Public school teachers during COVID-19: A study of performance using job demands-resources theory

by

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Abstract

This study examines the impact of the COVID-19 pandemic on public school teacher performance. The study uses job demands-resources (JD-R) theory to view the overall relationship between the positives and negative aspects of work for teachers, and additionally looks at public service motivation (PSM) and uncertainty reduction theory (URT). Utilizing qualitative respondent interviews, the study found that overall teacher productivity decreased during the pandemic due to an increase in job demands that were not typically present in an average school year.

The study also found that the primary resources utilized by teachers to remain productive and counteract job demands included PSM, transformational leadership, effective organizational communication, communication with coworkers, and disassociation from the job. PSM was found to be an extremely pertinent aspect of teachers' work, working as an effective job resource, and in some situations, as a demand. From an organizational standpoint, teachers most valued two-way symmetrical communication from their district, and URT was supported as an applicable theory in organizational settings.

Table of Contents

Chapter 1 (Introduction)

Since March of 2020, the coronavirus pandemic has ravaged the United States. With over 32 million cases and over 500 thousand deaths, COVID-19 has impacted every facet of our lives. Along with impacts on the lives of American citizens, the pandemic has affected how and where employees conduct business. Millions of employees have shifted to "work from home" environments (Brenan, 2020), where employees work remotely from their own homes to reduce their chances of becoming infected with the pandemic and potentially infecting others. With this switch to working from home, or WFH, there have been shifts in how people across the world perform their work, with implications for how organizations could potentially be run for years to come.

One of the largest questions that arises from working from home is the question of employee productivity (Hall, 2020): how will the productivity of employees be affected by moving from an office environment to their home? While there are many reported advantages to working at home, a sudden, unprepared shift toward working from home could negatively affect productivity. Nicholas Bloom, an economics professor at the Stanford Graduate School of Business, argues exactly that: "'We are home working alongside our kids, in unsuitable spaces, with no choice and no in-office days . . . This will create a productivity disaster for firms'" (Gorlick, 2020).

One of the professions that has been under media scrutiny during the COVID-19 pandemic is public school teachers. While public school teachers are not directly responsible for mitigating the pandemic, they are responsible for future successes of students, as quality education is a foundation for future careers. Teachers must handle educating children all while having their workplace be dramatically affected by the pandemic. It is for this reason that I have

chosen to study the experiences of public school teachers as they attempt to continue teaching during the COVID-19 pandemic.

Productivity is the result of many aspects of both the workplace and everyday life including leadership communication, communication between teams, internal communication, as well as employee motivation, empowerment, and burnout. Because of the many factors affecting productivity, I have selected job demands-resources theory (JD-R), a theory outside of the field of communication as a basis for my study because it will successfully encompass all aspects of productivity, including communication, while working within a public institution, such as a school. This theory states that overall production in the workplace is determined by workplace negatives and positives (job demands and job resources). Job resources typically act as supporting assets that counteract and buffer the job demands in the workplace. In this paper, I plan to study how the elements of the COVID-19 pandemic, including the work from home environment, affect the productivity of public school teachers working during the pandemic. I utilize a qualitative approach consisting of interviews to get an in-depth view of the various job demands and resources available to teachers, and how these affect their day-to-day work. Some of these job demands include working virtually, uncertainty, and poor organizational communication, while the most prominent job resources include communication and PSM. This research is intended to find the resources that teachers draw upon most to maintain their productivity as well as combat the negative aspects of their jobs. These resources will offer a great insight into the profession, as well as suggestions on how public education can be improved.

Chapter 2 (Literature Review)

There are several important bodies of literature that inform this project. The first category is job-demands resources theory, which offers an excellent framework for how the most important aspects of the organization affect the productivity of an employee. The second section discusses PSM, one of the driving aspects behind the productivity of public-sector employees. The third section looks at existing literature on working from home. The fourth section of the literature review discusses intrinsic and extrinsic motivation of employees, as well as teacher empowerment. Next, I discuss the effect of leadership communication on the productivity of an organization, and then discuss the effect information and communication technologies (ICTs) have on leadership communication. The final two sections of the literature review discuss employee burnout and health and crisis communication within the organization. For the burnout section, I primarily discuss the connection of burnout to job demands-resources theory, as well as social support as a buffer from job burnout. For the final section, I discuss quality internal crisis communication and its relation to productivity, as well as the connection between internal crisis communication and development of organizational resilience. In addition to broadly review the theory in each section, each section also covers information that is specifically relevant to public school teachers.

Job Demands-Resources Theory

Job demands-resources theory essentially states that overall performance in the workplace is affected by two large categories: job demands and job resources. Job demands are all the aspects of a job that negatively affect working conditions. These can be poor supervision and management, poor communication, lack of access to important documents/information, or any other factor that could make working more difficult. Job resources are all the aspects of a job

that increase performance and the well-being of employees. According to JD-R, these resources offer a negating effect toward job demands (Bakker & de Vries, 2020; Haenisch, 2012). While it is easy to simply ask if a person is more/less productive working during the pandemic, utilizing job demands-resources theory will be helpful to help understand why employees are more or less productive.

According to Bakker & Demerouti (2018), job demands-resources theory is categorized by six propositions: First, all characteristics of a job can be classified into two main categories: job demands and job resources. Second, these categories have unique and independent effects on the wellbeing of the employees. Third, job resources can act as a "buffer," counteracting the effects of job demands. Fourth, when job demands are high, job resources particularly influence motivation and work engagement. Fifth, personal resources (optimism, self-efficacy) play a similar role to job resources. And finally, "motivation has a positive impact on job performance, whereas job strain has a negative impact on job performance" (p. 3).

Job demands-resources theory is additionally applicable to how various levels of an organization can affect employee well-being and overall organizational performance. Bakker & Demerouti (2018) note that all levels of an organization can affect performance. At the organizational level, the overall hierarchy and structure of the organization tends to indirectly influence work engagement and performance outcomes. This effect is typically seen through various HR practices in the organization. At the leadership level, it is found that the type of leadership style influences job demands and resources. However, depending on the type of leadership, leadership style and communication from leaders can either exacerbate job demands or job resources (Bakker & Demerouti, 2018). The base level of applicability of JD-R is the team/individual level. Communication and interactions between individual members of the

organization or team is another double-edged sword. While communication can result in higher resources and job engagement, task and relationship conflict tend to result in lower performance (Moynihan & Pandey, 2007). This study will be focusing the most on how job demands and resources on the leadership and individual level of an organization tend to affect the productivity of employees. This focus is because these levels are more communicative and feature more social interaction.

Job demands-resources theory will continue to be pertinent throughout this prospectus, as it manages to tie together both communicative aspects of workplace productivity as well as non-communicative influences. While job demands-resources theory is not a communication theory, there are many communicative acts that fall within the demands and resources of a job, and this theory offers a holistic view of all the aspects of workplace performance, which may be relevant for understanding work from home in the public sector during the pandemic.

Public Service Motivation

Public service motivation (PSM) is a resource studied very specifically within the context of employees working in the public sector. It is a versatile variable that can be applied equally effectively to employees at the federal level as the state level, and equally effectively to employees who interact directly with the public (e.g., nurses, police officers, teachers) and those who do not (e.g., upper level CDC and FDA employees).

PSM is essentially an employee's tendency to perform actions in the public sector due to his or her own public interest. It is a self-explanatory concept that "is important not just to motivation but also to productivity, improved management practices, accountability, and trust in government" (Moynihan & Pandey, 2007, p. 41). There is a consensus among studies regarding PSM that there is a driving public service ethic among public employees (Cooke et al., 2019;

Giauque et al., 2012; Moynihan & Pandey, 2007; Mussagulova, 2020). PSM is something that must be factored in when studying the performance of public school teachers, as it is a driving motivation that will most likely be present while teachers are attempting to do their jobs despite having to navigate the detrimental aspects of the pandemic.

There are many aspects of everyday work at a public institution that affect an employee's PSM. Perry (1997) states that the four primary measures of PSM are attraction to policy making, commitment to public interest/civic duty, compassion, and self-sacrifice. However, there are many additional factors that many believe affect PSM. Moynihan & Pandey (2007) surveyed employees' perceptions of the work environment's culture, hierarchical authority, red tape, and reform orientation to better understand the specific organizational drawbacks that may limit PSM. I believe that this factor will be influential in studying teachers who have been thrust into a work-from-home environment.

Mussagulova (2020) finds that in work situations where job resources are scarce, PSM should be leveraged, as PSM tends to cyclically increase as members of public organizations communicate with themselves and with the constituents that they are assisting. As teachers who are used to regular face-to-face communication with their students quickly shifted to communicating exclusively in virtual classrooms, it is important to study how frequently teachers communicate with students and other teachers outside of scheduled meetings, as these communications would increase teachers' PSM.

PSM additionally ties into job demands-resources theory, sometimes viewed as a buffer or mediator between work engagement and job resources/demands (Baker et al., n.d.; Bloom et al., 2015; Kraut, 1989; Li et al., 2020; Nakrošienė et al., 2019). Mussagulova (2020) states that while the researchers did not manage to definitively prove PSM's usage as a buffer between job

demands and resources and work engagement, they did find that high/low PSM influenced work engagement. This study will be viewing PSM as an additional job resource, as it has been found to offset some of the negative demands that a workplace offers in a similar fashion to job resources.

Working from home

Many studies have shown that working from home under normal circumstances offers distinct advantages toward employee productivity, time management, and overall well-being (Baker et al., n.d.; Bloom et al., 2015; Kraut, 1989; Li et al., 2020; Nakrošienė et al., 2019). However, Li et al. (2020) state that while there are many reported psychological benefits to working from home, when WFH is not a choice it "presents a significant challenge" (p. 199). As stated above, a sudden shift from a classroom environment to an at home office area that is not prepared for a full-time teacher could result in a large decrease in productivity, especially if the teacher's home does not have a designated "home office" room to conduct their work.

Bloom et al. (2015) described a longitudinal study performed on call-center employees working from home. The employees had the opportunity to work from home for nine months, and the data collected at the end of the study found that employees not only were happier working from home, but also had been more productive over the nine month period (Bloom et al., 2015). This article is a prime example of the benefits of working from home, however it is clarified early on that the employees had access to the exact same equipment, work order flow, tasks, and pay system, which could potentially be different under mandatory work from home orders. Additionally, employees did not exclusively work from home during the nine month period, but instead worked four days at home, one day in the office. However, teachers who have been pushed into work from home environments do not have these same luxuries, and it would

10

be presumptive to state that these public employees would react the same as the call-center employees studied in Bloom et al. (2015).

While telework has several reported benefits, there are still noted downsides of teleworking, including some workers having difficulty handling distractions, "inability to work independently, problems in relationships with manager and coworkers, and reluctance to miss out on collaborative opportunities" (Ruth & Chaudhry, 2008, p. 89). On top of this, many employees do not have the technical setup at home that would allow them to perform at the same level as at their office. Many of us have had to deal with sudden shifts to at-home setups that have lacked the same quality set-up that physical office spaces tend to have. Telework can also be frustrating as it adds extra steps to communicating with members of a team or management. This lack of every day social connection often leads to feelings of isolation and disconnectedness, adding an extra layer of resistance toward performing everyday work (Li et al., 2020). This is supported in Bloom et al. (2015), as after the study was completed, two-thirds of the employees wished to return to office work due to the loneliness of working from home. Li et al. (2020) state that communication is one of the key elements in fighting these feelings of isolation and disconnectedness and continuing to develop high quality relationships with co-workers despite distance and virtual working. Continued communication helps to create perceived proximity, allowing increased cognitive salience, reduction in uncertainty, and more effective communication with fellow employees. Increased communication additionally helps to reduce organizational ambiguity in relation to hierarchy as well as updates on crisis information (Golden et al., 2008). Effective communication is a key element in individual productivity, and now that many employees are exclusively working from home continuous communication is more important than ever.

Golden et al. (2008) raise the idea of professional isolation, the idea that an employee is out of touch with his/her fellow employees in the office, and credits teleworking environments for boosting feelings of professional isolation. Golden et al. (2008) list three factors that influence the relationship between the feelings of professional isolation in teleworkers and job performance: amount of time spent working from home, number of face-to-face interactions with fellow employees, and use of information and communication technologies. It was found that amount of time spent teleworking had a negative relationship with job performance, while higher face-to-face interactions and access to ICTs tend to help with job performance. This is valuable information to have when looking at employees who are forced to work at home, as public school teachers working from home do not have the job resource of face-to-face interaction to help with their productivity, but have the demand of continued working from home without any trips to school. As K-12 teachers typically interact face-to-face with hundreds of people throughout the day, the isolation of working from home is all the more pertinent. While there are not many prominent studies on the productivity of teachers working from home, I have found no research that describes teachers having different WFH experiences than other public employees. However, while there is no research on whether the WFH experience is different for teachers, Dey et al. (2020) lists job involving "interacting face to face with the public" (p. 2) as unsuitable for working from home. Teaching is a job that relies heavily on being able to interact face to face with students, and while it is admirable that teachers have managed to adapt to working partially or fully online during the pandemic, it is not conducive for teachers to be working from home. I expect my findings to reflect this sentiment.

Additional issues found in WFH environments are the merging of work and personal life. In a time of ICTs that allow for workers to remain connected to their job even when they are at

12

home, employees who are stuck at home will most likely be experiencing work-life balancing issues. Even when not in the position of working through a pandemic, ICTs have caused workers to sacrifice work time for family time, and then attempt to make up work time during family time later (Ford, 2011). However, this blending of work and family when working from home has most often benefitted the employer, with employees performing more work than they typically would in an average day at the office (Gumusluoglu & Ilsev, 2009). So, while the personal lives of employees may suffer because of a lack of work-life balance, this study may reveal that there has been more overall productivity when working from home, due to employees sacrificing their personal time to complete work-related tasks.

Sacrifice of personal time to complete work related tasks is nothing unusual for teachers. In a study performed on secondary school teachers, Bauwens et al. (2020) state that teachers primarily feel obligated to engage in ICT usage during "home hours" due to social influence from colleagues and peers to perform work after hours. Bauwens et al. (2020) also found that participating in work-related after hour ICT usage results in more negative work-life balances, regardless of the teacher's preferences for integration of work and life. The results of the study as a whole imply that the integration of ICTs and digital learning environments may result in negative consequences for the well-being of teachers (Bauwens et al., 2020).

Employee Motivation

When examining productivity in any workplace, it is important to look at the motivating factors that help get work done. Motivation in the workplace falls into two overarching categories: intrinsic and extrinsic motivation. Intrinsic motivation is the internal motivation to complete a task because an employee finds the task engaging, interesting, and rewarding in itself (Frank & Lewis, 2004). Intrinsic motivation is often inspired by "interesting, meaningful work

13

that offers opportunities for personal growth and creativity" (Frank & Lewis, 2004, p. 39). Extrinsic motivation is motivation to complete a task because of the reward that will be delivered upon completion of the task. For instance, extrinsic motivation can be found in the chance of promotion/punishment if a specific job is or is not completed on time. Frank & Lewis (2004) found that public-sector employees were more likely to assign intrinsic motivators to their job and work ethic than private-sector employees. This is because government hierarchy often limits the connection between individual performance and pay, promotion, or punishment. This finding should be equally applicable toward teachers, as they are public sector employees.

While extrinsic motivators are effective, there is substantial evidence that intrinsic motivators are held with higher regard for public employees and provide more opportunities for personal growth and creativity within the workplace (Perry, 1997). Frank & Lewis (2004) state that four out of five of the most highly regarded motivators of U.S. workers were intrinsic, while extrinsic motivators such as pay, benefits, and promotion were further down the list. These findings also support the concept of PSM, as the driving factors behind PSM are primarily intrinsic: attraction to policy making, commitment to public interest/civic duty, compassion, and willingness for self-sacrifice (Gumusluoglu & Ilsev, 2009; Men, 2014; Park et al., 2014) are all internal motivators.

In a study of Romanian school teachers during the first two months of the COVID-19 pandemic, Panisoara et al. (2020) found that intrinsic motivation acted as a job resource, and helped to reduce occupational stress in teachers, while extrinsic motivation tended to amplify stress (Panisoara et al., 2020). As is seen with other research, I expect the presence of intrinsic motivation will have a positive effect on the productivity of teachers, and teachers with higher productivity will be primarily intrinsically motivated.

Leadership Communication

The style of leadership in an organization and communication practices and styles from administration as a huge impact on the overall productivity of employees at any organization (Solaja et al., 2016). Men (2014) finds that the aspect of transformational leadership has a positive relationship with employee job performance. Transformational leadership is an extremely effective leadership style that motivates followers to look beyond their own self-interest for the sake of the organization or group. Leaders that utilize transformational leadership create an emotional attachment between their followers and themselves (Kowalski & Swanson, 2005; Offstein et al., 2010). Men (2014) describes the specific behaviors that transformational leaders have:

> Transformational leaders take a genuine interest in the well-being of employees, foster a climate of trust, nurture confidence in their followers, and encourage individual development. To these ends, transformational leaders often engage in close interactions with their followers to understand and address their needs better. In terms of decision making, transformational leaders seek to empower followers. They are willing to share power and delegate significant authority to followers to make them less dependent on the leader. (Men, 2014b, p. 267)

Within the context of working from home and self-reported productivity during a pandemic, it is unclear whether or not this style of communication from leadership will continue to be most effective in keeping employees focused, motivated, and productive at work. However, this communication style remains important when discussing factors that could either act as job resources or job demands. There is a clear relationship between leadership ability and productivity of employees (Kowalski & Swanson, 2005; Offstein et al., 2010), so it is important

to understand if effective leadership communication is happening in virtual environments. School principals and other upper supervisors that utilize transformational leadership will most likely have more productive teachers.

Within the context of teachers, it was noted that the majority of public school teachers preferred school principals that had transformational leadership attributes (Hauserman & Stick, 2013). The presence of transformational leadership results in higher levels of long-term performance for teachers, students, and the organization as a whole (Balyer, 2012; Hauserman & Stick, 2013; Nguni et al., 2006). Balyer (2012) states that transformational leadership tends to increase performance expectations in followers, and in turn increases performance. This increase in performance expectations is a result of transformational leaders encouraging confidence and intellectual development among followers. Yao et al. (2020) also found that differentiated transformational leadership has a positive relationship with the psychological empowerment of teachers. They also found that the satisfaction of communication with the organization and its members has a positive relationship with job performance (Yao et al., 2020).

There are many suggestions for how to effectively communicate with employees who are working from home, ranging from diversifying communication methods to formalizing communications and creating a teleworking policy (Haenisch, 2012). Offstein et al. (2010) finds that "virtual leaders" (leaders of teams that are either fully online or mostly online) are extremely gifted in communication abilities, both physical and virtual. They attribute this quality communication to the variety of media that virtual leaders remain in contact with their employees, as well as their ability to accommodate time zones and schedule times to communicate with every employee as much as possible. Offstein et al. (2010) essentially state

that effective virtual leaders communicate frequently in multiple mediums, while accommodating meetings to the schedules of employees.

Burnout

An additional factor that must be considered when discussing working during a pandemic is employee burnout. Burnout is defined as a feeling of mental and/or physical exhaustion that is induced by the demands of a job (Kim & Wang, 2018). Continuous connection to the office through the use of ICTs has led to greater feelings of burnout. (Kim & Wang, 2018) state that having "work" and "home" be separate locations is a key aspect to reducing chances of work-induced overload and burnout. However, in situations where employees are forced to place their workspace inside of their home, employees may struggle with balancing work and life, especially when they are attempting to handle a pressing issue.

Burnout is not exclusively due to improper separation between work and home activities. Bakker & de Vries (2020) and Kim & Wang (2018) incorporate burnout into the job demands-resources model, acting as another potential outcome from the interaction between job demands and job resources. High job demands often lead to burnout, while job resources (when employees have them) tend to act as a buffer against burnout. Boren (2014) defines many different job demands and resources that have an effect on the chances of burnout in employees. For instance, he found that workers with more role ambiguity, heavier workloads, and more customer contact experienced more burnout, while employees with higher amounts of self-efficacy and social support help to reduce burnout. They also found that "individuals at a higher position in the organization experienced more burnout. Such individuals often assume more responsibility for the organization and their work" (Kim & Wang, 2018, p. 14). Some of these issues may be less

prevalent, such as "interaction with customers," however I suspect many of these job demands and resources will be seen to some extent in the day-to-day work of teachers.

Bottiani et al. (2019) found that high levels of student disruptive behavior acted as a job demand, having a positive effect on teacher burnout. Teachers' feelings of self-efficacy and social support from other teachers acted as job resources, buffering feelings of burnout among teachers. Surprisingly, this study also found that burnout in teachers was associated with higher levels of sensitivity to students' needs (Bottiani et al., 2019). This implies that the presence of burnout in teachers may not be entirely negative, as it could allow them to be more understanding and sensitive toward their students, who are also struggling through the effects of the pandemic.

Communication and ICTs have an additional effect on employee burnout. Wright et al. (2014) state that communication between leadership and employees outside of regular work hours using information and communication technologies is a key factor in increasing work-life conflict, and in turn increasing burnout. While working from home typically offers employees the opportunity to make their own schedules and allow for some overlap between family life and work life, it is important to recognize that employees who are frequently contacted during "home hours" using ICTs have a higher chance of experiencing burnout, and those who are more exclusively contacted during regular work hours have increased job satisfaction (Charoensukmongkol & Phungsoonthorn, 2020). It will be interesting to see if public school teachers manage to ever effectively "clock out" at the end of a school day now that they are working from home, especially since teachers frequently spend evenings and weekends grading and preparing for classes.

A frequently offered solution to burnout is social support. Social support is communication among co-workers about negative situations as a method of relieving stress. These conversations can be constructive and affirming but can also be negative in nature. Boren (2014) states "coworkers often communicate with each other with the inherent goal of social support, but instead co-construct negative messages about the organization and its members, or focus on other issues of particular salience" (p. 6). Boren (2014) defines this process as co-rumination: the action of discussing personal problems and focusing on negative feelings as an attempt to relieve stress. While social support typically has positive connotations with reductions in stress and burnout, the presence of co-rumination tends to have the opposite effect. While communication is typically helpful in reducing chances of burnout, not all communication is equally effective (Charoensukmongkol & Phungsoonthorn, 2020). It will be important to look for social support between teachers, as higher levels of social support act as a buffer from burnout (Bottiani et al., 2019).

Crisis and Organizational Communication

A key aspect of this paper is how teachers manage to balance the increased flexibility of working from home with continued daily lesson planning and classes. While there is similarity between teachers and other professions in the sense of both are affected by the social, organizational, and physical effects of the pandemic, public school teachers have the added pressures of being responsible for the education of children.

It has been found in multiple studies that clear crisis communication from upper management as well as social support and communication with coworkers helps to mitigate stress and decrease emotional exhaustion (Mazzei et al., 2012). Clear and effective internal crisis communication from upper management is important for employees in any profession to feel less

uncertain in their role, and in turn be able to focus further on their work. Charoensukmongkol &

Phungsoonthorn (2020) address the effects of crisis communication from the upper management

of private international universities in reaction to the COVID-19 pandemic, and the effects of the

pandemic on university staff. They found that university employees who received high quality

crisis communication had reduced levels of job uncertainty and emotional exhaustion. They also

found that the support of coworkers had the equivalent effect as quality crisis communication.

This finding insinuates that in situations where crisis communication is not available for

teachers, social support from fellow teachers may have a similar effect (Men & Stacks, 2014).

When looking at public school teachers, it is crucial to take into account both the internal crisis

communication and social support that these teachers are receiving during the pandemic.

When discussing internal communication of public schools, I am referring to the

management of the relationships and interactions between stakeholders within an organization.

This includes communication between groups, co-workers, and administration, from upper level

administration to everyday teachers. This definition draws from Walden (in press), who expands

upon an earlier definition from Welch & Jackson (2007) and is important because it emphasizes

all forms of communication at all levels, not just from management downwards.

Internal communication and communication between administration and staff builds trust

with the organization, leading to employees to react positively and offer further positive

communication in times of crisis. This positive relationship between employees and their

organization leads to improvements in overall performance of the company or organization

(Mazzei et al., 2012; Men & Stacks, 2014). Not only does this positive relationship between

employee and organization offer improved organizational performance, but also higher

productivity (Zehir & Narcıkara, 2016). Building this positive relationship can be done through

multiple ways, either through clear crisis communication throughout the organization, or through effective communication from leadership (Kim, 2020).

This theme of clear internal crisis communication is additionally seen in Kim (2020) and Zehir & Narcıkara (2016), within the contexts of building organizational resilience. Kim (2020) states that communication and interaction between organizational members plays a key role in building organizational resilience during a crisis. Organizational resilience is defined as "the ability to absorb strain and preserve functioning despite the presence of adversity or… the ability to recover or bounce back from untoward events" (Cho & Salmon, 2007). Communication oriented toward the internal publics of an organization (teachers) has been found to instill resilience in an organization and increase the chances of organizational survival and revival once the crisis has ended. Internal crisis management and clear communication information exchange go hand-in-hand, and both result in more organizational resilience among employees (Solaja et al., 2016). Zehir & Narcıkara (2016) take organizational resilience in times of crisis one step further and associate it positively with productivity and authentic leadership. There is a clear relationship between effective crisis management, communication, and organizational resilience that all have positive effects on productivity.

I additionally think that it is important to bring attention to teachers' exposure to pandemic information and warnings when working from home. It has been found that continued exposure to warnings about health risk often results in the general population feeling desensitized to social or health issues. Rather than an increase in awareness because of this exposure, often the public begins to feel desensitized, apathetic, and inert toward health crises (Corbin & Strauss, 2014). It will be curious to see if teachers feel more apathetic about the pandemic now that they've been encountering pandemic information and warnings for over eight

21

months, or if their levels of concern have remained the same as their jobs are typically very high-exposure.

Uncertainty

While some public school systems have chosen to be fully virtual for the foreseeable future, many have attempted in-person learning during the pandemic. However, due to rising and falling numbers of COVID-19 cases, many of these "in-person" schools are fluctuating back and forth between in-person and online learning (Brody & Koh, 2020). According to the Wall Street Journal, this decision to close or reopen a school depends on the local coronavirus test positivity rate, a percentage decided upon by the school system and public health department. This percentage seems to be subjective, and varies depending on the area of the country. For New York, schools shut down at 3% positivity rate. For Indianapolis, schools shut down at 13% (Brody & Koh, 2020). This fluctuation from open to closed is something that many teachers get minimal warning about, creating a heavy sense of uncertainty with their organization and in their day-to-day lives. While the job of a teacher comes with an inherent sense of uncertainty, there is a large chance that the addition of shifting modality could have a detrimental effect on teacher performance (Twyford & le Fevre, 2019).

A frequently changing workplace can result in high amounts of uncertainty for employees, with that uncertainty leading to feelings of being worn out and psychological exhaustion (Haenisch, 2012). For teachers who like to plan lessons far in advance, the uncertainty of teaching during the COVID-19 pandemic has had an even worse effect on the wellbeing of teachers, increasing stress and anxiety (MacIntyre et al., 2020). While some may argue that a sense of uncertainty in teaching allows for teachers to become more fluid, aware,

and open to change in their lesson planning, these ideas are more typically associated with more minor levels of uncertainty, not larger, week-to-week, environmental uncertainties.

Uncertainty reduction theory (URT) states that when individuals experience uncertainty, they are motivated to seek additional information in an attempt to reduce this uncertainty (Kramer, 1994, 1999). For teachers, this most likely will be found in the communicative actions toward fellow teachers and management (i.e. principals, the school board). However, these communicative actions do not always result in reduced uncertainty, the information gained through communication may actually result in further uncertainty (Bordia et al., 2004). While URT is primarily known as an interpersonal communication theory, there is research to support it within an organizational context as well (Benedict, 2020; Kramer, 1994, 1999). Kramer (1994) states that "organizational scholars have typically conceptualized uncertainty in organizational settings as negative and the reduction of uncertainty as positive, both at the organizational and individual level" (p. 385). This helps to place uncertainty within job demands and resources, with uncertainty acting as a job demand, and the reduction of uncertainty (through communication) acting as a job resource. URT is a concept that helps to combat uncertainty in organizations, and I believe should have an effect on the performance of public school teachers.

Within the context of teaching, clear communication with leaders at school helps to reduce feelings of risk and uncertainty for teachers. According to Twyford & le Fevre (2019), leaders who provide support, respect, trust, and empathy had the largest effect on reduced uncertainty among teachers. Helsing (2007) supported the communicative aspect of reducing teacher uncertainty, stating that "teachers who share their ideas, who unabashedly offer and solicit advice and assistance, and who interact substantively with a great number of colleagues" minimize their uncertainty (p. 1327).

While other studies have found that participation in decision making (PDM) has positive effects on feelings of control and reduced psychological strain, I suggest that it will be unlikely that this kind of leadership will be utilized by public school systems (Bordia et al., 2004). PDM is defined as a communicative activity in which "influence or decision-making is shared between superiors and their subordinates" (Bordia et al., 2004, p. 514). As stated above, school closures are determined by the school system and the public health department, and polling individual teachers to determine whether or not the school district stays in-person or not is simply not a feasible option.

Leadership communication, burnout, motivation, and PSM are all extremely applicable to the everyday productivity of public school teachers, while the additional study of uncertainty, working from home, and organizational communication will help to determine exactly how the COVID-19 pandemic has affected the work of public school teachers. Based on the cited research above, I expected these same topics to be utilized as resources by teachers attempting to remain productive and combat uncertainty. From the above literature review, I developed two primary research questions. Because one of the primary objectives of this study was devoted towards determining how productivity has been affected by the pandemic, my first research question is centered around finding more information around public school teacher productivity. My second research question focuses more on the specific resources that teachers have available to them during the pandemic. I believe many resources stated in the literature review will be present as resources utilized by teachers during COVID-19.

Research Questions

RQ1: How has public school teachers' productivity changed during the COVID-19 pandemic?

RQ2: What resources have public school teachers drawn on during the pandemic to remain productive and deal with uncertainty?

Chapter 3 (Methodology)

I utilized a qualitative methods approach to gathering data for this study. I performed twenty respondent interviews with public school teachers to get in-depth information on the changing demands and resources of school work during a pandemic.

These interviews allowed me to gain a better understanding of the experiences and perspectives of public school teachers as they attempt to work while in a pandemic. Qualitative interviewing allows for the researcher to gain further insight into the lived experiences of subjects and get further perspectives on a particular phenomenon (Lindlof & Taylor, 2010). This approach was appropriate to my study, as I sought to understand the lived experience of teachers during the pandemic, as well as better learn their perspectives as members of public institutions. While interviewing a select group of participants may not be generalizable like quantitative data collection is, interviews allowed me to receive in-depth responses, stories, and elaboration upon participant's answers to fully grasp the lived experiences of the participants. Qualitative interviewing is the best choice for gathering this data as it allows for the interviewer to hear the stories and accounts surrounding the participants' COVID-19 and work experiences. These experiences may revolve around personal, private stories, in which a focus group may reduce the likelihood of these experiences being shared. Lindlof & Taylor (2010) describe the qualitative interview as "a storytelling zone par excellence. It is an opportunity for people to tell their stories as they see fit and, in so doing, to achieve some coherence in shaping their own understandings" (p. 174). A qualitative interview is the optimal environment that allows for teachers to tell their stories as they see fit.

The study was initially submitted for approval from the Auburn Institutional Review Board on January 21st of 2021. The approval process included one round of necessary revisions

26

which primarily consisted of minor clerical adjustments. Auburn University IRB approved the study on January 28th of 2021 as exempt under federal regulation. The recruitment and interview process began shortly after.

This study utilized convenience and snowball sampling to find willing interview participants. I have a list of personal connections that I first reached out to and schedule meetings at times that accommodate their schedules. I then asked if those individuals had anyone else they think I should talk to in an effort to find additional participants. From that point I shared an information letter as well as a recruitment letter with the potential participants, and arranged a time to conduct the interview. The information letter and recruitment letter I used can be found in Appendices C and D.

The interview process was conducted completely online over the videoconferencing service Zoom. This was simultaneously due to many teachers being located in various cities all over the United States, and also due to face-to-face communication being limited by COVID-19 guidelines. The interview guide I used can be found in Appendix A. The length of interviews ranged from 30 minutes to one hour, with the average length being around 40 minutes. The study consisted of 20 interviews with public school teachers from all over the country. A majority of teachers were located in the Midwest (Indiana, Illinois, and Ohio), however there were also teachers located in Maryland, Idaho, and Texas. Eleven the participants taught high school, while four taught middle school, and three taught in the elementary school. One participant from a smaller, rural town stated that she taught at all three public school levels. Eleven participants reported teaching core curriculum classes (e.g., English, History, Math), while nine participants reported teaching an arts class (Band or Art). Eleven of the participants were female, while nine of the participants were male. All participants were Caucasian.

Demographic Information

Participant	Gender	Age	Race	Subject	School Level
1	Male	23	White	Core Curriculum	High
2	Male	24	White	Core Curriculum	High
3	Female	24	White	Core Curriculum	Elementary
4	Female	31	White	Arts	Elementary, Middle, and High
5	Female	23	White	Core Curriculum	Middle
6	Male	25	White	Arts	High
7	Female	25	White	Core Curriculum	High
8	Female	23	White	Core Curriculum	High
9	Female	55	White	Core Curriculum	Middle
10	Female	52	White	Core Curriculum	Elementary
11	Female	60	White	Core Curriculum	Middle
12	Male	45	White	Core Curriculum	High
13	Male	26	White	Arts	High
14	Male	23	White	Arts	High
15	Male	23	White	Arts	High
16	Female	47	White	Core Curriculum	High
17	Female	23	White	Arts	Elementary
18	Female	25	White	Arts	High
19	Male	32	White	Arts	High
20	Male	28	White	Arts	High

I conducted interviews until I reached a saturation point, or until the interviews reveal no new relevant themes or categories (Saunders et al., 2018). As is customary with respondent interviews, the questions from person to person were not exactly the same, however the structure

followed a similar order to allow for comparison of responses across the sample (Atkinson, 2017). Interviews were recorded and transcribed for analysis purposes.

This study used respondent interviews, as they attempt "to determine what influenced a person to form an opinion or to act in a certain way" as well as "to understand the interpretations that people attribute to their motivations to act" (Lindlof & Taylor, 2010, p. 179). I asked questions that were straightforward, neutral, and primarily open-ended, which allowed for participants to best provide their opinions and lived experiences around working for a school during the pandemic. I used a combination of nondirective questions (to get an idea of their job, organizational communication, and WFH environment) and directive questions (productivity, motivation, and burnout) to find answers to my research questions listed above.

Once the interviews and transcriptions were completed, I performed qualitative analysis on the transcriptions. I used grounded theory analysis when analyzing the interviews. Existing research on job demands-resources theory already states that PSM, burnout, and elements of working from home are factors that affect employee performance (Bakker & de Vries, 2020; Bauwens et al., 2020; Bloom et al., 2015; Boren, 2014; Mussagulova, 2020). This study is hoping to expand upon past theory research and see how employee productivity is affected during a pandemic, incorporating leadership communication and internal communication. To conduct this analysis, I performed open coding, axial coding, and selective coding throughout the process. Open coding refers to when a researcher creates thematic categories from question responses, axial coding is when the researcher then establishes relationships between these categories, and selective coding is when the researcher establishes relationships between the central concepts of each category (Atkinson, 2017). I performed all three of these methods as part of my grounded theory analysis, and the codebook I created can be found in Appendix B.

Chapter 4 (Findings)

One of the most interesting aspects of this study was how PSM permeated the interviews. PSM was repeatedly mentioned by participants as a resource that helped them, a demand that hindered productivity, a coping method for feelings of burnout, and the biggest advantage of working in-person over online. Additionally, PSM was discussed as a desirable trait in district-wide policy. Communication also appeared as a highly influential factor in this study, acting as the most used method of coping with burnout, as well as being one of the most desired features in internal support from teachers' school systems. This results section is organized based on the major themes that appeared after coding and analysis of the interviews, beginning with an overview of the many issues reported with working over the internet, followed by the resources and demands that effect teacher productivity, the causes of teacher burnout and their methods of coping, the effect of quality organizational support on teachers, the effects of transformational leadership on teacher performance, and finally teachers' reported methods of coping with organizational uncertainty.

Working Online

One of the major findings of this study was that teaching over the internet was not ideal for teachers. While every teacher interviewed managed to state some positives of working online, these tended to be more surface level and oriented towards physical convenience, such as "I enjoyed not having a commute," or "I liked being able to work in pajama pants all day." However, conducting work virtually was overall viewed as a negative by every teacher interviewed, with reported disadvantages including a lack of PSM, lower levels of communication with co-workers, lower motivation levels, and lower productivity levels.

One extremely prevalent issue with working over the internet is the lack of communication that teachers have with their students. This lack of interaction led to a lack of PSM, with many teachers saying that they struggled to connect with their students, and as a result they are also struggling to find the driving factor behind why they love their job. Ron, a high school U.S. history teacher, summarizes the feeling well:

> There's been a lot of times where I have like laid in bed, like 'I can't, I can't do it anymore I'm getting really burnt out.' Just because it's not what I want to do. Because another part of like why I wanted to be a teacher is that I genuinely enjoy just working with students and there is something really rewarding in seeing a person *Ron gestures above his head with his hands, making a bursting motion* like the light bulb pop like you can see it in their eyes, like they just learned something. That's really rewarding. And so, when you are working on a zoom where, if you put this in [the transcript] or not, but when you see a kid like this, all day. *Ron tilts his camera angle up until the view is only of his eyes and upward* This is the best you're going to get. Then it is definitely very hard to just go day by day, and it makes you… there's definitely many times, especially when it was the first semester, I'd say, 'well, what's the point of this?' Like, I'm not doing anything. I'm not, I'm not teaching. I am speaking at a screen of people on mute.

Ron states that the modality of his job is not only causing him feelings of burnout, but also is not satisfying his urge to help his students get better. Ron discusses the "light bulb moment," or the moment when instruction takes full effect on a student and they successfully learn something. This moment is something that is often cited by teachers as one of the driving factors behind why they chose to be teachers, and teachers who work from home, like Ron, stated that did not get to experience that feeling nearly as often when conducting their work

virtually. Whether or not students were actually experiencing those moments, not being in person to witness them happen has left a hole in Ron's job where PSM should be.

Teachers who worked solely online stated that they either struggled with their PSM, or simply could not find the drive behind helping their students at all while virtual. One teacher even stated that the past year of working from home had him seriously considering running for public office, partially because he wasn't satisfying his need to help others and his students while working from home:

> I definitely feel a need or a gap in my teaching, or like, what I would get out of my job. Because, like, I am not there performing with the kids, so I have talked a lot about with my friends about eventually possibly running for office. It's like… I still feel the need to serve, and I'm not getting that need out of my job right now. I don't know if it's going to shift now that we're back in school.

Mike, who has been a high school band teacher for eight years, has had PSM as a driving force behind his work for so long that he feels a desire to serve his community further by running for office. He states that the modality of his job has left a gap in his teaching that PSM would normally fill.

Another consistent theme related to working online was a lack of communication with coworkers. Every teacher interviewed stated that they communicated less with their fellow teachers when working over the internet. This was for a very simple and consistent reason: it is easier to communicate with coworkers when you are physically in the same location as them. Sarah, who just started a new teaching job this year, stated that working from home as well as COVID-19 protocols have prevented her from communicating with any of her fellow staff members outside of large online meetings.

It's just hard to work with people, I see them on Google meets, you know, 70 staff members, but I've really never seen any of them in person. So that's been a little bit of a struggle too. So it's, everything's totally virtual. There's nothing, you're not even really allowed, supposed to be in the school. Unless, you know, if you if you have to run in and get something you have to like sign in, sign out, you're not allowed to talk to anybody, wear a mask, all that good stuff.

For teachers who exclusively worked online all year, many of them have not been able to experience the small joys of casual, one-on-one conversation with their coworkers, and for Sarah, a teacher who is just beginning a new teaching job, she has the added stress of not really knowing her fellow teachers at all. For teachers who shifted modalities, when asked which modality they most frequently communicated with their fellow teachers in, every teacher stated the modality that they were in person the most in. For instance, Alex, whose school alternated between virtual, hybrid, and in-person, stated that communicating was much easier while in-person.

I would say it's easier to communicate in person, just because we're across the hall from each other, and we can continually rely on each other for the small conversations, whereas virtual it has to be a little more planned out so it doesn't… the communication isn't as often. But I would definitely say it's easier in person, more effective in person.

Alex says that working online not only eliminates the chances of small, casual conversation, but also adds an extra hurdle of having to plan for conversation. Like most professions, teachers do not plan for casual conversation, which tends to limit the amount of "chit chat" when working over the internet.

34

A final consistent theme among teachers who worked virtually is their motivation levels. For teachers who worked in multiple modalities, when asked which modality they felt the most motivated in, almost all of the teachers interviewed stated that their motivation increased when working in-person. Stephen discusses his reasoning why:

> I'm much more motivated in person. And a lot of that reason is because of the nature, of you know, how our class operates, where you just really can't do anything at home. I remember the first time we came back into the hybrid situation, just getting to see the kids face to face and, and hearing them play their instruments was just like such a special moment.

Stephen, a band teacher, does not feel as motivated to do his job when working online, because the modality prohibits his students from doing what the class is there to do—make music. Stephen has extra motivation when he is directly interacting with his students and watching them succeed. Unsurprisingly, it seems that PSM is working as a driving factor behind teachers' motivation, and conducting work virtually seems to get in the way of that feeling. April, a middle school history teacher, reiterates this feeling.

> Online I had no motivation. I was putting in minimal effort, just googling like… 'Worksheet for the war of 1812' on Google and just posting it because I was like, 'they're not going to do it anyway, and they're going to hate it, so what does it matter?' So being back in person, I feel a lot more motivated to give them actual beneficial stuff that like I made or I found and whatever. So, motivation levels are drastically different.

Again, we see that working from home and her not getting to see her kids utilize the material she is providing drastically lowers her motivation levels. Just a few moments later, she laughingly summarized her online experience in one sentence: "I have no motivation, students

have no motivation, no one cares, it's whatever." Similar to the sentiment of "I have a productive day when my kids have a productive day," it seems that teachers have lowered motivation when their students don't feel motivated, and this theme was commonly associated with working virtually. Throughout the rest of the results section working online will continue to be mentioned as it has changed almost every aspect of teachers' day-to-day lives.

Productivity

This study found that PSM, communication with students, and good work-life balance were often cited as productivity boosters, while PSM, working from home, and job uncertainty tended to act as job demands, hurting the productivity of teachers. When asked what contributes to a productive day during the pandemic, a majority of participants responded with some iteration of "I have a productive day when my students have a productive day." This can easily be interpreted as a form of PSM, as these teachers perceive the successes of their students as a marker for their own success. John, a high school chemistry and biology teacher, expresses this drive to help others:

> So days like that, where the kids come in and are excited learn, ready to go and ready to jump into stuff are the good days. And if I'm able to turn it around and help them feel productive, it translates to me feeling productive.

In this quote, John shows how his students' productivity makes him feel productive. In terms of PSM, the quote shows that a primary driving factor for John is the performance of his students, and if he can help them to successfully achieve their goals for the day, he feels as though his day has been productive.

In addition to PSM, multiple teachers reported higher levels of productivity when they could more frequently communicate and actually interact with students. When asked about her

productivity during the pandemic, Ashley told a story of a productive day in which she did not actually teach a lot but managed to have successful conversations with her students and connect with them.

> Even though we were completely off topic in terms of what I wanted to do for the poetry unit it did feel like a really productive day because we actually got to talk to each other and check in with each other and understand how the students were feeling a bit more.

Especially for teachers who have spent the past year teaching completely over the internet, quality communication has worked as a resource to bolster feelings of productivity in teachers. This can also be considered an extension off of PSM, due to the fact that many teachers are communicating with their students not to simply inform them of whatever subject they are teaching, but to connect and learn more about the emotional well-being of their students in a time of unprecedented crisis. For teachers who had worked in multiple modalities, when asked the question, "Which modality are you the most productive in?" all participants responded with the modality in which they were in-person and communicating directly with students.

Another reported productivity booster is teachers' ability to separate work and life. According to some teachers, the sign of a highly productive week consists of not having to do their work on the weekends.

> A productive day would also be from totally a teacher's, teacher's point of view of getting my work done. It's that… maybe I'm able to do something to help set up my following week. You know, I always try to be one week ahead of in my planning, so I don't have to spend all day Saturday and Sunday doing it. So a productive day would be if I can... you know, knock out little things every day to help me get ready for the next week, so I don't have to do it all day Sunday or all day Saturday.

This sentiment is shared by many teachers. As many teachers see sacrificing personal time as a part of the job, not having to do work during personal time is viewed as being above the average and a highly productive week. This sentiment is reflected when Josh, a high school biology and chemistry teacher, gave a testimony about his productivity when physically in school:

> I know I've had a good productive day when I don't do any work during my lunch break. That is a sign that I have done my work… if I don't have to do anything during lunch and I can just eat, then I know I've done well, like I've done a good job. If I am frantically trying to do something for the next two classes, I know I messed up.

Again, this idea of positive productivity having no negative effect on work-life balance is extremely prevalent, as Josh makes it clear that "frantically" accomplishing a task during his personal time tends to happen more often than not. It is clear that teachers view work-life balance to be a rare gift, rather than something that comes naturally with the job. While PSM, communication with students, and work-life balance were associated with high productivity, there were consistently stated job demands that were reported to negatively impact teacher's productivity. These included PSM, working from home, and job uncertainty.

In addition to PSM being a driving factor behind the productivity of teachers, it is important to note that it was perceived the inverse way as well. Mike reports that many of his fellow teachers who had difficulty seeing their influence and drive to help others were struggling with their productivity when working online:

> I think the teachers prior to the pandemic who you knew were like, the rock star teachers in the school... Like you just hear kids talk of like, their favorite English teacher, or the social studies teacher, like, 'this was really cool even though it was a lot of work.' I think

38

those teachers are the ones that figured it out and know how to make it work as best as possible over Zoom and are finding the joy in it. I think the teachers prior to the pandemic, who would complain about a lot of stuff or just had a hard time seeing like the philosophy or the vision of school are the ones who are just really struggling right now.

Mike states that the teachers who have that drive to help others and make sure their students get the most out of their time in school are succeeding and "making it work" while teaching online, and those who do not have the philosophy of student success are struggling with their own productivity and performance. So while PSM was reported multiple times as a driving factor behind a productive day, those who do not have PSM seem to be struggling extra because they don't have that resource to call upon in times of difficulty.

However, for teachers who draw upon PSM for when they have a productive day, they state that their students' performance can also negatively affect their feelings of productivity. Andrew, a band teacher, explains that if his students do not have a good day, he finds himself feeling less productive than he would if they had had a good day:

It feels really productive when the rehearsal went well. Like I could, I could get all those to do list items done, I could respond to every email and feel great otherwise, but if the rehearsal is shit, then like, I won't feel as productive as I could have been.

According to Andrew, even if the day is productive in a traditional sense of completing tasks on a list, if his students do not perform well, his feelings of PSM prevent him from feeling as though his day was truly the most productive it could be. This sentiment of the lack of student productivity affecting teachers' feelings of productivity is shared by Sarah, an elementary school teacher.

39

A lot of days you feel unproductive in the sense that you might be writing a paper and then you find that 50% of the kids didn't do it. You know, and so, then you have to go back in, pull them into small groups to try to help them.

Sarah's feelings of unproductivity seem to stem not only from the inconvenience and frustration of having to make her students make up previously assigned work, but also from her belief that she wants to help these kids to succeed and do well in school.

As mentioned earlier, when teachers were asked which modality they were most productive in, all responded with the format that included in-person, face-to-face learning. So it comes as no surprise that participants often said that working from home was a major detractor from productivity. Alex, a high school band teacher, states that when he worked online, it was difficult for him to find the markers of what a productive day looked like when he was working online, versus in-person.

I feel like for me, being in person I just I have much more of a defined idea about what I need to accomplish on a day-to-day basis, and I know where students are on a day to day basis. Whereas it's, it's much more of a question mark with virtual teaching.

This quote again draws back to PSM and personal productivity being dependent on the successes of students. Working online restricted Alex's abilities to check in on his students and make sure they were accomplishing their work, which in turn made him feel less productive while working over the internet.

The final job demand that was mentioned consistently is job uncertainty. In addition to day-to-day issues that come with being a teacher, this year many teachers had to deal with shifting schedules and modalities due to district policy and state safety guidelines. This job uncertainty was frequently cited as having a negative effect on the productivity of teachers. For

instance, Leah, a high school mentorship and journalism teacher, states that the uncertainty of not knowing whether students were going to be online or in-person prevented her from doing her job before classes started in August.

> So, I couldn't do my job. I couldn't do my job over the summer for all of those reasons, and then the semester turned around in three days, I got 30 new interns on February one, with no time… it usually takes me all summer to do that, so I was really, the expectation was that I do a job that takes me five months in the summertime in about three days, and I didn't get it done. I, of course, I didn't get it done.

When Leah did get the news about her school's modality, it was too late for her to get all of her work done on time. Uncertainty was frequently cited as a cause of a loss of productivity, and this is often because teachers do not have the time to plan for all possible modalities that their school could potentially be in. When it comes to the productivity of teachers during the pandemic, PSM, communication with students, and good work-life balance were consistent themes that helped teachers remain productive, while PSM, working from home, and job uncertainty were cited as hurting the productivity of teachers.

Burnout

Every teacher interviewed stated that they felt burnout to some degree throughout the year, with many of the teachers stating that they were either currently in a state of burnout or had felt burnt out within the past week. Teachers experiencing burnout most commonly associated aspects of working online with their feelings of burnout, followed by feelings of uncertainty and lack of support from their organization or community.

Working from home, and through it, PSM, was a driving factor behind why many teachers stated that they felt burnt out. Amanda, a band teacher, discusses her experiences with burnout over the past year of working online and in hybrid format.

It's definitely more prevalent, because, especially because, you know, you can only reach the students through the screen, at least some of them. I feel like for the in-person kids, they're doing great, they're there with us, they're with their friends. So they're getting those connections a little bit better and we're making music, that's good. For all the students that I don't get to see in person, I feel like I have to work like, three times as hard to try to like just show them how much I do care, even though I may have never met them in person before. It's like, 'I do care, and I want you to come to the high school and I want you to come to band, I want you to be in class next year.' And… and sometimes you're looking at a black screen when that's happening, and then you can't do anything about it, and then you feel like you've done everything for a kid and then they still quit because no one knows why and it's like, it's just… it's really defeating.

Amanda states that her passion for teaching has been heavily affected by teaching over the internet, and because of that modality she has to work extra hard to connect with her students, and that sometimes it is still not effective in getting her students to stick with her band classes. Amanda's PSM is shown through her wanting to be able to help her students to succeed, get better at their instruments, and continue to be in her classes. However, she believes that not being physically in the classroom is hurting her ability to help her students. Working from home has contributed to burnout for Amanda, both pushing her to work harder and straining the PSM that drives her.

Another recurring theme throughout the interviews was burnout caused by uncertainty. Sarah talks about her district's sudden shift to hybrid classes, and the effect it had on her:

We're starting hybrid in a week, and I have nothing. I don't know how it's going to work. I don't know… you know, I just got a list yesterday of the kids that are even coming back, I don't really have a total schedule, the parents haven't been told anything, so I and… that's just stressful. We're all burnt out.

Part of Sarah's feelings of burnout come from the stress and uncertainty of working during the pandemic with a shifting schedule that, as she said, no one really knows anything about. While uncertainty was not as commonly cited as working from home as a cause of burnout, it was a recurring theme shared by multiple teachers. The last consistent theme of causes of burnout comes from feelings of nonsupport from teachers' organization or community.

As we will see in the section on organizational support, an organization's ability to effectively communicate and support its members provides important benefits for their mental health and overall performance. However, lack of organizational support can work in the opposite way as well. Another one of the causes of burnout that teachers consistently mentioned was not feeling supported by their organization. Leah states that she consistently felt burnt out after meeting with district faculty, because they did not address the concerns that she and her fellow teachers believed needed to be addressed.

I am burned out after faculty meetings… Because they are about details that make us scratch our heads and go, 'but there's this really big elephant in the room over here that nobody wants to talk about, and you are sending us 1000 pages of maps of my school building, about which direction to walk in the hallway, and that just doesn't seem to be like a thing that we need to focus on.'

Lack of support from Leah's district leads her to feel burnt out. While good organizational support is excellent for teacher morale and coping with the pandemic, it is a double-edged sword. Poor organizational support can quickly lead to feelings of mental and physical exhaustion. Lack of support is also seen in some instances through actions and communication from the community. In a time where many teachers are being treated poorly due to working online, several participants discuss how a hostile community leads to burnout. Nancy, a teacher who took a leave of absence her second semester due to the pandemic, talks about the stress and feelings of exhaustion that teachers get from a community that does not like teachers.

> Well the frustration right now, as you see online, everyone's you know, nailing teachers on just not wanting to work. It's so frustrating. Now I know I am not one of those because we're not fully remote, and I understand all the pieces of that, like some people are really frustrated with that. But to say that they don't want to work, or not working… they're working way harder than they've ever worked before and I don't think people get that. And they're not sleeping at night, and they're trying to find different ways to do things, and some of those incredible teachers are not tech savvy… you know we lose teachers all the time, the stress is insane, even though people don't think so, and this is kind of, I really worry what it's going to do to our profession. I truly do. Some of the things people say.

Nancy has heard such terrible things about teachers online, that she questions the effect that it is going to have on the future of her profession. The stress of her job has not been alleviated by her community, but instead been increased. Burnout was a prevalent theme throughout the interviews, and while many teachers associated different things with their feelings of burnout, working from home, uncertainty, and lack of support were the three most prominent

and consistently cited causes. Luckily, every teacher interviewed had at least one coping strategy to help mitigate those feelings.

Coping with Burnout

Common methods of coping with burnout stated by teachers fell into three overall categories: PSM, communication, and dissociation. While it may have not been exclusively the only method for coping with burnout, PSM was reported to be drawn upon by a majority of the participants involved in order to cope with feelings of mental or physical exhaustion as a result of working during the pandemic. For example, Stephen, a high school band teacher, states,

> For the longest time, you know, this, this has been really hard on everybody, and there were there were moments I will admit that I felt, you know, 'is this what I want to do?' Like, if we're like this next year, is this something that I want to keep doing? But you know I keep reminding myself about like, 'well, I'm in this for the kids, you know, I want to give them…' The reason I do this is to create an enriching musical experience for the students. And getting to nurture their musical growth is why I do this.

Stephen draws on his drive to help others and create a positive environment for his students in order to get past the days where he feels as though he can't keep going. Using PSM as a way of coping with burnout is also shown when Emily, another band teacher, cites her students succeeding as a way of helping to mitigate the exhaustion.

> And, but like, this whole week, like today I had a really good lesson after school with a student who actually practiced, and like, you could tell he had worked on his stuff. And we came in and during seventh period, all of my students, and I only have 14 of them, but like, all of my students can improvise four measures using 16th note rhythms and off beats like…I don't know. See, seeing things like that helps.

When asked about her methods of coping with burnout, Emily's first response was to cite her own students' successes. Seeing her teaching be successful and watching her students develop is a prime example of her utilizing PSM to cope. However, PSM was not exclusively utilized as a method of coping with burnout. The other two highly prominent methods of coping included communication with others and dissociation from the job.

Almost all of the teachers interviewed stated that they communicate with others in order to feel less burnt out. This "communication as coping" appeared in two primary forms: either teachers communicate to commiserate and relive stress, or they communicate with others in an effort to receive support or solve issues they are experiencing in school. Almost all of the teachers reported using one or both forms of communication as coping. An example of commiseration can be found in an interview with Ron who, when asked about coping with burnout, states that his entire team commiserates with each other on a weekly basis.

> The entire U.S. history team, we plan a lot of stuff together and we meet probably about at the most, like once a week… and we will talk about, like, how bogus this is. Oh my God, like they're, like the first 15 minutes are venting. 'Oh my gosh I can't believe my students did this, can you believe my student did this stupid thing or said this dumb thing that they're doing this… continuing to do this dumb thing?' 'Oh, my gosh you believe the superintendent or the principal said this?' 'Oh, my gosh, when are we going to get that fax?' like, we… it is a gripe and moan session.

The other form of communication as coping for burnout is communicating to support other teachers, or to offer advice and solve problems. When asked about coping with burnout, Stephen stated that having experienced coworkers that he can openly communicate with is instrumental in helping to handle the issues that cause him burnout.

My co-teacher has taught for like 16 years or so, and then the orchestra teacher, who was actually my mentor teacher for the resident educator program that we have in our state, she's taught for many, many, many years and, like she's close to retirement now. But so, having their wisdom is always great to be able to listen to what they have to say. If there's a problem I've had, there's 99, or 99.99% chance that they've experienced the same thing at some point in their careers and they can offer advice for me and just let me know how they handled that and that sort of thing.

As one can see, having experienced teachers nearby that Stephen is comfortable to talk to about his problems has been instrumental in helping Stephen to lessen his feelings of burnout.

The final way that teachers coped with burnout was through dissociation from the job. This is when a teacher experiencing burnout attempts to mitigate the feeling by separating themselves from the job entirely for short periods of time. This strategy can be found in many different ways, like watching television or going on long walks. Multiple teachers explicitly stated that they exercised as a form of coping with feelings of burnout, although that is a form of disassociating from their jobs as well, as those who exercise cited "getting their mind off work" as a primary motivator. Dissociation as coping can be found in a simple evening activity, like Stephen suggests, or in a longer attempt at avoidance, like Ashley's attempt.

Stephen: Just find something to do to just get my mind off of everything. So it might be like, gaming, or practicing or something. Just, just something where I cannot think about teaching and just let my mind kind of reset on, or just going to bed. *laughs* Any of those options helps just to kind of recharge, and go back at the next day, like 'all right let's see what we can fix and let's see what we can make better for today.'

Ashley: I sort of took the weekend and I thought, 'okay, if a student sends me an email, obviously I'm not going to ignore them, but I truly didn't do any other grading or planning that weekend.' I was like, 'I kind of know what I want to do on Monday, and I will just figure out that week on Monday.' So sometimes it's taking a couple of days off is really nice.

Teachers often struggle with managing work-life balance during a normal year, and it is especially clear this year that many teachers feel as though they are constantly working. This simple method of completely disassociating from work has been found to be very successful in helping teachers cope with burnout. PSM, communication, and dissociation were the three most prominent and consistent methods of coping with burnout found throughout the interviews. All of the teachers who claim to use one or all of these methods of coping have stated that they are largely beneficial and help them to get through days and even weeks of mental/physical exhaustion from work.

Organizational Support

One topic that was discussed in the interviews was about communication and support from participants' broader organization (e.g., school district or system). The perceived support from these organizations varied. Multiple teachers believed that their school district was clearly and effectively communicating with them and supporting them, while others had nothing but negative things to say about their organization. For those who had a positive outlook on their organization's performance during the pandemic, they stressed clear, timely, two-way communication, as well as supportive actions that they believe actually benefit them. Overall, teachers with organizations that offered positive organizational support were managing the negatives of the pandemic well, while those who were not experiencing organizational support

seemed to be experiencing more difficulty. Teachers who experienced quality organizational support had reduced uncertainty and increased support in the organization. Those who did not experience organizational support reported higher uncertainty, frustration, burnout, and overall loss of faith in the organization. John summarizes the two-way communication and support his district offers by telling about when they were considering starting the school year in hybrid format:

> I really think from top to bottom, I think our… from the superintendent of the school board all the way down to my direct administrators, they're very concerned with supporting us, supporting the kids. When we were getting ready to start school, I was actually at the school board meeting where they decided to go all virtual for four weeks, our city was looking worse and worse in terms of COVID numbers and that absolutely continued. And we were not sure what the effects of putting a bunch of kids in the school together were going to be. And there were many teachers that showed up to this… And they had spent an hour working on that plan before the meeting even started, and then when the school meeting started, there were, I think… I think it was an hour and 43 minutes of public comment. It's kind of hard to deny that much, but they quite quickly said, 'hey, we hear you and we're going to start the year virtual until Labor Day, because there's obviously way too much concern about going back in with the kids right now.'

John has high opinions of his organization because he saw firsthand the clear, two-way communication the organization took with its members in order to remain effective and productively support its teachers. This appreciation for clear, consistent communication and effective support is shown again in Becca's glowing praise of her district's response to the pandemic.

So we've had really consistent communication with our superintendent throughout the whole thing, she emailed everybody every week and she's very easy to reach. We have… we've gotten a lot of support in like, COVID, COVID like, precaution things? We got, recently they gave us like, COVID home test kits, and they started doing testing at the schools, and they have been really helpful in helping us get like, the COVID vaccines and stuff like that. And they've been offering a lot of, like, coaching support on like, new technology and new curriculum. We have a few district level admin who are specifically… like their job is to coach teachers in technology or curriculum, or what have you.

Becca's district offered resources to its teachers that would not only help them to remain productive during the pandemic, but also offered resources that would help to ease their workplace uncertainty and maintain their physical health as well. Offering effective and valuable resources is paramount to keeping teachers effective and making sure that they remain supportive of the organization. However, while a lot of teachers felt well supported, there were also multiple instances of teachers who felts as though their district was not supporting them during the pandemic. A consistent issue brought up by these teachers was non-effective, performative support from the district due to the organization not appropriately listening to what teachers say that they need. This lack of support was found to make teachers' jobs more difficult to do, and was reported to add to uncertainty, frustration, feelings of burnout, and overall loss of faith in the organization.

Ron discusses his district's performative actions when talking about whether or not he feels supported by them:

50

[The district] feels very performative, they say stuff like, 'we care about you, you are our superheroes.' Yeah and then you… you change the dialogue and you force us all to go back quicker than we thought we would be, it's just like, 'oh we're going back in the building? okay cool.' Like, that to me is not support. You can, you can be smiling, happy and say we're great as much as you want, but that isn't supportive… I don't want to say it's a bad district, I think they're nice people, it's just in like… it is all student centered, which is always the end goal, but it's weird because now it's like, I'm a teacher, I don't want to die of COVID.

In Ron's summary of his district, he states that PSM is a good driver of organizational actions, but also that it should not be the exclusive input. He stresses that while it is important that the system be dedicated toward students, not listening to the voices of teachers and going back on previously set rules and regulations has added extra uncertainty to his job, and has resulted in him losing faith in his organization. This sentiment is seen again in my interview with Sarah, who spent a full year working from home.

I feel like they talk the talk, but they don't walk the walk. So they talk a good game that they're all about teachers' mental health, 'you need to do something for yourself, take care of yourself.' But yet they keep on piling on our responsibilities.

Again, this idea of "performative support" is extremely prevalent in interviews with teachers who did not believe their district was doing a good job during the pandemic. In Sarah's interview, her district stressed awareness for the mental health of teachers, yet didn't take actions that could help reduce stress or burnout, and instead added more responsibilities to teachers. Leah, another teacher working from home, described her district's "support" as empty words.

51

I would say that the county offices would also say that they have *air quotes* 'supported' us by including professional development on Wednesdays in the form of canvas modules. And my personal take is that they're, they are thousands and thousands and thousands and thousands of words that communicate absolutely nothing.

Leah's interview makes her district's support seem as though they are merely attempting to check off boxes rather than listen and provide the support that teachers actually want and need. Leah states that while there is a high volume of communication from the district, the communication is not two-way, and is not helping her do her job during the pandemic. No teacher interviewed explicitly said that poor organizational communication was an issue prior to the pandemic, but many implied that their organization had had difficulties in the past as well.

This is not to say that teachers who are not receiving clear communication and support from their district are not feeling supported at all. For teachers who do not believe that their district has done a good job, oftentimes these teachers feel very supported by their fellow teachers in their individual building, or in the district's teacher's union. Mike emphasizes the clear divide in his feelings between the building's administration and the district's administration:

I would say that I have felt supported by the building, so the high school. So my assistant principal, principal, um, other administrative staff. I feel like we've been working together to solve things as quickly as possible. The district building, though, because we're a unit district, I would say, most of them, not supported by. I just, I don't hear from them. Like, I know they're in a room making decisions, but there's a lot of decisions that have also been made that, I feel like they can't say anything because of the Union or just… it's not very transparent.

Mike has clear, positive feedback for the leadership in his school building, but that positivity does not extend to the district. This is because, again, the district does not clearly communicate with him or listen to his building's feedback. He seems willing to give his district the benefit of the doubt and state that the teachers' union might be preventing them from communicating everything to the teachers, but that doesn't stop his feelings of frustration. This idea of a clear divide between school building and school district support is reiterated in Josh's interview, who reported experiencing a high level of uncertainty due to his district's communication, but stated that his individual building provides a lot of support:

> Teachers… the people I've worked with, [I've gotten] a whole bunch of support. The administration, like people in the school, we all got our backs. As soon as that goes to the admin office or the superintendent… no one listens to us. Like, we have no say in if it's virtual or if we're comfortable with it being in person, nothing of those sorts, we don't know information until the last minute, so we can't plan anything.

While it is beneficial for teachers to experience some form of support, whether it is from the district or the building, support for coworkers does not act as a perfect supplement for clear communication from the district. While support at the building level is important, the building does not determine the modality of the teachers or their COVID-19 protocols. After analysis of these interviews, it is very clear that teachers who have positive experiences with the district, including clear, two-way communication and beneficial supportive actions, are experiencing less feelings of uncertainty, as well as an overall more positive outlook on their school's position in the pandemic. Teachers who are being left in the dark about policy and feeling unheard and unsupported are (unsurprisingly) experiencing higher levels of uncertainty about the future of

their jobs, as well as added frustration and lack of confidence in their school system. Leah summarizes the experience best.

It's very stressful, I become less productive, I've experienced less confidence in my school system than I ever have before, not that I had a great deal in our leadership to begin with, but… I have really felt like teachers don't matter one solitary bit.

School Leadership

Because I interviewed teachers from all across the country at various schools, there was a wide variety of responses surrounding the leadership of individual schools. Over half of the teachers interviewed stated that their supervisor had elements of transformational leadership (Men, 2014) and many of them further said that their supervisor's leadership makes their job better or easier. However, this statement was not nearly as popular in the inverse. Out of the participants who said that their supervisor's leadership was poor, only two said that it directly made their job harder or worse. So while transformational leadership seemed to work as a job resource, helping teachers combat the difficulties of their job, negative leadership had less of an effect on teachers.

Supervisors with transformational leadership were found to assist in minimizing various negative aspects of the job. For instance, Alex states that his department's leadership frequently includes his team in the decision-making process, especially when new COVID-19 guidelines are suggested.

He has a lot of work to do and really stays on top of it, but he also includes… the rest of the band staff in any other major decisions that happen, especially if there's anything related to COVID and pandemic guidelines. If there's changes, we talk about it as a

group, it isn't just like, 'hey do this, fix this, change that.' It's like, 'okay, this is happening, this is what is changing, what are we going to do about it?'

Alex later cited his leadership's open communication style and desire to hear team input as helpful. He said, "they're pretty open and willing to kind of help me figure things out, which has been helpful, especially this year with the jumping in and all the new roles of being a high school band director and then all this stuff on top of it." His supervisor's transformational leadership has helped make his job easier, especially in times of uncertainty.

Andrew's experiences with transformational leadership show a similar positive effect on his job. His supervisor's ability to delegate tasks and trust in his employees has resulted in a much more positive teaching experience for Andrew.

I've never felt like he has tried to do our jobs for us, I think he has like, pushed us at certain points, and he'll, he'll be the first to say that he's a micromanager at heart, but has been working on not doing that this year. Which is great for us because he, he trusts us. So that, that piece is there. That trust and honesty between the five of us. And it's just very friendly, like I mean I was like, my stomach hurts, because we were just laughing at not even band related stuff today.

While many teachers stated that their supervisor's transformational leadership had a positive effect on their own work experiences, whether through reduction of uncertainty, positive communication and friendly faces, or anything else, teachers who reported negative leadership traits in their bosses tended not to talk about how it hurt their own work. This is an interesting situation, as it seems that transformational leadership consistently acts as a resource for teachers, helping to improve their day to day, but negative leadership qualities do not seem to be nearly as consistent in acting as a job demand. For instance, Mary, a high school German teacher,

discussed her boss's inconsistent temperament, which she states she believes is a sign of poor leadership, but she doesn't ever state that it is something that is negatively affecting her job.

> She has gotten very stressed out periodically throughout the school year, especially when like big things are happening, and, and she would kind of like, *air quotes* 'lose it' a little bit. She would get short, like, short tempered, and would kind of just get really feisty with people. And it was like, 'okay, okay, you need to calm down. It's not as big of a deal as it is.' *laugh*

Among teachers who stated that their bosses had poor leadership skills, only two said that those poor leadership skills made their jobs more difficult to perform. The rest had very similar stories to Mary, who mentioned that their boss had some form of communication or leadership difficulties, but also seemed to brush the situation aside. For instance, Leah mentions that her principal does not interact with her at all. This can be viewed as poor leadership, but it does not seem to bother Leah.

> My immediate supervisor is the principle of the high school. And he checked into my class one time in October and I haven't seen any administrator beyond that. So I would say that I don't, I don't get a whole lot of communication, one on one with my administrators. They send plenty of communication to the whole faculty, but I don't personally interact with my administrators.

So while her direct supervisor is not present in her work, she has been working for so long that she seems dismissive of him. Other teachers, like Mary, laughed off their supervisor's poor leadership skills. So while positive leadership skills are very frequently reported to help improve the work of teachers and reduce the negative aspects of their job, negative leadership traits seem to have a much lighter effect on teachers' performance.

Coping with Uncertainty

Not a lot of teachers had specific strategies that they utilized for coping with feelings of uncertainty in their jobs, but those who did either mentioned communication and clarification as methods to relieve uncertainty, while others mentioned extremely lowered expectations so they can be "prepared for anything." Keith, a high school band director, discusses the uncertainty he felt when he heard that the district was going to be hybrid learning, and how he solved that uncertainty through communication:

> [I asked] like, 'do you want us to like try and run a classroom with kids on the zoom, are we okay to just do asynchronous work?' As you, as you can imagine, running a band over zoom doesn't work whatsoever. But we were lucky enough after checking, getting some clarification, that we're able to do asynchronous work, have kind of an assignment, a listening thing that hopefully wasn't going to bog the kids down too much, but give them some enrichment, kind of upon what we were offering in class for them.

When Keith experienced uncertainty in his office about what teaching was going to look like for him if his district moved into hybrid modality, he solved the issue by reaching out to leadership and asking clarifying questions. With that clarification, Keith was able to problem solve and achieve a successful, productive classroom environment. When done effectively, communication is both a tool to be utilized by the district to reduce uncertainty, as well as a tool to be used by the individual teachers to gain clarification and reduce uncertainty that way. While communication seemed to be the most effective way to fight uncertainty, there was also a consistent theme among teachers of lowered expectations as a way to fight their uncertainty. Becca, an elementary school teacher, summarized this best when she was asked "how do you cope with feelings of uncertainty?"

I just kind of go to work with no expectations. With no plan and no expectations for what's going to happen that day, because I could never ever guess what would happen in a given day. Yeah, if I don't, I'll go crazy. I've tried the other way, and it doesn't work.

In the times of COVID-19, it is clear that raising expectations and attempting to plan ahead is often not effective, so teachers like Becca try their best to remain flexible in order to better adapt to pandemic uncertainties. Josh reflects this sentiment in his interview, with the added stipulation that he plans for the situation that could require the most work, but no expectations about what will happen any given week.

I'm just under the assumption, like, 'alright what's going to require the most work?' I'm like, 'if I go back in person that means it's going to be the fastest pace,' and so I plan for all in person, and if it's hybrid or virtual I just take that one chunk I was going to spend a day on, then we'll spend two or three days on it.

Josh copes with the constant uncertainty of his job by prepping for the worst possible scenario, and then adapting when the modality for the week is decided by the district. While many teachers described using one of these two pathways for coping with uncertainty (communication and lowered expectations), other teachers who were dealing with uncertainty did not offer any solution for coping. Many teachers reported being very vocal about attempting to communicate with district leadership, however (as seen in "organizational support") oftentimes the district did not appear to be listening to their concerns or efforts for clarification. Utilizing communication to cope with uncertainty is only successful if that communication is reciprocated by the entity that has more information and decision making power (the organization).

Overall, PSM and communication were the two most important factors affecting teachers' productivity and overall experiences teaching during the COVID-19 pandemic. PSM appeared as a driving factor to remain productive during the pandemic, as well as a coping method for feelings of burnout and the largest advantage of working in-person over online. Communication was also extremely prevalent, as effective two-way communication with the district was viewed as extremely desirable, direct communication with students was often used as an example of PSM, and communication was the most frequently mentioned source of coping with burnout.

Chapter 5 (Discussion)

In the results I demonstrated how teachers adapted to work during the COVID-19 pandemic. To conclude, I will discuss how these findings answer my research questions as well as their theoretical and practical implications. To begin the discussion section, I examine the results of the study in relation to my two research questions, discussing the multiple job demands and resources revealed to impact the day-to-day work of teachers. From there, I discuss the contributions that these demands and resources offer toward the theoretical background of this study, including PSM, the many resources and demands of teaching within job demands-resources model, as well as uncertainty reduction theory. I will then discuss the practical implications that my results suggest for the field of teaching, and then conclude with the limitations and potential future directions of the research.

In response to RQ1, I found that overall, teacher productivity decreased during the pandemic. This is because the pandemic introduced new, monumental job demands to the everyday work of teachers, including high levels of uncertainty and working from home. While teachers cited many job resources, productivity remained low. This shows that teachers' job resources were not effective enough to fully reduce the new job demands created by the pandemic. In response to RQ2, the job resources utilized by teachers in an attempt to fight feelings of uncertainty and remain productive included PSM, transformational leadership, effective organizational communication, communication with coworkers, and disassociation from the job. These resources were mentioned throughout the interviews, either within the contexts of remaining productive, or combatting the negatives of a job, such as uncertainty or burnout.

Theoretical Implications

The findings of this study reinforce many existing findings in the literature, as well as suggesting new findings that can be further explored through future research. The theoretical implications of this study include the impact of PSM, the fit of the job demands-resources model, expansion upon burnout research, support of uncertainty reduction theory in organizational settings, as well as additional findings surrounding leadership and organizational communication.

First, PSM turned out to be a very unique factor in this study. This study proposed that PSM would act as a job resource, and it primarily did. PSM appeared as one of the drivers behind productivity, one of the most cited ways of coping with burnout, and the primary advantage of working in-person over online. However, PSM did additionally appear as a job demand when teachers were directly asked about productivity. This finding is an interesting addition to PSM theory, as previous research has primarily found PSM to be either a job resource, or a neutral facet of JD-R (Bloom et al., 2015; Li et al., 2020; Mussalgova, 2020). However, within the context of public school teachers, where many of them utilize PSM as a driving factor behind their work, PSM can actually act negatively toward their job if their students are not performing at the level that is expected of them. This placement of PSM as a negative aspect of working is something that should receive more attention and further research.

Mussalgova's (2020) proposed relationship between PSM and communication was supported by this study. Mussalgova (2020) states that as public servants communicate with other members of public organizations and the constituents that they serve, their feelings of PSM will be bolstered. Teachers who worked online tended to struggle with their feelings of PSM due to lack of communication with their students. When a teacher is pushed into online work and has

to take additional steps to connect with students, it is expected that their feelings of PSM would fall, due to lack of communication. Teachers also stated that they communicated significantly less with fellow teachers when working online. This also would limit feelings of PSM, as being cut off from communicating stops the cyclical building of PSM in public servants.

Job demands-resources theory proved to be a valuable asset for structuring and organizing the positive aspects of a job that increase performance and the well-being of employees as well as the negative, detrimental aspects that hurt employee performance. Overall, the core concepts of JD-R were applicable toward this study, as teachers who were experiencing high job demands and reported minimal resources were seemingly less productive and experiencing more burnout. Teachers who had more job resources and fewer demands were more content with their job and were reportedly maintaining their productivity during the pandemic.

Propositions one, two, three, four, and six of JD-R theory were applicable and present in this study. These five propositions state that all characteristics of a job can be classified into demands and resources (proposition 1), having unique effects on the wellbeing of employees (proposition 2). Job resources act as a buffer (proposition 3), and when demands are high, job resources particularly influence motivation and work engagement (proposition 4). Motivation has a positive impact on performance, while strain hurts performance (proposition six) (Bakker & Demerouti, 2018). However, the fifth proposition, which states that personal resources (optimism, self-efficacy) play a similar role to job resources, was less present in this study. This is most likely due to the fact that either personal resources were simply discussed less during interviews, or personal resources were not available for discussion. For instance, optimism was not discussed during the interview process as none of the teachers interviewed were very optimistic. Because of the pandemic, it would not be surprising to find that many teachers are

struggling with feeling optimistic or effective, and therefore would not immediately attribute these personal resources as key in fighting job demands. Proposition five could be something that future studies could look at more in-depth. Overall, the JD-R model was primarily supported in this study and was extremely effective in organizing both communicative and noncommunicative aspects of an organization.

This study also offered additional implications for the study of burnout, and its relationship within the job demand-resources model. Existing research typically places burnout as one of the results of the interactions between job demands and job resources. When job demands outweigh job resources, an individual is more likely to experience feelings of burnout (Cooke et al., 2019; Mussagulova, 2020). With this study, these ideas were fully supported. Demands such as working online, feelings of uncertainty, and lack of support from the organization and community were some of the most prevalent demands associated with burnout, and teachers who did not have enough resources at their disposal to counter those job demands appeared to be suffering more intensely from feelings of burnout.

The three resources that were found to be utilized by teachers to combat burnout are communication with coworkers, PSM, and disassociation from the job. Boren (2014) states that individuals with higher levels of self-efficacy and social support mitigate feelings of burnout better, and we do see this social support aspect through teachers communicating to cope. Communication as coping was something that proved extremely effective and pertinent in every teacher's interview, whether through commiseration or through constructive problem solving.

Additional forms of coping with burnout beyond communication included PSM and dissociation from the job. Past research has been inconsistent about the full effects and capabilities that PSM has within the jobs demands-resources model and in relation to burnout,

63

but from teachers experiencing extreme job demands and high levels of burnout, PSM is one of the most consistently cited job resource used to combat feelings of burnout and clearly acts as a job resource. This finding again stresses the importance of PSM, showing that in times of mental and physical exhaustion, PSM can most often be leveraged to help keep public employees performing.

The final consistently stated job resource in relation to burnout is the action of dissociation from the job. Surprisingly, this concept is something that has not appeared in other research surrounding burnout and the job demands-resources model. Teachers who were experiencing high levels of burnout often stated that they take time to completely push thoughts surrounding their job out of their mind for a small period of time. For instance, Stephen stated that when he is burnt out, he says he "just find something to do to just get [his] mind off of everything." Teachers briefly disassociating from their job allows for them to stop worrying about the stresses and demands of their day-to-day and relax. Especially for teachers who are working from home, many feel as though they are constantly working, so being able to push thoughts of work to the back allow for teachers to cope with feeling mentally and physically exhausted. Despite a lack of research surrounding disassociation, it is clear through the many references to dissociation found in the interviews that it is being drawn upon by teachers to combat feelings of burnout. This is something that could be investigated further, as it was consistently cited as a way to fight burnout. Overall, this study reinforced the basic ideas of burnout within the JD-R model, while discovering the primary resources that teachers utilize to cope with feelings of burnout during the COVID-19 pandemic.

The findings of this study additionally supported the involvement of uncertainty reduction theory within organizational settings. Utilizing communication to seek additional

information and reduce uncertainty in the workplace helps to reinforce Benedict's (2020) and Kramer's (1994, 1999) usage of URT in organizational settings. Teachers who experienced uncertainty participated in information seeking behavior in an attempt to reduce it. However, communication was not exclusively the only coping method that teachers utilized to deal with uncertainty—other teachers simply stated that they lowered their expectations.

Multiple teachers stated that they coped with uncertainty by keeping their expectations of what is going to happen every day lowered. This could be due to a lack of reliable and consistent information available to teachers in the individual's district. For instance, Josh's school district consistently shifts between various modalities every week, and does not receive any kind of quality communication from his district. His lowering of expectations seems to be because there is not a reliable place to get information available for him, and this may be a reason shared by the other teachers who cited lowered expectations as a coping method. So while the findings of this study support uncertainty reduction theory in an organizational setting, it also presents a potential alternate method utilized by individuals who do not have access to reliable information that could reduce uncertainty. Although it was clear that teachers wanted information to reduce uncertainty, this long period of uncertainty with very little information led them to eventually cope with uncertainty by lowering their expectations. This finding extends URT by suggesting a new way that people might cope with ongoing uncertainty.

This study also added to the growing field of leadership communication, specifically focusing on the positive effects of transformational leadership. As one would suspect, school supervisors who exhibited signs of transformational leadership tended to have a positive effect on their teachers' performance and combat the negative aspects of their jobs. Teachers cited improvements in their work, as well as reductions in feelings of uncertainty. This finding shows

the value that transformational leadership has in teaching settings, as well as unpredictable job environments.

However, while transformational leadership acted as a job resource, combatting negative feelings and job demands, poor leadership did not tend to act as a job demand. Teachers with negative leaders tended to be ambivalent toward their supervisor's leadership style. I propose two possible explanations for this. The first possible explanation could be that the teachers with poor leaders have years of experience under their belt and do not necessarily rely as much on their supervisor as much as someone who is closer to the beginning of their teaching career. For instance, Leah, who stated that she has not heard or interacted with her principal since October, has been teaching for over a decade and might not need the immediate, personal support that the principal may provide.

Another potential explanation for poor leadership having less of an impact on employees could be that the individual teacher's PSM may be acting as a buffer to counteract negative effects of poor leadership. Kroll & Vogel (2013) state that individuals with high levels of PSM tend to be less negatively affected by a lack of transformational leadership or poor leadership. While this would require further research, as interviewed teachers did not cite their feelings of PSM helping them to overcome negative leadership, it could be something to examine. Overall, this juxtaposition between the effects of transformational leadership and the effects of poor leadership show the value of transformational leadership traits, such as showing trust, showing interest in well-being of employees, encouraging development, delegating tasks, empowerment, and close, personal interactions. While poor leadership did not appear as a job demand, transformational leadership certainly acted as a resource, and reflected the positive effects stated in past research, such as Solaja et al., (2016), Men (2014), and Balyer (2012).

66

This study also revealed the importance and power of quality communication between teachers and the organization. Good organizational communication was found to act as a job resource, keeping teachers productive, as well as combating feelings of burnout. Bordia et al. (2004) state that participation in decision making (PDM) has positive effects on feelings of control and reduced psychological strain, and this idea is reflected in teachers' preferred communication method from their organization. Teachers most valued two-way symmetrical communication with their organizational administration, stating that they wanted clear and consistent communication, while also having their voices heard, with their district solving issues with the input of teachers. Teachers who did experience quality, two-way symmetrical communication with their organization felt more valued, supported, and seemed to have more trust with the organization. And research shows that as this organizational relationship improves, overall organizational performance and productivity rises (Mazzei et al., 2012; Men & Stacks, 2014; Zehir & Narcıkara, 2016).

Charoensukmongkol & Phungsoonthorn (2020) state that quality crisis communication can reduce feelings of uncertainty and emotional exhaustion, and while that is true in this scenario, it is additionally true in the inverse. Teachers who stated that they were not experiencing two-way symmetrical communication (e.g., lack of transparency from district, feeling unheard, complaints unanswered) were experiencing higher levels of uncertainty, frustration, burnout, and overall loss of faith in the organization. This finding continues to reiterate that two-way symmetrical communication with internal publics is essential in all scenarios, and especially during times of crisis.

Additionally, past research has stated that support from coworkers can act as a supplement in place of poor organizational communication (Charoensukmongkol &

Phungsoonthorn, 2020; Men & Stacks, 2014). This is partially seen through teachers like Mike and Josh finding support from members of their building, however it was not found to work perfectly. While communication from coworkers can work well as a job resource to fight feelings of burnout, coworkers are not responsible for communicating decisions that ultimately reduce uncertainties, such as district protocols and modality changes. So while coworker support among teachers was found to partially supplement the exhaustion attributed to poor organizational communication, it was not fully able to reduce the uncertainties. This again stresses the irreplaceability of quality communication between an organization and its members. Two-way symmetrical communication between teachers and their organization successfully acts as a job resource within the JD-R model, fighting uncertainty and burnout as well as helping to develop a stronger relationship between the organization and its members. This study has several theoretical implications including the many facets of PSM, further findings on the placement of communication within the JD-R model and the organization as a whole, as well as further insights into burnout and uncertainty in the workplace.

Practical Implications

There are multiple practical implications that can be discerned from this study. One of the most prominent is the presence of PSM in the day-to-day lives of teachers. This study showed the PSM is drawn upon as a resource to both combat feelings of burnout, as well as help teachers to be as productive as they can. It was also stated that teachers who lacked this drive to perform public service were not performing to the best of their abilities during the pandemic. PSM is a quality that has proved very beneficial toward teachers, and I would recommend that school administration seek to grow and develop teachers' individual senses of PSM, and hire teachers who have a driving public service ethic and want to help improve the lives of their students.

The second implication centers on communication between teachers and their organization. As stated above, the ideal form of communication between teachers and their organization was two-way symmetrical communication, in which their voices could be heard and they could work closely with the district to come to solutions that work best for both parties. As shown in the results section, a lack of quality crisis communication from the district hurts many different aspects of teachers' jobs. So I would recommend that the larger organization (whether it be school district, system, corporation, etc.) adopt a two-way symmetrical model of communication in order to reduce feelings of uncertainty, burnout, frustration, and stress that has been seen to come with poor communication, as well as help to build a better relationship between teachers and the district.

Additionally, implementing two-way symmetrical communication could work as a preventative measure to keep teachers happily employed. As stated in the literature review, internal communication has been found to instill resilience in an organization and increase the chances of organizational survival and revival (Solaja et al., 2016; Cho & Salmon, 2007). While school systems as a whole will most likely survive this pandemic, there is concern among teachers that the stressful environment of teaching during COVID-19 is going to lead to mass exodus from the profession. Multiple teachers interviewed stated that they were considering not coming back next year. This shows that clear, effective communication that works for organizational members (for teachers, two-way symmetrical communication) is both useful in improving relationships and reducing job demands, but also has the potential to increase chances of organizational retention and keep teachers from leaving. The practical implications that come with finding a communication style that works for teachers is detrimental toward keeping teachers employed. A majority of the teachers interviewed did not have a district that kept them

well informed, listened to their requests, and worked with them to solve issues at the organizational level. If a majority of the teachers employed in the United States this past year quit their jobs because of the high levels of uncertainty and stress associated with teaching during the pandemic, the United States would have a major education crisis. This study finds that teachers who experience two-way symmetrical communication with their organization are performing better, and because of that, less likely to quit.

The final implementation focuses on school leadership. Because transformational leadership was found to have a positive effect on teachers, I would recommend that school building administration (principals, vice principals, department heads, etc.) adopt the facets of transformational leadership: "take a genuine interest in the well-being of employees, foster a climate of trust, nurture confidence in their followers, and encourage individual development" (Men, 2014b, p. 267). While administrators who had poor leadership did not seem to be doing too much damage, those who had transformational leadership qualities were helping.

Limitations

The most prominent limitation of this study is the fact that the data gathered was qualitative and not quantitative, and therefore not generalizable to a larger population. The other limitations all have to do with the sample. Almost half of the teachers interviewed were arts/music teachers, whose topic is potentially even more negatively affected by working virtually. This potentially could have skewed the data to paint working virtually as worse than it actually is. Another limitation is the age of the participants. A majority of the teachers interviewed were within their first four years teaching. While all teachers were struggling with their modalities, the younger teachers appeared more confident in their tech abilities than the older teachers, which could potentially negate the negative the overall effects of working over

the internet. Additionally, a younger population may be more likely to need further assistance with their jobs than teachers who have been working for decades. This could skew the data yet again.

Future Directions

Future research could study a similar topic quantitatively to generate generalizable results. Additionally, I propose that PSM continue to be studied, as this study found it to be a very influential resource that assists the performance of public sector employees. I also suggest that the negative relationship between PSM and productivity be studied, as this study did find that it can act as a job demand within the contexts of teaching. I also propose that URT be more frequently drawn upon and studied in situations of organizational uncertainty. While it has primarily been viewed as an interpersonal communication theory, this study shows that its core principals appear in times of workplace uncertainty.

Finally, I propose that the relationship between organizational communication studies and JD-R theory be continued to be examined. Not only did this study find further insights into communication, burnout, uncertainty, and PSM, but it also presented an alternative way of looking at how communication can work within the larger schema of job resources and demands. I recommend that the JD-R model continue to be employed when looking at organizational communication studies, as it worked well in both categorizing the positive and negatives of employment as well as the side effects of the interactions between resources and demands.

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Appendix A (Interview Guide)

Warm up/Introductory Questions
1. Tell me a bit about your job. What do you do?
2. How long have you been working for _____?
3. Walk me through what a day looks like at your job [during COVID].

Work From Home
4. Tell me about where at home you work.
    a. What does it consist of?
    b. Where is it located?
    c. Is that space just for work or do you do other things there too?
    d. How often do you work from home?
5. Who do you share a household with?
    a. Tell me about how being at home [with other people] has changed your work.
    b. What benefits/limitations have you seen when working from home?
    c. Follow up if relevant: what have you enjoyed/not enjoyed?
6. Tell me about how you manage work and non-work boundaries. Do you try to integrate or separate them?
    a. Follow up if relevant: When was the last day that you didn't do any work-related activities?
    b. Follow up: Do you get those days very often?

Uncertainty
7. How often do you teach from home?
    a. Follow up if applicable: Tell me about the last time your school was moved online. What did you do? How did you find out?
    b. Follow up if applicable: Tell me about a time when you have experienced work-related uncertainty during the pandemic. Did that affect your productivity or ability to do your job?

Productivity
8. What has a productive day during the pandemic looked like?
9. When you have a really productive day, what contributes to that?
10. What are the specific factors that have affected your productivity when you work from home?
11. Do you think that other people in your office are having the same experience? Why or why not?

Public Service Motivation
12. What made you choose to become a teacher?
    a. Follow up: are you accomplishing that [the driving factor behind the decision] handling the outbreak of COVID-19?

Motivation
13. Are you finding yourself more or less motivated now that you're working from home?
    a. Follow up: what causes you to lose motivation at work?

Burnout
14. Tell me about the last time you felt burnt out. What did you do?
    a. Follow up: do you talk with others when you start to feel burnt out?

Leadership Communication

15. What's your boss like? How does he or she communicate with you?
16. Do you think the way he/she communicates is effective for you? Why or why not?
17. Has he or she changed their approach since the pandemic began?
18. How often do you communicate with your coworkers now that you're working from home?

Internal Crisis Communication

19. What kind of support have you gotten from your organization during the pandemic?
20. Have you felt like you were in the know about your organization's response?
    a. Can you give a specific example of something you were or were not told?

Wrap up

Is there anything else you think I should know about your job?

Appendix B (Codebook)

Abbreviation	Code	Description	Examples
WFH-P	Work From Home-Positive	The perceived advantages of working from home	I enjoy having no commute to work.
WFH-N	Work From Home-Negative	The perceived disadvantages of working from home	I can't connect as well with my students when working virtually.
WLB	Work-Life Balance	Individual discusses the balance, or lack of, between their work and their life.	When the school day is done, I stop working. I struggle with finding a balance between my work and my home
Burnout	Burnout	Individual expresses feelings of burnout (feelings of mental and/or physical exhaustion due to work)	Days are so long, I find myself asking why I'm doing this. My workdays are draining.
CWB-PSM	Coping with Burnout-Public Service Motivation	Individual cites elements of public service motivation when discussing how they handle feelings of burnout	On days when I'm feeling burnt out, it helps when I can teach my kids something.
CWB-Comm	Coping with Burnout-Communication	Individual actively communicates with others when they are feeling burnt out.	When I'm feeling burnt out, I like to complain with my coworkers about my boss or my students. When we're having bad days, the other teachers and I sit down and talk about how to fix problems.
CWB-Diss	Coping with Burnout-Disassociation	Participant states that they actively avoid responsibilities or even thinking about work as a method of coping with burnout.	When I'm feeling burnt out, I take a night to not even think about work. I go for long walks with my dog to try

			and clear my head and not worry about work.
CWB-Exercise	Coping with Burnout-Exercise	Individual cites exercise as a way to mitigate burnout. This code is sometimes seen with CWB-Diss.	On really bad days, I go to the gym for an hour or two to clear my head and fight the mental exhaustion.
Uncertainty	Uncertainty	Individual discusses a time when they felt uncertainty about the future of their workspace	We find out every two weeks whether or not we're going to be online or in-person. We've shifted multiple times from in-person, to hybrid, to virtual. We found out on Friday that we were going online the next Monday.
HP	High Productivity	Discussion surrounding high levels of productivity	When I work in-person, I'm much more productive. I have a good, productive day when my kids are engaged and I get everything done.
LP	Low Productivity	Discussion surrounding low levels of productivity	Working online hurts my productivity. When I can't see my students faces, and when I don't have to get out of bed, I have a much less productive day.
HM	High Motivation	Discussion surrounding high levels of motivation	I'm more motivated to do my job when I can talk face to face with other teachers and students.
LM	Low Motivation	Discussion surrounding low levels of motivation	When I don't leave my house during the day, I find myself

			less and less motivated.
PSM	Public Service Motivation	Discussion of performing work in an act of public service, in connection with helping others, self-sacrifice, compassion, or attraction to policy.	I'm here for the kids. I want to fix issues that are prevalent in schools. I feel rewarded when I can teach or inspire a student.
FCC	Frequent Communication with Coworkers	Individual reports being in frequent or constant communication with fellow teachers, or discusses scenarios in which they frequently talk with coworkers.	I talk to my coworkers all the time. The other teachers and I are constantly exchanging ideas, talking about our days, or just chatting. The other teachers and I have a text group that we use a lot.
LCC	Low Communication with Coworkers	Individual reports low levels of communication between themselves and coworkers, or discusses scenarios in which they do not talk often with coworkers	When we're virtual, I'll go days without talking to other teachers. I don't talk to any of my coworkers unless I run into them.
FCS	Frequent Communication with Students	Individual reports frequently communicating with his/her students	Even though we're in a pandemic, I still get to talk a lot with my students.
LCS	Low Communication with Students	Individual reports lowered levels of communication with his/her students.	Because we work online, I don't get to have a lot of basic conversations with my kids.
TL	Transformational Leadership	Supervisors share elements of transformational leadership: trust, interest in well being	My boss is very personable, supportive, and quick to give praise to her employees.

		of employees, encourage development, task delegation, empowerment, and close, personal interaction.	Our department head likes to ask us our opinion on issues, and then assign us things to do. Our principal is always open and free for us to talk to her.
NL	Negative Leadership	Participant discusses flaws in their administration or supervisor's leadership	I really wish my boss would hold more meetings. Our supervisor gives us too much stuff to do.
CL-P	Communication with Leadership- Positive	Perceived positives of communication from leadership	My assistant principal does a great job of keeping us informed whenever there's a shift in numbers.
CL-N	Communication with Leadership- Negative	Perceived negatives of communication from leadership	Our superintendent does not listen to our opinions or take them into account.
CS	Communication Shift	Perceived change in communication from leadership throughout the pandemic	My boss has gotten much more hands off since the beginning of the pandemic
FS	Feelings of Support	Individual states that they feel supported by their school or school system	My school system offers many resources to help make our jobs easier. My team helps each other out when we need it, I can rely on them.
FNS	Feelings of No Support	Individual states that they do not feel supported by their school or school system	My school system says that they want me to be comfortable, but then adds extra work for me to do and doesn't provide any valuable resources to help.
HC	Hostile Community	Individual discusses poor treatment from	Parents are complaining that

		members of the community, including parents, etc.	we're lazy, and we don't want to go back to work. Our administration has received a lot of pushback from parents and the community about virtual schooling

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INFORMATION LETTER
for a Research Study entitled
"Public school teachers in times of crisis"

You are invited to participate in a research study to understand how elements of the COVID-19 pandemic have affected your workplace productivity. The study is being conducted by David Schell and Elizabeth Larson in the School of Communication and Journalism at Auburn University. You are invited to participate because you currently work as a public school teacher in the United States and are age 19 or older.

What will be involved if you participate? Your participation is completely voluntary. If you decide to participate in this research study, you will be asked to participate in a 45 minute to one hour interview over Zoom.

Are there any risks or discomforts? The risks associated with participating in this study are a potential loss of confidentiality. To minimize these risks, your data will be encrypted and we will not collect any identifying information. As part of the transcription process, you will be identified by pseudonyms and there will be no record connecting your identity to your data.

Are there any benefits to yourself or others? If you participate in this study, there will not be any direct benefits for you. Benefits to others may include a better understanding of organizational communication.

Will you receive compensation for participating? There is no compensation for participating.

Are there any costs? There are no costs to you.
If you change your mind about participating, you can choose to end the interview at any time. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University or the School of Communication and Journalism.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide. The data is encrypted while online. Once data collection is finished, the data will be downloaded

Information collected through your participation may be used to fulfill an educational requirement

If you have questions about this study, please contact David Schell at djs0078@auburn.edu or (410) 459-1813.

If you have questions about your rights as a research participant, you may contact the Auburn University Office of Research Compliance or the Institutional Review Board by phone (334) 844-5966 or e-mail at IRBadmin@auburn.edu.

HAVING READ THE INFORMATION ABOVE, YOU MUST DECIDE IF YOU WANT TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, PLEASE CLICK ON THE LINK BELOW.

YOU MAY PRINT A COPY OF THIS LETTER TO KEEP.

_____
Investigator   Date

The Auburn University Institutional Review Board has approved this document for use from _____ to _____. Protocol #18-463 EX 1811, "The Communicative Properties of Workplace Design."

Appendix D (Recruitment Letter)

Hello,

You are invited to participate in the study "Public school teachers in times of crisis" which examines the effects of the COVID-19 pandemic on the productivity of public school teachers. The study examines various aspects of the everyday work of public school teachers during the pandemic, including communication with leadership, coworkers, and students, working from home, motivation, productivity, and feelings of burnout and uncertainty. Your insights will be used to contribute to the developing body of knowledge regarding public employee performance.

Your participation would involve a 45 minute to one hour Zoom interview, designed to gain understanding of your experience as a public school teacher working during the COVID-19 pandemic. Your identity will be kept confidential.

With any research study there is always a potential risk, such as feeling uncomfortable thinking about your experiences over the past several months. However, benefits include having the opportunity to reflect on your teaching experience, as well as increasing our understanding of how teachers combat adversity. There are no costs for participants of this study.

This study is being conducted by David Schell, M.A. student and Elizabeth Larson, Ph.D. of Auburn University. Study questions may be directed to David Schell at djs0078@auburn.edu or Elizabeth Larson at elarson@auburn.edu. Questions about your rights as a study participant should be directed to the Auburn University Office of Research Compliance at (334) 844-5966 or irbadmin@auburn.edu.

If you are interested in participating, please email David Schell at djs0078@auburn.edu to set up an interview time. Thank you for being willing to share your insights and participate in this important research.

David Schell

Auburn University

djs0078@auburn.edu