THE EFFECT OF SCHOOL CLIMATE ON TEACHER BURNOUT, PERCEIVED HEALTH AND WELLBEING

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Abstract: The health and wellbeing of teachers is not only good for teachers, it is also critical for students wellbeing and academic outcomes. Using the Social Ecological Model to drive this study and considering the school climate at the organization level, this study focuses on how the school climate effects teacher's burnout, perceived health and wellbeing. School climate was measured by the strength of the school district's wellness policy as it addressed staff health and practice of staff wellness programming, along with the five dimensions of the staff personnel survey of the Center on Positive Behavioral Interventions & Supports (PBIS) School Climate Survey (staff connections, structure for learning, school safety, physical environment, and peer and adult relations). Teacher burnout was measured utilizing the Copenhagen Burnout Inventory, wellbeing through the World Health Organization Wellbeing Index (WHO-5) and perceived health through a single question. A multivariate regression analysis was used to analyze to identify school climate dimensions that effect teacher burnout, perceived health and wellbeing. Major findings include the peer and adult relations dimensions having the largest effect on teacher burnout as well as effecting perceived health. The staff connections dimension was also found to have a negative relationship with burnout. School safety was found to effect perceived health, as the perception of school safety decreased, the participants perceived health decreased as well. Lastly staff wellness programming in practice was found to have a positive effect on teacher wellbeing. Future recommendations include school districts implementing the Center of Disease Control and Prevention's Whole School, Whole Community, Whole Child (WSCC) Model. Fully implementing the ten components of the WSCC model will work to increase safety in the school setting. Schools should put emphasis on the social and emotional school climate to work toward reducing burnout and increasing perceived health. Lastly, committing to staff wellness through the district school wellness policy and fully implementing staff wellness programming will work towards increasing teacher wellbeing while also increasing the culture of health and wellbeing in the school setting.

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CHAPTER I

INTRODUCTION

A teacher's work environment is a child's learning situation. School environments have the potential to affect a teacher's health and wellbeing (Mattke, Liu, Caloyeras, Huang, Van Busum, Khodyakov & Shier, 2013). How a district addresses staff health can be identified in the school district's wellness policy, however the school climate can also have an effect on a teacher's health and wellbeing. This study focused on teachers in Oklahoma and how school climate effects their perceived health, wellbeing and burnout.

Problem

School climate sets the quality and character of school life (Cohen, McCabe, Michelli, Nicholas & Pickeral, 2009). While it is made up of the collective individual experiences of patterns that reflect norms, goals, values, interpersonal relationships, teaching

and learning practices as well as organizational structures (Cohen et al., 2009) the school climate is the collective of these experiences and is largely influenced by policy, structures and practices at the school site. Teachers are a major pillar of school climate. Their health and wellbeing have a direct effect on the learning outcomes of their students (Perikkou, Kougioufa and Yannakoulia, 2013). In Oklahoma, teachers make a low salary as compared to other professions who hold the same level of educational attainment (Allegretto & Mishel, 2019). Funding for public education in Oklahoma has decreased steadily for the last decade. A result of this includes larger class sizes and fewer resources to support learning, increasing workload. Research has shown that two major sources of teacher stress stem from students' behavior and discipline, along with stress related to an increased workload (Collie, Shapka & Perry, 2012).

School climate can potentially influence a teachers perceived health and wellbeing as well as burnout. Dimensions of school climate include: physical and social-emotional safety, quality of teaching and learning, relationships and collaboration and the structural environment (Cohen et al., 2009). School climate reflects the environments that teachers work in through the school norms, values and goals and are based on people's patterns of experiences (National School Climate Center, 2007). These experiences are made up through interpersonal relationships, organizational structures such as school wellness policy, and teaching and learning practices (National School Climate Center, 2007). Little research has been conducted in Oklahoma to see how school climate effects burnout, perceived health and wellbeing for teachers in the district.

Purpose

An adult's work environment will influence their health outcomes (Mattke et al., 2013). The purpose of this inquiry was to see how teachers work environment is affecting their perceived health, wellbeing and burnout.

Research Questions

Two research questions and hypotheses guide this study. Research questions include:

1. What elements of School Climate affectburnout for Oklahoma teachers?
2. What elements of School Climate affect perceived health and wellbeing for Oklahoma teachers?

Hypotheses for this study include:

1. Hypothesis: School climate will have an effect on burnout for teacher.

   Null Hypothesis: School climate will have no effect on burnout for teachers.

2. Hypothesis: School climate will have an effect on perceived health and wellbeing for teachers.

   Null Hypothesis: School climate will have no effect on perceived health and wellbeing for teachers.

Significance

Research

Little research has been done in the last decade to assess how school climate is effecting teachers' perceived health, wellbeing or burnout. This study will contribute to the

gaps in knowledge by examining what elements of school climate comprised of five sub-dimensions: (a) staff connections, (b) structure for learning, (c) school safety, (d) physical environment, (e) peer and adult relations as well as school wellness policy strength and practice of staff wellness and their effects on teacher burnout, perceived health and wellbeing.

Theory

The CDC's Whole School, Whole Community, Whole Child (WSCC) Model calls for a greater alignment of the public health and school health sectors through coordinating policy, process and practice to improve learning and health (CDCd, 2020). The framework embodies a social ecological system approach at the school site level. Policy influences environment which will have an effect on an individual's health. Applying the Social Ecological Model to research increases the understanding of how the school's ecological environment affects the teachers who interact within its systems.

Practice

Additionally, public health professionals will have an understanding of the effect of school climate as well as staff health policy on teachers' perceived health, wellbeing and burnout. They will be able to advocate for public policy and district level policy changes in schools to address the environment to support staff health. Additionally, the research can help school districts make informed decisions on how to stimulate the school climate to reduce burnout and increase perceived health and wellbeing for their teachers.

Research Design/Methods

Reviewing district wellness policies for components of staff wellness informed which districts to recruit to participate in this research. Survey research was conducted with

teachers in selected districts to assess the five sub-dimensions of school climate, as well as their perceived health and wellbeing and burnout.

Theoretical framework

The Social Ecological Model was used for the theoretical framework. The foundation of the Social Ecological Model asserts that an individual's behavior both influences and is influenced by their environment (Sallis, et al., 2014). Levels of influence in an individual's environment include interpersonal, organizational, community and public policy. The focus of this research is on policy at the organizational level, or the school district, as well as school climate and its influence on teachers, while taking into account the public policy environment in the state of Oklahoma. The Center for Disease Control and Prevention (CDC)'s Whole School, Whole Community, Whole Child (WSCC) model looks at the school's ecological system and how it supports the child by creating environments where the child feels safe, supported, challenged, engaged and healthy (CDCd, 2020). Staff wellness is a component in the model aimed at creating this healthy environment. The community and school coordinate policy, procedures and practice to support all people who interact with the school setting.

Methods

Survey research was conducted with teachers in school districts who have adopted school wellness policies that address staff health at different levels of strength. Strength was based on the number of elements in the school wellness policy that addressed staff wellness as well as the strength in language of each element. Two validated surveys, the Copenhagen Burnout Inventory and the WHO-5, were utilized to measure burnout and wellbeing, while a single question was used to measure perceived health. A third survey, Positive Behavioral

Interventions & Supports School Climate Survey of School Personnel was used to measure school climate. A multivariate regression statistical analysis of the data collected was conducted to determine what elements of school climate affects burnout, perceived health and wellbeing of staff within the selected school districts.

Procedures

School districts were recruited in Oklahoma based on their school wellness policy rating and strength of policy elements that address staff wellness. School districts that agreed to participate in the study shared the contact work emails for teachers under contract in their district. A unique Qualtrics survey link was created for each district and then emailed to teachers. One school district Superintendent sent the survey directly to teachers in their district, another school district had the survey sent to the principals at each school site, who in turn sent the survey to their respective teachers and the last district had the researcher send the survey directly to the teachers. The survey was open for two weeks with a reminder going out to participants each week and the last day.

Research Sites

Schools who participated in this research had an established school wellness policy. By USDA Final Rule, schools are required to have school wellness policies that address nutrition and physical activity environments (USDA, 2020). School districts can choose to incorporate staff wellness language into their policy. The school wellness policy was reviewed and categorized by the number of policy elements that addressed staff wellness.

Research Subjects/Participants

The participants of the study were Oklahoma teachers who work in public school districts that address staff health in their school wellness policy.

Sampling

The sample was of convenience. The researcher reached out to district superintendents to assess willingness to participate in the research. The survey was sent to all teachers in the participating school districts. Teachers were provided the option to participate in the survey with an incentive to be put in a pool to win one of ten $50 gift cards.

Data Analysis

Data was analyzed using SPSS. SPSS analyzed data using multivariate regression analysis and the results are presented in the fourth chapter.

Delimitations

Some conditions that cannot be controlled for this sample include potential confounding variables such as social economic status, school enrollment and the urban verses rural setting of the school district. When selecting school districts to recruit, social economic status and size of the school was taken into consideration by initially contacting districts of similar eligibility for free and reduced lunch as well as similar size student enrollment and number of employees. Additionally the districts place in the county was taken into consideration. Each district in the original recruitment criteria were set as County seats. However, the recruitment criteria had to be broadened due to non-response of districts during recruitment. As a result two of the three districts are similar in size, social economic setting and place in the county. The third district is considered to be in a suburban setting with a lower eligibility for free and reduced lunch.

Definition of Terms

Burnout is defined as a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding (Schaufeli &

Greenglass, 2001, p. 501) and is measured through fatigue and exhaustion questions (Kristensen, Borritz, Villadsen, & Christensen, 2005).

School Climate is defined as, "based on patterns of people's experiences of school life and reflects norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures (National School Climate Center, 2007).

Wellness, wellbeing and health is defined as "good mental states, including all of the various evaluations, positive and negative, that people make of their lives, and the affective reactions of people to their experiences" (OECD, 2013, p. 29).

Chapter Summary

Exploring the effect of school climate on the perceived health, wellbeing, and burnout of teachers will provide insight to how the school environment affects a person's occupational health. A teacher's occupational health influences a student's learning situation. The following chapters will review the literature of the social ecological model, school climate, school wellness policies that include staff health, burnout, perceived health and wellbeing followed by the research questions, methods, results of the data and discussion chapters.

CHAPTER II

REVIEW OF LITERATURE

In this chapter, key concepts of the study will be introduced, what the research indicates in the literature about the concepts, ending with the social ecological climate as it relates to teachers.

Social Ecological Model

The Social Ecological Model (SEM) is an ecological perspective that posits there are multiple levels of influence on health behavior (Sallis, Owen and Fisher, 2014). The term ecology, refers to the how organisms, in this case humans, interrelate among themselves and their environment (Sallis et al., 2014). The key concepts of the Social Ecological Model include the notion that humans are influenced by their environments in all levels of their ecologic system. These levels include individual, interpersonal, organizational, community and public policy (Sallis et al., 2014) and work to create a sphere of influence on health behavior and choices. As demonstrated by the figure

below, the higher levels of the ecologic system exert influence over all the embedded, lower levels, the higher the level, the bigger the circle of influence (Sallis et al., 2014).

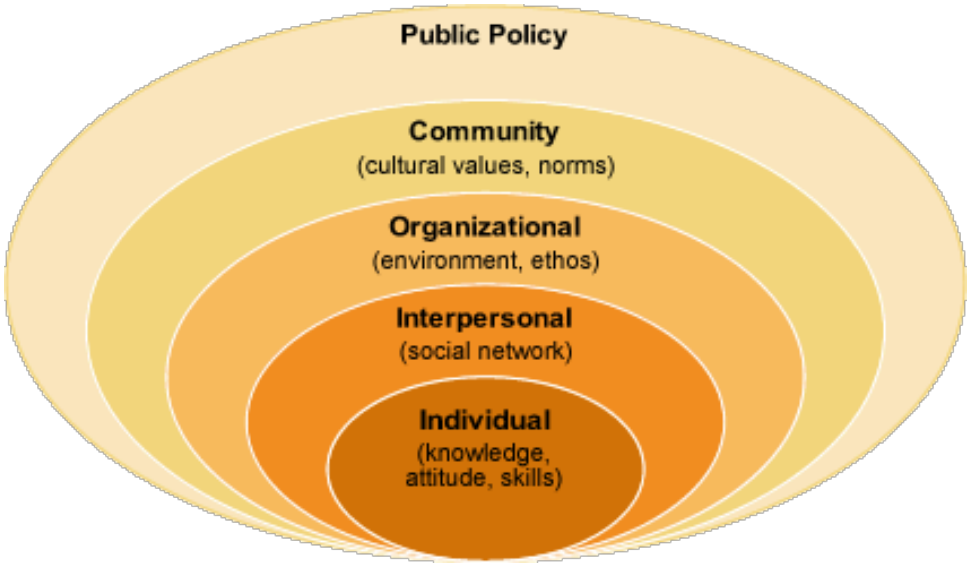

Figure 1. Example of the Social Ecological Model

One of the core principles of the Social Ecological Model is that multiple levels of influence interact with each other. Studies show that change in one level of the model will have an influence on the other levels. The change process is bi-directional, meaning a change in the individual level will influence the interpersonal, organizational, community and public policy levels and a change at the public policy level will influence behavior at the community, organizational, interpersonal and individual levels (Schultz, et al., 2015; Brownson, et al., 2005; Amuta, Jacobs, Idoko, Barry & McKyer, 2015; Robinson, 2008; Eyler, et al., 2008). "The importance of ecological models in the social sciences is that they view behavior as being affected by, and affecting the social environment" (McLeroy, Bibeau, Steckler, & Glanz, 1988, p. 355). An individual's knowledge and attitude will interact with their social network at the interpersonal level to influence their peers. Public policy will influence the community's norms and values and

will interact with the environments in which individuals live, work, learn, play and pray. Therefore to plan interventions to reach a desired behavior, a multi-level approach is necessary (Sallis et al., 2014).

There are unique characteristics of each level to focus on for successful behavior change interventions to occur. Individual level characteristics that influence behavior include a person's knowledge, attitudes and beliefs towards that specific behavior as well as their biological make up and family situation (Sallis et al., 2014; McLeroy et al., 1988; Allchin, Chaplin & Horwitz, 2019). The interpersonal level characteristics include an individual's primary group, such as family, peers, social networks and associations (Sallis et al., 2014; McLeroy et al., 1988). These networks influence the individual's social identity and role definition (Sallis et al., 2014; McLeroy et al., 1988). The organization's individuals interact with, such as worksites, schools or religious groups make up the organization level. Organizations have rules, regulations, policies and informal structures in place that will influence how individuals behavior while interacting with them (Sallis et al., 2014; McLeroy et al., 1988). The community level encompasses social norms and relationships between the organizations, within a defined boundary, that influence the public and media agenda (Sallis et al., 2014; McLeroy et al., 1988) and lastly public policy is inclusive of local, state and federal policies and laws that influence health behavior through regulation or support (Sallis et al., 2014; McLeroy et al., 1988). When utilizing the Social Ecological Model, it is important to be specific about the behavior or outcome that you want to address and then analyze the population of interest and the levels that they interact with. Identify contributing factors in the environmental, policy and program that may influence the behavior or outcome of choice and then assess the

barriers and opportunities within those levels to drive a multi-faced approach to achieve the desired change.

The below example, outlined by Soderlund (2017), demonstrates how interventions can be applied across the Social Ecological Model, to address Type 2 Diabetes for Hispanic Women. The specific behavior of focus was physical activity.

Public policy has a sweeping effect on the population at large and can determine funding priorities, programs offered in the community and what behaviors are addressed (Langille and Rodgers, 2010). Soderlund (2017) found that barriers to physical activity for Hispanic Women included unsafe neighborhoods and poor access to places to exercise, such as parks. Funding for sidewalks and safe routes to parks or places to exercise from neighborhoods can both be addressed at the policy level (Soderlund, 2017).

At the organization level, places of employment and the organization's culture set through policy and practice will have an effect on one's health (Crump et al., 1996; Middlestadt et al., 2011; Person et al, 2010; Hannon et al., 2011; Pescud et al., 2015). The employer view on worksite wellness programs can play a critical role in the organization's culture. Research on physical activity interventions found that workplaces that allow time for employees to participate in Diabetes Self-Management programs provided support for people with type 2 diabetes to be more physically active (Gleeson-Kreig, 2008). Soderlund's (2017) research found physical activity increased when a health care organization integrated 30 minutes of physical activity into a 90 minutes Diabetes Self-Management program. (Soderlund, 2017).

At the Interpersonal level of the SEM, focus should be on the sphere of influence of the individual or population of interest. Soderlund (2017) found research interventions that included social support, such as encouraging family members of participants of the Diabetes Self-Management program to participate alongside the participant, had more significant physical activity outcomes by working to also improve the skills of family and friends to support the participants lifestyle change (Soderlund, 2017). As their attitudes and knowledge shifted, so did their influence on their social network.

Policy and practices in place at the school can promote wellness at the individual level of the Social Ecological Model and can work to increase self-efficacy to engage in healthy behaviors. Soderlund (2017) found that the more frequent the individual was exposed to physical activity and nutrition change, the more significant the physical activity outcomes.

The Social Ecological Model is the theoretical framework that will drive this research.

Whole School, Whole Community, Whole Child (WSCC)

The CDC's Whole School, Whole Community, Whole Child (WSCC) model exhibits the social ecological system in the school setting. The WSCC model originated from a national call to integrate both public health and education to address health by working together whenever possible (CDCd, 2020). The goal of the model is to foster an educational environment where kids feel safe, engaged, supported, challenged and healthy by coordinating policy, process and practice to improve learning and health. The ten components include: (a) Health Education, (b) Physical Education and Physical

Activity, (c) Nutrition Environment and Services, (d) Health Services, (e) Counseling, Psychological, and Social Services, (f) Social and Emotional Climate, (g) Physical Environment, (h) *Employee Wellness*, (i) Family Engagement, and (j) Community Involvement all while keeping the child in the center (CDCd, 2020). Given the importance of wellness and the role of the workplace in wellness for employees, the CDC's Whole School, Whole Child, Whole Community is a critical, national model for considering the importance of addressing teacher health.

Figure 2. CDC Whole School, Whole Community, Whole Child Framework

Employee Wellness being one of the ten components identified demonstrates the importance of having a healthy workforce to support the educational system. While the framework focuses on the child/student, it acknowledges that employee wellness has an influence on the child's academic environment. In terms of the school environment, if

physical activity and healthy nutrition environments are established into the school system, then teachers will interact within the environments to support their own healthy behavior. Examples include policy elements practiced at the school site that only allow snacks offered in the classroom that meet the USDA Smart Snack standards, or the school offering professional development to teachers on ways to incorporate movement and physical activity into the classroom setting.

Perceived Health

Six in ten adults live with a chronic disease in the United States and about four in ten adults have two or more chronic diseases (CDCa, 2019). Chronic diseases are particularly prevalent in Oklahoma where the leading causes of death are Heart Disease, Cancer and Chronic Lower Respiratory Disease (CDCb, 2018), and the state's national ranking for these causes of death are 2nd, 6th, and 4th respectively (CDCb, 2018). Heart disease accounts for 1 in 4 deaths and is the leading cause of death in Oklahoma (OSDHa, 2019). Cancer is the second leading cause of death in Oklahoma, with lung cancer leading in number of deaths, followed by colorectal, breast, then cervical cancers (OSDHa, 2019). In general, 21.6 percent of Oklahomans self-report their perceived general health as fair or poor (BRFSS, 2017). The percent of Oklahomans under the age of 65 who are living with a disability is 11.4% (CDCb, 2018). Research has found that physical health is associated with all three dimensions of burnout, not just exhaustion (Honkonen et al., 2006). As the severity of burnout increases, the prevalence of physical diseases increases with it (Honkonen et al., 2006). For employee wellness, a self-rated health question along with a measure for burnout have been found to have predictor values for identifying employees who are at risk for absence related to sickness (Cheng,

Chen, Chen, Burr, Hasselhorn, 2013). Particularly in jobs that are high in demand, have poor social support or the rewards are not in balance with the effort put in (Cheng et al., 2013).

Wellbeing

The terms wellness, wellbeing and health are often used interchangeably in the literature (Organization for Economic Cooperation and Development [OECD], 2013) and are used interchangeably in this paper. The OECD defines perceived wellbeing as, "good mental states, including all of the various evaluations, positive and negative, that people make of their lives, and the affective reactions of people to their experiences" (OECD, 2013, p. 29). The term "good mental states" in this definition is broad and includes internal assessments, such as fulfilment, interest, engagement and meaning as well as affective states (OECD, 2013; Prilleltensky, 2012). The Substance Abuse and Mental Health Services Administration (SAMHSA) takes the definition of wellness a step further by adding that it is a state of being in good mental and physical health (SAMHSA, 2016). SAMHSA describes a reciprocal connection between a person's mental and physical health and indicate that if a person is experiencing an issue in one area, the other will be affected (SAMHSA, 2016).

Prilleltensky (2012) reflects on the meaning of wellness from a Social Ecological Model (SEM) lens and defines it as, "a positive state of affairs, brought about by the simultaneous and balances satisfaction of diverse objective and subjective needs of individuals, relationships, organizations, and communities" (p. 2). From this definition the individual's needs, both objective and subjective, across the levels of the SEM need to be balanced so that the individual can thrive (Prilleltensky, 2012).

Objective needs include physical necessities such as food, shelter and clothing (Prilleltensky, 2012; Schulte et al., 2015). Income, job opportunity and employment contribute to individuals achieving these basic needs (Schulte et al., 2015). The physical necessities do not necessarily define wellbeing, however, research has found that the absence of such necessities correlates with a lack of wellbeing (Schulte et al., 2015). Other objective indicators across the SEM include, access to education and services as well as social capital in the community, occupational access to resources to be able to do one's job properly as well as job recognition and instances of conflict in the organization and interpersonal relationships with friends and family (Prilleltensky, 2012).

Subjective needs refer to emotional and psychological needs (Prillenltensky, 2012; OECD, 2013; Schulte et al., 2015). These subjective internal assessments are either assessed through feelings experienced, or are life evaluations of self around life satisfaction as a whole (OECD, 2013; Prillenltensky, 2012), which can include an individual's perceptions of meaningfulness, sense of purpose and value of life (Schulte et al., 2015). Other subjective indicators of wellbeing across the SEM include a sense of community and safety at the community level, occupational support and have positive work climate at the organizational level, feelings of being valued and supported at the interpersonal level and feeling financially secure and feelings of energy, vitality and perceptions of health at the individual level (Prillenltensky, 2012).

Burnout

Burnout, on the other hand, can be described as "the draining of energy" (Schaufeli, Leiter and Maslach, 2009, p. 205). Like the name suggests, it is the burning of resources over a sustained period of time (Maslach & Schaufeli, 1993). Burnout is not

simply the opposite of wellbeing, but rather, it is a negative consequence of an individual not having the proper resources and mental power due to undo stress and fatigue over a prolonged period of time (Schaufeli et al., 2009). It is a process in which the body's ability to adapt to the prolonged stress wears out and the breakdown in the adaptation process malfunctions (Maslach & Schaufeli, 1993). The burnout process is complete when the person's coping mechanism turns defensive of the stress and the individual psychologically detaches themselves from the job, becoming cynical or apathetic to it (Maslach & Schaufeli, 1993). This can lead to the individual not being able to accomplish as much, as they will not have the capacity to keep up the energy needed to create a meaningful impact (Schaufeli et al., 2009). Therefore, the three dimensions of burnout include; exhaustion, cynicism and inefficacy (Maslach & Schaufeli, 1993; Schaufeli et al., 2009; Colomeischi, 2015).

Burnout was originally thought to be specific to individuals employed in human service work, however, while it is more prevalent in human service work, signs of burnout are also evident in other professions (Aronsson, Toivanen & Nyberg, 2016). Exhaustion is brought out by the demanding characteristics of human service work, while cynicism is seen as a coping mechanism or protection of one's emotional reactions by distancing themselves from the client (Maslach, Schaufeli & Leiter, 2001). Lastly, inefficacy is brought about as a consequence of the exhaustion and cynicism or develops alongside them (Maslach, Schaufeli & Leiter, 2001).

The unique stressors for teachers and risk factors for burnout are discussed in greater detail below.

Teacher Health and Wellbeing

The health of teachers influences a student's academic achievement (National Association of Chronic Disease Directors [NACDD], 2018). Being a teacher has unique stressors and these stressors are important because a teacher's wellbeing is associated with students' mental health and wellbeing (Harding, et al., 2019). In addition to mental health and academic achievement, teacher stress is also related to burnout and high turnover, which is costly to school districts (NACDD, 2018). Sources of stress for teachers include: (a) teaching unmotivated students, (b) classroom discipline, (c) large class sizes, (d) a demanding workload, (e) frequent changes, (f) evaluation processes, (g) maintaining relationships with colleagues and administrators, and (h) poor working conditions (Nasser-Abu Alhija, 2015). Teacher stress manifests from prolonged exposure to these sources of stress. Over time, teachers start to feel negative emotions, such as frustration, anger, nervousness, anxiety and depression. These emotions manifest into teacher stress (Nasser-Abu Alhija, 2015) and over time, can lead to burnout. Chan, Chen & Chong, found that teacher stress is a widespread problem for teachers across the globe, it is not isolated to one country (2010).

Johnson, et al., (2005), identified the teaching profession falls in with a category of occupations acknowledged as being the most stressful, as measured through physical and psychological wellbeing. A common characteristic with occupations in this category, is that all of them have high interaction with clients; however, the display of emotions for teachers is restricted by rules, therefore manifesting more stress (Johnson et al., 2005; Colomeischi, 2015). Teachers, for example, interact with students regularly, but are restricted from showing frustration at a student who might be unwilling to learn or are

disruptive to the classroom (Johnson et al., 2005). This is described as "emotional labor" (Johnson et al., 2005).

The teaching profession also is characterized as having a "work overload phenomenon" (Colomeischi, 2015, p.1068). That is, there is a lot of work for teachers to accomplish in too little time and with too few resources (Colomeischi, 2015). Teachers have a high level of paperwork on top of their performance in the classroom, through lesson plans and grading (Johnson et al., 2005). Teachers might only have one planning period scheduled to complete the required paperwork, otherwise it is not uncommon to finish the administrative needs outside of working hours. Over the last ten years, evaluation of teachers has shifted from their own performance to being evaluated on their students' academic performance (Johnson et al., 2005). Additionally, teachers have other tasks such as, after school meetings with parents, supervising extracurricular activities, preparing long term plans and projects, and counseling students and parents. All of these duties associated with the teaching profession, lead to increased symptoms of burnout (Colomeichi, 2015).

The mental health of teachers is found to influence students' mental health (Harding et al., 2019). When teachers health and wellbeing are high, so is the associated student wellbeing (Harding et al., 2019). Student wellbeing is correlated with student academic outcomes (Kidger, et al., 2016). Additionally, teachers' mental health is associated with the quality of the teacher-student relationships, as well as their presenteeism and absences (Harding et al., 2019; Kidger et al., 2016). In other words, teachers who reported higher states of mental health had positive, quality of relationships and increased presence in the classroom with fewer absences. This was found to be

inversely correlated with student wellbeing and distress, in that, the better the teacher wellbeing, the lower the student psychological distress (Harding et al., 2019). Therefore, focus on teachers health and wellbeing is not only good for the teacher, it is good for students as well.

Employee Wellness Programs

With adults spending a large part of their day at work, worksite wellness programs are a way to promote health to adults during the workday. They also represent programming at the organizational level of the SEM. A healthy workforce has many benefits including reduced healthcare costs, reduced absenteeism and increased presentism (Grossmeier, et al., 2016). Employee wellness programs are made up of policy, practice and environmental components that support healthy environments. Components such as screening programs allow employees to find out their own personal risk factors towards chronic diseases and if a lifestyle change might be needed to reduce their risk. Changing environments to facilitate more physical activity and healthy nutrition throughout the day will foster a healthier workforce. (Matson-Koffman, 2014).

Employee wellness programs work to reduce stress and potentially increase engagement while decreasing symptoms of burnout. When employees are engaged in their work, they are fully immersed and are in a positive, affective state of emotions (Bakker, Schaufeli, Leiter & Taris, 2008). Their work is fulfilling so they are more enthusiastic about it (Bakker et al., 2008). Three things that characterize engagement are energy, involvement and efficacy (Bakker et al., 2008). The positive outcomes of

engagement include growth and development at the individual level and better performance at the organizational level (Bakker et al., 2008)

Teachers and the Social Ecological Model

Public Policy Level

Funding for Schools

Funding for schools falls at the public policy level of the Social Ecological Model and is considered a construct within the larger society that influences health (Sallis et al., 2014). School systems are funded differently dependent on the state policy. In Oklahoma, a revenue source for the school system is funded by the people who live within the boundaries of that school system in the community through property tax (Oklahoma State Department of Education [OSDE], 2018). Therefore, if the community does not support a higher tax base, then there is less funding for the school system. Additional funds can be borrowed through the insurance of bonds after the bond issue is approved by at least 60 percent of voters (OSDE, 2018).

State funding for public education is another source of revenue for schools. In Oklahoma, state funding has decreased steadily for the last decade. Since 2008, funding through the state has been cut by $179 million, yet the enrollment in K-12 has increased by more than 50,000 students during the same time period (Oklahoma Policy Institute [okpolicy], 2018). The chart below highlights the proportion of funding in schools as compared with student enrollment for the state.

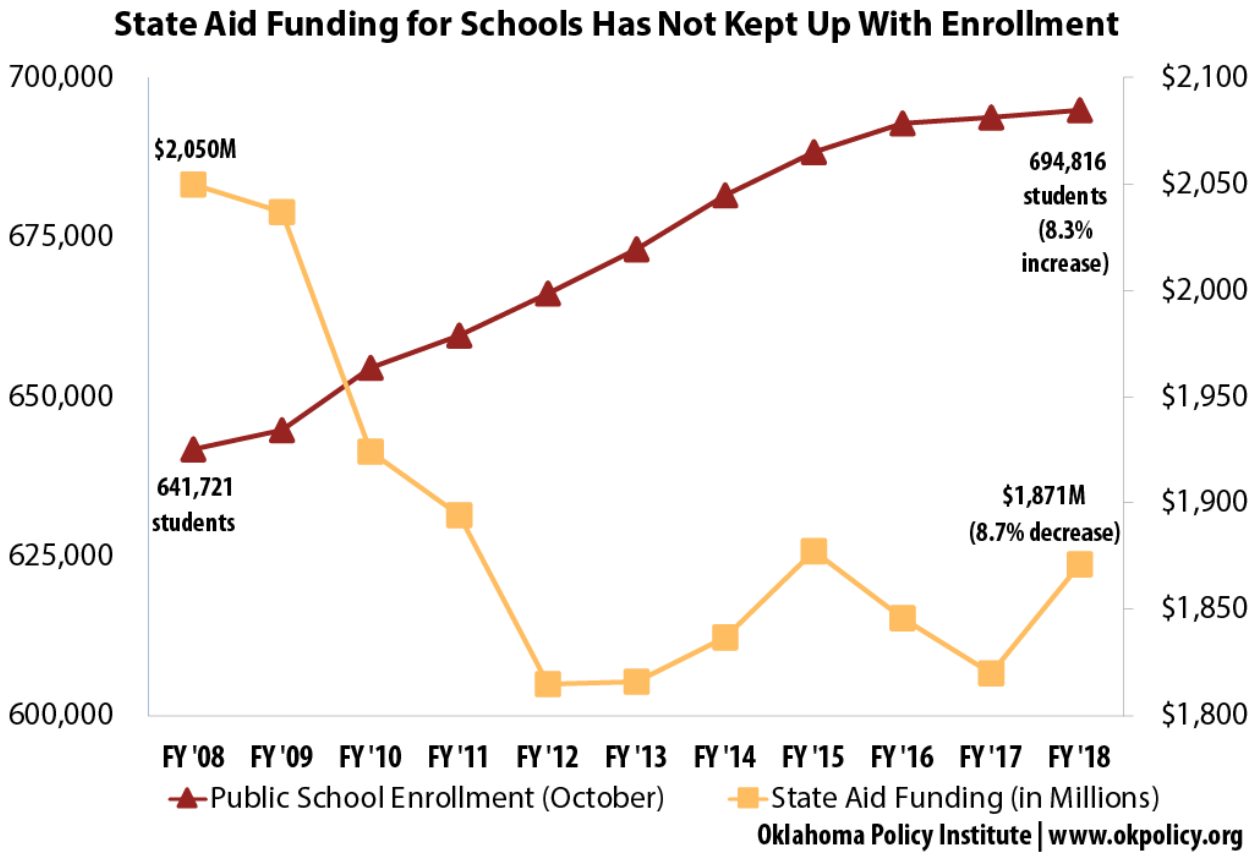

Figure 3. State Aid Funding for Schools Has Not Kept Up With Enrollment

The funding shortage has affected schools at the organization level with fewer teachers, counselors, librarians and teacher aides (okpolicy, 2018) to support the student body. Fewer staff means teachers have larger class sizes and students have access to fewer courses and programs as well as outdated textbooks (okpolicy, 2018). There are fewer funds for developmental resources in the classroom, such as smartboards, computers or educational software and textbooks (Dearing, 2008). Some school districts have shifted to a four-day school week to compensate for the funding shortage (okpolicy, 2018).

Not only could this school environment have an effect on student learning, it can create a more stressful environment for the individuals, like teachers, interacting with the

school on a daily basis. Claudio, Rivera and Ramirez (2016) found that the physical environment at the school site had an effect on a teacher's health. Under funding can leave schools without the funds to make infrastructure updates to buildings. This can lead to more unsafe school conditions. Buildings that are in disrepair or have toxins such as asbestos or lead could be exposing both teachers and students during the school day (Dearing, 2008). Poor classroom environments have been found to be associated with asthmas, colds, eye irritation, nasal congestion and sore throat for teachers (Claudio et al., 2016).

Investing in teachers health is not only important for supporting positive health and academic outcomes in the child, it can also benefit school districts financially to invest in promoting health and wellness among their teachers and staff. In Oklahoma, the cost for teachers' annual health care has been found to be significantly higher than that of the private sector (Costrell, 2015). Therefore it is in the best interest of the school districts to invest in their employees' health to curb the rising costs of an unhealthy workforce (Grossmeier et al., 2016).

Teacher Salary

As individuals, teachers hold higher educational degrees, yet make a low salary as compared to other professions who have achieved the same level of education. An individual's salary matters because it can determine the quality and quantity of resources they have access to in life (Dearing, 2008; Evans & Cassels, 2014, Evans & Kim, 2012; Hackman et al., 2010; Hart et al., 2008). Examples of resources include the type of housing one can afford, which can determine the neighborhood a person lives in.

Additionally, income determines the type of foods an individual has access to as well as the type of leisure time activities one can afford. (Dearing, 2008; Evans & Cassels, 2014, Evans & Kim, 2012; Hackman, Farah & Meaney, 2010; Hart, Atkins & Matsuba, 2008). Regardless of an individual's race, there is a relationship between income and health, with higher income associated with better perceived health and wellbeing (Meraya, et al., 2018).

Nationally, the wage gap for teachers as compared to other professionals has been increasing. According to the Economic Policy Institute, the wage gap for teachers has grown from 1.8 percent in 1994 to 21.4 percent in 2018 (Allegretto & Mishel, 2019). The comparable wage for female school teachers was found to be 15.6 percent less and for males, 26.8 percent less than comparable female and male workers respectively (Allegretto & Mishel, 2019). The report further explained that the decline in teacher pay cannot be blamed on the Great Recession, rather it is due to *policy* decisions made at the state level to cut taxes so that the states were not generating enough revenue to support public education (Allegretto & Mishel, 2019). Oklahoma is one of the eight states cited to have created policy that negatively impacts teacher wages (Allegretto and Mishel, 2019). In addition to fewer wages, teachers are found to spend out of pocket, on average, $500 of unreimbursed funds on their classroom for supplies (National Center for Educational Statistics [NCES], 2018).

In Oklahoma, funding priorities at the public policy level have, until the 2018-19 school year, pushed the pause button in the salary schedule for teachers, meaning they had not seen an increase in salary for close to a decade (okpolicy, 2018). Oklahoma pay was ranked 50th in the nation until FY19 when an average $6100 pay raise went into

effect. Even with the raise, Oklahoma teacher salaries are still below the regional average. A consequence of the low teacher salaries is qualified teachers are leaving the profession or moving to other states for higher pay (okpolicy, 2018). To fill the teacher shortage, Oklahoma has issued more than 1,800 emergency certifications (okpolicy, 2018); these emergency certifications allow individuals who do not have an academic background or training in education to teach.

Johnson and Strange (2007) conducted a comprehensive review of policies that influence educational attainment in rural communities. They found that having a higher salary offering in rural schools made it easier to recruit and retain high quality teachers. The higher the salary offering for teachers at the district level, the higher the state testing scores of the students (Johnson & Strange, 2007). In low SES school districts, teachers do not get paid as high of a salary as in higher SES schools. According to the Oklahoma Public School Local Salary Schedule for the 2019-2020 school year, a first year teacher with a bachelor's degree can make start off making $45,161 annually in a higher SES school district, while in a lower SES district located in the same county a few miles away start at $39,726 with the same number years of experience and education (OSDE, 2020). This means there are many more inexperienced teachers who are working to build up their resume to get jobs in the higher SES school districts (Dearing, 2008). When wages are low, the research shows that there tends to be higher teacher shortages, higher teacher turnover rates and teachers assigned to topics they are not qualified to teach (Dearing, 2008); all factors which negatively impact student learning.

Organizational Level

School Climate

The National School Climate Center (2007), defines school climate as, "the quality and character of school life. It is based on patterns of school life experiences and reflects norms, goals, values, interpersonal relationships, teaching, learning and leadership practices, and organizational structures" (National School Climate Center, 2007). Studies have shown a positive correlation between school climate and positive risk prevention, health promotion and learning (Najaka, Gottfredson & Wilson, 2002). School climate and lifelong health are strongly correlated in that a positive school climate has correlates with length of school attendance as well as dropout rates (Cohen, 2001).

In Maslow's work to depict the five most fundamental needs of human beings, he uses a pyramid to demonstrate the hierarchal order to build from, starting with physiologic needs (food, water, shelter) at the base and building up the next level with safety, then love and belonging, esteem and self-actualization at the top (Maslow, 1943). Safety is a fundamental human need that must be satisfied before a person can attend to higher needs such as building relationships with othersMaslow, 1943) School safety, a key component of school climate, connects to promoting student learning and healthy development and includes not only physical safety, but also social, emotional, and intellectual (Astor et al., 2013). Elements in the school setting that contribute to school safety are supportive norms, structure and relationships or connections (Astor et al., 2013). Structure is found to be a protective factor for safety for both students and teachers (Thapa et al, 2013). Research shows that teachers and students having clarity of the school rules and support are found to be associated with less teacher victimization

(Thapa et al., 2013). For teachers, higher levels of support from coworkers has been associated with lower levels of burnout (Lim & Eo, 2014). In schools where students report having received higher levels of support, school records reflect decreased threats against faculty (Thapa et al., 2013). School climate is inclusive of staff connections within the school setting. A teacher's feeling of inclusion, respect and peer relationships will not only affect their work environment, but also have a positive effect on the school's overall climate (Thapa et al., 2013). Social support and feeling a sense of community within the school setting are sources of protection from burnout (Lim & Eo, 2014).

School Wellness Policies

School wellness policies are a way for schools to identify how they are going to create environments that support health and communicate that information to staff, families and community stakeholders. The written documents help to provide guidance to the district on how they are going to support school nutrition and physical activity environments (CDCe, 2018). For schools that participate in the federal Child Nutrition Programs, the United States Department of Agriculture (USDA) requires them to develop and implement a wellness policy that addresses goals for nutrition and physical activity promotion, guidelines for foods sold and offered to students, food marketing, parent and community engagement and to identify who will ensure the policy is implemented at the school sites (CDCe, 2018). Schools are also required to evaluate and update their school wellness policy every three years (CDCe, 2018).

The requirement to have a school wellness policy was first established in 2004 by the Child Nutrition and Woman Infant and Children (WIC) Reauthorization Act, and the

requirements have become more specific and enhanced through the Healthy, Hunger-Free Kids Act of 2010 (HHFKA) (CDCe, 2018). The HHFKA has been implemented in phases, first addressing standards for school meals and Smart Snack standards for other foods sold during the school day. The final provisions of the act were rolled out in 2016 and were implemented in the 2016-2017 school year. During this time, schools had to update their school wellness policies to address the goals listed above. Schools were also encouraged to assess their own needs and create customized goals to address nutrition and physical activity promotion and health education curriculum. While there are no requirements for schools to address staff wellness, if a school chooses to implement policy to address staff wellness, the school wellness policy is the place to do so.

Chapter Summary

The issue of teacher burnout, health and wellbeing is not just an Oklahoma concern; rather it is a topic on the national health agenda, and it's not just good for teachers. For this reason, determining if school climate including a focus on staff health through school wellness policies has an influence on burnout for teachers or perceived health and wellbeing is worthy of further investigation.

CHAPTER III

METHODOLOGY

In this chapter, the methods are introduced. The context of the research sites are discussed as well as how participants for the study were sampled and selected. Data variables and the instruments used to gather them are introduced along with the data gathering methodology and analysis.

Purpose

The purpose of this research was to understand what effects school climate has on teacher burnout, perceived health and wellbeing.

Research Questions and Hypotheses

Two research questions and two hypotheses guide this study. Research questions include:

Research Questions

Two research questions and hypotheses guided this study. Research questions include:

1. What elements of School Climate affect burnout for Oklahoma teachers?
2. What elements of School Climate affect perceived health and wellbeing for Oklahoma teachers?

Hypotheses for this study include:

1. Hypothesis: School climate will have an effect on burnout for teacher.

   Null Hypothesis: School climate will have no effect on burnout for teachers.

2. Hypothesis: School climate will have an effect on perceived health and wellbeing for teachers.

   Null Hypothesis: School climate will have no effect on perceived health and wellbeing for teachers.

Methods

A cross-sectional correlation study was used as the study design for this research.

Research Sites

Ten public school districts in Oklahoma were recruited to participate in this study. Inclusion criteria included school wellness policy ratings for staff health described below publicly funded and employed more than 300 teachers.

Research Subjects/Participants

The study population consisted of Oklahoma teachers K-12 employed in participating public school districts. All teachers under contract at participating school districts were asked to participate in the study. The researcher expected to survey 60 teachers per school district for a minimum sample size of 180.

Sampling

The sample was a purposeful, non-probability voluntary sample. The researcher first requested a list of public school districts with school wellness policies that had been rated on a scale of 1 to 100 by a State Agency utilizing a policy and practice tool structured around the University of Connecticut Rudd Center's WellSat 3.0 Wellness School Assessment Tool. Based on the number of policy elements and strength of language, district wellness policies were categorized into starter (score from 1 to 49%), , builder (score of 50 to 74%) or leader (score of 75 to 99%) policy in the area of staff wellness. From that list, the school districts that had fewer than 300 teachers employed were removed. Additionally, the percentage of free and reduced meal eligibility were compared to select districts with similar eligibility. At least three school districts in each category (starter, builder, leader) were asked to participate. An email requesting permission to survey the district teachers was sent to the superintendent with a follow up phone call. Nine districts were originally contacted, two District Superintendents, for the Builder and Leader category agreed to allow teachers in their district to participate in the survey. Having heard no response from any of the recruited districts in the Starter category, one additional district that fit the Starter category was contacted and agreed to participate.

Recruitment

Once an agreement to participate was made, a list of teacher email addresses from the district was compiled. One district provided the list and provided permission for me to email their teachers directly. One district Superintendent opted to send the survey directly to the teachers in their district. One district requested me to send the recruitment

materials to their Assistant Superintendent, who in turn sent the materials to the site Principal's to share with their teachers. The emails sent had the survey link with a description of the study, requesting them to participate. As an incentive to participate, each person who completed the survey was put into a drawing to win one of ten $50 Amazon gift cards with one gift card designated per district to guarantee at least one winner per district.

Institutional Review Board

The researcher obtained IRB approval through Oklahoma State University and the Oklahoma State Department of Health before conducting the research. Written approval for participating public school sites was obtained prior to recruiting teachers at the sites.

Measures

School climate was measured using both the Positive Behavioral Interventions & Supports (PBIS) School Climate Survey for School Personnel as well as organizational structure in place to support employee wellbeing via the district school wellness policy and practice of the policy. A copy of the survey is available in Appendix B.

The PBIS survey had 26 items that measured five dimensions; (a) Staff Connections, (b) Structure for Learning, (c) School Safety, (d) Physical Environment, (e) Peer and Adult Relations. Each item was measured on a four point Likert scale with the anchors Strongly Disagree and Strongly Agree.

Part 1. Staff Connections

1. I feel supported by other teachers at my school.
2. I get along well with other staff members at my school.

3. I feel like I am an important part of my school.
4. I enjoy working in teams (e.g. grade level, content) at my school.
5. I feel like I fit in among other staff members at my school.
6. I feel connected to the teachers at my school.

Part 2: Structure for Learning

1. Teachers at my school frequently recognize students for good behavior.
2. Teachers at my school have high standards for achievement.
3. My school promoted academic success for all students.
4. All students are treated fairly by the adults at my school.
5. Teachers at my school treat students fairly regardless of race, ethnicity, or culture.
6. Teachers at my school work hard to make sure that students do well.

Part 3: School Safety

1. I feel safe at my school.
2. I have been concerned about my physical safety at school.
3. If I report unsafe or dangerous behaviors, I can be sure the problem will be taken care of.
4. I feel safe when entering and leaving my school building.

Part 4: Physical Environment

1. My school building is well-maintained
2. Instructional materials are up to date and in good condition.

3. Teachers at my school keep their classrooms clean and organized.
4. Teachers make an effort to keep the school building and facilities clean.

Part 5: Peer and Adult Relations

1. Students at my school would help another student who was being bullied.
2. Students at my school get along well with one another.
3. Students at my school treat each other with respects.
4. Students at my school treat other students fairly regardless of race, ethnicity, or culture.
5. Students at my school show respect to other students regardless of their academic ability.
6. Students at my school demonstrate behaviors that allow teachers to teach, and students to learn.

The next measure of the school climate organizational structure as set by district school wellness policy honed in on elements that support employee wellness. The variable was categorical and dependent on the number of Staff Wellness elements the school district addresses and the strength of language in their School Wellness Policy (SWP). There were 16 potential staff wellness elements recommended for school districts to adopt in their SWP outlined below.

1. Serve only those foods and beverages that meet Smart Snacks standards at all staff meetings, trainings, special occasions (e.g., birthdays and retirement parties), and other workplace gatherings.

2. Provide employees with access to a refrigerator, microwave, and sink with a water faucet.
3. Partner with community organizations or agencies to offer staff accessible and free or low-cost healthy eating/weight management programs.
4. Promote walking meetings.
5. Incorporate 10-minute physical activity breaks into every hour of sedentary meetings.
6. Provide access to on-campus athletic facilities, such as gyms, running tracks, basketball courts, tennis courts, and swimming pools.
7. Promote employee participation in physical activity by creating exercise clubs or groups and/or sponsoring employee sports teams.
8. Promote stairwell use, if applicable, throughout the workday by making stairs appealing and posting motivational signs.
9. Use posters, pamphlets, and other forms of communication to promote physical activity.
10. Provide information about local physical activity resources and facilities, such as walking trails, community parks, and recreation facilities.
11. Partner with community organizations or agencies to offer voluntary health screenings annually to staff, including free or low-cost health assessments.
12. Partner with community organizations or agencies to provide stress management programs annually to staff.

13. Ensure access to a private space (other than a restroom) that has an electrical outlet, and provide flexible paid or unpaid break times to allow mothers to express breast milk and/or breastfeed.
14. Partner with community organizations or agencies to offer immunization clinics (e.g., flu, Tdap, etc.) to staff.
15. Provide or partner with community organizations or agencies to offer free or low-cost first aid and CPR training.
16. The District will provide staff with educational resources and annual training in health and health-related topics.

Rating the policy variables mirrored the University of Connecticut Rudd Center for Food & Obesity's WellSAT tool for reviewing local school wellness policies. Each policy element was rated "0", "1", or "2" using the following definitions (UCONN, 2018). A "0" rating was given when the policy element was not included in the text of the policy (UCONN, 2018), in other words the element was absent. A "1" rating was provided when the policy element was mentioned, but was a weak statement (UCONN, 2018). The reviewer identified a weak statement as vague, unclear or confusing. The statement was a suggestion or recommendation or there were loopholes that weaken the enforcement of the element (UCONN, 2018). In other words, the element was there, but was written in a way that created doubt in the enforcement of it. Some examples of words that can weaken the language of an element were: may, can, could, should, might, encourage, suggest, urge, some, partial, try (UCONN, 2018). A "2" rating was provided when the policy element meets or exceeds expectations (UCONN, 2018), meaning the policy element was written using strong language that indicated the action was required

(UCONN, 2018). Examples of words used to strengthen the policy language were: will, must, require, have to, all (UCONN, 2018). If a policy element was questioned for interpretation on how to enforce it, these words made it so there was no doubt as to the requirement of the action the element is requiring.

The policy was then assigned two scores, comprehensiveness and strength (UCONN, 2018). The comprehensive score was calculated by adding the number of policy elements that received either a "1" or "2" rating. It reflected the number of elements the policy addresses regardless of the strength of language. The strength score was calculated by adding the number of policy elements that received a "2" rating, reflecting the strong language.

Practice of the policy was measured using three different methods, observations, conducting interviews, and reviewing documents (University Partnership for Applied Evaluation and Research [UPAER], 2015). Observation was used to gather information on the practice of a policy element by watching an event, behavior or looking at physical characteristics that pertain to the implementation of a policy element (UPAER, 2015). Interviews were conducted with stakeholders from the school district to gather more in-depth information about implementation of policy elements (UPAER, 2015). Lastly, documents, such as reports, meeting minutes, newsletters and marketing materials were reviewed as another source of information to evidence policy implementation. Each element was then rated utilizing a rating system of "0", not practiced, "1" partial practice or "2" full and complete practice (UPAER, 2015).

District policies were classified based on the strength rating of the policy as well as the implementation of each element measured as practice (UPAER, 2015). A classification of *Starter* policy denotes that 1-49% of the policy elements and practice were rated with a "2" (UPAER, 2015). *Builder* classification denotes that 50-74% of the policy elements and practice were rated with a "2" and a *Leader* classification denotes a "2" rating was given to 75-99% of policy elements were practice (UPAER, 2015). The school district sites were selected based on their classification of employee wellness in their District School Wellness Policy.

Dependent variables include teacher burnout, perceived health and wellbeing.

Burnout was defined as, "a state of physical, emotional and mental exhaustion that results from long-term involvement in work situations that are emotionally demanding" (Schaufeli & Greenglass, 2001, p. 501) and was measured through fatigue and exhaustion questions (Kristensen, Borritz, Villadsen, & Christensen, 2005).

The Copenhagen Burnout Inventory is a brief survey designed to measure burnout across 3 different dimensions: personal burnout, work-related burnout and client-related burnout (Kristensen et al., 2005). Personal burnout, is a generic scale for all human beings which aims to measure the participants state of physical and psychological exhaustion, which can lead to burnout if prolonged over time (Kristensen et al., 2005). Work-related burnout questions are designed for humans who are paid for their work and aims to measure an individual's state of physical and psychological exhaustion due to their perceived work load, which can lead to burnout if prolonged for a long period of time (Kristensen et al., 2005). A teacher's clients are students, therefore, the word

"student" will replace the word "client" to measure student-related burnout. Questions in this sub-dimension are designed for people who work with students and aims to measure a person's state of physical and psychological exhaustion due to their perceived work with students, which can lead to burnout if prolonged for a long period of time (Kristensen et al., 2005). Questions with reverse coding have been added to each sub-dimension grouping to avoid stereotyped response patterns.

Researchers validated the instrument with a teacher population in New Zealand (Milfont, Denny, Ameratunga, Robinson and Merry, 2008) and in Italy (Fiorilli, et al., 2015). Both studies found the CBI instrument to be valid through having internal consistency and homogeneity as well as validity (Milfont et al., 2008; Fiorilli et al., 2015).

The CBI had 19 questions scored on a 5-point Likert scale to measure three sub-dimensions of burnout: personal, work-related and student-related (The National Research Center for Work Environment, 2019). Part 1, Personal burnout has six questions, Part 2, Work-related burnout has seven questions and Part 3, Student-related burnout has six questions. Scoring was calculated by assigned points to each point on the Likert Scale: Always: 100, Often: 75, Sometimes: 50, Seldom: 25, Never/almost never: 0 (The National Research Center for Work Environment, 2019). The scores of each section are then totaled to provide the total score for that section. Samples of questions from each section include:

Part 1: Personal burnout

1. How often do you feel tired?

2. How often are you physically exhausted?
3. How often are you emotionally exhausted?
4. How often do you think: “I can’t take it anymore”?
5. How often do you feel worn out?
6. How often do you feel weak and susceptible to illness?

Part 2: Work-related burnout

1. Is your work emotionally exhausting?
2. Do you feel burnt out because of your work?
3. Does your work frustrate you?
4. Do you feel worn out at the end of the working day?
5. Are you exhausted in the morning at the thought of another day at work?
6. Do you feel that every working hour is tiring for you?
7. Do you have enough energy for family and friends during leisure time?

Part 3: Student-related burnout

1. Do you find it hard to work with students?
2. Do you find it frustrating to work with students?
3. Does it drain your energy to work with students?
4. Do you feel that you give more than you get back when you work with students?
5. Are you tired of working with students?
6. Do you sometimes wonder how long you will be able to continue working with students?

(The National Research Center for Work Environment, 2019).

All three measures were utilized from The Copenhagen Burnout Instrument as independent measures of each sub-dimension of burnout.

Wellbeing. Wellness or wellbeing was defined as "a positive state of affairs, brought about by the simultaneous and balanced satisfaction of diverse objective and subjective needs of individuals, relationships, organizations, and communities" (Prilleltensky, 2012, p. 2). The survey instrument that I used to measure perceived wellness was the World Health Organization (WHO)'s Wellbeing Index (WHO-5). The WHO-5 measured perceived wellness or wellbeing by breaking the measures into three categories, subjective quality of life, vitality, and general interest (being interested in things) (WHO-5, 2019).

The WHO-5 Wellbeing Index. The WHO-5 measured current mental wellbeing utilizing five questions rated on a 6-point Likert scale (WHO-5, 2019). Subjective quality of life was measured through self-reported good spirits and relaxation in the previous two weeks (WHO-5, 2019). Vitality was measured through self-report of being active and waking up feeling fresh and rested in the previous two weeks (WHO-5, 2019). Lastly, general interest was measured through the participant self-reporting being interested in things the previous two weeks (WHO-5, 2019). Higher scores on the scale signified better wellbeing (WHO-5, 2019). The instrument could also be used as a tool to screen for depression by looking at the lower scores on the scale (WHO-5, 2019).

To score the results of the instrument, one must add up the total points of the five answers. The raw score ranges from 0-25 with 0 being the worst possible quality of life

and 25 being the best (WHO-5, 2019). A raw score below 13 could be interpreted as poor wellbeing (WHO-5, 2019). To calculate the percentage score, the raw score was multiplied by 4, creating a range from 1 to 100 (WHO-5, 2019). A 0 on the percentage score represented the worst possible quality of life while a 100 percentage score represented the best possible quality of life (WHO-5, 2019). A systematic review of literature of studies utilizing the WHO-5 Wellbeing Index found the instrument to have to have construct validity through utilizing an item response theory model (Topp et al., 2015). The results confirmed that the five items of the index each add value to creating a unidimensional scale to measure the level of an individual's wellbeing (Topp et al., 2015). One clinical trial, found the index to have predictive validity of significantly higher mortality rates in a study of patients with cardiac disease (Topp et al., 2015).

Questions on this survey instrument included:

Over the last two weeks:

1) I have felt cheerful and in good spirits
2) I have felt calm and relaxed
3) I have felt active and vigorous
4) I woke up feeling fresh and rested
5) My daily life has been filled with things that interest me

Perceived health. A single, self-report item was used to assess the individual's perceived general health. The question, "My perceived general health is" was measured with a 5-point Likert scale with the anchors of Excellent and Poor (Milfont et al., 2008). The single item self-rated health question has been utilized in multiple research studies

on burnout and wellbeing of teachers or employee wellbeing (Milfont et al., 2008; Cheng et al., 2013).

Teacher Demographics. Basic demographic questions included:

What age group are you in?

- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50-54
- 55-59
- 60-64
- 65+

What is your current marital status?

- Single, never married
- Married or domestic partnership
- Widowed
- Divorced
- Separated

What was your total household income before taxes during the past 12 months?

- Less than $25,000
- $25,000 to $34,999
- $35,000 to $49,999
- $50,000 to $74,999
- $75,000 to $99,999
- $100,000 to $149,999
- $150,000 to $199,999
- $200,000 or more

In addition to teaching, do you have any additional paying jobs?

- Yes
- No

If yes, do you work these additional paying jobs during the school year?

- Yes
- No

If yes – approximately how many hours a week do you work at these additional paying jobs during the school year? _____ (insert number)

If yes, do you work these additional paying jobs during the summer?

- Yes
- No

If yes, approximately how many hours a week do you work at these additional paying jobs during the summer _____ (insert number)

What is your gender:

- Male
- Female
- Other
- Prefer not to answer

How would you describe yourself? (Check all that apply)

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- Hispanic/Latino
- White
- Other
- Prefer not to answer

How many years have you been teaching?

- <1
- 1-2
- 3-5
- 6-10
- 10-15
- 16-20
- 20+

What grade level are you currently teaching? (check all that apply)

- Pre-Kindergarten – 1st
- 2nd – 4th
- 5th – 6th
- 7th – 8th
- 9th – 12th

The online questionnaire for this study had four components: (1) the Copenhagen Burnout Inventory, (2) the WHO-5 Wellbeing Index, (3) researcher created questions that collected basic demographic information as well as addressed perceived health and (4) the PBIS Survey for five dimensions of School Climate. A copy of the questionnaire is provided in Appendix B.

Procedures/Methods

The survey instrument was created in Qualtrics and disseminated via email to K-12 public school teachers in participating public school districts in Oklahoma. The initial recruitment email included language describing the study as research about the physical and mental health of teachers in Oklahoma and contained a unique link to the District's survey. A copy of the email script can be found in appendix A.

A separate survey link was set up in Qualtrics for each participating school district. The teachers received their customized district link via email. Once clicking on the link, the opening page had information about the study and informed consent. If the participant agreed to consent to take the survey, they clicked the "next" button to take them into the survey questions. Once completing the questions on the survey instrument, there was a link at the end for the participant to click on if they wanted to be entered into the drawing for the gift card. Once clicking on the final link, they were taken to a separate site to enter their name and contact information. The survey took around 15 minutes to complete and was open for 14 days. Two reminder emails were sent in order to maximize participation. The first reminder was sent at the halfway point and the final one on the last day to complete the survey. At the completion of data collection, the drawing for the gift cards was conducted using a randomizer to randomize the entries and

sort to identify the top ten randomized entries. The winners were notified via email. Gift cards were mailed directly to each individual winner.

Data Analysis

Using SPSS, descriptive statistics were analyzed and assumptions for multivariate multiple regression analysis were checked, normality within treatment combinations, independence of observations, and homogeneity of variance within treatment combinations. Next a multivariate multiple regression analysis was conducted to test the effects of each independent variable (PBIS school climate domains and school wellness policy and practice of the school wellness policy) on the dependent variables (burnout, perceived health and wellbeing) while controlling for age and additional jobs.

Timeline

This proposal was approved in May 2019. The researcher submitted the proposal for IRB approval in August 2019. Once approved, recruitment of school districts began at the beginning of the 2019-2020 school year in mid-August. Teacher emails were collected and the survey was administered in December. Once the survey period ended, the data was analyzed and written up in the Spring, Summer and Fall of 2020.

Presentation of Results

The demographic data of the participants are displayed in chapter 4 along with the descriptive statistics of the study variables. Next, the results of the multivariate regression analysis are presented along with discussion on the findings to the research questions.

Chapter Summary

The aim of the research was to understand how school climate effects teacher's burnout, perceived health and wellbeing. Reviewing the comprehensiveness and strength of the District's school wellness policy and practice of the school wellness policy as well as survey data measuring the PBIS staff personnel domains for school climate served as the independent variable and the teacher's burnout, perceived health and wellbeing served as the dependent variables. After the survey was conducted, the data was analyzed utilizing SPSS to assess if there were statistically significant relationships between the independent and dependent variables. The results are displayed and discussed in the following two chapters.

CHAPTER IV

FINDINGS

Introduction

The purpose of this study was to determine the relationship among school climate, school wellness policies, practice and teacher burnout, perceived health and wellbeing.

A solicitation to participate in the study was sent to 1,119 teachers across three public school districts in Oklahoma, and resulted in responses from 268 teachers (24 percent response rate). Of the 268 teachers who completed the survey, 53 teachers or 19 percent of the sample represent district 1, 98 teachers or 36.6 percent of the sample represent district 2 and 117 teachers or 43.7 percent of the sample represent the third district. First, the demographic information of the sample is presented, followed by the descriptive statistics of the study variables. Lastly, the analysis of the research questions is presented with a summary of results.

Sample Description

Nine school districts were recruited to participate in this study. The data set was sorted by school wellness policy designation (starter, builder, leader) and then by percentage eligibility for free and reduced lunch. The summary of recruited school district characteristics is presented in Table 1.

Table 1

District Selection Eligibility Criteria

District number	Wellness policy rank	Number of Employees	Percent Eligibility for Free and Reduced Lunch	Position in County
1	Starter	700	59.9	Non-County Seat
2	Starter	370	60.0	County Seat
3	Starter	460	68.1	**County Seat**
4	Builder	330	77.3	County Seat
5	Builder	500	78.0	County Seat
6	**Builder**	**355**	**80.0**	**County Seat**
7	Leader	317	63.0	County Seat
8	Leader	500	64.0	County Seat
9	**Leader**	**462**	**67.0**	**County Seat**
10	**Starter**	**302**	**38.8**	**Non-County Seat**

Referencing the table above, districts 1-5, 7 and 8 did not respond to the invitation to participate in research, leaving no school in the starter category. Therefore a tenth district was recruited to fulfill the starter policy designation. School districts 6, 9 and 10 agreed to participate. Tables from this point forward will be cited as district one, two and three (starter, builder, leader) respectively.

The sample for this study was comprised of 268 teachers from three different school districts. Of the respondents, 19.8 percent (n = 53) were male, 78.4 percent (n = 210) were female and .2 percent (n = 2) preferred not to answer and 1.1 percent (n = 3)

were missing. The majority of the sample, or 89.2 percent, self-identified as white and married (68.3 percent).

The research sample's demographic characteristics are summarized in Table 2.

Table 2

Participant Characteristics

Characteristic	Frequency	Research Sample (%)
Gender		
Male	53	19.8
Female	210	78.4
Prefer not to answer	2	.2
Age		
20-24	16	6
25-29	32	11.9
30-34	23	8.6
35-39	30	11.2
40-44	39	14.6
45-49	36	13.4
50-54	45	16.8
55-59	21	7.1
60-64	19	7.1
65+	5	1.9
Marital Status		
Single, never married	35	13.1
Married or domestic partnership	183	68.3
Widowed	8	3.0
Divorced	34	12.7
Separated	4	1.5
Ethnicity		
American Indian or Alaska Native	18	6.7
Asian	0	0
Black or African American	4	1.5
Native Hawaiian or Other Pacific Islander	2	.7
Hispanic/Latino	9	3.4
White	239	89.2
Other	2	.7
Prefer not to answer	3	1.1

Number of Years Teaching		
<1	13	4.9
1-2	22	8.2
3-5	31	11.6
6-10	38	14.2
11-15	48	17.9
16-20	41	15.3
21-25	29	10.8
26-30	27	10.1
30+	16	6.0
Grades Taught*		
Pre-Kindergarten – 1st	53	19.8
2nd – 4th	68	25.4
5th – 6th	30	11.2
7th – 8th	39	14.6
9th – 12th	133	49.6
Additional Paying Jobs		
Yes	92	39.3
No	142	60.6

*The total is greater than 100% as some teachers instruct students in multiple age groups/categories.

The research sample has similarities to teachers statewide in terms of years of educator experience as compared to data from the Oklahoma State Department of Education (OSDE) report on Oklahoma Educator Supply and Demand written to reflect the 2017-18 academic year (Lazarte Alcala, 2018). The comparison is shown below in Table 3. While the range of years is slightly different, the research sample is still comparable to the statewide data from the lead agency for Education in the State.

Table 3

Number of Years Teaching for the Research Sample Compared with Oklahoma Teachers Statewide

Number of Years Teaching Research Sample 2019-20	Percent of Research Sample	Number of Years of Teaching 2017-18 Statewide	Percent of Teachers Statewide
<1	4.9	<1	10.7
1-2	8.2	1-3	17.3
3-10	25.8	4-9	21.2
11-15	17.9	10-14	14.7
16 +	42.2	15+	36.1

In terms of age distribution, the research sample differed slightly compared to the overall population of teachers in Oklahoma as outlined in Table 4. The majority of the research sample, 64.6 percent, fell into the 30-54 age range with only 9 percent falling into the 60+ combined categories. Whereas, the age range for the Statewide population of teachers as reported in 2017-18 was more evenly distributed with a larger portion, 36.5 percent, falling into the 60+ category.

Table 4

Age Comparison of Research Sample Compared with Age of 2017-18 Teachers Statewide

Age Research Sample 2019-20	Percent Research Sample	2017-18 Age Teachers Statewide Population	Percent Teachers Statewide Population
> 30	17.9	> 31	11.2
30-54	64.6	32-53	23.7
55-59	7.1	54-59	28.6
60+	9.0	60+	36.5

The race/ethnicity demographics of the research sample were not similar to the population estimates of Oklahoma residents for the districts sampled according to the US

Census bureau as of July 1, 2019. The teacher sample was predominantly white for all three districts (87.8, 94.3 and 90.7 percent respectively). The Black or African American population similarly represented in the first district and underrepresented in the second and third districts as compared to the makeup of their respective communities. The Indian/Alaska Native was over represented in the first district, underrepresented in the second district and similarly represented in the third district as compared to the makeup of their respective communities. The Hispanic or Latino population was underrepresented in all three districts compared to community residents. Unfortunately there was not a source of comparison for the actual teacher demographics statewide. Table 5 displays the comparison of the research sample with the statewide population as a whole, alongside the student population for the same academic year the data was collected.

Table 5

*Race/Ethnicity of Research Sample Compared with Community Demographics by District**

Race/Ethnicity	Percent Research Sample	Percent Census for Community Residents
District 1		
White	87.8	79.3
Black or African American	1.7	2.6
Indian and Alaska Native	10.4	4.7
Asian	0.0	4.9
Native Hawaiian and Other Pacific Islander	0.9	0.0
Hispanic or Latino	3.5	5.8
Other	0.0	-
Prefer not to answer	1.7	-
District 2		
White	94.3	67.9
Black or African American	0.0	6.0

Indian and Alaska Native	3.8	11.3
Asian	0.0	0.5
Native Hawaiian and Other Pacific Islander	1.9	0.1
Hispanic or Latino	5.7	17.7
Other	0.0	-
Prefer not to answer	0.0	-
District 3		
White	90.7	75.3
Black or African American	2.1	15.7
Indian and Alaska Native	4.1	3.8
Asian	0.0	0.2
Native Hawaiian and Other Pacific Islander	0.0	0.0
Hispanic or Latino	2.1	5.4
Other	2.1	-
Prefer not to answer	1.0	-

*The total is greater than 100% as some teachers may have selected multiple categories.

Descriptive Statistics of Study Variables

School climate was measured using the Positive Behavioral Interventions & Supports (PBIS) School Climate Survey for School Personnel (La Salle et al., 2018) as well as the employee wellbeing supports put in place via the district school wellness policy and practice. The descriptive statistics for composite scores are presented in Table 6. Higher scores for each dimension reflect a higher level of perceived school support for that dimension.

Table 6

Participant *Composite Scores on PBIS Measures on Staff Personnel School Climate*

Measures and scoring range	n	M	SD
Staff Connectedness (6-24)	267	20.1	3.7
Structure for Learning (6-24)	264	20.0	3.3
School Safety (4-16)	263	13.3	2.7
Physical Environment (4-16)	267	12.7	2.3
Peer/Adult Relations (6-24)	266	17.5	2.9

Internal consistency was measured for each of the PBIS school climate composite measures. The Cronbach's alpha for staff connections was .879, structure for learning was .855, school safety was .791, physical environment was .750 and peer and adult relations was .850, suggesting each individual dimension has high internal consistency.

The Oklahoma State Department of Health provided the School Wellness Policy and Practice data for this study. The resulting policy and practice scores are presented by district in Table 7.

Table 7

Participant School District School Wellness Policy and Practice–

Staff Wellness ratings

District	Policy Rating (0-32)	Practice Rating (0-32)
District 1	3	21
District 2	29	32
District 3	32	22

As the ratings demonstrate, although District 1 did not have a high frequency of policy elements in language within their school wellness policy, they were actively practicing some of them. For example, District 1 does not have language in their school wellness policy stating they will partner with community organizations to offer voluntary health screenings annually to their staff, but they actively do this within their district annually. Whereas District 3 had all of the staff wellness policy elements being evaluated written into their school wellness policy in strong language, but did not fully practice them all. For example, 'offering voluntary health screenings annually' was written into their school wellness policy, but they did not offer the screenings annually or at all school sites. District 2 fully practiced all of the staff wellness policy elements, but did not have them all written into their school wellness policy in strong language. District 3 might consider reviewing their written policy to fully implement and practice what has already been committed to in writing to address the staffs' health of the district.

Burnout was measured using the Copenhagen Burnout Inventory (CBI). CBI measures burnout across three dimensions: personal, work-related and student-related. The burnout scores for the research teacher sample are reported in Table 8.

Internal consistency was measured for each of the burnout dimensions. The Cronbach's alpha for personal burnout was .899, work-related burnout, .741 and student related burnout, .834. The alpha coefficient is higher than the recommended level of .70 suggesting that the items in each of the burnout measures have a relatively high internal consistency (UCLA, 2020).

Table 8

Personal Burnout, Work Related Burnout and Student Burnout Measures

Measures	n	M	SD
Personal Burnout	262	56.5	18.9
Work Related Burnout	261	53.7	15.4
Student Related Burnout	262	36.7	17.9

As presented above in Table 7, the mean score for personal burnout is 56.5, work related burnout is 53.7 and student related burnout is 36.7. These means are higher than the means of other studies using the CBI instrument. A study conducted with teachers in New Zealand had the mean personal burnout score of 43.0, work-related burnout of 41.5 and student-related burnout of 40.4 (Milfont et al., 2007). The original study validated the CBI with 1898 participants across 15 client related occupations and had mean scores of individual burnout of 35.9, work-related burnout of 33.0 and client related burnout of 30.9 (Kristensen et al., 2005). The highest mean score reported in the original study when separated out by occupation was for Midwives, personal burnout 44.7, work-related burnout 43.5 and then client related burnout of 38.4 (Kristensen et al., 2005). Oklahoma teachers are at least 10 points higher for personal and work related burnout.

Wellbeing was measured using the WHO-5 Wellbeing Index consisting of five questions rated on a 6-point Likert scale (WHO-5, 2019). Table 9 presents the data in two ways, as a percent with a range of zero to 100 as is recommended by the WHO-5 and as the sum score with a range of zero to 25 to allow for comparison with other studies. A raw score 13 or below is an indication of poor wellbeing (WHO-5, 2019).

Table 9

Wellbeing Measure

Measures	n	M	SD
WHO-5 Wellbeing Index Sum	266	19.7	3.3
WHO-5 Wellbeing Index Percent	266	78.8	13.0

The mean raw score for this sample is 19.7 or more than six points above the threshold for poor wellbeing. Other studies have used the WHO-5 to measure the mean percentage score for the general population in European counties and in the Danish general population are found to be 70 percent (Topp, Ostergaard, Sondergaard & Bech, 2015). The mean percentage for the sample is 78.8 percent or 8.8 percentage points higher than general populations in other studies.

Perceived General Health was measured by a single, self-report item with a 5-point Likert scale with the anchors of 1, excellent to 5, poor. Table 10 presents the frequency results of the research sample. The mean results are 3.5, which demonstrations the sample reported on average between good and fair to describe their perceived general health.

Table 10

Perceived Health Measure

Measures	Frequency	Percent
Excellent	2	.7
Very Good	32	11.9
Good	96	35.8
Fair	102	38.1
Poor	34	12.7

Analysis of Research Questions

To examine the research questions, a multivariate multiple regression analysis was conducted to assess if school climate, including school wellness policy and practice as well as staff connections, structure for learning, school safety, physical environment and peer and adult relations predicts burnout, perceived health or wellbeing. The variables of age (Cheng et al., 2013) and additional paying jobs were controlled for in the analysis to remove their variance to see if the predictor variables are able to explain variance in the dependent variables. Table 11 shows the results of a Multivariate test Wilks' Lamda. The results indicate there are variables in school climate that are important to determining the outcome variables of burnout, perceived health and wellbeing.

Table 11

Multivariate Tests Wilks' Lambda

Predictor	Wilks Lambda Value	F	df	Sig
Staff Connections	**.912**	**3.921**	**5**	**.002**
Structure for Learning	**.935**	**2.832**	**5**	**.017**
School Safety	**.940**	**2.624**	**5**	**.025**
Physical Environment	.984	.669	5	.647
Peer and Adult Relations	**.919**	**3.604**	**5**	**.004**
Staff Wellness Policy	.959	1.751	5	.125
Staff Wellness Practice	.972	1.157	5	.332
Additional Paying Jobs	.984	.655	5	.658
Age	**.738**	**1.427**	**45**	**.036**
Age*Additional Paying Jobs	.770	1.378	40	.062

Significance level is set at .05

As the table above demonstrates, the dimensions of school climate that are shown to have statistical significance as predictor variables include staff connections, structure for learning, school safety, peer and adult relations as well as age.

Research Questions/Hypotheses 1

RQ1: What elements of School Climate affect burnout for Oklahoma teachers?

H1a: School climate will have an effect on burnout for teacher.

H1o: School climate will have no effect on burnout for teachers.

Research question 1 focused on determining whether elements school climate affected burnout for Oklahoma teachers. The results of the multivariate analysis were significant across multiple areas of school climate. For personal burnout and school climate the results were significant, F (7, 228) = 63.259, p =.000. Work related burnout and school climate also reflected significant results, F (7, 228) = 75.697, p =.000 as well as student-related burnout and school climate, F (7, 228) = 31.329, p =.000.

School climate explained variance in personal burnout, work related burnout and student related burnout (16.1, 19.6 and 12.1 percent) respectively. Table 12 below shows the regression results for the analysis.

Table 12

Regression Results for Burnout

Dependent Variable	R Squared	Adjusted R Squared	Percent Variance Explained
Personal Burnout	.251	.161	16.1 percent
Work Related Burnout	.282	.196	19.6 percent
Student Related Burnout	.215	.121	12.1 percent

As displayed below in Table 13, the unstandardized Beta Coefficient is negative for the statistically significant results, indicating that for every 1-unit the index for the predictor variables of staff connections and peer and adult relations decreases the dependent variables of personal burnout, work related burnout and student burnout will increase by the value of the coefficient. For example the unstandardized Beta Coefficient value for Staff Connections is -.778. Therefore for every one unit staff connections decreases,

personal burnout index will increase by .778 units. Table 13 describes the Between-Subjects Effects of the multivariate multiple regression results using the six dimensions of the PBIS and staff wellness policy and practice as the predictors and the CBI burnout scales as the dependent variable using more paying jobs as a fixed variable. Of note the Beta Coefficients are the largest for the Peer and Adult Relations dimension. For every 1 unit this dimension decreases personal, work related and student related burnout increases by 1.372, 1.391 and 1.559 units respectively.

Table 13

Between Subject Effects of Multivariate Analysis with School Climate Predicting Burnout

Dependent Variable	Predictor	B	Std. Error	t	p
Personal Burnout	**Staff Connections**	**-.778**	**.365**	**-2.129**	**.034**
	Structure for Learning	.004	.433	0.010	.992
	School Safety	-.696	.507	-1.373	.171
	Physical Environment	-.182	.695	-.262	.793
	Peer and Adult Relations	**-1.372**	**.464**	**-2.958**	**.003**
	Staff Wellness Policy	.107	.127	.837	.403
	Staff Wellness Practice	-.265	.331	-.802	.423
Work Related Burnout	Staff Connections	.005	.287	.018	.986
	Structure for Learning	-.490	.341	-1.438	.152
	School Safety	-.573	.398	-1.440	.151
	Physical Environment	-.159	.547	-.291	.771
	Peer and Adult	**-1.391**	**.365**	**-3.814**	**.000**

	Relations				
	Staff Wellness Policy	-.059	.100	-.589	.556
	Staff Wellness Practice	.040	.260	.152	.879
Student Related	**Staff Connections**	**-.809**	**.350**	**-2.309**	**.022**
Burnout					
	Structure for Learning	.700	.415	1.686	.093
	School Safety	-.791	.486	-1.629	.105
	Physical Environment	.025	.667	.038	.970
	Peer and Adult	**-1.559**	**.445**	**-3.506**	**.001**
	Relations				
	Staff Wellness Policy	-.069	.122	-.566	.572
	Staff Wellness Practice	.045	.317	.141	.888

The significance level is set at $p < .05$

Research Questions/Hypotheses 2

RQ2: What elements of School Climate affect perceived health and wellbeing for Oklahoma teachers?

H2a: School climate will have an effect on teachers' perceived health and wellbeing.

H2o: School climate will not have an effect on teachers' perceived health and wellbeing.

Research question 2 explored whether or not school climate had an effect on perceived health and wellbeing for Oklahoma teachers. The results of the multivariate analysis were significant for the overall, composite measure of school climate and across multiple sub-domains of school climate. Wellbeing and school climate reflected significant results, F (7, 228) = 33.360, p =.000, as well as perceived health and school climate, F (7, 228) = 13.226, p =.000.

The adjusted R squared values for perceived health was .039 meaning 3.9 percent of the variance of the dependent variable, perceived health, was explained by the independent or predictor variables, school climate. The adjusted R squared value for wellbeing was .052 meaning that 5.2 percent of the variance of the dependent variables, wellbeing, was explained by the independent or predictor variables, school climate. Table 14 shows the regression results of the analysis.

Table 14

Regression Results for Perceived Health and Wellbeing

Dependent Variable	R Squared	Adjusted R Squared	Percent Variance Explained
Perceived Health	.142	.039	3.9 percent
Wellbeing	.154	.052	5.2 percent

Table 15 displays the results of the Multivariate Multiple Regression with School Climate predicting perceived health and wellbeing. As shown below, there are significant findings in the school safety and the peer and adult relations domain for perceived health and in school wellness policy practice for wellbeing. The unstandardized beta coefficient scores for Peer and Adult relations and staff wellness practice are positive indicating that

as that sub-dimension increased, so did the participants perceived health and wellbeing respectively. The unstandardized beta coefficient score for School Safety is positive, this result indicates that for every 1 unit the school safety dimension decreases, the perceived health also decreases by the value of the unstandardized beta coefficient of .051. Additionally the beta coefficient for staff wellness practice is positive, indicating that for every 1 unit staff wellness practice increased, the wellbeing index score increased by the beta coefficients value of .119.

Table 15

Between Subject Effects of Multivariate Multiple Regression with School Climate Predicting Perceived Health and Wellbeing

Dependent Variable	Predictor	B	Std. Error	t	p
Perceived Health	Staff Connections	-.009	.019	-.506	.613
	Structure for Learning	.013	.022	.584	.560
	School Safety	**.051**	**.026**	**1.977**	**.049**
	Physical Environment	-.062	.035	-1.752	.081
	Peer and Adult Relations	**-.046**	**.024**	**-1.971**	**.050**
	Staff Wellness Policy	-.007	.006	-1.143	.254
	Staff Wellness Practice	.002	.017	.149	.882
Wellbeing	Staff Connections	-.102	.066	-1.542	.125
	Structure for Learning	.072	.079	.916	.361
	School Safety	.122	.092	1.320	.188
	Physical Environment	.046	.126	.361	.719

	Peer and Adult Relations	.056	.084	.661	.509
	Staff Wellness Policy	-.033	.023	-1.432	.154
	Staff Wellness Practice	**.119**	**.060**	**1.972**	**.050**

Chapter Summary

The purpose of this study was to assess whether or not school climate is correlated with teacher burnout, perceived health and wellbeing. The hypotheses for this research were: School climate will have an effect on teachers' burnout and School climate will have an effect on teachers' perceived health and wellbeing.

The data analysis for both research questions were statistically significant, meaning there are variables in the school climate that are predictors of teacher burnout, perceived health and wellbeing. Therefore, the null hypotheses for both were rejected, accepting the hypotheses.

The Staff Connections dimension within the PBIS survey was found to be a significant predictor for personal and student related burnout. Exploring strategies to increase support staff feeling connected to each other might be further investigated for mitigating symptoms of personal or student related burnout.

The Peer and Adult Relations dimension within the PBIS survey was found to be a significant predictor for all domains of the CBI which include personal, work and student related burnout as well as perceived health. Exploring strategies to increase peer and adult relations within the social and emotional climate of the Whole School, Whole

Community, Whole Child framework might be worth further investigation to address this sub-dimension and reduce burnout for teachers across all domains and increase perceived health.

The School Safety dimension within the PBIS survey was found to be a significant predictor for perceived health. Exploring strategies for teachers to feel safe at school as well as administrative support when reporting unsafe or dangerous behaviors will work to increase teachers perceived health.

Practice of Staff Wellness programming in schools was found to be a significant predictor of wellbeing. Exploring more ways to train schools on how to implement wellness environments to increase staff wellbeing should be explored in the future.

While additional paying jobs was not a domain factored into the definition of school climate, it was taken into consideration as a potential confounding, fixed variable in the multivariate regression analysis. It was found to be a statistically significant predictor of work related burnout when analyzed as the only independent variable. However, when added in as the fixed factor with other variables, it was not found to have statistical significance. In running a bivariate correlation, it was found to be correlated with other variables and therefore did not contribute significantly beyond safety and age. As age is a non-modifiable risk factor, considerations around increasing the teacher salary so there is not a need to hold additional paying jobs might decrease work-related burnout. It might be worth investigating if teachers who work in states and/or school districts that pay at a higher salary obtain additional paying jobs as compared to states and/or school districts that offer lower salaries for teachers. Further investigation is warranted.

Lastly age was taken into consideration as a potential confounding, fixed variable in the multivariate regression analysis. It was found to be statistically significant across all age ranges for all domains of burnout, personal, work-related and school-related. Age is a factor that cannot be controlled but should be acknowledged. Considering it into the analysis as a potential confounding variable will be important for future studies.

The significance of the findings as well as recommendations for practice will be discussed further in Chapter 5.

CHAPTER V

CONCLUSION

The sample for the current study represents urban cluster, Oklahoma school districts with community income levels that range from the state median to slightly below. Eligibility for free and reduced lunch in schools is often used as an indicator of income for a school population. The percentage of students who qualified for free and reduced lunch in the participating school districts had a range between 35 to 80 percent. This means that in one of the districts, 80 percent of the households had an annual income level for a household of four that is lower than $48,470 annually for reduced lunch and $34,060 for free lunch eligibility. All three districts reside in communities with a population range of 10,000 to 25,000 which makes them urban cluster communities by definition (Census, 2019).

School districts have the freedom to set their own school wellness policy for staff wellness and it was important to understand how those varying policies impacted teacher burnout, perceived health and wellbeing. While there is a minimum standard of what the school wellness policy needs to address for eligibility to participate in the USDA school lunch program, staff wellness is not a part of the minimum requirements. Therefore, it is possible for some districts to not focus on staff wellness at all in policy. All three districts who participated in this study addressed staff wellness in some way in their school wellness policy as well as practice. Findings demonstrate that staff wellness practice does increase a teacher's wellbeing.

Placing staff wellness into the school wellness policy will strengthen the schools commitment to addressing staff health in the school setting. Each district recruited for this study had a different level of strength in language to address staff health in their school wellness policy. Of sixteen recommended elements that were assessed to address staff health, one district addressed 100 percent of the elements in language, one established 81 percent and the other 18 percent. Program data collected to assess the district's establishment of practice of the policy elements found that the district that had 100 percent of elements in language, only practiced 59 percent of them fully. The district that had 81 percent of the elements in language fully practiced all sixteen components and the third district practiced a little less than half of the elements, even though they only had 18 percent in language. Compared to other similar sized school districts across the state, three districts have zero policy elements that address staff wellness, fifteen districts fall in the starter category, four in the builder category and six are ranked as leaders for addressing staff wellness (OSDH PPT Data Set, 2019). As described, policy

language is only as good when it manifests in implemented programming. While it is possible for a district to implement wellness programs without institutionalizing them into their school wellness policy, it is recommended that the wellness practices are written into established policy. Otherwise, it becomes easier for programs to be taken away or canceled due to other competing priorities. School districts demonstrating their commitment to their staff's health and wellness through outlining program supports in policy not only shows they value their staff, but also sets the priority when there may be a change in school or district leadership.

Major Findings

Oklahoma teachers' in this research sample had burnout scores that were 10 percentage points higher for personal and work-related burnout than the mean scores reported in other studies utilizing the same survey instrument (Kristensen et al., 2005). In their research to validate the CBI burnout scales, Kristensen et al., sampled fifteen different jobs and published the index scores for each. Teachers in the sample of three school districts reflect scores that are 10 percentage points higher than other professions (midwives, next home helpers, then hospital doctors) research utilizing the same instrument to measure burnout (Kristensen et al., 2005). There are a number of aspects of school climate that were found to be predictors of teacher burnout, perceived health and wellbeing across multiple dimensions. The element with the largest effect was the presence of positive peer and adult relationships. Positive peer and adult relations decreased the burnout of teachers across all three domains as well as increased perceived health and therefore should be addressed in a comprehensive school wellness program. The peer and adult relations dimension focuses on the teacher's perception of how

students get along with each other in terms of treating each other with respect regardless of race, ethnicity, culture or academic ability. Social and emotional learning practices can work to increase the peer and adult relationships in the school climate as they work to build up competencies for students in the area of relationships with other students, staff, family and community (CDC, 2020).

The importance of social and emotional climate is formalized in the Whole School, Whole Community, Whole Child (WSCC) Model. The Social and Emotional Climate component of the WSCC model is the component most associated with peer and adult relations in schools. According to the CDC, social and emotional climate focuses attention on the psychosocial aspects of the educational environment that influence the social and emotional development of students (CDC, 2019). One of the tenants of this component includes the influence of the social and emotional climate on students' relationships with other students, staff, family and community (CDC, 2019). The core competencies for social and emotional learning include self-awareness, self-management, responsible decision making, relationship skills and social awareness (Collaborative for Academic, Social and Emotional Learning (CASEL), 2020).

It is important to understand how these core competencies align. Self-awareness is the ability to identify emotions, thoughts and values accurately and understand how they influence behavior as well as recognizing one's strengths and limitations, self-confidence and self-efficacy to grow (CASEL, 2020). Self-management focuses on the regulation of a person's emotions, thoughts and behaviors as they apply to different situations (CASEL, 2020). This includes stress management, controlling impulses and self-motivation (CASEL, 2020). Goal setting and organizational skills to work towards

academic and personal goals are developed through this competency (CASEL, 2020). Social awareness focuses on the ability to empathize with others or to see another person's perspective including different cultures and backgrounds with respect for others (CASEL, 2020). Relationship skills focuses on communication with others, social engagement, negotiating conflict constructively and teamwork (CASEL, 2020). Lastly, responsible decision making focuses on individuals making constructive choices around social interactions and behavior based on ethical standards (CASEL 2020). Decision making includes the ability to evaluate consequences of actions as well as consider the wellbeing of self and others (CASEL, 2020). Practice of CASEL's competencies can work to improve relationships among students and therefore increase the social and emotional climate of the school setting.

Support for teacher's physical and mental health, or lack of, was also found as a predictor for burnout. The Staff Connections Dimension was found to significantly influence teacher burnout. Items in this domain center on the teacher feeling supported and getting along with other teachers in the school, their sense of connection and worth, and feeling like an important part of the school. Programs designed to support and grow staff connections could reduce burnout for teachers. Those educators most at risk for a higher turnover rate are the ones who have been emergency certified (Carver-Thomas & Darling-Hammond, 2017) to be in the classroom. Emergency certification is a way for school districts to address shortages of local certified teachers. It helps people who do not have an education degree enter into the teaching profession to fill the shortage temporarily (OSDE, 2020). Staff support and connection programs have been found to

be a protector against burnout (Finney, 2019) and could serve as a valuable safety net to these vulnerable teachers.

Perceived Health was measured by a single item on the survey with a 5-point Likert scale (Excellent, Very Good, Good, Fair or Poor). Results showed that the majority of teachers surveyed, 73.9 percent, viewed their health as good or fair. Further analysis showed that school climate had a significant influence on the participant's perceived health through both the peer and adult relations dimension as well as school safety. The school safety dimension was positively correlated with perceived health, as the school safety dimension score increased, so did the participant's perceived health. Items in this dimension center on the person's concern for their physical safety at school, their perception of problems concerning unsafe or dangerous behavior being taken care of if reported and their overall feeling of safety at school, as well as entering and leaving their building.

The Whole School, Whole Community, Whole Child (WSCC) framework, has five whole child tenants that surrounds the child in the center and represent five types of learning environments that will foster higher learning outcomes (CDC, 2020). The ten components of the WSCC model are meant to work together through coordinating policy, process and practice to create environments of the whole child tenants where the child feels *safe*, engaged, supported, challenged and healthy (CDC, 2019). Safety is promoted as one of the five whole child tenants of the WSCC framework and supports environments that are physically and emotionally safe for both students and adults (ASCD, 2020). Focus on the ten components of the WSCC model, for example, the physical environment, the social and emotional school climate, and counseling,

psychological and social services, will work by coordinating policy, process and practice to create a school environments where both the students and adults feel safe.

With study results supporting the linkages between school climate and teacher health, wellbeing and burnout, administrators would be well served to focus attention on employee wellness when making decisions regarding the overall school wellness policy. The school's wellness policy not only helps to coordinate programs and practices across the WSCC framework to create safe and healthy environments for the school it was also found to increase teacher's wellbeing. The research has demonstrated that the more elements of employee wellness that were practiced in the district, the higher the teacher's wellbeing score. Explicitly placing staff wellness into the school wellness policy will strengthen the schools commitment to improving staff health in the school setting. The employee wellness component of the WSCC model can provide guidance to the district's decision making process regarding staff wellness. With programming institutionalized in policy, the program has more protection to continue in the event of a change in leadership in the district.

Recommendations for Practice

As the results demonstrated, multiple components of the Whole School, Whole Community, Whole Child (WSCC) framework must be activated to increase a positive school climate to address burnout, perceived health and wellbeing for teachers. Focus on the social and emotional climate will have the biggest effect as the beta coefficients are the largest for the influence of peer and adult relations on burnout. Emphasis in this area could decrease burnout across both work and student related domains as well as increasing the teacher's perceived health. As discussed in the previous section, social

and emotional learning teaches students and adults how to manage emotions, show empathy to others and how to establish and maintain positive relationships (CASEL, 2020). One area of the school setting where the students have the opportunity to learn and practice the core competencies of social and emotional learning is in Physical Education (PE). The Society of Health and Physical Educators (SHAPE) America aligned the National Standards for Physical Education K-12 with the Collaborative for Academic, Social, and Emotional Learning (CASEL)'s Social and Emotional Learning Competences. For example, SHAPE America's Standard 2, the physically literate individual applies knowledge of concepts, principles, strategies and tactics related to movement and performance, aligns with CASEL's self-management and responsible decision making competencies on analyzing situations and problem solving (SHAPE, 2019). Additionally SHAPE America's standard 3, the physically literate individual demonstrates the knowledge and skills to achieve and maintain a health-enhancing level of physical activity and fitness, aligns with CASEL's Self-Management competency to address stress management, self-motivation and goal setting. Ensuring students are meeting the National Standards for K-12 Physical Education will have the additional benefit of increasing and developing the child's social and emotional competency (SHAPE, 2019). Professional development opportunities to teach physical education teachers how to reinforce social and emotional learning in alignment with their PE standards will be beneficial to increasing the peer and adult relations. One barrier to implementation in Oklahoma is that Physical Education (PE) is not a required course for students past the 5th grade. After that, it is up to individual school districts to decide if

they will require it and it is often offered only as an elective course. There could be benefit to including physical education beyond the 5th grade.

In addition to having a standards based physical education program to reinforce social and emotional learning with students, implementing evidence-based programs to address conflict resolution, bullying prevention and increasing trusting and caring relationships between youth and adults are all strategies recommended to increase the social and emotional school climate. Increasing trusted adults in schools can be as simple as implementing a hallway visibility strategy and greeting protocols with teachers (OSDE, 2020). Additionally implementing a check in/check out program with students and teachers can help with relationship building between teachers and students (OSDE, 2020). Schools who have implemented trusted adult programs have found the likelihood of violent incidents significantly decrease (OSDE, 2020), thus increasing the social and emotional environment as well as school safety.

Social and emotional components that are more teacher centered should also be an area of focus for school wellness programming. Turnkey programs aimed at reducing staff stress and improving the safety, connectedness and relationships among student and staff, as well as increase effectiveness of the mental health systems in schools can be found at National organizations such as the Alliance for a Healthier Generation (Healthier Generation, 2020). The Resilience in School Environments (RISE) initiative can potentially work towards strengthening both staff connections and peer and adult relations in the school setting. Resources for the program include guidance on how to create a staff relaxation zone and a comprehensive curriculum for self-care and stress management. Additionally, data from this study can be used to help build the case for

school administration to focus on the social and emotional wellbeing of both staff and students with steps on building a wellbeing team for staff.

The school safety domain of school climate was significantly connected with perceived health. The correlation shows, the less a participant felt safe in their school environment, the lower their perceived health. While activating components across the Whole School, Whole Community, Whole Child (WSCC) model through coordinating policy, process and practice creates an environment where the child feels safe, staff should also be considered in such policies and practices. Schools wanting to focus on how to assess and implement the WSCC framework can start with the School Health Index (SHI). According to the Center for Disease Control and Prevention (CDC), the School Health Index assists schools in identifying strengths and weaknesses of safety and health policies and programs (CDC, 2020). Once strengths and weaknesses are identified, the State of Oklahoma has two different programs that recommend evidence based strategies to help schools implement the ten WSCC Components: The Oklahoma State Department of Health's Certified Healthy School Program (OSDH, 2020) and the Oklahoma State Department of Education's Champions of Excellence for Safe and Healthy Schools (OSDE, 2020). Both programs have aligned to provide uniform guidance and professional learning for schools to implement strategies under each of the ten components of the WSCC framework to create healthy and safe environments.

The Employee wellness component of the WSCC Model is the other area of attention to be activated to increase wellbeing for teachers. Implementation of this component spans across policy, benefit offerings and environmental supports and should focus on a range of health topics such as nutrition, physical activity, stress management

and screenings. The current study measured staff wellness across sixteen strategies that were scored for policy strength and implementation to create the staff wellness policy and practice variables. As practice of the staff wellness strategies increased in number and strength, so did the staff's wellbeing. In addition to evaluating policy elements, schools can utilize the CDC's Worksite Health Scorecard to identify strengths and gaps in benefit offerings, programming and environmental supports that are evidence-based to create a culture of health in the school setting for staff. The following examples illustrate the evidenced based strategies assessed in this research and are recommended to increase employee wellness in schools.

Environmental supports for nutrition addressed in the staff wellness policy elements covered a broad spectrum of topics. First, providing access to a refrigerator, microwave and sink with a water faucet allows staff to bring and prepare a healthy lunch making them less likely to rely on calorically dense fast food. Second, serving only foods and/or beverages that meet Smart Snacks standards at all staff meetings, trainings, special occasions and other workplace gatherings provides a healthy food environment where staff are not consuming unwanted calories. It also creates a culture that supports healthy food consumption. Third, providing access to a private space, other than a restroom, that has an electrical outlet for mothers to express breast milk and/or breastfeed during flexible paid or unpaid break times encourages healthy breastfeeding practices for mothers. Finally, free or low-cost healthy eating/weight management programs that address nutrition can be implemented through partnerships with community organizations or agencies.

Environmental supports could also include a number of physical activity recommendations in the staff wellness policy. First, providing access to on-campus athletic facilities, such as gyms, running tracks, basketball courts, tennis courts, and swimming pools for use outside of school time increases the access to purposeful exercise space. Second, promoting stairwell use throughout the workday by making stairs appealing and posting motivational signs could increase the staff's functional daily activity. Third, promoting physical activity through posters, pamphlets and other forms of communication can help boost motivation to be more physically active and create a culture of healthy physical activity. Fourth, promoting programs such as employee exercise clubs and/or sponsoring employee sports teams provides a social component to programming while also encouraging physical activity. Lastly, providing information about local physical activity resources and facilities, such as walking trails, community parks and recreation facilities all work towards increasing physical activity opportunities for staff.

Additional environmental support could be developed for stress management and access to health screenings. First, the creation of a calm room for teachers to rejuvenate during times of stress would reinforce the importance of positive mental health. Second, districts could partner with community organizations or agencies to provide stress management programs to staff or teach stress management techniques to cope with stress. Third, offering voluntary health screenings annually to staff, including free or low-cost health assessments will enable teachers to better understand their health risks and make informed decisions on how to manage them. Finally, offering immunization clinics to

staff for flu, Tdap, etc. will work towards protecting their individual health and the health of the community throughout the school year.

Strengths and Limitations of Study

There are a several strengths of this research. First, the amount of literature focused on the teacher as an outcome of the study design is sparse. This research works towards filling that gap. Additionally, the results reinforce the need to focus on implementation of the CDC's Whole School, Whole Community, Whole Child framework with emphasis on the Social and Emotional Learning Climate and Staff Wellness. Additionally, the timeframe for survey administration was critical. Conducting the survey too early in the year might skew the results, considering many of the participants will have started the year after a long summer break.

There are a couple limitations to note. Generalizability of the findings are limited. The researcher was unable to ascertain teacher demographics of the districts that participated to see if the sample is representative of the districts sampled. Additionally, generalizability of the findings may be limited as the race/ethnicity of the research sample does not align with the demographics of the community population the districts reside in. Additionally the research sample trended slightly younger than the population of Oklahoma teachers. A high proportion, 64.6 percent, of the teachers surveyed fall into the 30-54 age category whereas, statewide, the percentage of total population of Oklahoma teachers who fall into that age range is closer to 24 percent. Conversely, about 16 percent of the research sample were older than age 55 and statewide 65 percent of teachers are 54 years of age or older. Conducting this research on a larger, statewide basis will help with generalizing the results to the population of the state.

Additionally, two of the districts opted to send the survey out directly to their staff, one via the superintendent and the other through the site principals. There could have been potential pressure within those districts to respond to the survey sent to them directly from their superior.

Future Directions

This research study focused on the organizational level of the Social Ecological Model. Future research across the various levels of the Social Ecological Model will provide greater understanding of those factors influencing teachers' perceived health, wellbeing and burnout. At the policy level, conducting this research on a more statewide or national scale will provide a better picture of the state of teacher burnout, perceived health and wellbeing and the influence of policy on the profession. Each state has their own State Educational Agency with their own set of rules for certification, salary schedule and programing. It would be interesting to compare teacher burnout, perceived health and wellbeing state to state to further investigate statewide policies and systems. This would include research comparing the burnout, perceived health and wellbeing of teachers in school climates of school districts who are funded at higher rates due to increased school taxes or bond issues compared to districts that do not have as much income.

A large scale investigating related to the burnout issue of teachers who work a second job is worthy of further research. Survey findings showed that 40.3 percent of the participants indicated that they work another paying job in additional to teaching. A secondary analysis of the data found that teachers who indicated they work an additional paying job had significantly higher rates of burnout in the personal and work related

burnout domains. To control for confounding results, the statistical analysis used the "do you work another paying job" variable as a fixed variable, therefore controlling for additional paying jobs. This finding branched outside the scope of this research, however is noteworthy of further investigation to understand the influence of salary on burnout. Conducting a study that compares teachers who are paid a higher wage for their district compared to districts who pay the state minimum wage for teachers might show a difference in burnout rate. At a National level, does the standard teaching wage influence whether teachers take on a second paying job? Secondly, what are the burnout rates of teachers in states with higher wages as compared to teachers in states that pay a lower rate?

At the organization level, looking at programs structured within the Whole School, Whole Child, Whole Community (WSCC) framework will provide insight on how each of the 10 components not only influence the child at the center but also the staff working in the school environment. Prioritizing intervention studies on the social and emotional climate and its influence on the Center for Positive Behavioral Interventions & Support (PBIS) school climate domains, in particular, the staff connections and peer and adult relations domain, will be a point of emphasis for future research on reducing burnout for teachers. This could include comparing the peer and adult relations domain as well as burnout rates for teachers in districts who require Physical Education K-12 vs districts who only require the state minimum or K-5. Additionally, researching the effect of bullying, conflict resolution and trusting and caring relationships programs in schools on rates of teacher burnout is worthy of future research.

Conducting research on safe and healthy school models, such as the Oklahoma State Department of Health's Certified Healthy School program or the Oklahoma State Department of Education's (OSDE) Champions of Excellence for Safe and Healthy Schools framework will be worthy of investigation on the teacher's perception of school safety. Such a study could address school safety's correlation to perceived health. The OSDE had 290 school sites select to prioritize safe and healthy schools for the 2020-21 school year, a comparison study of school climate, teacher burnout, perceived health and wellbeing with school sites not purposely addressing safe and healthy schools will be a valuable study to assess the effectiveness of the program.

School districts committed to addressing staff wellness in the school wellness policy and implementing the elements to fidelity will be able to see the benefits of their commitment by increasing the wellbeing of staff as well as having a positive affect on school climate. Additional analysis utilizing the PBIS school climate domains as the dependent variable and policy and practice as the independent variable using a one-way ANOVA found there were statistically significant results of staff wellness policy and practice and school safety, physical environment and peer and adult relations. Thus, as strength of policy and practice increased, so did perception of positive school safety, physical environment and peer and adult relations. This was outside of the scope of the current study but is noteworthy for further investigation is needed.

A deeper dive into staff wellness programs and the effects of individual elements on teacher wellbeing as well as on the school climate as a whole will be a focus of further inquiry. Adding questions to the survey instrument addressing types of staff wellness programs as well as participation in them will allow for deeper analysis of their affect.

For example, focus could be on examining environmental supports, such as calm rooms or relaxation rooms and staff burnout, perceived health and wellbeing or usage of athletic facilities. Future studies may also benefit from a different measurement for employee wellness programming. Instead of solely using the strength of policy and practice score as the independent variable, this data should be coupled with additional survey questions about the teacher's awareness of staff wellness programming and if they participated in any employee wellness offerings. A more comprehensive measure would further address the effectiveness of staff wellness programing on reducing teacher burnout while increasing perceived health and wellbeing.

Future inquiry at the individual level should include the certification type of the teacher. In Oklahoma, the number of teachers who have emergency teacher certifications has more than quadrupled in the last five years from 505 emergency certifications in the 2014-2015 school year to 3,285 for the 2019-2020 school year (OSDE 2020). According to Oklahoma law 70 O.S. § 6-187(F), the State Board of Education can only issue an emergency certificate if the district has documented "substantial efforts to employ a teacher who holds a current non-emergency certificate…[or] efforts to employ an individual with a non-emergency certificate in another curricular area with academic preparation in the field of need" (OSDE, 2020). That means a growing number of teachers in Oklahoma do not have the background education or education training before entering the classroom. Educators with a degree in education are trained in frameworks on how to teach knowledge, comprehension, application, analysis, synthesis and evaluation of material. Additionally they are trained in classroom management as well as conflict resolution. Emergency teaching certification often means the teacher lacks the

traditional training, tools and knowhow for teaching, and this could be a contributing factor associated with the higher rate of burnout in this sample. Adding a question to the survey instrument on the type of certification the teacher holds can help to further investigate this question.

Lastly, this research was conducted in Fall 2019, months before the COVID-19 pandemic swept the world. Returning to school for the 2020-21 school year looks different for each district in Oklahoma. Some school districts have chosen to require masks, some have made them optional. Some have returned 100 percent virtual, some have returned 100 percent in person, while others have chosen a hybrid option of splitting the student population in half and having them return half in person and half virtual to reduce the number of students in the classroom. Any future research conducted on teacher burnout will need to take this new historical context into consideration.

Chapter Summary

Research on the effect school climate has on teacher burnout, perceived health and wellbeing is worthy of further investigation. Results demonstrate that there are elements of the school climate that do influence the perceived health and wellbeing of teachers as well as their burnout. Taking a holistic approach to span effects across the social ecological model with emphasis on implementing the CDC's Whole School, Whole Community, Whole Child framework will work to help reduce the burden of burnout on Oklahoma's teachers as well as increase their perceived health and wellbeing. Policy should be used as a vehicle to assure implementation of the Whole School, Whole Community, Whole Child framework.

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APPENDICES
APPENDIX A
Recruitment E-mails for School Districts and Individuals

RECRUITMENT EMAIL/PHONE SCRIPT TO SCHOOL DISTRICTS

Greetings,

My name is Julie Dearing and I am a doctoral student working with Dr. Bridget Miller at Oklahoma State University. I'm writing to invite you to participate in my research study about how School Wellness Policies affect the health and wellbeing of teachers. You're eligible to be in this study because you have an adopted school wellness policy for your school district.

If you decide to participate in this study, you will send a list of emails for the teachers in your school district. The teachers will be asked to voluntarily complete a survey about their physical and psychological health. As incentive to participate, they will be entered into a drawing to win one of ten $50 Amazon gift cards. The information will be kept anonymous and will be presented in aggregate form.

Remember, this is completely voluntary. You can choose to be in the study or not. If ou'd like to participate or have any questions about the study, please email or contact me at Julie.Dearing@okstate.edu.

Thank you very much.

Sincerely,

Julie Dearing
Doctoral Student
Oklahoma State University

Greetings,

My name is Julie Dearing and I am a doctoral student working with Dr. Bridget Miller at Oklahoma State University. We are conducting a research study about the physical and psychological health of teachers in Oklahoma. I am writing to invite you to participate in the study.

If you decide to participate in the study, we ask for you to complete a survey that should take about 15 minutes of your time. Participation is completely voluntary and your answers will be anonymous. Each person who completes the survey will be put into a drawing to win one of ten $50 Amazon gift cards.

If you are interested, please click on the link for the survey and additional information: (insert survey link).

If you have any questions, please do not hesitate to contact me at Julie.Dearing@okstate.edu.

Thank you for your time.

Julie Dearing
Doctoral Student
Oklahoma State University

APPENDIX B

Survey Instrument

Thank you for taking our survey! We are excited to have you as a valuable participant!

This survey will help us to better understand how wellness programs benefit employees mental and physical health. With your input, we can help to create more effective workplace wellness programs and policies.

Your responses will be anonymous, and your participation is completely voluntary.

Thank you for your time and consideration!

For the following questions, please select the answer which fits best for you.

	Always	**Often**	**Sometimes**	**Seldom**	**Never/almost never**
How often do you feel tired?					
How often are you physically exhausted?					
How often are you emotionally exhausted					
How often do you wake up feeling full of energy?					
How often do you think: “I can’t take it anymore”?					
How often do you feel worn out?					
How often do you feel weak and susceptible to illness?					

For the following questions, please select the answer to the best of your knowledge.

	Always	Often	Sometimes	Seldom	Never/almost never
Is your work emotionally exhausting?					
Do you feel burnt out because of your work?					
Does your work frustrate you?					
Do you feel worn out at the end of the working day?					
Do you feel energized throughout your day?					
Are you exhausted in the morning at the thought of another day at work?					
Do you feel that every working hour is tiring for you?					
Do you have enough energy for family and friends during leisure time?					

For the following questions, please select the answer to the best of your knowledge.

	Always	Often	Sometimes	Seldom	Never/almost never
Do you find it hard to work with students?					
Do you find it frustrating to work with students?					
Does it drain your energy to work with students?					
Does working with students energize you?					
Do you feel that you give more than you get back when you work with students?					

Are you tired of working with students?					
Do you sometimes wonder how long you will be able to continue working with students?					

For the following questions, please select the answer to the best of your knowledge.

Over the last two weeks:	All the Time	Most of the Time	More than half of the time	Less than half of the time	Some of the time	At no time
I have felt cheerful and in good spirits						
I have felt calm and relaxed						
I have felt active and vigorous						
I woke up feeling fresh and rested						
My daily life has been filled with things that interest me						

	Excellent	Very Good	Good	Fair	Poor
My perceived general health is					

Staff Connections	Strongly Disagree	Somewhat Disagree	Somewhat Agree	Strongly Agree
I feel supported by other teachers at my school.				
I get along well with other staff members at my school.				
I feel like I am an important part of my school.				
I enjoy working in teams (e.g. grade level, content) at my school.				
I feel like I fit in among other staff members at my school.				
I feel connected to the teachers at my school.				

Structure for Learning	**Strongly Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Strongly Agree**
Teachers at my school frequently recognize students for good behavior.				
Teachers at my school have high standards for achievement.				
My school promoted academic success for all students.				
All students are treated fairly by the adults at my school.				
Teachers at my school treat students fairly regardless of race, ethnicity, or culture.				
Teachers at my school work hard to make sure that students do well.				

School Safety	**Strongly Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Strongly Agree**
I feel safe at my school.				
I have been concerned about my physical safety at school.				
If I report unsafe or dangerous behaviors, I can be sure the problem will be taken care of.				
I feel safe when entering and leaving my school building.				

Physical Environment	**Strongly Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Strongly Agree**
My school building is well-maintained				
Instructional materials are up to date and in good condition.				
Teachers at my school keep their classrooms clean and organized.				
Teachers make an effort to keep the school building and facilities clean.				

Peer and Adult Relations	**Strongly Disagree**	**Somewhat Disagree**	**Somewhat Agree**	**Strongly Agree**
Students at my school would help another student who was being bullied.				
Students at my school get along well with one another.				

Students at my school treat each other with respect.				
Students at my school treat other students fairly regardless of race, ethnicity, or culture.				
Students at my school show respect to other students regardless of their academic ability.				
Students at my school demonstrate behaviors that allow teachers to teach, and students to learn.				

What age group are you in?

- 20-24
- 25-29
- 30-34
- 35-39
- 40-44
- 45-49
- 50-54
- 55-59
- 60-64
- 65+

What is your current marital status?

- Single, never married
- Married or domestic partnership
- Widowed
- Divorced
- Separated

What was your total household income before taxes during the past 12 months?

- Less than $25,000
- $25,000 to $34,999
- $35,000 to $49,999
- $50,000 to $74,999
- $75,000 to $99,999
- $100,000 to $149,999
- $150,000 to $199,999
- $200,000 or more

In addition to teaching, do you have any additional paying jobs?

- Yes

- No

If yes, do you work these additional paying jobs during the school year?

- Yes
- No

If yes – approximately how many hours a week do you work at these additional paying jobs during the school year? _____ (insert number)

If yes, do you work these additional paying jobs during the summer?

- Yes
- No

If yes, approximately how many hours a week do you work at these additional paying jobs during the summer _____ (insert number)

What is your gender:

- Male
- Female
- Other
- Prefer not to answer

How would you describe yourself? (Check all that apply)

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- Hispanic/Latino
- White
- Other
- Prefer not to answer

How many years have you been teaching?

- <1
- 1-2
- 3-5
- 6-10
- 10-15
- 16-20
- 20+

What grade level are you currently teaching? (check all that apply)

- Pre-Kindergarten – 1st
- 2nd – 4th

- $5^{th} – 6^{th}$
- $7^{th} – 8^{th}$
- $9^{th} – 12^{th}$

APPENDIX C

Oklahoma State University IRB Letter of Approval

Oklahoma State University Institutional Review Board

Date:	06/17/2019
Application Number:	ED-19-76
Proposal Title:	School Wellness Policies and Effects on Teacher Burnout, Well-Being and Perceived Health.

Principal Investigator:

Julie Dearing Co-Investigator(s):

Faculty Adviser:

Bridget Miller Project Coordinator:

Research Assistant(s):

Processed as: Exempt

Exempt Category:

Status Recommended by Reviewer(s): Approved

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate

in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in 45CFR46.

This study meets criteria in the Revised Common Rule, as well as, one or more of the circumstances for which continuing review is not required. As Principal Investigator of this research, you will be required to submit a status report to the IRB triennially.

The final versions of any recruitment, consent and assent documents bearing the IRB approval stamp are available for download from IRBManager. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be approved by the IRB. Protocol modifications requiring approval may include changes to the title, PI, adviser, other research personnel, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms.
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any unanticipated and/or adverse events to the IRB Office promptly.
4. Notify the IRB office when your research project is complete or when you are no longer affiliated with Oklahoma State University.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact the IRB Office at 405-744- 3377 or irb@okstate.edu.

Sincerely,

Oklahoma State University IRB

VITA

Julie Dearing

Candidate for the Degree of

Doctor of Philosophy

Dissertation: THE EFFECT OF SCHOOL CLIMATE ON TEACHER BURNOUT, PERCIEVED HEALTH AND WELLBEING

Major Field: Health, Leisure, and Human Performance

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Health, Leisure and Human Performance at Oklahoma State University, Stillwater, Oklahoma in December, 2020.

Completed the requirements for the Master of Science in Wellness Management at University of Central Oklahoma, Edmond, Oklahoma in 2008.

Completed the requirements for the Bachelor of Arts in Communication Management at University of Dayton, Dayton, Ohio in 2001.

Experience:

Adjunct Faculty – University of Central Oklahoma	August 2008-May 2014
Program Grant Consultant – OK State Depart of Health	April 2010-June 2014
Wellness Systems Manager – OK State Depart of Health	June 2014-April 2017
State Programs Coordinator – OK State Depart of Health	April 2017 – Present
Licensed CDC Work@Health Trainer	June 2019 - Present

Professional Memberships:

American School Health Association
Oklahoma Public Health Association