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A STUDY OF TEACHER BURNOUT DURING THE COVID-19 PANDEMIC

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

BY THE COMMITTEE CONSISTING OF

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"The difficult is what takes a little time; the impossible is what takes a little longer."

-Fridtjof Nansen

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Abstract

Teaching has become an increasingly challenging profession with growing class sizes, dwindling resources, expanded administrative responsibilities, and a perceived lack of support. These factors have contributed to rising rates of emotional exhaustion. The addition of teaching during the COVID-19 pandemic only intensified the situation. Prior work on teacher burnout focuses on qualities such as: poor working conditions, time, family conflicts, hours worked, and school type (Milfont et al., 2008). Principal support of teacher psychological needs (PSTPN) is a relatively new construct about supporting a teacher's autonomy, competence, and relatedness. The literature shows that through all types of school leadership (instructional, transformational, and collective) the foundation of leadership is about conversation and relationships. Using self-determination theory as a theoretical lens, this quantitative study analyzes the University of Oklahoma's annual climate survey that is distributed to teachers within two metropolitan school districts. The study captured the level of teacher burnout prior to and during the COVID-19 pandemic, if teachers experienced principal support for their psychological needs prior to and during the pandemic, and if there is a relationship between PSTPN and teacher reported burnout prior to and during the pandemic. Analyses include descriptive statistics and a series of regression models. This study shows that principal support of teacher's psychological needs through informal and formal conversations may lead to decreased teacher burnout.

Chapter 1: Introduction

Teachers are teaching in difficult conditions throughout our country. Many national reports show a decline in teacher well-being and work satisfaction due to factors that include, but are not limited to, restrictive government policies, job-related stressors, low salaries, and poor administration support (Skaalvik & Skaalvik, 2011; Smithers & Robinson, 2003; Walker, 2021). Relational factors also play a role in lower quality working conditions. A toxic social climate, declining trust, limited cooperation, and increased isolation harm teacher psychological needs and constrain their optimal functioning (Skaalvik & Skaalvik, 2010; Skaalvik & Skaalvik, 2011). Other job demands identified by teachers as affecting their well-being include student discipline problems and time pressure for completing teacher tasks (Skaalvik & Skaalvik, 2018). With the addition of a pandemic in 2020, it is clear that this is a challenging time to be a teacher.

With increased stress and tension plaguing teachers, it is not surprising that teacher burnout has become a considerable issue for which educational leaders need to be aware. A Phi Delta Kappa (PDK) 2019 survey showed that 50% of teachers surveyed said they considered quitting the teaching profession (Hess, 2019). Of these teachers, 19% cited stress and pressure leading to burnout as primary reasons for which they are considering leaving teaching. Burnout is considered a psychological problem stemming from constant work-related stress (Milfont et al., 2008). Stress is the body's physical and psychological reaction to certain environmental factors that hinder optimal states (Kemeny, 2003). Many teachers experience harmful stressors stemming from school environments. Chang (2009) and Stoeber and Rennert (2008) found that teachers report job demands, time pressure, poor relationships with colleagues, administration, students, and parents as prevailing stressors.

Stress was likely amplified for many teachers in the 2020-2021 school year when COVID-19 forced schools to move to virtual learning plans. Early in the pandemic, international evidence indicated increased teacher stress during the initial lockdown period. Teachers in the UK reported during the first six weeks of the shutdown increased stress concerning how to properly teach students (Kim & Asbury, 2020). In particular, UK teachers shared concerns about finding a way to teach students remotely and the worry for their most vulnerable students. Teachers in Germany also reported elevated stress associated with teaching challenges (Klapproth et al., 2020). It is reasonable that teaching virtually during a pandemic contributed to stress. On top of teaching, many teachers have the responsibility for taking care of their own children and/or providing care for elderly family members (Kim & Asbury, 2020). The virtual setting created many instructional challenges: a lack of access to computer hardware, low internet connectivity, low motivation and excessive workload of students caused considerable problems for teachers (Klapproth et al., 2020). Such challenges have likely consequences for heightened teacher burnout.

More recent research about teaching during the pandemic indicated that teachers plan to leave the education profession earlier than intended (Walker, 2021). This comes from a June 2021 NEA survey of 2,690 members where 32% of respondents said the pandemic led them to leave teaching earlier than expected (Walker, 2021). Teachers who were in-person at their schools shared more concerns about teaching in a pandemic. Teachers shared concerns about school infrastructure with replacing HVAC systems for proper ventilation, addressing student academic challenges from 2020, and properly implementing COVID-19 safety measures as other areas of worry (Walker, 2021).

For some teachers, the toll of the pandemic was too much. A May 2021 survey conducted by MissionSquare Research Institute and Greenwald Research surveyed 493 U.S. K-12 public school employees as a part of a national survey of public sector employees. In part, this survey looked at the effect of COVID-19 on teacher mental health. Survey results showed that a large percentage of K-12 employees "reported feeling stressed (52%), burnt-out/fatigued (52%), and/or anxious (34%) while at work" (Liss-Levinson, 2021). Moreover, K-12 public employees were more likely to report mental health challenges compared to other government employees (Liss-Levinson, 2021). It is not a stretch to claim that COVID-19 exacerbated the already difficult teaching situation leading to an increase in stress and burnout.

Research on teacher burnout has examined performance effects associated with this emotional state, as well as factors contributing to its rise in teachers (Bauer et al., 2006; Chang, 2009; Farber, 1984; Maslach, 2003; Parker et al., 2012; Russell et al., 1987). For performance effects, evidence suggests teachers show reduced job performance, dehumanized attitudes, and increased absenteeism (Maslach, 2003; Parker et al., 2012). Burnout at its worst can force individuals to quit their jobs (Maslach, 2003). Which leaves organizations like schools struggling to attract and retain teachers and staff (Walker, 2021).

For contributing factors of teacher burnout, evidence suggests that teacher characteristics, school structures, relational conditions, and leadership factor into teacher emotional states (Bauer et al., 2006; Chang, 2009; Farber, 1984; Russell et al., 1987). Younger teachers show more burnout states compared to veteran teachers. In their study, both Farber (1984) and Russell et al. (1987) found that younger teachers, who are beginning their careers, experienced more stressful events, emotional exhaustion, and perceived feelings of burnout compared to veteran teachers. The younger age group attributed burnout to difficulties in managing large class sizes and limited

social support to help them address social and emotional needs of students (Farber, 1984; Russell et al., 1987). More recent research supports these findings. Maslach (2003) found that young individuals, who are novices in their careers, are more likely to show characteristics of burnout compared to more experienced colleagues. Other evidence of school factors and teacher burnout are lower socio-economic status schools, low teacher salaries, and poor school conditions/buildings (Chang, 2009). Large class sizes and challenging student behavior are other school factors that can lead to teacher burnout (Bauer et al., 2006). These factors may affect burnout due to their relationship with stress and emotional exhaustion.

The relational context has consequences for teacher burnout as well. Relationships with students, parents, colleagues, and administrators all have been found to have an association with burnout (Farber, 1984; Stoeber & Rennert, 2008). Not only do these relationships contribute to a generalized mental state, but they are also associated with each facet of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment (Stoeber & Rennert, 2008). Farber (1984) found that 63.4% of teachers report that they did not receive support or reassurance from their principals. Brouwers et al. (2001) found that this lack of perceived support can result in a reduced sense of self-efficacy to seek support which can lead teachers to be more susceptible to burnout symptoms. Teacher perception of supportive or non-supportive principals can contribute to burnout (Fernet et al., 2012). Supportive principals can alleviate teacher burnout. A problem is that many teachers do not experience support by principals.

Contrary to teachers who had non-supportive principals, teachers who had supportive principals showed less signs of burnout. A supportive workplace and positive administration relationships can mitigate the effects of teacher burnout (Ju et al., 2015; Kinman et al., 2011; Russell et al., 1987; Salami, 2011; Shin et al., 2014; Weber & Jaekel-Reinhard, 2000). This is an

important finding for school leadership because it establishes principals as helping to alleviate teacher burnout. One of the mechanisms that principals can use to foster support is through formal and informal conversations with teachers. Ärlestig (2008) found that principals need to use a multidimensional approach (faculty meetings, classroom visits, etc.) in their conversations with teachers to help support positive outcomes for their school. These conversations are not only about the organizational context of the school, but about teaching and learning and feedback for the teacher (Ärlestig, 2008). The evidence suggests that supervisors who communicate with teachers about job performance can help to reduce teacher burnout (Ju et al., 2015; Weber & Jaekel-Reinhard, 2000). Principals who participate in formal and informal conversations with teachers to establish support can help alleviate teacher burnout.

Evidence on teacher burnout, school conditions related to its manifestation, and increased stress with COVID-19 establish a jumping off place for this study. The research problem emerges from contextual issues affecting teachers as well as evidence on leadership practices as factors in elevating and mitigating burnout. The problem statement is presented next.

Statement of Problem

Teacher burnout is a problem that educational leaders need to confront. A recent Gallup survey found that teaching is tied with nursing as the most stressful occupation in the United States (Feather, 2019). An *American Federation of Teachers 2017 Educator Quality of Work Life Survey* reported 61% of educators and staff members find work “always” or “often” stressful which is double the rate of other workers (Weingarten, 2017). During the pandemic, uncertainties, confusion, stress, pressure, and challenges were amplified. Teachers were experiencing stressors and pressures at unimaginable levels. The Yale Center for Emotional Intelligence surveyed over 5,000 teachers about their emotions after schools closed and the same

words appeared many times from responses, “stressed, anxious, worried, overwhelmed, and confused” (Walker, 2020). Teachers reported a medium to high level of stress during initial lockdowns in Germany (Klapproth et al., 2020). The sense of uncertainty of what was going to happen next, not being able to answer student questions regarding the lockdowns and worrying for the most vulnerable of students contributed to teacher anxiety and stress (Kim & Asbury, 2020).

Beyond the common barriers of teaching such as large class sizes and student discipline problems, teaching during a pandemic presented a new set of barriers for teachers to handle. Some teachers were balancing a hybrid model of teaching with in-person and distance learning along with the new tasks of cleaning their classroom to keep everyone safe only added to the stress (Long, 2020). Lack of access to computer hardware, low internet connectivity, low motivation of students, and excessive workload for students during remote learning were reported as barriers experienced by teachers during distance learning (Klapproth et al., 2020).

Teaching is a difficult career. We know that teachers experience stress in their daily work and there are different factors that contribute to that stress in a non-pandemic year. During the pandemic, teachers were experiencing a new level of stress. This stress built into burnout. What we do not know yet is the level of burnout teachers were feeling at this moment in time and if teachers were experiencing support for their psychological needs from school principals. This presents a problem for research and practice that this study will address.

A second problem relates to limited evidence on leadership practices and teacher burnout. Research evidence has indicated that school leaders can mitigate the effects of teacher burnout (Ju et al., 2015; Russell et al., 1987; Weber & Jaekel-Reinhard, 2000). Administrative support can help to reduce emotional exhaustion and show an increase in personal accomplishment

(Russell et al., 1987). Ju et al. (2015) found that a socially supportive workplace can decrease burnout and, an important form of support comes through feedback about job performance. The evidence suggests that supervisors who communicate with teachers about job performance can help to reduce teacher burnout (Ju et al., 2015; Weber & Jaekel-Reinhard, 2000). During the COVID pandemic, we do not know if teachers were experiencing support for their psychological needs from their school principal and if there is a relationship between leadership actions and lower reports of teacher burnout. This leads to another important gap in knowledge, that this study addressed. The relationship between principal and teacher conversations and teacher burnout.

Statement of Purpose

The lack of knowledge on teacher burnout, as well as the relationship between leadership actions and feelings of teacher burnout led to this study. The purpose was to measure teacher reports of burnout during the COVID-19 pandemic, if teachers experienced principal support for their teacher psychological needs, and to determine if there was a relationship between leader-teacher communication and feelings of burnout. The research questions for this study were:

Research Question #1: What degree of burnout were teachers experiencing during the pandemic? How did this compare to teacher reported burnout prior to the pandemic?

Research Question #2: What degree of psychological need support did teachers experience during the pandemic? How did this compare to need support before the pandemic?

Research Question #3: Is there a relationship between principal support of teacher psychological needs and teacher reported burnout prior to COVID-19 and during COVID-19?

Chapter 2: Review of Literature

The literature review begins with a review of scholarship on burnout and definitions used to study burnout in different professions. The literature review shifts to factors that exacerbate teacher burnout and synthesizes alleviating factors of teacher burnout. Next, the review of literature explores leadership frameworks and practices to describe how leaders support the social and psychological health of teachers. Literature on leadership and teacher psychological needs leads to the construct of principal support of teacher psychological needs. The conceptual framework is included at the end of the literature review.

Teacher Burnout

Overview of Scholarship of Burnout

The origins of the concept of burnout stems from the social, economic, and cultural developments of the 1960s (Schaufeli et al., 2009). The War on Poverty movement, more government control over the human services industry, and the cultural revolution of the 1960s led to the study of burnout within the work environment (Neckel et al., 2017; Schaufeli et al., 2009). Maslach (2003) coined the term "burnout syndrome" to describe the process that plays out when one experiences burnout. Burnout is considered a psychological problem stemming from constant work-related stress (Milfont et al., 2008).

The early phases of burnout research took place in health services and health care industries (Maslach et al., 2001; Schaufeli et al., 2009). These types of careers require employees (providers) to work closely with people in need (recipients) and can elicit emotional response and stress that lead to challenging work conditions (Maslach et al., 2001). Early burnout research was qualitative focusing on interviews and observations with people. The purpose was to paint a vivid picture of what people were experiencing and feeling in their job (Schaufeli et al., 2009).

The next phase of burnout research turned toward quantitative evidence in the 1980s with different burnout scales being introduced. The Maslach Burnout Inventory is a widely used scale that can assess different dimensions of burnout (Maslach et al. 2001; Neckel et al., 2017). The quantitative shift expanded burnout research by enabling researchers to study the relationship between social and psychological conditions and burnout (Maslach et al., 2001). By the 1990s, burnout research had extended to professions such as clerical, managers, and the military. Longitudinal studies were conducted to research burnout in the work environment and the associated effects over time (Maslach et al., 2001). These longitudinal studies tracked patterns in burnout with shifts in work environments (Maslach et al., 2001).

Through the years, evidence from burnout research indicates three observed dimensions of the psychological state: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach et al., 2001; Maslach, 2003; Schaufeli et al., 2009). Initially, burnout arises from the stress associated with constant social interactions with people. This stress builds into an emotional exhaustion (Maslach et al., 2001; Maslach, 2003; Schaufeli et al., 2009). People experiencing emotional exhaustion lack energy and are overwhelmed with many demands (Maslach, 2003). Burnout victims cope with this by distancing themselves from others to avoid taking on their needs and demands. This unhealthy detachment is called depersonalization (Maslach et al., 2001; Maslach, 2003; Schaufeli et al., 2009). Experiencing depersonalization means you have negative opinions about others and expecting the worst from others (Maslach, 2003). Eventually, this constant negative feelings towards others turns inward. Thoughts of inadequacy and failure consume the burnout victim. This is call reduced personal accomplishment (Maslach et al., 2001; Maslach, 2003; Schaufeli et al., 2009). With reduced

personal accomplishment, people generally experience and are more likely to leave a profession they may have once loved (Maslach, 2003).

In summary, the evolution of burnout research has expanded over time. The social, cultural, and economic developments of the 1960's contributed to the burnout phenomenon expanding in the health services and health care industries. By the 1980's, burnout research became empirical with the Maslach Burnout Inventory which allowed for burnout to be studied in relationship with other variables (job commitment and job satisfaction). Today, burnout research takes place in all different types of professions (Maslach et al., 2001). Education is an important social sector where understanding burnout has implications for the type of working and learning environments educators construct.

Definition of Burnout from Existing Evidence

As mentioned in the previous section, research on burnout was largely settling on a definition that considers burnout a psychological problem stemming from constant work-related stress (Milfont et al., 2008). Maslach (2003) identified emotional exhaustion, depersonalization, and reduced personal accomplishment as observed dimensions of burnout. This description of burnout moves beyond just stress and into processes and conditions related to burnout and behavioral responses to burnout.

Emotional exhaustion can be characterized as constant stress over time that creates an emotional toll which depletes a person's energy and focus (Maslach, 2003). Beyond experiencing actual exhaustion, emotional exhaustion often leads individuals to distance themselves from different facets of their job. This can be an emotional and cognitive distance from their work (Maslach et al., 2001). Maslach (2003) described this as being a "petty bureaucrat" where you only deal with people by the book. This allows for individuals to avoid

the relational and emotional aspect of working with other people and focus on dealing with problems or issues that arise (Maslach, 2003). Although emotional exhaustion is a dimension of burnout, emotional exhaustion does not stand alone in the psychological state (Maslach et al., 2001; Schaufeli et al., 2009).

As mentioned before, emotional exhaustion leads people to distance themselves from others in their job to just maintain only the minimum level of interactions. This detachment is a sense of self-protection to avoid the emotional side of involvement with others (Maslach, 2003). However, the detachment can be so severe that people develop a cynical attitude towards work and become callous (Maslach & Jackson, 1981; Maslach et al., 2001; Maslach, 2003; Maslach & Leiter, 2008). This psychological state is called depersonalization. Depersonalization is the development of negative attitudes towards others and a detachment from the people who demand constant care (Maslach et al., 2001; Maslach, 2003). At this point, the individual has a bad opinion of other people, expects the worst out of them, and has an active dislike for them which can lead to a complete shut out of others (Maslach, 2003).

Extreme negative attitudes toward others have consequences that eventually affect perceptions of oneself (Maslach & Jackson, 1981; Maslach et al., 2001; Maslach, 2003). Negative attitudes also manifest into feelings of guilt and anguish over the negative attitudes and thoughts that the individual had about others to begin with and the sense that they are becoming an uncaring person (Maslach & Jackson, 1981; Maslach, 2003). Persistent negative attitudes and feelings trigger reduced personal accomplishment (Maslach, 2003). Reduced personal accomplishment is when negative attitudes turn inward, and a feeling of failure builds (Maslach et al., 2001; Maslach, 2003; Maslach & Leiter, 2008). When this occurs, individuals believe they can no longer relate to and care for others and a sense of overall ineffectiveness and failure sets

in (Maslach & Jackson, 1981; Maslach et al., 2001; Maslach, 2003; Maslach & Leiter, 2008). Depression can occur in this degree of burnout which can lead individuals to see a therapist (Maslach, 2003). Emotional exhaustion, depersonalization, and reduced personal accomplishment are the three dimensions of burnout that explains the process that plays when one experiences burnout.

Emotional exhaustion, depersonalization, and reduced personal accomplishment have all been studied in research on teacher burnout (Bauer et al., 2006; Betoret, 2006; Farber, 1984; Goddard et al., 2006; Loonstra et al., 2009; Russell et al., 1987; Stoeber & Rennert, 2008). Evidence suggests that teachers experience each of these dimensions of burnout for various reasons (Bauer et al., 2006; Betoret, 2006; Farber, 1984; Goddard et al., 2006; Loonstra et al., 2009; Russell et al., 1987; Stoeber & Rennert, 2008), and when combined the dimensions of burnout lead to less job productivity, stress, and depression (Maslach, 2003). The evidence suggests that different school related factors and teacher demographics affect these three factors of burnout which are addressed in the following sections.

Variation in Burnout across Teacher Characteristics

There is variation in burnout among teacher characteristics. Some teacher characteristics related to burnout are physical characteristics like years teaching, gender, and marital status (Bauer et al., 2006; Farber, 1984; Goddard et al., 2006; Russell et al., 1987). Other are psychological factors that are sensitive to the social context such as efficacy and perfectionism (Betoret, 2006; Loonstra et al., 2009; Stoeber & Rennert, 2008).

Older literature regarding teacher burnout explains that younger teachers experience teacher burnout at a higher rate than veteran teachers. Both Farber (1984) and Russell et al. (1987) identified the younger age group of teachers as showing higher levels burnout and stress

related characteristics. Russell et al. (1987) researched job-related stress, social support, and burnout among different groups of teachers. They found that younger teachers exhibited more stressful events at school, and that younger teachers and teachers with larger class sizes showed more emotional exhaustion. Specific to depersonalization, Russel et al. (1987) found that grade level and a teacher's gender were related to emotional distance and detachment. Goddard et al. (2006) supports these earlier findings that beginning teachers identified with higher levels of emotional exhaustion, depersonalization, and a lower level of personal accomplishment. Farber (1984) found that the feelings of burnout coincide with feelings of lack of commitment and lack of satisfaction within the profession. Teachers' age and gender, and grade level taught are teacher characteristics evident of teacher burnout.

Gender is another teacher characteristic found to be associated with burnout (Bauer et al., 2006). In a study of German teachers looking at occupational burden and psychological strain of teaching, Bauer et al. (2006) found that woman reported teacher burnout more often than male teachers. Maslach (2003) found more nuanced relationships. Her research found that males and females (not necessarily teachers) were about equal in reporting burnout. However, females identified with emotional exhaustion more often than men did, while men reported higher depersonalization compared to female teachers (Maslach, 2003). Maslach (2003) speculates that women identify more with emotional exhaustion because they are more sociable, nurturing, and vulnerable to other's feelings whereas, men are less likely to have close contact and an emotional attachment to people which describes why are men are prone to depersonalization.

Bauer et al. (2006) found that marital status came up as another teacher characteristic related to teacher burnout. In a study of German teachers, teachers who were married or in a living relationship showed a lower level of burnout compared to divorced teachers (Bauer et al.,

2006). Maslach (2003) findings support this claim with single people experiencing the most burnout and married people showing a lower level of burnout. Divorced people were mostly in the middle of the burnout spectrum (Maslach, 2003). Another feature Maslach (2003) discussed was children. People who had a child (or more) showed lower burnout levels because they knew how to handle emotional situations and stress.

Psychological factors within the social context contribute to teacher burnout. Betoret (2006) researched the relationships between teacher stressor, self-efficacy, coping resources, and burnout. This research indicated that teachers felt stress when outside influences interfered in their daily classroom environment and in their subject area (Betoret, 2006). Teachers who had a high level of self-efficacy and coping skills reported a lower level of burnout and stress. Job stressors affect teacher motivation and anxiety. Betoret (2006) explained that external pressures and relationships have a strong effect on a teacher's stress and/or burnout. Loonstra et al. (2009) found that these external pressures (students and supervisors) weaken a teacher's self-acceptance and overall existential fulfillment due to the burnout. Teachers who also experienced a lack of professional development and opportunity for growth in their positions identified with a lower level of self-actualization (Loonstra et al., 2009). The conclusion is that teacher burnout is a serious problem that affects a teacher on multiple psychological levels.

Stoeber and Rennert (2008) researched perfectionism in teachers and the associated characteristics of stress, copying, and burnout. Teachers receive pressure to be perfect from different groups of people: colleagues, students, and parents. The literature separates perfection into two types: perfectionistic concerns and perfectionistic strivings. Teachers reported a higher level of perceived pressure from parents than colleagues and students. This is a pressure to be perfect. Early research in the 1980's found that young teachers exhibited burnout more than

veteran teachers. More recent work confirms this and paints a more nuanced picture about teacher burnout. Teacher characteristics such as gender, marital status, and psychological factors of efficacy and perfectionism can be features of burnout.

School and Relational Factors related to Burnout

The next set of literature relates to school and relational factors that can contribute to teacher burnout. Relational factors of burnout are the social relationships a teacher has throughout the school. These can be relationships with students, parents, colleagues, and administration (Farber, 1984; Stoeber & Rennert, 2008). School factors can also contribute to teacher burnout. School factors that can contribute to teacher burnout include class sizes, student discipline problems, socio-economic status of the school, workload, low teacher salary, school building conditions, and teacher preparation (Bauer et al., 2006; Chang, 2009).

Pressure from relationships and non-supportive relationships can contribute to teacher burnout (Stoeber & Rennert, 2008). These relationships can be with students, colleagues, parents, and administration. All three sources of pressure: colleagues, students, and parents indicated positive correlations with emotional exhaustion, depersonalization, and total burnout (Stoeber & Rennert, 2008). Pressure from students and parents had positive correlations with lack of personal accomplishment (Stoeber & Rennert, 2008). Pressure from students' parents showed the highest correlation with total burnout whereas pressure from colleagues showed the lowest correlation with total burnout. Non-supportive relationships can contribute to teacher burnout. Teachers reported that they view principals as not improving the value of their job and 63.4% reported that they did not receive support or reassurance from their principals (Farber, 1984).

In Bauer et al's. (2006) study of German teachers' occupational burden and psychological strain of teaching, they found not only do relational factors play a role in teacher burnout, but school factors do as well. School factors related to teacher burnout are size of school class and behavior of difficult students (Bauer et al., 2006). The larger the school class the harder it is to teach and maintain control of the classroom. It is hard to reach every student at a personal level with large class sizes. Poor behavior of students also contributes to teacher burnout. Student bad behavior affects the entire classroom environment and makes the life of a teacher even more difficult to teach and conduct daily classroom tasks.

Additional school factors such as low salary, socio-economic status of the school, lack of teacher preparation can contribute to teacher burnout. Chang (2009) reviewed literature about the emotional work of teachers and teacher burnout. Through the review of literature, Chang (2009) cited other school factors related to teacher burnout: lower socio-economic status schools, low teacher salaries, overall work demands, lack of teacher preparation in school issues, and poor school conditions/buildings (Chang, 2009). These other school factors along with size of school class and behavior of difficult of students contributes to a teacher's burnout. Relational and school factors relate to teacher burnout. Pressures from the relationships with parents, students, and colleagues can contribute to burnout. Other school factors such as class sizes, student discipline, and workload can also cause burnout.

Alleviating Factors of Burnout

As seen in the previous evidence, teacher characteristics, school, and relational factors contribute to teacher burnout (Bauer et al., 2006; Chang, 2009; Farber, 1984; Goddard et al., 2006; Russell et al., 1987; Stoeber & Rennert, 2008). Teacher burnout is not a given emotional state. It fluctuates by features of the workplace. Two features in practice standout as alleviating

factors: supportive workplace and positive administration relationships (Farber, 1984; Ford et al., 2019; Jentsch et al., 2023; Ju et al., 2015; Kinman et al., 2011; Russell et al., 1987; Salami, 2011; Shin et al., 2014; Weber & Jaekel-Reinhard, 2000).

Ju et al. (2015) studied trait emotional intelligence and teacher burnout. One of the conditions to alleviate teacher burnout is to create a supportive workplace. Results indicated that a socially supportive workplace was negatively associated with teacher burnout (Ju et al., 2015). Kinman et al. (2011) and Salami (2011) support these findings that a socially supportive workplace can mitigate burnout. Supportive workplace includes feeling supported from fellow teachers and supervisors. The evidence suggests that supervisors who communicate with teachers about job performance can help to reduce teacher burnout.

Beyond creating a supportive workplace for employees, supervisor support for employees through conversation and appreciation can alleviate burnout. Weber and Jaekel-Reinhard (2000) researched burnout as a disease and identified preventative methods to help organizations hopefully reduce burnout for their employees. Those preventative measures are healthy working environments (balancing work time and communication from leadership), appreciation of employees for their performance, and management trainings (Weber & Jaekel-Reinhard, 2000). Shin et al. (2014) categorized two types of coping skills: problem-focused coping and emotional-focused coping as interventions to manage burnout. One of the qualities of emotional-focused coping was utilizing social support from supervisors. Supervisor social support can help to control work-life balance (Shin et al., 2014).

Research suggests that social support received from administrators was found to be the only substantial predictor of burnout (Russell et al., 1987). Teachers had less emotional exhaustion, better attitudes and showed personal accomplishment who had supportive

supervisors (Russell et al., 1987). Farber (1984) and Russell et al. (1987) show how leadership behavior correlates to teacher burnout. Farber (1984) explained that teachers did not see principals improving the quality of their job by not being helpful in solving problems or showing support or encouragement for teachers which can lead to stress. Whereas in Russell et al. (1987), as supervisor support increased, the relationship between job-related stress and depersonalization decreased for teachers.

Evidence suggests principals matter for teacher burnout (Farber, 1984; Ford et al., 2019; Ju et al., 2015; Kinman et al., 2011; Russell et al., 1987; Salami, 2011; Shin et al., 2014; Weber & Jaekel-Reinhard, 2000). School principals can reduce burnout by being supportive of teachers (Kinman et al., 2011; Russell et al., 1987; Salami, 2011; Shin et al., 2014; Weber & Jaekel-Reinhard, 2000). Such support consists of positive communication and appreciation from administration (Kinman et al., 2011; Russell et al., 1987; Salami, 2011; Shin et al., 2014; Weber & Jaekel-Reinhard, 2000).

Recent research since the pandemic has explored the relationship between school leaders and teacher burnout. The demand of COVID-19 forced school districts to reexamine how administration support might look regarding communication, instruction and technology support, and supporting teacher's mental and physical health (Pressley, 2021; Pressley et al., 2021). Even during COVID-19, administration support was significant in all stages of burnout (Sokal et al., 2020). Although it was an indirect relationship, Collie (2021) found that autonomy-supportive leadership was negatively associated with stress and emotional exhaustion for teachers. Not addressed is how principals might provide such support. An answer may come in the form of how principals talk with teachers; therefore, the literature review turns to principal support of

teacher psychological needs, a concept that frames principal-teacher conversation by characteristics of psychological need support.

Principal Support of Teacher Psychological Needs

School leadership is relational (Boberg & Bourgeois, 2016; Hallinger, 2003; Leithwood et al., 1998; Leithwood & Jantzi, 2000; Leithwood & Jantzi, 2008). This is evident, in part, in examining leadership frameworks of instructional, transformational, and distributed leadership. Instructional leadership involves interacting with teachers to support the teaching and learning in a school. Instructional leadership does not happen without conversation that revolves around supervising and evaluating instruction, coordinating the curriculum, and monitoring student progress (Hallinger, 2003; Robinson, 2007; Shatzer et al., 2014). Transformational leadership is driven by social interactions and relationships with teachers (Boberg & Bourgeois, 2016; Hallinger, 2003; Leithwood et al., 1998; Leithwood & Jantzi, 2000; Leithwood & Jantzi, 2008). Collective leadership is about shared power and authority (Butt & Retallick, 2009; Jacobson, 2011; Leithwood & Mascall, 2008). No matter the form or type of leadership, principals influence comes through relationships, and relationships are shaped through conversation. Principal support of teacher psychological needs emerges from the conversational aspect of leadership practices.

Principal Support of Teacher Psychological Needs (PSTPN) is a relatively new construct within educational research. PSTPN is defined as intentional conversations with teachers that focus on supporting their psychological needs of autonomy, competence, and relatedness (Olsen, 2017). PSTPN is not a school leadership type, but a mechanism that principals can use to support a teacher's wellbeing in the workplace through intentional conversations (Olsen, 2017). PSTPN

was derived from two conceptual and theoretical sources: organizational conversation and self-determination theory (Groysberg & Slind, 2012).

Groysberg and Slind (2012) examined leadership in the workplace beyond the traditional top-down approach and focused on communication. Specifically, they argue that *conversational communication* between leadership and employees nurtures a culture of employee engagement, flexibility, and alignment (Groysberg & Slind, 2012). Groysberg and Slind (2012) developed four components of what they call organizational conversation: intimacy, interactivity, inclusion, and intentionality.

Intimacy is getting close to your employees by building trust, active listening, and sharing personal characteristics (Groysberg & Slind, 2012). Getting close does not only mean physical proximity, but mental and emotional as well. Leaders communicate and listen on a personal level directly with employees without being authoritative. Interactivity is the action of participating in a conversation, this is the back and forth of conversations. Interactivity is a shift from directive talk to a fluid dialogue with employees (Groysberg & Slind, 2012). Interactivity builds upon intimacy to close the gap between leaders and employees in an organization. For interactivity to work successfully, employees need to have the right tools and support to participate in an open dialogue with leaders (Groysberg & Slind, 2012).

Inclusion is the role that employees play in organizational conversation. This is a critical piece of organization conversation where employees are involved in the process of the dialogue and share their own ideas (Groysberg & Slind, 2012). This heightens the level of employee engagement in the organization. Finally, intentionality is separate from intimacy, interactivity, and inclusion. Intentionality is a measured approach to conversation. Leaders who practice intentional conversations have strategic principles that they share with others to build consensus

rather than being an authoritarian who uses power (Groysberg & Slind, 2012). This process of intentional conversation builds to an understanding of principles that aligns to a shared agenda within the organization (Groysberg & Slind, 2012). Organization conversation can support or frustrate basic psychological needs. Intimacy, interactivity, inclusion, and intentionality align to PSTPN by the relational engagement of teachers through intentional conversations and interactions to support their needs and an open opportunity where teachers can relay what they need from principals to help support their psychological needs.

Conceptual Framework for the Relationship between PSTPN and Burnout

The third research question for this study comes from evidence on school factors associated with teacher burnout and evidence in self-determination theory showing that support for psychological needs can protect against maladaptive states. The plausible relationship exists within a dynamic school environment and this dynamic environment has consequences for teacher psychological distress.

Teacher characteristics such as age, gender, years teaching can affect burnout (Chang, 2009). Additionally, "transactional" or teacher perceptions of the job environment contribute to burnout as well (Van Droogenbroeck et al., 2021). Evidence supports that individual accounts are essential in telling the story of burnout, but there is an organizational role at play in discussing burnout (Ford et al., 2019; Kruse & Edge, 2023; Van Droogenbroeck et al., 2021). Examples of organizational factors that contribute to burnout are socio-economic status of the school, work demands, student misbehavior, and class size (Chang, 2009; Van Droogenbroeck et al., 2021). Teacher burnout is a multi-level issue, meaning that individual, interpersonal, and organizational level factors interact to affect distress teachers may feel. Consequently, individual,

interpersonal, and organizational conditions also function to protect teachers from burnout (Ford et al., 2019). Self-determination theory supports this later point.

As mentioned before, PSTPN uses self-determination theory as a base for its conceptualization and self-determination theory is used to theorize on the plausible relationship between PSTPN and teacher burnout. Deci and Ryan (2002) explained that self-determination theory assumes that all people have an instinctive and practical need to expand and better oneself. People are curious, full of energy, and self-motivated (Niemiec & Ryan, 2009; Ryan & Deci, 2000). Basic psychological needs is a mini theory within self-determination theory (Ryan & Deci, 2000). Autonomy, competence, and relatedness are the three basic elements of psychological needs to support an individual's wellbeing (Ryan & Deci, 2000).

Autonomy is the sense of authority over behavior or pursuits (Deci & Ryan, 2002; Deci & Vansteenkiste, 2003; Ryan & Deci, 2017). With autonomy, behavior is felt as an extension of the self. When external factors affect actions, autonomous people still feel in control and volitional in these situations (Deci & Ryan, 2002). Competence and relatedness are the other two components of basic psychological needs. Competence is having confidence within your environment and the capacity you hold (Deci & Ryan, 2002; Deci & Vansteenkiste, 2003). Seeking out challenges related to your capacity and maintaining those skills support the need for competence (Deci & Ryan, 2002). Deci and Ryan (2002) describe that competence is not something you obtain, but a sense of confidence. Relatedness is the common human need to unite with and be accepted by others through life's interactions and experiences (Deci & Ryan, 2002). Relatedness can be thought of a real sense of belongingness with others and within a community (Deci & Ryan, 2002; Deci & Vansteenkiste, 2003; Ryan & Deci, 2017).

Social environments can support or thwart a person's psychological needs (Ryan & Deci, 2000; Ryan & Deci, 2017). A supportive social environment ignites human spirit, growth, and motivation which is a sense of wellbeing for the individual (Ryan & Deci, 2000). Otherwise, a non-supportive social environment crushes spirit and motivation (Ryan & Deci, 2017).

Burnout represents the maladaptive side of human experience (Maslach, 2003). As previously mentioned, teachers who feel burned out are stressed, anxious, exhausted, lack job productivity and energy (Maslach, 2003). The process of burnout plays out where teachers experience emotional exhaustion, depersonalization, and reduced personal accomplishment (Bauer et al., 2006; Betoret, 2006; Farber, 1984; Goddard et al., 2006; Loonstra et al., 2009; Russell et al., 1987; Stoeber & Rennert, 2008). However, if principals support a teacher's autonomy, competence, and relatedness, this can improve the relational context and alleviate burnout (Farber, 1984; Ju et al., 2015; Kinman et al., 2011; Russell et al., 1987; Salami, 2011; Shin et al., 2014; Weber & Jaekel-Reinhard, 2000). Psychological needs satisfaction allows teachers to thrive and grow in their environment.

As stated before, leadership can influence teacher burnout (Farber, 1984; Ford et al., 2019; Ju et al., 2015; Kinman et al., 2011; Russell et al., 1987; Salami, 2011; Shin et al., 2014; Weber & Jaekel-Reinhard, 2000). Teachers who had unsupportive and unhelpful principals did not see principals improving the quality of their job which led to stress (Brouwers et al., 2001; Farber, 1984). On the other hand, teachers who had socially supportive supervisors reported less emotional exhaustion, better attitudes and showed personal accomplishment (Russell et al., 1987). Additionally, as supervisor support increased, the relationship between job-related stress and depersonalization decreased for teachers (Russell et al., 1987). Given the evidence, it seems likely that principal support of teacher psychological needs will be associated with decreased

teacher burnout during the COVID-19 pandemic, even when accounting for other conditions related to burnout.

To understand the unique relationship between PSTPN and teacher burnout, this study also accounted for relational, psychological, and school factors available from these administrative data. Relational factors are the social relationship with students and colleagues that a teacher has within the work environment (Farber, 1984; Stoeber & Rennert, 2008). If these are unsupportive and pressured relationships, this may lead to burnout (Stoeber & Rennert, 2008). Teacher workplace connectedness is an additional variable that asks a teacher's perception of being part of team and culture of their school. Faculty trust in students is another variable and teachers will share their views of the collective student body and how students treat one another.

On top of the relational factor within the school environment, faculty trust in district administration is another variable to analyze. A decline in trust, toxic social climate, and lack of cooperation can harm psychological needs (Skaalvik & Skaalvik, 2010; Skaalvik & Skaalvik, 2011). Faculty trust in district administration asks teachers to judge their administration's integrity, values, and responsibility. A psychological factor within the social context that is related to burnout is efficacy (Betoret, 2006). Teachers with a high level of efficacy will report a lower level of burnout; however, job and relational stressors can affect burnout. Collective teacher efficacy is a variable that gathers teacher's perceptions of confidence and competence of the teachers in their school.

Lack of teacher preparation through professional development opportunities and an increase in work demands are some of the organizational factors that may lead to teacher burnout (Chang, 2009; Loonstra et al., 2009). Program coherence and instructional program coherence

are two more variables available within the data sets. Program coherence relates to alignment between curriculum, instruction, and learning materials within their classroom and the school. Instructional program coherence asks if teachers have a shared view of teaching students, expectations, and classroom management. Teachers who aren't trained properly and cannot keep up with an increase in work demands might not view their program as aligned to meet student needs. Further, teachers who do not have the opportunity for professional development experiences, might not have a shared view of teaching, classroom management, and expectations for students. All these variables will be revisited again in the methods, results, and discussion chapters.

Chapter 3: Methods

This is a study about teacher burnout during the COVID-19 pandemic. The empirical study was designed to provide evidence to answer the three research questions: (1) What degree of burnout were teachers experiencing during the pandemic? How did this compare to teacher burnout prior to the pandemic? (2) What degree of psychological need support did teachers experience during the pandemic? How did this compare to need support before the pandemic? (3) Is there a relationship between principal support of teacher psychological needs and teacher reported burnout prior to COVID-19 and during COVID-19? Components of the empirical study are detailed in this chapter. These components include research design and its alignment with the research questions, a description of the two school districts from which teacher data were collected, a description of the data source, and a description of the analytical techniques used.

The empirical study used a descriptive and correlational research design. Descriptive design provides an overall description of the data being analyzed from different survey instruments. Surveys were used to gather teacher opinions about burnout and principal support of teacher psychological needs prior to COVID and during COVID. Descriptive statistics describe the state of the construct being examined (Anderson & Arsenault, 1998). This can be in the form of frequency, mean, ranges, and standard deviations. In this study, a descriptive design is necessary to answer the first and second research questions about teacher experience with burnout during the pandemic and whether teachers are experiencing support for their psychological needs from their principals. Item means are used to describe how teachers experienced burnout and their experienced principal support for their psychological needs.

Correlation between variables was the next step after descriptive data. Correlational evidence adds detail to the story about the variables within the research by describing relationships between principal-teacher conversation and teacher reported burnout.

Data Source

The sample came from two school districts within metropolitan cities in the mid-west and southern part of the United States. The first school district (District A) is an urban, public school district from the mid-western part of the United States. District A has a student enrollment of about 16,000 students. The demographic makeup of students is Asian 7.2%, Hispanic 35%, African American 14.7%, Native American 4.5%, Pacific Islander 0.2%, multi-racial 9%, and Caucasian 29.4%. District A has about 991 teachers, 871 support personnel, and 77 administrators. There are a total of 19 schools within District A. The other district that made up the sample is a metropolitan private school district (District B) from the southern part of the United States. Student enrollment for District B is about 13,560 students. There are a total of 45 schools within District B.

Data came from the school districts and were collected by Oklahoma Center for Educational Policy (OCEP). These are administrative data. First, data consists of longitudinal burnout mean scores between District A and District B over the years of 2018-2021. Next, the sample consists of teachers that taught during the COVID-19 pandemic. Data were first collected pre-pandemic in March 2020. Then again after the pandemic began in March 2021. The survey is Faculty Survey A from OCEP. Based upon available data, there were different variables for District A and District B. Data for District A includes *years teaching, years in school, teacher workplace connectedness, program coherence, and faculty trust in district administration*. Data for District B includes *collective teacher efficacy, instructional program coherence, and faculty*

trust in students. Survey data were based on a Likert response set ranging from 1 (strongly disagree) to 6 (strongly agree). A methodological strength is that the constructs on this survey have been psychometrically tested. The items measure each construct.

District A Variables

Teacher Burnout

The burnout measure currently consists of 15 items. These items cover all three areas of burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion or burnout addresses teacher's attitudes about their school, students, and overall job performance. Items about meeting student's needs are also addressed. Teacher burnout leads to teachers leaving the profession. Teacher burnout is the dependent variable for this study. The scale was adapted from the Maslach Burnout Inventory (Maslach et al., 1986). The previous annual survey measured a 0.92 on the Cronbach's alpha for reliability.

Principal Support of Teacher Psychological Needs

Principal support of teacher psychological needs is the independent variable for this study. Principal support of teacher psychological needs measures the competence, autonomy, and relatedness support with currently 9 items. This measure specifically asks for teachers to reflect upon formal and informal conversations with their administrator as they address each survey item. Previous reliability score using Cronbach's alpha was 0.94.

Teacher Workplace Connectedness

Teacher workplace connectedness is an additional control variable that is available for District A. Teacher workplace connectedness captures teachers' reported views of being a part of the school environment and culture. Teacher workplace connectedness currently consists of 8 items.

Program Coherence

Program coherence is an additional control variable that is available for District A. Program coherence asks teachers for their views on alignment between curriculum, instruction, and learning materials within their school. Program coherence currently consists of 6 items.

Faculty Trust in District Administration

Faculty trust in district administration is an additional control variable that is available for District A. Faculty trust in district administration asks teachers to rate their district administration's accountability to teachers and students, values, and commitment. Faculty trust in district administration currently consists of 10 items.

District B Variables

Teacher Burnout

The burnout measure currently consists of 4 items. These items cover the emotional exhaustion component of burnout. Teacher burnout is the dependent variable for this study. The scale was adapted from the Maslach Burnout Inventory (Maslach et al., 1986).

Principal Support of Teacher Psychological Needs

Principal support of teacher psychological needs is the independent variable for this study. Principal support of teacher psychological needs measures the competence, autonomy, and relatedness support with currently 6 items. This measure specifically asks for teachers to reflect upon formal and informal conversations with their administrator as they address each survey item.

Collective Teacher Efficacy

Collective teacher efficacy is an additional control variable that is available for District B. Collective teacher efficacy captures a teacher's view of the confidence and competence of their teachers in school. Collective teacher efficacy currently consists of 5 items.

Instructional Program Coherence

Instructional program coherence is an additional control variable that is available for District B. Instructional program coherence asks for teachers views on the alignment of a shared understanding of teaching and assessing students, expectations, and classroom management. Instructional program coherence currently consists of 8 items.

Faculty Trust in Students

Faculty trust in students is an additional control variable that is available for District B. Faculty trust in students asks teachers to rate their trust of the collective student body, and about how students care and respect one another. Faculty trust in students currently consists of 4 items.

Data Analysis

The research questions require different analytical techniques. For the first research question, descriptive analysis was used to track and report teacher emotional exhaustion. First, longitudinal data were reported in a line graph to show average teacher burnout over four years, two years preceding COVID-19 and two years into the pandemic. This is an important analysis to see how burnout changed before and during the pandemic and showing how the pandemic affected teachers. Each item of the burnout measure was analyzed by descriptive statistics for 2020 and 2021school years for both District A and District B. The data are displayed in a table to show comparison. Analysis includes mean averages, standard deviations, and the 2020 burnout and 2021 burnout percentages came from adding together the agree and strongly agree valid

percent. These data show how emotional exhaustion changed for teachers from before the pandemic to during the pandemic and descriptive statistics gives us this information.

For the second research question, descriptive analysis was used to track and report teachers' experience of principal support of psychological needs. Like the first research question, the second research question used descriptive statistics for the analysis. Each item of the PSTPN measure was analyzed for the 2020 and 2021 school years for both District A and District B. The data are displayed in a table. These data give us an idea of how teachers viewed their principals support for their psychological needs before and during the pandemic. Information regarding teacher's emotional exhaustion and principal support for their psychological needs leads us to study the relationship between these variables which is addressed next.

For the third research question, stepwise regression analysis was used to examine the relationship between principal support of teacher psychological needs and teacher reported burnout. This regression analysis was used for 2020 and 2021 data for both District A and District B. Using this type of analysis allows us to compare multiple control variables against the dependent variable. We able to see the strength of the relationship from the R^2 value and note if a relationship between burnout and a control variable is statistically significant.

Empirical Limitations

A limitation is that this study uses correlational analysis. This will not be a casual analysis. The study will not be able to directly conclude that principals who support teacher psychological needs through conversation will reduce teacher burnout. Another limitation of this proposal is the quantitative methods chosen for the analysis. A qualitive aspect would paint a picture of the daily life of a teacher during the pandemic. Interviews and field observations would give more context to the situation beyond survey responses.

Another limitation in this study is the focus on work environment as contributing to teacher burnout. There are other conditions that lead to teacher burnout. Workload, job demands, and lack of job resources are additional areas contributing to the story of teacher burnout (Chang, 2009; Van Droogenbroeck et al., 2021). Moreover, as Van Droogenbroeck et al. (2021) describes, this is a "transactional" study focusing on teacher perceptions of the school context. An "organizational" or multi-level approach would allow us to investigate the individual and school context contributing factors of burnout (Kruse & Edge, 2023; Van Droogenbroeck et al., 2021).

Finally, the results from the analysis are difficult to generalize to the entire population of teachers. Using teachers from multiple states and/or countries could have different results since the entire world of teachers experienced teaching in a pandemic. The results are also difficult to generalize due to the time specific nature of this study during the pandemic. Conducting this study at another time outside of COVID-19 could generate different results.

Chapter 4: Results

The results chapter presents evidence related to the three research questions. Before presenting evidence, specific to the research questions though, longitudinal data are presented on teacher burnout for the two districts in the study. Longitudinal data span the school years 2018-2020. Evidence for each research question is presented first for the public urban school district, labeled as District A then for the private school district labeled District B. Evidence for teacher burnout and PSTPN is reported for the 2020 and 2021 years. The chapter concludes with a summary of the primary findings.

Longitudinal Data on Teacher Burnout

Table 4.1 and Figure 4.1 report average teacher burnout from 2018-2021 for both school districts. These data show an increase in teacher reported burnout before COVID-19 disrupted schools and during the pandemic in 2021. District A saw teacher reported burnout increase from a mean of 2.78 in 2018 to 3.64 in 2021. Similarly, District B experienced increases in teacher reported burnout during this time, going from a mean of 2.79 to 3.26. When comparing mean teacher burnout scores, District B showed lower scores for three of the four years. As illustrated in the line graph, District B had the largest increase in teacher reported burnout between 2020 and 2021.

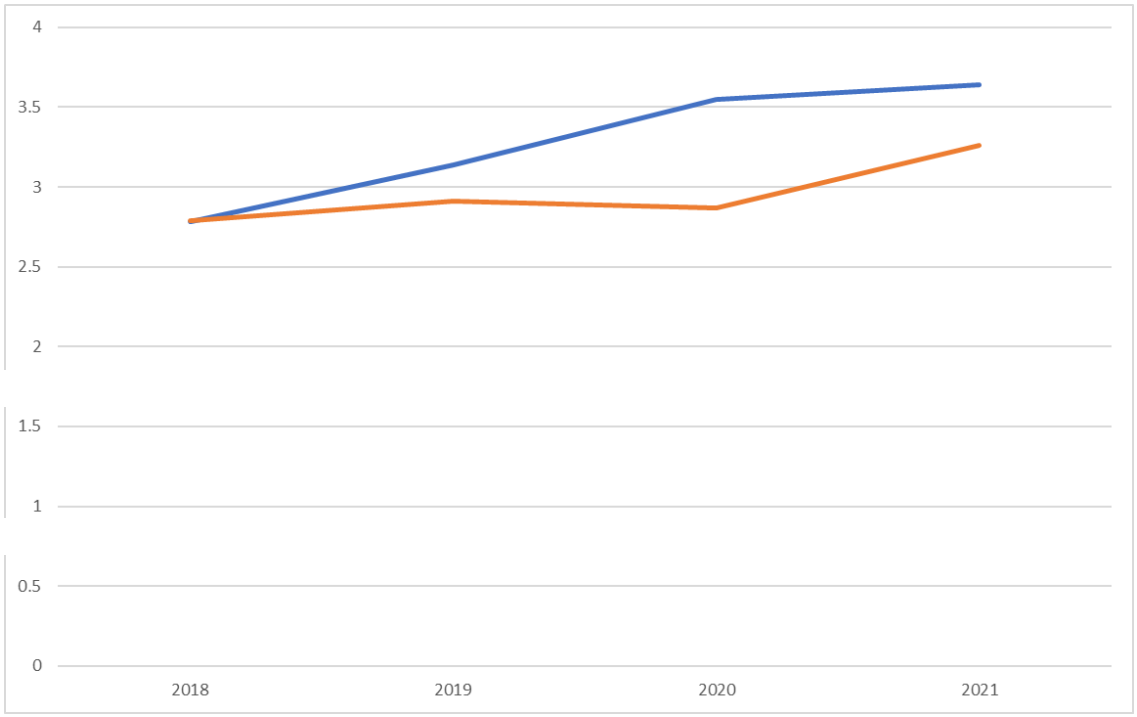
Table 4.1

Burnout Mean Scores

Year	District A	District B
2018	2.78	2.79
2019	3.14	2.91
2020	3.55	2.87
2021	3.64	3.26

Figure 4.1

Burnout Mean Scores



Note: District A is the blue graph (public), and District B is the orange graph (private).

RQ1: What degree of burnout were teachers experiencing during the pandemic? How did this compare to teacher reported burnout prior to the pandemic?

Item level results from the burnout survey were used to address the first research question. Item means and the percent of teachers reaching the burnout threshold are reported for 2020 and 2021. Item standard deviations are also provided. The two time periods allow for a comparison of teacher responses before COVID-19 affected schools and one year into the pandemic.

Table 4.2 reports results for District A. The overall mean Burnout Score in 2020 was 3.55 and in 2021 it was 3.64. The overall percent Burnout Score in 2020 was 19% and in 2021 it was 17.8%. The average burnout score though hides variance in emotional states. These

variations are captured with the item analysis. In 2020, 46.6% of teachers reported feeling emotionally drained from teaching with a mean of 4.19. This increased slightly in 2021 to 47.4% of teachers who reported feeling emotionally drained from teaching with a mean of 4.26. In 2020, 43.6% of teachers reported feeling used up at the end of the day with a mean of 4.13. This increased in 2021 to 47% of teachers who reported feeling used up at the end of the day with a mean 4.22. In 2020, 24.8% of teachers reported feeling fatigued when they get up in the morning and have to face another day teaching with a mean of 3.31. This item also increased in 2021 to 31.2% with a mean of 3.55.

Table 4.2

Burnout Descriptive Statistics – District A

	2020 Mean	2021 Mean	2020 SD	2021 SD	2020 % burnout	2021 % burnout
Burnout Score	3.55	3.64	1.279	1.309	19%	17.8%
I feel emotionally drained from teaching.	4.19	4.26	1.440	1.453	46.6%	47.4%
I feel used up at the end of the day.	4.13	4.22	1.451	1.479	43.6%	47%
I feel fatigued when I get up in the morning and have to face another day teaching.	3.31	3.55	1.531	1.607	24.8%	31.2%
I feel frustrated with my job.	3.14	3.19	1.457	1.494	16.3%	19.4%
I feel my expectations of teaching have not been met	2.99	2.98	1.488	1.469	16.8%	17.4%

Note. N = 202 for 2020 and N = 253 for 2021

Table 4.3 reports results for District B. The overall mean Burnout Score in 2020 was 2.87 and in 2021 it was 3.26. The overall percent Burnout Score in 2020 was 9.4% and in 2021 was 25.3%. In 2020, 21% of teachers reported feeing emotionally drained from teaching with a mean of 3.16. This increased in 2021 to 31.9% of teachers who reported feeling emotionally drained with a mean of 3.56. In 2020, 22.6% of teachers reported feeling used up at the end of the day with a mean of 3.23. This also increased in 2021 to 33.6% of teachers who reported feeling used up at the end of the day with a mean of 3.66. In 2020, 13% of teachers reported feeling fatigued in the morning and have to face another day teaching with a mean of 2.67. This increased in 2021 to 21.9% of teachers who reported feeling fatigued in the morning and have to face another day teaching with a mean of 3.10.

Table 4.3

Burnout Descriptive Statistics – District B

	2020 Mean	2021 Mean	2020 SD	2021 SD	2020 % burnout	2021 % burnout
Burnout Score	2.87	3.26	1.330	1.465	9.4%	25.3%
I feel emotionally drained from teaching.	3.16	3.56	1.512	1.637	21%	31.9%
I feel used up at the end of the day.	3.23	3.66	1.536	1.643	22.6%	33.6%
I feel fatigued when I get up in the morning and have to face another day teaching.	2.67	3.10	1.457	1.609	13%	21.9%
I feel frustrated with my job.	2.43	2.72	1.403	1.573	8.9%	16.1%

Note. N = 738 for 2020 and N = 689 for 2021

RQ2: What degree of psychological need support did teachers experience during the pandemic? How did this compare to need support before the pandemic?

Item level results from the PSTPN survey were used to address the 2nd research question. Item means and the percent of teachers reaching the PSTPN threshold are reported for 2020 and 2021. Item standard deviations are also provided. The two time periods allow for a comparison of teacher responses before COVID-19 affected schools and one year into the pandemic.

Table 4.4 reports results for District A. The overall mean PSTPN Score in 2020 was 4.87 and in 2021 it was 4.62. In 2020, the overall percent of teachers reporting support for psychological needs by principals was 58.2% and in 2021 it was 55.2%. Item analysis report differences in perceived supports experienced by teachers. In 2020, 71.8% of teachers reported that in their conversations/interactions with their principal he/she celebrates their growth as an educator with a mean of 4.85. This decreased slightly in 2021, to 65% of teachers who reported their principal celebrated their growth as an educator with a mean of 4.60. In 2020, 70.7% of teachers reported that their principal provides valuable feedback that helps me improve my teaching with a mean of 4.84. This also decreased in 2021, to 65.4% teachers who reported their principal provides valuable feedback about their teaching with a mean of 4.58. In 2020, 71.3% of teachers reported their principal listens to my opinions and ideas with a mean of 4.94. In 2021, this decreased to 65.4% of teachers who reported their principal listens to my opinions and ideas with a mean of 4.55.

Table 4.4

PSTPN Descriptive Statistics – District A

"In reflecting upon my formal and informal interactions and conversations with my principal, I feel he/she…"

	2020 Mean	2021 Mean	2020 SD	2021 SD	2020 % PSTPN	2021 % PSTPN
PSTPN Score	4.87	4.62	1.111	1.369	58.2%	55.2%
celebrates my growth as an educator	4.85	4.60	1.192	1.489	71.8%	65%
provides valuable feedback that helps me improve my teaching	4.84	4.58	1.244	1.490	70.7%	65.4%
instills confidence in my ability to do my job well	4.95	4.74	1.185	1.453	74.2%	70.5%
listens to my opinions and ideas	4.94	4.55	1.193	1.541	71.3%	65.4%
explains the rationale behind decisions that are made	4.74	4.46	1.332	1.549	65.8%	61.4%
trusts me to solve problems in the way I see fit	4.99	4.80	1.124	1.324	76.2%	72.4%
is someone I am able to be open with at school	4.71	4.44	1.466	1.645	65.4%	61.8%
cares about me as a person	4.98	4.80	1.186	1.379	72.3%	70.1%
makes me feel like I am part of a team	4.88	4.64	1.293	1.525	71.3%	65%

Note. N = 202 for 2020 and N = 254 for 2021

Table 4.5 reports results for District B. The overall mean PSTPN Score in 2020 was 5.07 and in 2021 it was 5.04. The overall percent of teachers reporting support for psychological needs by principals score in 2020 was 69.7% and in 2021 it was 79.7%. Item means and percentages stayed relatively stable for 2020 to 2021. In 2020. 77.2% of teachers reported that in their conversations/interactions with their principal celebrates he/she growth as an educator with

a mean of 5.06. In 2021, 76.8% of teachers reported that their principal celebrates my growth as an educator with a mean of 5.00. In 2020, 75.8% of teachers reported their principal listens to my opinions and ideas with a mean of 5.03. This deceased in 2021, to 74.2% of teachers who reported their principal listens to my opinions and ideas with a mean of 4.97. In 2020, 82.2% of teacher reported their principal trusts me to solve problems in the way I see fit with a mean of 5.19. This slightly decreased in 2021, to 79.9% of teachers who reported their principal trusts me to solve problems in the way I see fit with a mean of 5.14.

Table 4.5

PSTPN Descriptive Statistics – District B

"In reflecting upon my formal and informal interactions and conversations with my principal, I feel he/she…"

	2020 Mean	2021 Mean	2020 SD	2021 SD	2020 % PSTPN	2021 % PSTPN
PSTPN Score	5.07	5.04	1.132	1.178	69.7%	79.7%
celebrates my growth as an educator	5.06	5.00	1.210	1.271	77.2%	76.8%
provides valuable feedback that helps me improve my teaching	4.78	4.78	1.319	1.347	68.1%	68.9%
listens to my opinions and ideas	5.03	4.97	1.288	1.337	75.8%	74.2%
instills confidence in my ability to do my job well	5.12	5.10	1.262	1.259	78.3%	78.3%
trusts me to solve problems in the way I see fit	5.19	5.14	1.191	1.242	82.2%	79.9%
cares about me as a person	5.26	5.26	1.157	1.235	83.5%	81.7%

Note. N = 775 for 2020 and N = 737 for 2021

RQ3: Is there a relationship between principal support of teacher psychological needs and teacher reported burnout prior to COVID-19 and during COVID-19?

Stepwise regression analysis was used to examine the relationship between principal support of teacher psychological needs and teacher reported burnout. Regression models were run for District A and District B for the years 2020 and 2021. Control variables differed for the districts based on available district data. For District A, teacher controls of years of teaching experience, years in current school, and workplace connectedness were entered in model one. PSTPN was entered in model two and faculty trust in district administration and program coherence were entered in model three. The only available controls for District B were collective teacher efficacy, faculty trust in students, and program coherence. PSTPN was entered in model two for District B.

Table 4.6 presents regression results for District A in 2020. Table 4.7 presents variance results for District A in 2020. In model one, teaching experience, years in current school, and teacher workplace connectedness explained ($R^2 =$ 3.2%) of the variance in teacher burnout. Teacher workplace connectedness had a negative, statistically significant relationship with teacher burnout (β = -.206, $p < 0.01$). In model two, the addition of PSTPN increased explained variance to ($R^2 =$ nearly 10%). PSTPN had a negative and statistically significant relationship with teacher burnout (β = -.312, $p < 0.01$), meaning that as teachers reported more psychological need support from principals they reported lower burnout. Further, in model two, the relationship between teacher workplace connectedness and burnout attenuated, decreasing from β = -0.206 to β = -0.048 and non-statistically significant.

Explained variance in teacher burnout increased in model three with the inclusion of faculty trust in district administration and program coherence ($R^2 = 12.8\%$). PSTPN maintained

a statistically significant and negative relationship with teacher burnout ($\beta = -0.193$, $p < 0.05$). Program coherence also had a statistically significant and negative relationship with burnout ($\beta = -0.2$, $p < 0.05$).

Table 4.6

District A Burnout Regression 2020

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.217	.717		7.273	<.001
	yearsteach	-.031	.098	-.026	-.319	.750
	yearsinschool	.284	.220	.106	1.290	.199
	TWC2020	-.380	.133	-.206	-2.871	.005
2	(Constant)	5.647	.701		8.056	<.001
	yearsteach	-.029	.094	-.025	-.312	.755
	yearsinschool	.117	.217	.044	.540	.590
	TWC2020	-.088	.148	-.048	-.595	.553
	PSTPN2020	-.355	.092	-.312	-3.870	<.001*
3	(Constant)	6.020	.750		8.027	<.001
	yearsteach	.001	.094	.000	.005	.996
	yearsinschool	.058	.214	.022	.272	.786
	TWC2020	.026	.155	.014	.168	.867
	PSTPN2020	-.220	.102	-.193	-2.161	.032**
	PC2020	-.259	.129	-.200	-1.997	.047**
	FTDIST2020	-.107	.123	-.076	-.869	.386

a. Dependent Variable: BURN2020 *p < .01, ** p < .05

Table 4.7

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.216[a]	.047	.032	1.25715
2	.343[b]	.118	.099	1.21286
3	.395[c]	.156	.128	1.19269

a. Predictors: (Constant), TWC2020, yearsteach, yearsinschool

b. Predictors: (Constant), TWC2020, yearsteach, yearsinschool, PSTPN2020
c. Predictors: (Constant), TWC2020, yearsteach, yearsinschool, PSTPN2020, FTDIST2020, PC2020

Table 4.8 presents regression results for District A in 2021. Table 4.9 presents variance results for District A in 2021. In model one, teaching experience, years in current school, and teacher workplace connectedness explained ($R^2 = 9.1\%$) of the variance in teacher burnout. Teacher workplace connectedness had a negative, statistically significant relationship with teacher burnout ($\beta = -0.292$, $p < 0.01$). In model two, the addition PSTPN increased explained variance to ($R^2 = 14\%$). PSTPN had a negative and statistically significant relationship with teacher burnout ($\beta = -0.267$, $p < 0.01$), meaning that as teachers reported more support from principals their report of burnout was also lower. Additionally, in model two, the relationship between teacher workplace connectedness and burnout attenuated decreasing from $\beta = -.292$ to $\beta = -.151$.

Explained variance in teacher burnout increased in model three with the inclusion of faculty trust in district administration and program coherence ($R^2 = 26.3\%$). PSTPN did not maintain a statistically significant relationship with the added variables. Program coherence had a negative and statistically significant relationship with teacher burnout ($\beta = -0.254$, $p < 0.01$). Further, faculty trust in district administration had a negative and statistically significant relationship with teacher burnout ($\beta = -0.293$, $p < 0.01$).

Table 4.8

District A Burnout Regression 2021

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.657	.516		10.953	<.001
	yearsteac	-.140	.090	-.117	-1.559	.120
	yearsinsch	.447	.196	.170	2.276	.024
	TWC2021	-.455	.095	-.292	-4.805	<.001*
2	(Constant)	5.831	.504		11.561	<.001
	yearsteac	-.149	.088	-.124	-1.698	.091
	yearsinsch	.377	.192	.143	1.965	.050
	TWC2021	-.235	.108	-.151	-2.173	.031
	PSTPN2021	-.255	.066	-.267	-3.884	<.001*
3	(Constant)	6.405	.480		13.345	<.001
	yearsteac	-.113	.081	-.094	-1.394	.165
	yearsinsch	.239	.179	.091	1.335	.183
	TWC2021	-.031	.106	-.020	-.295	.768
	PSTPN2021	-.019	.072	-.020	-.261	.794
	PC2021	-.283	.090	-.254	-3.157	.002
	FTDIST2021	-.325	.078	-.293	-4.170	<.001*

a. Dependent Variable: BURN2021 *p < .01, ** p < .05

Table 4.9

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.320[a]	.102	.091	1.24679
2	.392[b]	.154	.140	1.21283
3	.530[c]	.281	.263	1.12277

a. Predictors: (Constant), TWC2021, yearsinsch, yearsteac

b. Predictors: (Constant), TWC2021, yearsinsch, yearsteac, PSTPN2021

c. Predictors: (Constant), TWC2021, yearsinsch, yearsteac, PSTPN2021, FTDIST2021, PC2021

Table 4.10 presents regression results for District B in 2020. Table 4.11 presents variance results for District B in 2020. In model one, collective teacher efficacy, program coherence, and faculty trust in students explained ($R^2 = 21.5\%$) of the variance in teacher burnout. Faculty trust in students had a negative and statistically significant relationship with teacher burnout (β = -0.345, p < 0.01). In model two, the addition of PSTPN increased explained variance to ($R^2 = 24.2\%$). PSTPN had a negative and statistically significant relationship with teacher burnout (β = -0.180, p < 0.01). Further, faculty trust in students had a negative and statistically significant relationship with teacher burnout (β = -0.327, p < 0.01).

Table 4.10

District B Burnout Regression 2020

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	7.036	.306		23.016	<.001
	CTE2020	-.159	.087	-.095	-1.829	.068
	IPCsch2020	-.129	.066	-.096	-1.972	.049
	FTStu2020	-.605	.070	-.345	-8.691	<.001*
2	(Constant)	7.596	.319		23.817	<.001
	CTE2020	-.147	.085	-.088	-1.721	.086
	IPCsch2020	-.063	.066	-.047	-.958	.339
	FTStu2020	-.574	.069	-.327	-8.367	<.001*
	PSTPN2020	-.211	.040	-.180	-5.218	<.001*

a. Dependent Variable: BURN2020 *p < .01, ** p < .05

Table 4.11

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.467[a]	.218	.215	1.17527
2	.496[b]	.246	.242	1.15463

a. Predictors: (Constant), FTStu2020, IPCsch2020, CTE2020

b. Predictors: (Constant), FTStu2020, IPCsch2020, CTE2020, PSTPN2020

Table 4.12 presents regression results for District B in 2021. Table 4.13 presents variance results for District B in 2021. In model one, program coherence, collective teacher efficacy, and faculty trust in students explained ($R^2 = 20.9\%$) of the variance in teacher burnout. Program coherence had a negative and statistically significant relationship with teacher burnout (β = -0.234, $p < 0.01$). Additionally, faculty trust in students had a negative and statistically significant relationship with teacher burnout (β = -0.201, $p < 0.01$).

In model two, the addition of PSTPN increased explained variance to ($R^2 = 25\%$). Faculty trust in students had a negative and statistically significant relationship with teacher burnout (β = -0.191, $p < 0.01$). Further, PSTPN had a negative and statistically significant relationship with teacher burnout (β = -0.222, $p < 0.01$).

Table 4.12

District B Burnout Regression 2021

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	7.787	.384		20.273	<.001
	IPCsch2021	-.318	.071	-.234	-4.489	<.001*
	CTE2021	-.194	.102	-.105	-1.899	.058
	FTStu2021	-.428	.088	-.201	-4.871	<.001*
2	(Constant)	8.563	.394		21.731	<.001
	IPCsch2021	-.229	.070	-.169	-3.257	.001
	CTE2021	-.166	.099	-.090	-1.669	.096
	FTStu2021	-.407	.086	-.191	-4.751	<.001*
	PSTPN2021	-.282	.045	-.222	-6.239	<.001*

a. Dependent Variable: BURN2021 *p < .01, ** p < .05

Table 4.13

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.461[a]	.212	.209	1.303
2	.505[b]	.255	.250	1.269

a. Predictors: (Constant), FTStu2021, IPCsch2021, CTE2021

b. Predictors: (Constant), FTStu2021, IPCsch2021, CTE2021, PSTPN2021

Chapter 5: Discussion and Conclusion

The purpose of this study was to examine teacher reported burnout and principal support of teacher psychological needs (PSTPN) prior to schools moving to virtual learning because of COVID and in spring 2021 after one year of schools navigating COVID. Patterns in the results lead to three claims about teacher burnout that have implications for educational leaders: (1) the rise in teacher burnout is not simply a COVID effect; (2) school working conditions are related to teacher burnout; (3) school leaders can protect teachers from the psychological distress of burnout. These claims are explained with data from this study and situated in the context of existing literature.

Teacher Burnout Is Not Simply a COVID Effect

As mentioned in the literature review, burnout is considered a maladaptive psychological state stemming from constant work-related stress (Milfont et al., 2008). Kemeny (2003) defined stress as the body's physical and psychological reaction to certain environmental factors that hinder optimal states. Research has found that contributing factors to teacher burnout can vary between teacher characteristics, school structures, relational conditions, and school leadership (Bauer et al., 2006; Chang, 2009; Farber, 1984; Russell et al., 1987). Without a doubt, COVID elevated tensions in schools and school systems, increasing teacher stress, fatigue, and worry (Kim & Asbury, 2020; Klapproth et al., 2020; Liss-Levinson, 2021; Walker, 2020). Beyond the normal teacher stressors, teachers had to worry about keeping themselves and their students safe from getting sick and managing the hybrid model of teaching with supporting students at home (Klapproth et al., 2020; Long, 2020; Walker, 2021).

COVID presented many challenges for teachers, but teacher burnout and its social sources are more nuanced than merely attributing the problem to COVID. Patterns in teacher

burnout responses from the public district and private district in this study raise intriguing suppositions about teacher psychological distress. From the public district (District A), teacher burnout showed larges increases from 2018-2020 (a mean of 2.78 in 2018 to a mean of 3.55 in 2020). In this district, teacher reported emotional distress had been increasing before COVID resulted in school closures, remote learning plans, exposure and quarantine protocols, and major disruptions to teaching and learning. A few burnout items in 2020 had 40% or more of teachers expressing psychological strains with only slight increases in 2021. For example, in 2020, 46.6% of teachers reported feeling emotionally drained from teaching and 43.6% of teacher reported feeling used up at the end of the day. These percentages increased slightly in 2021 to 47.4% of teachers feeling emotionally drained and 47% feeling used up at the end of the day.

For the public district, teachers were reporting more psychological tensions well before COVID disrupted school routines. COVID certainly did not make working conditions better for these teachers, nor did it reduce psychological distress, but increases in reported burnout for the COVID year were not as stark as what teachers in the private district reported. It is reasonable to claim that for the public district, COVID may have exposed and called attention to a disconcerting distress that had been gradually growing. In fact, the burnout trend in the public district aligns with other national reports suggesting increased teacher stress and burnout before the pandemic. A 2019 Phi Delta Kappa survey showed that 50% of teachers surveyed said they considered quitting the teaching profession and 19% of these teachers cited stress and pressure leading to burnout as primary reasons for which they were considering leaving teaching (Hess, 2019). Furthermore, a Gallup survey found that teaching was tied with nursing as the most stressful occupation in the United States (Feather, 2019).

Teacher reported burnout in the private district followed a different path than the public district. Whereas teacher reported burnout was increasing in the public district in the years before COVID, the private district saw average burnout scores remain relatively stable during this time period. This stability was disrupted during the COVID year. Teacher reported burnout in the private district was less than 10 percent in 2020 with only two items (I feel emotionally drained from teaching and I feel used up at the end of the day) reaching a 20 percent endorsement rate. Teacher reported burnout increased to 25.3 percent in 2021 with all items except one reaching a 20 percent endorsement rate. The one item was, I feel frustrated with my job.

What is learned from teacher reported burnout in the private school district is that COVID seemed to increase work related tension in the environment that was either not being experienced before or was not leading to as much psychological distress. Either way, teacher reported frustration with their job, feeling emotionally drained from teaching, feeling fatigued, and feeling used-up all saw considerable increases. It is unknown how the strain of dealing with COVID outside of school contributed to the psychological distress or if it was the tension within the school environment leading to higher feelings of burnout. Irrespective of the source, teacher reported burnout saw considerable increases during COVID in the private district.

Working Conditions Can Lessen Teacher Burnout

The inclusion of working conditions as control variables in the regression models produced interesting results. Although these conditions were not the central focus of the study, useful knowledge about teacher burnout can be construed from the evidence. There are two sides to the coin when considering working conditions and burnout. As regression results from the full models suggest in this study, just as working conditions might induce psychological tension, working conditions also have the capacity to lessen psychological distress behind burnout.

Specific conditions with a negative relationship to burnout were program coherence, instructional program coherence, teacher trust in students, trust in the district leadership, and teacher workplace connectedness.

Working conditions as control variables for the public district included program coherence, trust in district administration, and teacher workplace connectedness. Program coherence in both 2020 and 2021 had a moderate, statistically significant, and negative relationship with teacher burnout. In 2020 and 2021, the public district showed that program coherence had a negative, statistically significant relationship with teacher burnout (2020: $\beta = -.200$, $p < 0.05$; 2021: $\beta = -.254$, $p < 0.01$). Program coherence identifies a school district's curriculum, instruction, and learning materials consistency.

Teachers who experienced alignment of the curricular program reported less psychological distress compared to teachers who experienced the misalignment of their curricular program reported higher psychological distress. This finding makes sense in the context of other burnout studies where school factors such as class sizes, student discipline problems, workload, school building conditions, and teacher preparation can lead to teacher burnout (Bauer et al., 2006; Chang, 2009). Program coherence is a school factor that can affect a teacher's burnout. Teachers' view of program coherence in their classroom may lead to burnout.

Teacher trust in district administration was also related to lower teacher burnout in the public district. Interestingly, though, trust in district administration only had a negative relationship with teacher burnout during the COVID year. In 2021, faculty trust in district administration had a negative, statistically significant relationship with teacher burnout ($\beta = -.293$, $p < 0.01$). For teachers in the public district the decisions and actions of district administration had a stronger negative relationship with burnout during COVID than before.

This finding makes sense when considering that teachers reported common feelings of stress, burnout/fatigue, and anxiety about COVID while at work (Liss-Levinson, 2021) and along with the fact that a supportive workplace and positive administration support can mitigate the effects of burnout (Farber, 1984; Ju et al., 2015; Kinman et al., 2011; Russell et al., 1987; Salami, 2011; Shin et al., 2014; Weber & Jaekel-Reinhard, 2000). During COVID, district administrators were managing and coordinating many of the decisions and actions that affected how schools and teachers were responding to volatile situations. It makes sense that for teachers who experienced district administration as more trustworthy at this time, they would feel less uncertainty and tension in their work.

Prior to COVID and during COVID, the public district had a negative relationship with teacher workplace connectedness that affected teacher burnout. In 2020 and 2021, the public district showed that teacher workplace connectedness had a negative, statistically significant relationship with teacher burnout (2020: $\beta = -.206$, $p < 0.01$; 2021: $\beta = -0.292$, $p < 0.01$). Teacher workplace connectedness measures a teacher's relationship with their peers and overall connection to their school environment. For teachers, non-supportive relationships with their peers can contribute to burnout (Stoeber & Rennert, 2008). In 2021, COVID exacerbated the teacher workplace connectedness situation due to the isolation that COVID caused in the workplace.

The private district did not have the same control variables as the public district. Working conditions included as control variables for the private district are instructional program coherence, faculty trust in students, and collective teacher efficacy. In 2021 during the COVID year, instructional program coherence had a moderate and statistically significant, negative relationship with teacher burnout, however, instructional coherence had a weak relationship with

burnout in the year before COVID. In 2020 and 2021, the private district showed that instructional program coherence had a negative, statistically significant relationship with teacher burnout (2020: $\beta = -.096$, $p < 0.05$; 2021: $\beta = -.234$, $p < 0.01$). This finding raises interesting questions about the instructional program and teacher burnout, particularly during times of great uncertainty. It seems that for teachers in the private district perceiving a shared view of the instructional program might have provided some consistency and stability during a crisis. This finding makes sense in the context of other burnout studies where teachers reported increased stress and struggles with how to teach students during COVID (Kim & Asbury, 2020; Klapproth et al., 2020).

Teacher trust in students was also related to lower teacher burnout in the private school district in the year before COVID and during the COVID year. In 2020 and 2021, the private district showed that faculty trust in students had a negative, statistically significant relationship with teacher burnout (2020: $\beta = -.345$, $p < 0.01$; 2021: $\beta = -.201$, $p < 0.01$). Interestingly, the relationship was stronger in the year before COVID. It seems that trusting teacher-student relationships are essential social conditions for lessening teacher burnout, but the effects of the teacher-student relationship on teacher psychological distress are not immune from other working conditions in schools. For teachers in the private district the decisions and actions of students had a stronger effect on their psychological states in both years. This finding makes sense when considering that there are relational factors contributing to burnout such as relationships with students (Farber, 1984; Stoeber & Rennert, 2008) and COVID likely exacerbated the situation. During COVID, schools were back and forth between distance learning and students were quarantined at times so this might be attributed to result.

Principal Support of Teacher Psychological Needs Can Protect Teachers from Burnout

PSTPN emerged as an important leadership behavior for protecting teachers from prolonged psychological distress of burnout. Regression results for both districts, for the year before COVID and the year during COVID, suggest that principal-teacher interactions are a factor in teacher burnout, even when considering other work conditions. Interactions that can protect teachers from the burnout are ones that generally support teacher psychological needs of autonomy, competence, and relatedness.

We know that sources of teacher burnout are more nuanced than merely blaming it on COVID, but the pandemic exacerbated the burnout issue. Furthermore, school working conditions contribute to teacher burnout as well. The question is how we can try to alleviate teacher burnout. From the literature review, school leadership can play a role to alleviate teacher burnout. We know that school leadership is relational through daily interactions and conversations (Boberg & Bourgeois, 2016; Hallinger, 2003; Leithwood et al., 1998; Leithwood & Jantzi, 2000; Leithwood & Jantzi, 2008). As mentioned before in the literature review, school leaders can help to alleviate symptoms of burnout for teachers through positive and supportive relationships with their teachers (Kinman et al., 2011; Russell et al., 1987; Salami, 2011; Shin et al., 2014; Weber & Jaekel-Reinhard, 2000). The third claim is school leaders can protect teachers from prolong psychological distress of burnout through principal support of teacher psychological needs.

To recall, principal support of teacher psychological needs (PSTPN) is a measurable construct used in our stepwise regression. PSTPN is defined as intentional conversations with teachers that focus on supporting their psychological needs of autonomy, competence, and relatedness (Olsen, 2017). PSTPN is not a school leadership type, but a mechanism that

principals can use to support a teacher's wellbeing in the workplace through intentional conversations (Olsen, 2017). We can compare PSTPN in 2020 and 2021 for both the public and private school district.

For the public district, before COVID, PSTPN had a negative, statistically significant relationship with burnout ($\beta = -0.312$, $p < 0.01$) when compared to years teaching, years in school, and teacher workplace connectedness. PSTPN maintained a negative, statistically significant relationship with burnout in 2020 ($\beta = -0.193$, $p < 0.05$) when accounting for program coherence and faculty trust in district administration. These results suggest that prior to increased challenges with COVID teachers who experienced psychological need-support from their principal had less burnout symptoms. Further, principal-teacher interactions were a stronger protective factor than feeling connected to colleagues in the school and trust in district administration.

Regression results during the COVID year for the public district show an intriguing change in the PSTPN and burnout relationship. PSTPN still had a negative, statistically significant relationship with burnout ($\beta = -0.267$, $p < 0.01$) when comparing it to teacher characteristics and teacher connectedness. The importance of PSTPN depreciated when accounting for program coherence and faculty trust in district administration. Need-supportive interactions with principals carried less weight compared to teacher perceptions of decisions and actions taken by district administration and the degree of coherence they experienced with the curricular program. This finding may relate to the centralization of decisions and actions during COVID, a factor that would require evidence beyond this study. This information supports the idea that PSTPN is a mechanism to alleviate teacher burnout. PSTPN did not hold a statistically

significant relationship with the addition of program coherence and faculty trust in district administration in 2021.

For the private district, PSTPN also had negative relationships with teacher burnout. In 2020, PSTPN had a negative, statistically significant relationship with burnout ($\beta = -0.180$, $p < 0.01$) compared to collective teacher efficacy, instructional program coherence, and faculty trust in students. Like the public district, teachers who experienced psychological-need support from their principals had less burnout symptoms. Further, PSTPN held up as important as faculty trust in students in having a negative relationship with teacher burnout.

Interestingly, in 2021, PSTPN kept a negative, statistically significant relationship with burnout ($\beta = -0.222$, $p < 0.01$) compared to instructional program coherence, collective teacher efficacy, and faculty trust in students. In contrast to the public district, even during COVID, the private district showed that principal support for their psychological needs contributed to less teacher burnout experience. Once again, PSTPN and faculty trust in student were important factors in contributing to a negative relationship with teacher burnout.

Beyond teacher characteristics and psychological factors that may lead to burnout, there are school and relational factors too. For instance, pressure from relationships with students, parents, teachers, and administration can contribute to burnout (Stoeber & Rennert, 2008). School factors that lead to burnout can be class size, socio-economic status of the school, workload, poor teacher salary, and building conditions (Bauer et al., 2006; Chang, 2009). This study was different; it identifies conditions that can lessen burnout and principal-teacher interactions that can protect teachers from experiencing prolonged psychological distress. Teacher burnout is not a fixed emotional state. Burnout can vary by conditions of the workplace.

Implications for School Leaders

Teacher burnout has become a national concern due to a decline in teacher well-being and work satisfaction (Hess, 2019; Skaalvik & Skaalvik, 2010; Skaalvik & Skaalvik, 2011; Skaalvik & Skaalvik, 2018; Smithers & Robinson, 2003; Walker, 2021). Prevailing stressors that lead to burnout include job demands, time constraints, and poor relationships with colleagues, administration, students, and parents (Chang, 2009; Stoeber & Rennert, 2008). Teachers in the public and private districts are no different. They reported high burnout during the first year of COVID. For teachers in the public schools their burnout had been increasing before the pandemic. School leaders may not be able to prevent teachers from experiencing burnout but results in the study inform three implications for how school leaders may be able to protect teachers from increased burnout: be aware of the external environment, be attuned to work conditions, be aware of how you talk to and with teachers.

Be Aware of The External Environment

School leaders need to be aware of the external environment. COVID added more stress for teachers (Kim & Asbury, 2020; Klapproth et al., 2020; Liss-Levinson, 2021; Walker, 2021). From this study, we learned how COVID contributed to teacher's burnout. For the public district, in 2020, 46.6% of teachers felt emotionally drained from teaching; this increased to 47.4% of teachers in 2021. Additionally, in 2020, 24.8% of teachers reported feeling fatigued when they get up in the morning and have to face another day teaching; this increased to 31.2% of teachers in 2021. For the private district, in 2020, 21% of teachers reported feeling emotionally drained from teaching; this increased to 31.9% of teachers in 2021.

Furthermore, in 2020 in the private district, 13% of teachers reported feeling fatigued when they get up in the morning and have to face another day teaching; this increased to 21.9%

of teachers in 2021. COVID is one example of an outside influence that can affect teachers. Other external environments that school leaders need to be aware of are the divisive political climate in our culture (Walker, 2019) and community and school violence that also finds its way into our schools (Litvinov, 2023). Paying attention to these outside factors can help school leaders understand that there are multiple layers that can contribute to burnout.

Be Attuned to Work Conditions

School leaders need to be attuned to work conditions. Much of the literature addressing teacher burnout focuses on individual interventions for teachers (Maslach et al., 2001; Maslach, 2003; Schaufeli et al., 2009), and although important, such teacher level interventions leave unaddressed tensions in the school environment contributing to burnout. Principals influence this environment and just as the environment may create psychological distress, this study's findings show that the environment can also be a source of support. Looking at the results of this study, program coherence for the public district and instructional program coherence for the private district was negatively associated with teacher burnout. In 2020 and 2021, the public district showed that program coherence had a negative, statistically significant relationship with teacher burnout (2020: $\beta = -.200$, $p < 0.05$; 2021: $\beta = -.254$, $p < 0.01$). In 2020 and 2021, the private district showed that instructional program coherence had a negative, statistically significant relationship with teacher burnout (2020: $\beta = -.096$, $p < 0.05$; 2021: $\beta = -.234$, $p < 0.01$). The varying models of teaching between in-person and distance learning tested the structure of our curriculum programs and how teachers viewed those programs.

Another area, faculty trust in district administration, had a negative relationship with teacher burnout during COVID for the public district. In 2021, faculty trust in district administration had a negative, statistically significant relationship with teacher burnout ($\beta = -$

.293, $p < 0.01$). District level leaders were in a position of making district wide decisions immediately affecting classrooms (i.e. transitioning to distance learning). This is an area where district leadership can influence the environment for teachers. Interestingly, for the private district, faculty trust in students had a negative relationship with teacher burnout before and during COVID. In 2020 and 2021, the private district showed that faculty trust in students had a negative, statistically significant relationship with teacher burnout (2020: $\beta = -.345$, $p < 0.01$; 2021: $\beta = -.201$, $p < 0.01$). Although these areas provided increased levels of teacher burnout, it's an opportunity to look at these contexts as a potential area to provide support for teachers.

Be Aware of How You Talk to and With Teachers

The final implication for school leaders is the powerful tool of simply talking to teachers to protect against burnout. Early teacher burnout research suggested that social support from administrators was found to be the only substantial predictor of burnout (Russell et al., 1987). More recent evidence supports this claim that a supportive workplace and positive communication/conversation from administrators can help to reduce teacher burnout (Ju et al., 2015; Kinman et al., 2011; Salami, 2011; Shin et al., 2014; Weber & Jaekel-Reinhard, 2000). The power of talking in the workplace can nurture a supportive environment. Groysberg and Slind (2012) explain that conversational communication between leaders and their employees supports a culture of engaged employees, flexibility, and alignment.

This study applied principal support of teacher psychological needs (PSTPN) as the mechanism of principals supporting a teacher's well-being through intentional conversation. Both districts had evidence of PSTPN being negatively associated with teacher burnout before and after COVID began. For the public district, PSTPN had a negative, statistically significant relationship with burnout ($\beta = -0.312$, $p < 0.01$) in 2020. For 2021, PSTPN had a negative,

statistically significant relationship with burnout ($\beta = -0.267$, $p < 0.01$) before the addition of program coherence and faculty trust in district administration. Continuing with the private district, PSTPN had a negative, statistically significant relationship with burnout (2020: $\beta = -0.180$, $p < 0.01$; 2021: $\beta = -0.222$, $p < 0.01$). These findings, although limited in scope, support that PSTPN can help to alleviate teacher burnout. School leaders can rely on the small action of conversational communication with their teachers to nurture their psychological needs and reduce stress.

Future Research

This study researched teacher burnout prior to and during COVID-19. Implications include ways for principals to support teachers to hopefully alleviate the burnout syndrome. Future research identifying how to train principals in principal support of teacher psychological needs is essential to develop school leadership.

What's also important is principal burnout. Future research about principal burnout and how district leadership might alleviate such burnout is crucial. Supporting principals' well-being would allow the principal to be able to support teachers more effectively. This would allow everyone to thrive in a school environment.

Conclusion

The purpose of this study was to research teacher burnout during the pandemic and if there was a relationship between principal support for teacher psychological needs and teacher reported burnout prior to COVID and during COVID. Applying the lens of self-determination theory, we can identify and study factors within different environments that support or frustrate autonomy, competence, and relatedness (Deci & Ryan, 2002). During the pandemic, there were

increased levels of teacher reported burnout and there is a relationship between PSTPN and teacher burnout. PSTPN is a way to alleviate teacher burnout. Results, discussion, and implications were outlined. Three implications were listed for school leaders: be aware of the external environment, be attuned to work conditions, and be aware of how you talk to and with teachers.

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Appendix A: IRB Approval

The UNIVERSITY of OKLAHOMA

Institutional Review Board for the Protection of Human Subjects

Approval of Initial Submission – Exempt from IRB Review – AP01

Date: February 07, 2022 **IRB#:** 14249

Principal Investigator: Julia Gale Hughes

Approval Date: 02/07/2022

Exempt Category: 4

Study Title: A Study of Teacher Burnout During the COVID-19 Pandemic

On behalf of the Institutional Review Board (IRB), I have reviewed the above-referenced research study and determined that it meets the criteria for exemption from IRB review. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Request approval from the IRB prior to implementing any/all modifications as changes could affect the exempt status determination.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Notify the IRB at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

Aimee Franklin, Ph.D.
Chair, Institutional Review Board