheed, D., DeWeese, A., DeMauro, A. A., & Cham, H. (2017). Impacts of the CARE for Teachers program on teachers' social and emotional competence and classroom interactions. *Journal of Educational Psychology, 109*(7), 1010. https://psycnet.apa.org/doi/10.1037/edu0000187

Jennings, P. A., DeMauro, A. A., & Mischenko, P. P. (2019). *The mindful school: Transforming school culture through mindfulness and compassion*. Guilford Publications.

Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research, 79*(1), 491–525. https://doi.org/10.3102/0034654308325693

Jennings, P. A., Snowberg, K. E., Coccia, M. A., & Greenberg, M. T. (2011). Improving classroom learning environments by cultivating awareness and resilience in education (CARE): Results of two pilot studies. *The Journal of Classroom Interaction*, 37–48. https://www.jstor.org/stable/23870550

Jones, S. M., & Kahn, J. (2018). The evidence base for how learning happens: A consensus on social, emotional, and academic development. *American Educator*, *41*(4), 16. https://files.eric.ed.gov/fulltext/EJ1164389.pdf

Kaihoi, C. A., Bottiani, J. H., & Bradshaw, C. P. (2022). Teachers supporting teachers: a social network perspective on collegial stress support and emotional wellbeing among elementary and middle school educators. *School Mental Health*, *14*(4), 1070-1085. https://doi.org/10.1007/s12310-022-09529-y Karing, C., & Beelmann, A. (2019). Cognitive emotional regulation strategies: Potential mediators in the relationship between mindfulness, emotional exhaustion, and satisfaction? *Mindfulness, 10*(3), 459-468. https://doi.org/10.1007/s12671-018-0987-z

Kentucky Department of Education. (2022, April 6). *Social, emotional, and behavioral learning/health*—Kentucky Department of Education. https://education.ky.gov/school/sdfs/Pages/Social,-Emotional-and-Behavioral-Learning-Health.aspx

Khan, F., Yusoff, R. M., & Khan, A. (2014). Job demands, burnout and resources in teaching a conceptual review. *World Applied Sciences Journal*, *30*(1), 20-28. https://doi.org/10.5829/idosi.wasj.2014.30.01.21029

Kim, S., Crooks, C. V., Bax, K., & Shokoohi, M. (2021). Impact of trauma-informed training and mindfulness-based social–emotional learning program on teacher attitudes and burnout: A mixed-methods study. *School Mental Health, 13*(1), 55–68. https://doi.org/10.1007/s12310-020-09406-6

Klusmann, U., Aldrup, K., Roloff-Bruchmann, J., Carstensen, B., Wartenberg, G., Hansen, J., & Hanewinkel, R. (2023). Teachers' emotional exhaustion during the Covid-19 pandemic: Levels, changes, and relations to pandemic-specific demands. *Teaching and Teacher Education*, *121*, 103908. https://doi.org/10.1016/j.tate.2022.103908

Li, S. (2023). The effect of teacher self-efficacy, teacher resilience, and emotion regulation on teacher burnout: A mediation model. *Frontiers in Psychology*, *14*. https://doi.org/10.3389%2Ffpsyg.2023.1185079

Llorens-Gumbau, S., & Salanova-Soria, M. (2014). Loss and gain cycles? A longitudinal study about burnout, engagement, and self-efficacy. *Burnout Research, 1*(1), 3-11. https://doi.org/10.1016/j.burn.2014.02.001

Lozano-Peña, G., Sáez-Delgado, F., López-Angulo, Y., & Mella-Norambuena, J. (2021). Teachers' social–emotional competence: History, concept, models, instruments, and recommendations for educational quality. *Sustainability, 13*(21), 12142. https://doi.org/10.3390/su132112142

Mansfield, C., Beltman, S., Weatherby-Fell, N., & Broadley, T. (2016). Classroom ready? Building resilience in teacher education. In *Teacher education* (pp. 211–229). Springer.

Maslach, C., & Jackson, S. E. (1984). Burnout in organizational settings. *Applied Social Psychology Annual 5,* 133–153.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). *Maslach burnout inventory*. Scarecrow Education.

Maslach, C., & Leiter, M.P. (2016) Burnout. In *Stress: Concepts, cognition, emotion, and behavior*, (pp.351-357). Academic Press. Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). *Mayer-Salovery-Caruso emotional intelligence test*. Multi-Health Systems Incorporated.

Mercer, S., & Gregersen, T. (2020). *Teacher wellbeing*. Oxford University Press.

Mérida-López, S., & Extremera, N. (2017). Emotional intelligence and teacher burnout: A systematic review. *International Journal of Educational Research*, *85*, 121-130. https://doi.org/10.1016/j.ijer.2017.07.006

Netro, T. (2021). *Does principals' transformational leadership predict teachers' commitment and perceptions of school climate?* (2021-08064-224; Issues 6-A) [ProQuest Information & Learning]. APA PsycInfo.

Oberle, E., Gist, A., Cooray, M. S., & Pinto, J. B. (2020). Do students notice stress in teachers? Associations between classroom teacher burnout and students' perceptions of teacher social–emotional competence. *Psychology in the Schools, 57*(11), 1741–1756. https://doi.org/10.1002/pits.22432

Oberle, E., & Schonert-Reichl, K. A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students. *Social Science & Medicine, 159*, 30–37. https://doi.org/10.1016/j.socscimed.2016.04.031

Oliveira, S., Roberto, M. S., Veiga-Simão, A. M., & Marques-Pinto, A. (2021). A meta-analysis of the impact of social and emotional learning interventions on teachers' burnout symptoms. *Educational Psychology Review, 33*(4), 1779-1808. https://doi.org/10.1007/s10648-021-09612-x

O'Brennan, L., Pas, E., & Bradshaw, C. (2017). Multilevel examination of burnout among high school staff: Importance of staff and school factors. *School Psychology Review, 46*(2), 165–176. https://files.eric.ed.gov/fulltext/EJ1156208.pdf

Parveen, H., & Bano, M. (2019). Relationship between teachers' stress and job satisfaction: Moderating role of teachers' emotions. *Pakistan Journal of Psychological Research*, *34*(2), 353-366. https://scholar.archive.org/work/pduypiuuqfbg3jirzybxmjmuve/access/wayback/http://www.pjprnip.edu.pk/pjpr/index.php/pjpr/article/download/503/511

Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008). The positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific reviews. Technical Report. *Collaborative for Academic, Social, and Emotional Learning (NJ1),* 1-50. https://files.eric.ed.gov/fulltext/ED505370.pdf

Pedditzi, M. L., Nonnis, M., & Nicotra, E. F. (2021). Teacher satisfaction in relationships with students and parents and burnout. *Frontiers in Psychology, 12*, 703130. https://doi.org/10.3389/fpsyg.2021.703130

Pillay, H., Goddard, R., & Wilss, L. (2005). Well-being, burnout, and competence: implications for teachers. *Australian Journal of Teacher Education*, *30*(2), 21-31. https://search.informit.org/doi/reader/10.3316/aeipt.146715

Pokrzywinski, R. K. (2022). *Practice of mindfulness, its potential influence on teacher burnout and turnover for trauma-Impacted students submitted.* (Doctoral dissertation, Grand Canyon University).

Poulou, M. S. (2017). Social and emotional learning and teacher–student relationships: Preschool teachers' and students' perceptions. *Early Childhood Education Journal, 45*(3), 427-435. https://doi.org/10.1007/s10643-016-0800-3

Poulou, M. S., Garner, P. W., & Bassett, H. H. (2022). Teachers' emotional expressiveness and classroom management practices: Associations with young students' social-emotional and behavioral competence. *Psychology in the Schools, 59*(3), 557–573. https://doi.org/10.1002/pits.22631

Powell, J. E., Powell, A. L., & Petrosko, J. M. (2015). School climate as a predictor of incivility and bullying among public school employees: A multilevel analysis. *Journal of School Violence, 14*(2), 217–244. https://doi.org/10.1080/15388220.2014.906917

Pressley, T. (2021). Factors contributing to teacher burnout during COVID-19. *Educational Researcher, 50*(5), 325–327. https://doi.org/10.3102/0013189X211004138

Puertas-Molero, P., Zurita-Ortega, F., Ubago-Jiménez, J. L., & González-Valero, G. (2019). Influence of emotional intelligence and burnout syndrome on teachers' well-being: A systematic review. *Social Sciences, 8*(6), 185. https://doi.org/10.3390/socsci8060185

Ramsey-Tolliver, J. R. (2019). *Teacher stress and coping: A qualitative case study*. (Doctoral dissertation, Concordia University (Oregon).

Salazar, L. F., Crosby, R., & DiClemente, R. J. (2015). *Research methods in health promotion*. John Wiley & Sons.

Schäfer, A., Pels, F., & Kleinert, J. (2020). Coping strategies as mediators within the relationship between emotion-regulation and perceived stress in teachers. *International Journal of Emotional Education, 12*(1), 35-47. https://www.um.edu.mt/library/oar/bitstream/123456789/55034/4/v12i1p3b.pdf

Schonert-Reichl, K. A. (2017). Social and emotional learning and teachers. *The Future of Children*, *(27)*1, 137–155. https://files.eric.ed.gov/fulltext/EJ1145076.pdf

Schussler, D. L., Greenberg, M., DeWeese, A., Rasheed, D., DeMauro, A., Jennings, P. A., & Brown, J. (2018). Stress and release: Case studies of teacher resilience following a mindfulness-based intervention. *American Journal of Education, 125*(1), 1–28. https://doi.org/10.1086/699808

Sebastian, J., Herman, K. C., & Reinke, W. M. (2019). Do organizational conditions influence teacher implementation of effective classroom management practices: Findings from a randomized trial. *Journal of School Psychology, 72*, 134–149. https://doi.org/10.1016/j.jsp.2018.12.008

Setia, M. S. (2016). Methodology series module 3: Cross-sectional studies. *Indian Journal of Dermatology, 61*(3), 261. https://doi.org/10.4103%2F0019-5154.182410

Sideridis, G., & Alghamdi, M. H. (2023). Teacher Burnout in Saudi Arabia: The Catastrophic Role of Parental Disengagement. *Behavioral Sciences*, *13*(5), 367. https://doi.org/10.3390/bs13050367

Simon, N., & Johnson, S. M. (2015). Teacher turnover in high-poverty schools: What we know and can do. *Teachers College Record, 117*(3), 1–36. https://doi.org/10.1177/016146811511700305

Skaalvik, E. M., & Skaalvik, S. (2009). Does school context matter? Relations with teacher burnout and job satisfaction. *Teaching and Teacher Education, 25*(3), 518-524. https://doi.org/10.1016/j.tate.2008.12.006

Skaalvik, E. M., & Skaalvik, S. (2020). Teacher burnout: Relations between dimensions of burnout, perceived school context, job satisfaction, and motivation for teaching. A longitudinal study. *Teachers and Teaching, 26*(7–8), 602–616. https://doi.org/10.1080/13540602.2021.1913404

Skura, M., & Świderska, J. (2022). The role of teachers' emotional intelligence and social competences with special educational needs students. *European Journal of Special Needs Education, 37*(3), 401–416. https://doi.org/10.1080/08856257.2021.1885177

Smetana, K. (2020). *Examining the perceptions of teachers' social-emotional competence and well-being on classroom management from the perspective of students and the classroom teacher.* Western Illinois University.

Smith, S. J., Basham, J., Rice, M. F., & Carter, R. A., Jr. (2016). Preparing Special Educators for the K-12 Online Learning Environment: A Survey of Teacher Educators. *Journal of Special Education Technology, 31*(3), 170–178. https://doi.org/10.1177/0162643416660834

Smith, T. E., & Sheridan, S. M. (2019). The effects of teacher training on teachers' family-engagement practices, attitudes, and knowledge: A meta-analysis. *Journal of educational and psychological consultation, 29*(2), 128-157. https://doi.org/10.1080/10474412.2018.1460725

Smith, J. D., & Whitley, J. (2023, January). Teaching with acceptance and commitment: Building teachers' social-emotional competencies for teaching effectiveness. In *The educational forum* (Vol. 87, No. 1, pp. 90-104). Routledge.

Sokal, L., Trudel, L. E., & Babb, J. (2020). Canadian teachers' attitudes toward change, efficacy, and burnout during the COVID-19 pandemic. *International Journal of Educational Research Open, 1*, 100016. https://doi.org/10.1016/j.ijedro.2020.100016

Souza, J. C. D., Sousa, I. C. D., Belísio, A. S., & Azevedo, C. V. M. D. (2012). Sleep habits, daytime sleepiness, and sleep quality of high school teachers. *Psychology & Neuroscience*, *5*, 257-263. https://doi.org/10.3922/j.psns.2012.2.17

Spilt, J. L., Koomen, H. M., & Thijs, J. T. (2011). Teacher wellbeing: The importance of teacher–student relationships. *Educational Psychology Review, 23*(4), 457–477. https://doi.org/10.1007/s10648-011-9170- y

Steinhardt, M. A., Smith-Jaggars, S. E., Faulk, K. E., & Gloria, C. T. (2011). Chronic work stress and depressive symptoms: Assessing the mediating role of teacher burnout. *Stress and Health*, *27*(5), 420-429. https://doi.org/10.1002/smi.1394

Steiner, E. D., & Woo, A. (2021). *Job-related stress threatens the teacher supply: Key finding from the 2021 State of the US Teacher Survey*. Technical Appendixes. Research Report. RR-A1108-1. Rand Corporation. https://www.rand.org/content/dam/rand/pubs/research_reports/RRA1100/RRA1108-1/RAND_RRA1108-1.pdf

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2013). *Using multivariate statistics* (Vol. 6).Pearson.

Tan, K., & Mahoney, J. (2022). Is self-care the answer? *Children & Schools, 44*(3), 131–135. https://doi-org.ezproxy.uky.edu/10.1093/cs/cdac012

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research, 83*(3), 357–385. https://doi.org/10.3102/0034654313483907

Tian, J., Zhang, W., Mao, Y., & Gurr, D. (2022). The impact of transformational leadership on teachers' job burnout: the mediating role of social-emotional competence and student-teacher relationship. *Journal of Educational Administration, 60*(4), 369-385. https://doi.org/10.1108/JEA-04-2021-0075

Travers, C. (2017). Current knowledge on the nature, prevalence, sources, and potential impact of teacher stress. In T. M. McIntyre, S. E. McIntyre, & D. J. Francis (Eds.), *Educator stress: An occupational health perspective* (pp. 23–54). Springer International Publishing AG. https://doi.org/10.1007/978-3-319-53053-6_2

Trudel, E. L. G., Sokal, L. J., & Babb, J. C. (2020). Supporting teachers in times of change: The job demands-resources model and teacher burnout during the COVID-19 pandemic. *International Journal of Contemporary Education 3*(2), 67-74. http://doi.org/10.11114/ijce.v3i2.493 1

US Department of Education. (2015). *Improving basic programs operated by local educational agencies* (Title I, Part A).

Wang, N., Wilhite, S., & Martino, D. (2016). Understanding the relationship between school leaders' social and emotional competence and their transformational leadership: The importance of self-other agreement. *Educational Management Administration & Leadership, 44*(3), 467–490. https://doi.org/10.1177/1741143214558568

Weinert, F. E. (2001). Concept of competence: A conceptual clarification. In D. S. Rychen & L. H. Salganik (Eds.), *Defining and selecting key competencies* (pp. 45–65). Hogrefe & Huber Publishers.

Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs, and affective experiences. *Human Resource Management Review, 12*(2), 173–194. https://doi.org/10.1016/S1053-4822(02)00045-1

Weissberg, R. P., Durlak, J. A., Domitrovich, C. E., & Gullotta, T. P. (2015). Social and emotional learning: Past, present, and future. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullotta (Eds.), *Handbook of social and emotional learning: Research and practice* (pp. 3–19). The Guilford Press.

West, M. R., Pier, L., Fricke, H., Hough, H., Loeb, S., Meyer, R. H., & Rice, A. B. (2020). Trends in student social-emotional learning: Evidence from the first large-

scale panel student survey. *Educational Evaluation and Policy Analysis, 42*(2), 279–303. https://doi.org/10.3102/0162373720912236

Westfall, P. H., & Henning, K. S. (2013). *Understanding advanced statistical methods.* CRC Press.

Wilhelm, J., & Lewis, L. (2021). *Outside jobs among US public school teachers*. Data Point. NCES 2021-007. National Center for Education Statistics.

Yoon, S. J. (2002). Teacher characteristics as predictors of teacher-student relationships: Stress, negative affect, and self-efficacy. *Social Behavior and Personality: An International Journal, 30*(5), 485–493. https://doi.org/10.2224/sbp.2002.30.5.485

Zhang, W., He, E., Mao, Y., Pang, S., & Tian, J. (2023). How teacher social-emotional competence affects job burnout: The chain mediation role of teacher-student relationship and well-being. *Sustainability*, *15*(3), 2061. https://doi.org/10.3390/su15032061

Zins, J. E. (2004). *Building academic success on social and emotional learning: What does the research say?* Teachers College Press.

Zinsser, K. M., Christensen, C. G., & Torres, L. (2016). She's supporting them; who's supporting her? Preschool center-level social-emotional supports and teacher well-being. *Journal of School Psychology, 59*, 55–66. https://doi.org/10.1016/j.jsp.2016.09.001

VITA

Monica E. Mundy, MPH, CHES

E-mail: monica.mundy@eku.edu

Education

MPH Concentration- Community Health Education | Eastern Kentucky University — December 2010
BA Major- Communications | University of Kentucky — August 2006

Certification

Certified Health Education Specialist (CHES) — 2017-present

Professional Teaching and Mentoring Experience

Assistant Professor | Department of Public Health and Clinical Sciences, Eastern Kentucky University
August 2020-present
Adjunct Professor | Department of Kinesiology and Health Promotion, University of Kentucky
March 2018-May 2020
Undergraduate Internship Coordinator | College of Nursing, University of Kentucky
August 2016-September 2019

Professional Experience

Health Policy Analyst II
Tobacco Prevention and Cessation Program, Department for Public Health
September 2019 -August 2020

Program Coordinator II
College of Nursing, University of Kentucky
November 2008-September 2019

Honors and Awards

SOPHE Graduate Student Case Study Competition, Participant 2018
University of Kentucky Lyman T. Johnson Torch of Excellence College of Nursing Recipient 2014
American Public Health Association Student Showcase, "Other Drug" Category Winner 2010

Community Service and Affiliations

Fayette County School Board Equity Council, Member — 2023-present
One Love Dance Company Board of Directors, Member — 2023-present
RISE STEM Academy for Girls, PTA Advocacy Committee, Chair
2022-present
Central KY YMCA Black Achievers, Health Science Cluster Leader — 2021-present
Madison County ASAP Board, Member — 2021-present
McConnell's Trace Neighborhood Association, Vice President — 2019-present

McConnell's Trace Neighborhood Association, Secretary 2019-2022, Current

Professional Affiliations

Kentucky Public Health Association, Governance Committee, Member	2023-present
Kentucky Public Health Association, Advocacy Committee, Co-Chair.	2021-present
American Public Health Association, Member	2010-present

Training Programs

Council on Post-Secondary Education Academic Leadership Develop. Institute, Participant	2023-present
Eastern Kentucky University Faculty Summer Grant Writing Bootcamp, Participant	2023

University of Kentucky Disparities Researchers Equalizing Access for Minorities (DREAM) Scholar, Associate 2018-2020

Publications

Refereed Publication in Progress

Mundy, M., Ickes, M. (in-progress). A systematic review of youth and young adult empowerment programs in tobacco control.

Mundy, M., Ickes, M., (in-progress). The relationship between social-emotional competence and burnout in Kentucky teachers.

Mundy, M., Ickes, M., (in-progress). Teacher social-emotional competence, burnout, and school climate: A cross-sectional study through a prosocial classroom lens.

Refereed Publications

Ickes, M., Sampson, J., Parsons, J., Rayens, M.K., Xiao, M., Fisher, A., **Mundy, M.**, & Hahn, E. (September 13, 2019, accepted). Tobacco-free ambassador partnership: Training youth advocates in Appalachia. Health Promotion Practice Special Issue.

Hahn, E. J., Huntington-Moskos, L., **Mundy, M.**, Rademacher, K., Wiggins, A. T., Rayens, M. K., & Butler, K. M. (2019). A Randomized Trial to Test Personalized Environmental Report Back to Reduce Lung Cancer Risk. Health Education & Behavior, 46(1), 165-175.

Hahn, E.J., Huntington-Moskos, L., **Mundy, M**., Rademacher, K., Wiggins, A., Rayens, M.K., Studts, J., Butler, K. (2018). Personalized environmental report back to reduce lung cancer risk. Health Education and Behavior.

Hahn, E.J., Begley, K., Gokun, Y., Johnson, A.O., **Mundy, M**., Rayens, M.K. (2014). Electronic cigarette retail outlets and proximity to schools. American Journal of Health Promotion. doi: http://dx.doi.org/10.4278/ajhp.130627-ARB-335