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The Impact of COVID-19 on Secondary Teachers' Health and Wellbeing

by
James J. R. Thornton

An Applied Dissertation Submitted to the
Abraham S. Fischler College of Education
and School of Criminal Justice in Partial
Fulfillment of the Requirements for the
Degree of Doctor of Education

Nova Southeastern University
2021

Approval Page

This applied dissertation was submitted by James J. R. Thornton under the direction of the persons listed below. It was submitted to the Abraham S. Fischler College of Education and School of Criminal Justice and approved in partial fulfillment of the requirements for the degree of Doctor of Education at Nova Southeastern University.

Jennifer Reeves, PhD
Committee Chair

Candace Lacey, PhD
Committee Member

Kimberly Durham, PsyD
Dean

Statement of Original Work

I declare the following:

I have read the Code of Student Conduct and Academic Responsibility as described in the *Student Handbook* of Nova Southeastern University. This applied dissertation represents my original work, except where I have acknowledged the ideas, words, or material of other authors.

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James J. R. Thornton

Name

November 4, 2021

Date

Abstract

The Impact of COVID-19 on Secondary Teachers Health and Wellbeing.
James J. R. Thornton, 2021: Applied Dissertation, Nova Southeastern University,
Abraham S. Fischler College of Education and School of Criminal Justice. Keywords:
well-being, teacher stress, coronavirus (COVID-19), teacher exhaustion, coping

Secondary teachers across the United States have had various experiences due to the COVID-19 global pandemic during the 2020-2021 school year. These experiences may have influenced teacher exhaustion and their ability to cope with numerous stressors related to COVID-19. This applied dissertation was designed to provide additional clarity to districts related to secondary teachers' daily work experiences and attitudes while teaching during the COVID-19 global pandemic.

Secondary teachers were surveyed on how they perceived their occupational demands related specifically to emotional exhaustion, personal accomplishments, and depersonalization utilizing the Maslach Burnout Inventory- Educators (MBI-ES). The study also examined how secondary teachers' coping mechanisms influenced their perception of well-being and its impact on the primary method of instruction (i.e., face-to-face, blended, or fully virtual) during the COVID-19 global pandemic using the Impact of Coronavirus Pandemic on Secondary Teachers Survey (IC-19PSTS). The results indicated significant, negative correlations between Depersonalization and well-being and Depersonalization and coping. Similar analysis reported that Personal Accomplishment and coping were significantly, positively correlated, while there was a moderate positive correlation found between coping mechanisms and well-being. The overarching discoveries to the study were that professional development benefits teachers during crisis by contributing to their overall feeling of Personal Accomplishment and teachers who choose positive coping mechanisms improve their overall well-being.

Table of Contents

	Page
Chapter 1: Introduction.....	1
Statement of the Problem.....	1
Purpose of the Study.....	6
Definition of Terms.....	6
Chapter 2: Literature Review.....	8
Theoretical Framework.....	9
Teacher Job Related Stress.....	13
Teacher Job Demands.....	21
Instruments.....	32
Conclusion.....	38
Research Questions.....	39
Chapter 3: Methodology.....	41
Participants.....	41
Instruments.....	42
Procedures.....	46
Chapter 4: Results.....	53
Introduction.....	53
Demographic Characteristics.....	54
Data Analysis.....	57
Additional Analysis.....	63
Summary.....	64
Chapter 5: Discussion.....	66
Introduction.....	66
Summary of Findings.....	67
Interpretation of Findings.....	70
Context of Findings.....	74
Implications of Findings.....	80
Limitations of Study.....	84
Future Research Directions.....	87
Conclusion.....	90
References.....	92
Appendices	
A Survey Flyer.....	107
B Maslach Behavior Inventory - Educators Survey (MBI-ES).....	109
C Impact of COVID-19 Pandemic on Secondary Teachers Survey	

(IC-19PSTS)114

Tables

1 Summary of the Age Range and Number of Participants.....55
2 Participant Grade Levels Taught During 2020-2021 School Year.....55
3 Professional Development Offered During COVID-1956
4 Total Number of Years Teaching57

Chapter 1: Introduction

Statement of the Problem

According to McKim and Sorenson (2020), the COVID-19 pandemic significantly impacted teacher work-related stress due to an abrupt change to daily responsibilities, procedures, and functions, which decreased job satisfaction by nearly 25% among all participants in a national study. As a result, teachers are experiencing a decrease in self-efficacy and an increase in emotional fatigue, leading to ineffective teaching practices (Cook et al., 2017). Jansen in de Wal et al. (2020) found that secondary school teachers' occupation involved continuous psychological challenges linked to job-related anxiety and emotional exhaustion. Consequently, overworked teachers, increased job demands, and a lack of district-wide health supports contributed to over 50% of educators desiring to leave the teaching profession (Hester et al., 2020).

Furthermore, Kaden (2020) reported the time needed to adapt content for online use, student engagement, assessment, and checking on students' well-being continued to be difficult for teachers to sustain. Even prior to the COVID-19 pandemic, a study conducted by Kutsyuruba et al. (2019) investigated the perceptions of novice teachers' classroom experiences and reported increased levels of stress related to the teaching profession, which not only impacted their health, but also their ability to teach well. Unless school districts improve ways to intervene and address employee mental health and well-being, an educator's life span will decrease 4-10 years, employee retention and productivity will decrease, and employee absenteeism will increase (Maccagnan et al., 2019).

The Research Problem

The problem addressed in this study was to explore if the increased job demands, due to the COVID-19 global pandemic, negatively impacted job-related stress of suburban secondary school teachers in the United States. There may have been concerns from school districts, before the COVID-19 global pandemic that expressed that not only has poor mental health and well-being contributed to absenteeism, but also to teacher presenteeism, or a decline in work productivity (Hayes et al., 2020). Additionally, Oberle and Schonert-Reichl (2016) reported that an increase in additional responsibilities such as counseling, parenting, and mentoring students adversely impacted teacher mental health and well-being prior to the COVID-19 pandemic arriving in the United States. Before COVID-19 there were increased levels of psychological stress in teachers which lead to a decrease in the current number of educators in the profession due to burnout, stressful job conditions, and high levels of mental distress (Brown, 2020; Schonfeld et al., 2017). School districts must respond to the contributing factors that are hindering the overall welfare of educators and ensure sustainable emotional support is provided for each teacher.

Background and Justification

An educator's primary function is to ensure learning for each student takes place each day while contributing not only to students improving their own lives, but also the lives of others (Cassidy et al, 2018). However, a previous study showed that teacher job demands may negatively impact the mental health and well-being of teachers, which may play a vital role in student academic success (Szigeti et al., 2017). If teachers struggle with increased job demands, as well as negative experiences at work, students may not have the opportunity for a positive learning environment to exist. Cutri et al. (2020)

reported that the COVID-19 pandemic challenged teachers' ability to take risks teaching online, maintain authenticity among students' online, and increased barriers to assessing students online. A teacher's inability to appropriately evaluate students may impact their ability to accurately address student academic needs, thus contributing to the feeling of inadequacy because they are not able to ensure learning. According to Cutri et al., when teachers no longer viewed themselves as instructional experts or felt uncomfortable teaching classes remotely, stress levels increased.

Furthermore, Wong and Moorhouse (2020) found that the COVID-19 pandemic led to decreased social engagement among teachers due to the fear that close personal contact with others would have increased the likelihood of transmission of the virus. As a result of the sudden reduction in person-to-person daily interaction, teachers developed early signs of depression and increased anxiety. In addition, the loss of connectivity between teachers and their peers negatively impacted overall school performance and quality of teacher instruction (Reynolds et al., 2020). Overall, the COVID-19 pandemic not only changed the school physical environment and how teachers worked, but it also changed how they interacted with the students within the school environment which may have led to tension among many educators.

McInerney et al. (2018) defined the mental health and well-being of a teacher as how they negatively or positively viewed their work experiences. Flores and Swennen (2020) found that teachers during the COVID-19 pandemic experienced increased teacher workloads and blurred boundaries between work and home, creating a barrier to maintaining a healthy work-life balance. Equally, secondary school teachers in the Southern part of the United States reported emotional stress as one of the prominent

factors contributing to their ability to maintain a positive outlook on their job (Camacho & Parham, 2019). Furthermore, a national study explored veteran and novice teachers' sources of job related stress based on symptoms of burnout and decreased class control, which determined that both were key to increasing the risk factors associated with high levels of stress (Fitchett et al., 2018). Teachers experiencing high-levels of stress are less likely to build healthy student-teacher relationships, therefore, decreasing student engagement which negatively impacts student learning (Aparisi et al., 2019). Thus, the mental health and well-being of teachers' must be a focal point for school districts to ensure that school-level work environments are conducive for learning.

Deficiencies in the Evidence

The rigors of the teaching profession have impacted mental health and well-being of teachers with little focus on what is the appropriate response to the crisis. There has not only been insufficient research done to address the mental health and well-being of teachers, but also research has failed to include how that inadequacy has contributed to an increasing gap between teachers and their ability to support and connect with students (Kidger et al., 2016). To that end, research continues to focus on students' depression and anxiety, but fails to do the same for teachers. Kidger et al. (2016) stated that teachers are continuing to be trained to implement programming for students that minimally reduces rates of suicidal ideation in students, because the health and well-being of the teacher was never addressed.

Additionally, risk factors associated with employees' mental health may lead to depression, in addition to impacting an organization's productivity (Alker et al., 2015; World Health Organization, 2019). However, a focus on teachers' poor mental health and

well-being leading to intervention is missing in the literature. Other studies have shown that teachers with increased depression levels were not only physically unhealthy, but also mentally unhealthy and reported more conflict with students (Roberts et al., 2019). Based on McNerney et al.'s (2018) research, teachers had multiple factors that contributed to their increased levels of exhaustion and decreased psychological well-being, however a comprehensive response to these challenges by school districts is missing. As a result, more studies are needed to not only address teacher mental health and well-being, but also research what school districts can do to help teachers who have had or are having negative mental health and well-being experiences.

Audience

This study benefited secondary students, secondary teachers, and school district leaders. The teachers were helped by providing the school district leaders with critical insight as to how well-being influences teacher job satisfaction. According to Richards et al. (2019), teachers were more effective at educating students when they were satisfied with their job experiences. To that end, the study will give an opportunity for the educational community to develop appropriate mediation for teachers who are not satisfied in their job due to mental health and well-being (Schonfeld et al., 2017). Likewise, the study assisted district leaders in identifying current well-being concerns surrounding secondary teachers which could lead to proactive interventions to improve teacher productivity. Moreover, identifying risk factors may lessen the effect that negative mental health and well-being has on physical and mental illness (Aparisi et al., 2019). Lastly, the findings from the study may improve overall teacher work experience and decrease depression levels. Addressing depression in teachers may improve job

satisfaction, teacher attrition, and promote a positive school climate (Chambers et al., 2019).

Purpose of the Study

The purpose of this study was twofold: to determine (a) how occupational demands and coping mechanisms affected secondary teachers' well-being during the COVID-19 pandemic, and (b) how secondary teachers' perceptions of job demands, well-being, and coping mechanisms were affected by the primary method of instruction during the COVID-19 pandemic. This study looked at secondary school teachers who used one of three instructional methods. The teaching methods for this study included (a) face-to-face teaching where the teacher is teaching all students exclusively in the classroom; (b) exclusively online, or remotely, with no students in the classroom; or (c) a blended-model of instruction where teachers simultaneously taught students both in person and remotely.

Definition of Terms

Emotional Exhaustion (EE) can be identified as an individual emotionally overwhelmed with work responsibilities without adequately recovering (Maslach, 1986).

Depersonalization (DP) is characterized as an individual responding impersonally to the demands not only to other people, but also to the world around them (Maslach, 1986).

Personal Accomplishment (PA) is one's increased level of competence and overall perception of work success (Maslach, 1986).

Well-being is an individual persons decision to view life with optimism and contentment while functioning with minimal to no negative thoughts or emotions (Centers for Disease Control and Prevention, 2021).

Burnout is prolonged job related stress as a result of a decrease in emotion and motivation over an extended period of time (Lieter, 2014).

Chapter 2: Literature Review

The purpose of this study was twofold: to determine (a) how occupational demands and coping mechanisms affected secondary teachers' well-being during the COVID-19 pandemic, and (b) how were secondary teachers' perceptions of job demands, well-being, and coping mechanisms affected by the primary method of instruction during the COVID-19 pandemic. Previous literature that examined the importance of teacher well-being and the impact of schools insufficiently focusing on the well-being needs of the teacher. The theoretical framework used to guide this study will be based on Job Demands Resource – Theory (JD-R), which believed that individuals who cannot respond to physiological and psychological job stress may result in increased levels of occupational stress (Bakker & Demerouti, 2007). The JD-R Theory suggested that decreased resources and increased occupational job demands negatively impacted job stress and motivation (Bakker & Demerouti, 2007). Similarly, the JD-R Theory predicted the results from undesirable employee experiences led to unwanted organizational outcomes. The JD-R Theory underpins both the Maslach Burnout Inventory – Educators (MBI-ES), which showed the factors that led to teacher exhaustion, occupational stress, and job demands, and the Impact of Coronavirus Pandemic on Secondary Teachers Survey (IC-19PSTS).

This chapter also built a foundation of history not only explaining how teacher well-being was impacted by multiple stressors, but also the effect job stress and job demands had on teacher welfare. Additionally, various factors contributing to negative teacher work experiences within the context of the school setting were examined. Similarly, the effectiveness of studies linking teacher interventions and coping strategies

for improving educator well-being were reviewed. Moreover, studies have been conducted which addressed teacher burnout, job stress, and job demands. However, current literature has not addressed the impact Coronavirus Disease 2019 (COVID-19) has had on job stress and job demands of secondary teachers. Examining the health and well-being of teachers in school districts across the United States during the COVID-19 world-wide pandemic will require a focused and comprehensive strategy to address teacher well-being and job stress.

Theoretical Framework

The problem of increased job demands, due to the COVID-19 global pandemic, negatively impacting the job-related stress of secondary school teachers in the United States is grounded in the Job Demands Resources (JD-R) theory. This theory was originally developed by Bakker and Demerouti in 2006 and was primarily used to study teacher burnout and their intentions to leave (Bakker & Demerouti, 2007). In addition to the influence of job demands and resources on teacher inspiration and health (Skaalvik & Skaalvik, 2018), the JD-R Theory is undergirded by job resources and job demands as key categories for the theory (Bakker & Demerouti, 2007). The premise of the theory is that there were physiological and psychological stressors encountered each day, which may become overwhelming, leaving employees unable to proficiently perform their jobs (Bakker & Demerouti, 2007). Additionally, JD-R Theory proposed there is comingling of well-being and motivation that can positively or negatively impacted the work environment. Therefore, JD-R Theory suggested that improving employee health and motivation will increase overall employee well-being and cultivate a healthy work environment (Bakker & Demerouti, 2014).

Numerous researchers have used the JD-R Theory in educational studies to examine how occupational demands and job resources in education predict teachers' well-being, overall commitment to the teaching profession, and their desire to exit the field (Bottiani et al., 2019; Rajendran et al., 2020; Skaalvik & Skaalvik, 2018). Furthermore, additional studies provided convincing evidence to support this argument (Bermego-Toro et al., 2016; Collie et al., 2020; Keller-Schneider, 2018). Van Nroogenbroeck (2016) and Chang and Chen (2017) both utilized the JD-R Theory to explain their findings across multiple teacher groups in studies on the perception of job demands and job resources.

According to Bottiani et al. (2019), the JD-R Theory helped explain the relationship between job demands and job resources, anxiety, and teacher exhaustion due to disruptive student behavior and how it impacted teacher effectiveness. The researchers applied the JD-R Theory to compare how job demands and resources related to anxiety and teacher exhaustion. Next, researchers examined how that relationship was related to teachers adjusting their instruction to meet the demands of disruptive students. Despite disruptive students impacting teacher effectiveness, the outcome of the study showed unwanted student behavior insignificantly impacted teacher wellness. The JD-R Theory aligned with the findings that suggested that when job demands and job resources are inadequate teacher well-being will be negatively impacted; however, when minimal resources are mitigated teachers' effectiveness increased (Bottiani et al., 2019). Subsequently, the study was limited by its cross-sectional design and sample constraints. The design failed to account for the higher rate of discipline infractions among middle school students as compared to the lower behavior rate of a high school students. As a

result, the study was unable to align the results to specific grade bands, thus making it difficult to predict whose well-being was negatively affected by disruptive behaviors.

Teacher well-being and desire to leave the profession may be predicated by their perception of the occupational demands and resources available to teach effectively. Two studies have examined teacher intent to leave the profession and emotional exhaustion using the JD-R Theory as their framework for research (Rajendran et al., 2020; Skaalvik & Skaalvik, 2018). Overall, these two studies found that when teachers' work and life were impacted by the time expected to complete job tasks, teacher well-being decreased and emotional fatigue increased (Rajendran et al., 2020; Skaalvik & Skaalvik, 2018). This increase in anxiety demotivated teachers and increased their desire to leave the teaching profession. In addition, Rajendran et al. (2020) posited that participants reported that they left the profession to seek organizations that were perceived to have less stressful working environments and better support when dealing with disruptive students. Likewise, Skaalvik and Skaalvik (2018) noted that school environments where teachers shared similar professional values and supported each other when problems occurred presented higher levels of well-being than those who did not. Nevertheless, both studies were limited by their participants. For example, Skaalvik and Skaalvik (2018) reported that both the participants' level of stress while taking the survey may have influenced how they answered the questions, in addition to the participants' level of interaction with peers at the time of the study. If participants were experiencing raised levels of stress or do not have many friends at the time of the study the data would have been skewed. Also, Rajendran et al. (2020) stated that a limitation to the research results were the low sample of male participants in the outcome of the study, which made the data less relevant for

male teachers. The JD-R Theory was useful in both studies in clarifying how job-related stress may impact teacher well-being.

Further evidence supported the use of the JD-R Theory in studies that involved educators. Two studies looked to assess factors contributing to teacher exhaustion and the characteristics of the resources that support teacher health (Bermejo-Toro, et al., 2016; Keller-Schneider, 2018). The studies both took an evaluation on teacher resources in their respective environments and developed models, based on the JD- Theory, to predict teacher emotional fatigue (Bermejo-Toro, et al., 2016; Keller-Schneider, 2018). The emotional exhaustion model developed by Keller-Schneider (2018) revealed that prolonged periods of increased job demands also increased teacher emotional fatigue, whereas support from colleagues mitigated teacher exhaustion. Equally, Bermejo-Toro, et al. (2016) examined teacher job demands, summarized that teacher-peer support was also an effective way to cope with increased stress associated with the profession. Although the JD-R Theory established results of each study that job demands and resources impact teacher emotional well-being, there were limitations to the study. For example, both studies were limited by participants' self-reporting, their cross-sectional design, and sample participant demographics where groups were overrepresented (Bermejo-Toro, et al., 2016; Keller-Schneider, 2018). The JD-R Theory supported the findings of the relationship between job demands and teacher perceived exhaustion and how job resources, such as peer support can improve teacher well-being.

Additionally, teacher well-being may impact not only veteran teachers in secondary schools, but also teachers across core content areas (math, science, English, and social studies) and elective disciplines such as Physical Education (PE). The JD-R

theoretical model was used to frame research examining differences in teacher resources and job demands among hourly-paid employees and teaching professions, which may influence teacher motivation impacting participant well-being. More specifically, Zhang and Chen (2017) attempted to develop a valid instrument to measure PE teacher perceptions on their level of support and job demands leading to a positive well-being. Using the JD-R Theory as a guide, the survey revealed that PE teacher responses showed job resources and job demands had an adverse relationship suggesting the JD-R Theory was an appropriate lens to view the study (Zhang & Chen, 2017). Similarly, Van Droogenbroeck and Spruyt (2016) investigated motivating factors of teacher attrition leading to exhaustion and the eventual decline in teacher well-being by using the JD-Theory. The study analyzed the differences among tenured teachers and blue-collar professions and the impact that different levels of support may play in emotional fatigue among educators. The study concluded that although teacher's experienced high levels of stress, when compared to the manual labor work, hourly-paid employees reported better work relationships and a healthier work-life balance (Van Droogenbroeck & Spruyt, 2016). Nevertheless, self-reporting and sampling bias proved to be limitations in both studies (Van Droogenbroeck & Spruyt, 2016). Similar to how the JD-R Theory was used to frame recent research on how secondary teacher attrition may have led to exhaustion, the JD-R Theory will also help guide research on secondary school teachers' response to stress-related to job resources and occupational demands of teaching during the COVID-19 pandemic.

Teacher Job Related Stress

Teacher job related stress may impact one's ability to perform at their best. This

section will examine potential factors that may have impacted teacher well-being during the COVID-19 global pandemic. More specifically, stress related to the secondary school environment, teacher exhaustion, and overall teacher well-being will be discussed.

Previous research will frame potential perspectives as to how teaching practices may have changed due to the COVID-19 pandemic.

COVID-19 Disease 2019 (COVID-19) Pandemic

COVID-19 is a virus that originated in Wuhan, China in early 2020. The COVID-19 virus was spread from an infected person talking, coughing, or sneezing tiny air droplets within six-feet of a healthy individual and that individual inhales the same droplets and can be fatal (Centers for Disease Control and Prevention, 2020). Cases of COVID-19 virus spread through the provinces of China impacting various communities. The COVID-19 virus became a worldwide pandemic negatively impacting both schools and local communities. Teachers were not only impacted by COVID-19 personally, but also as teaching professionals.

The American Psychological Association (2020) posited that although individual responses to COVID-19 were varied, many may experience depression due to abrupt hiatus from work or daily activities, frustration, or irritability as a result feeling a loss of control over what may or may not happen to them. To that end, Wong and Moorhouse (2020) conducted an exploratory study utilizing surveys to collect data from 10 secondary and primary school teachers to determine stress related to the impact of the COVID-19 virus. Wong and Moorhouse focused on the impact COVID-19 virus had on motivation and commitment to the teaching profession while in an unpredictable learning environment. Wong and Moorhouse found that teacher motivation increased because

educators placed the physical and mental well-being of their students above their own, giving their unstable environment purpose. Wong and Moorhouse also examined the effect that COVID-19 virus had on teachers' decreased social interaction due to recommendations to restrict person-to-person contact and reported that teachers developed early signs of depression and increased levels of anxiety.

Stress in Secondary School Teachers

Teacher job related stress can be described as stressors that are detrimental to the well-being of an individual as a result of not having the resources or the ability to perform the duties necessary for the job (Gulzar & Rashid, 2020). An organization, such as a school district, has various descriptions of stress associated with multiple jobs required to ensure school success. Stress impacts school organizations differently based on the perception teachers have about the work required outside of school to prepare for future lessons or activities (Gulzar & Rashid, 2020; Szigeti et al., 2017). To that end, Gulzar and Rashid (2020) utilized surveys with public and private secondary school teachers to understand the organizational stress they were experiencing during the school year. Approximately 1000 secondary teachers from 100 private and public school sites rated themselves on perceived performance, in addition to stress induced by nature (Gulzar & Rashid, 2020). The summary of the responses from the two rating scales revealed multiple areas of stress experienced by public and private school secondary teachers, with attitude in participants being told what to do without a choice as the most severe stressor (61.7%), followed by work done without an administrative rationale (44%), long work hours (41%), a lack of perceived fun/recreation (24%), and the harsh attitude of the boss (15.3%). The sample size was a relative strength in the researchers'

approach to gathering data.

Additionally, Anderson et al. (2019) found that during evaluations, secondary teachers who perceived their principal to have a negative attitude toward them reported a decrease in well-being and increase in stress. Conversely, work environments that had a supportive and encouraging principal showed a positive impact on teacher well-being leading to an improved emotional state (Anderson et al., 2019). Therefore, secondary teachers' perceived stress may be negatively influenced by the leader's inability to support, communicate, and create a positive environment for teachers to work.

However, Rajendran et al. (2020) revealed that there were no differences in the reports of negative emotional responses due to job-demands or work-related stress in 675 secondary teachers. Additionally, there were no differences in the 171 male and 504 female participants who reported they had an intent to leave should their work stress and demands not improve. Furthermore, women in the study were more likely to become emotionally exhausted due to a perceived imbalance between work and life. Nearly 90% of teachers reported job-related stress as a key predictor of exhaustion over student behaviors as a negative factor for stress. Future research is warranted to further investigate perceived job stress due to demands from inside and outside of the workplace, which may negatively impact teachers.

Gulzar and Rashid (2020) found that one way to reduce organizational stress in public and private schools was to develop solutions for decreasing teacher workloads and increasing time for teachers to prepare for lessons. However, teachers may not always consider more duties as the only increase in workload. Teacher populations also viewed high-need students, who have experienced trauma, as an additional stress which

indirectly affects teacher effectiveness and workload. Similarly, Farmer et al. (2020) reported that teachers' lack of protected time for planning in preparation for lessons also inhibited a teachers' ability to deliver instruction. Likewise, the combination of hindrance stress, or stress caused by tasks assigned from principals without an explanation and lack of engagement added to teacher anxiety and stress (Abos et al., 2019; Farmer, 2020; Stiglbauer & Zuber, 2018). Although secondary teacher well-being may be impacted by multiple stress factors, challenge stress, or stress used to motivate a teacher, may be used to improve performance rather than hinder it (Stiglbauer & Zuber, 2018).

Teacher Exhaustion

Additionally, teachers have multiple external and internal stressors that may decrease well-being. Szigeti et al. (2017) conducted a study examining the associative factors of exhaustion coupled with signs of depression and over commitment by secondary school teachers. Nearly 88% of the secondary teachers in the study were women averaged nearly 40 years of age. The aim of the study was to use multiple confirmatory analysis to determine best fit for teacher burnout, depersonalization, and teacher individual accomplishment (Szigeti et al., 2017). Szigeti et al. utilized two surveys within a cross-sectional research design: The MBI-ES inventory and the Over Commitment Scale. The survey results indicated that secondary teachers may show high levels of exhaustion based on their perceived over commitment to the teaching field, whereas teachers who had a higher self-efficacy were reported to have lower levels of perceived burnout. Participant's age and gender failed to show a significant relationship to teacher exhaustion and over-commitment which were key factors that led to burnout in secondary teachers. Nonetheless, Szigeti et al.'s (2017) results were not only

ungeneralizable due to the sample size of 211 participants collected from a convenience sample from one country in Europe, but also inconclusive in determining the causal pathways associated with whether depression caused burnout or burnout caused depression in secondary teachers in the study.

Secondary school teachers' stress may determine how they view their daily work, relationships with students, and support. Similarly, the daily rigors of teaching lessons, preparation for instruction, and student discipline may increase stress levels. As a result, teachers have reported stress-related illnesses, occupational exhaustion, in addition to an increased desire to leave the profession (Farmer, 2020). Evidence suggested that work environment and student relationships among secondary teachers were contributing factors that may have hindered or improved teacher work experience and influenced teacher exhaustion (Farmer, 2020). Soini (2019) also found that a negative schoolwork environment had an undesirable impact on teacher and student relationships, which led to increased teacher exhaustion.

Student relationships are complex and involve teachers spending adequate time and attention with students, particularly students with special education needs. Similarly, depression, occupational stress, and stress-related illness have been associated with working with special education student populations (Soini et al., 2019; Szigeti, 2017). Although teachers cited exhaustion as one reason for increased levels of stress, fatigue was more closely connected to the teachers feeling inadequate in their ability to meet the needs of students with exceptionalities (Soini, 2019). Nonetheless, findings from a longitudinal survey involving 1,245 teachers reported high levels of sustained stress over a 5-year period due to student relationships and feelings of inadequacy were low risk for

exhaustion because of their high level of self-efficacy and resilience to continue to build relationships with reluctant student populations (Soini, 2019).

Teacher Well Being

A secondary school teacher's well-being plays an important role in their performance and their ability to connect with students and other staff members (Aparisi et al., 2019). In a previous study, Parrello et al. (2019) sought to examine the coping tools that were available for teachers to recognize and strategize a plan for improvement during a challenging situation, in addition to exploring how social constructs may positively impact teacher resilience. Parrello also discussed the problems that undergirded teacher performance, such as the feeling of incompetence and ineffectiveness due to negative student behaviors. As a result of poor performance, teachers felt disconnected from students and peers and would benefit from programs that improve well-being (Parrello et al., 2019). According to American Psychological Association (2020), teachers who experienced long periods of not being in a community with others or not speaking to others may exasperate feelings of anxiety, sadness, or stigmatization.

Parrello et al. (2019) utilized the Teacher Participatory Action Research (T-PAR) as the methodological framework to educate teachers on how their current practices with students may be improved through reflection and self-awareness. Using the T-PAR methodology, researchers first collected observation data from teacher-participants, then categorized the information collected into themes until a complete understanding of each participant was accomplished (Parrello et al., 2019). Using a major metropolitan area consisting of 200 teachers from nearly 15 secondary schools, Parrello et al.'s (2019) study revealed secondary teachers are negatively impacted by the demands of the

organization, which play an integral part in teachers developing healthy relationships with students. The stress placed on teachers by districts may lead educators to become emotionally fatigued, raising daily tension and lowering student performance (Aparisi et al., 2019).

Many limitations existed among teacher job stress studies. For example, Parrello et al.'s (2019) results of the prevention study lacked data from multiple tools of observation, interventions, and evaluation of data, which would inform teachers of actionable steps to improve their well-being, making the study ungeneralizable. Similarly, Cook et al. (2017) conducted a study on evidence-based interventions promoting well-being through self-reflection strategies, which would be beneficial to secondary teachers, however the researchers failed to collect follow-up data to help determine long-term impact and implementation. Nonetheless, a common theme and strength to the series of studies found that student connectivity, competence, and a plan to improve teacher well-being would positively benefit teacher wellness (Cook et al., 2017; Hobson & Maxwell, 2017; Parrello et al., 2019).

Each profession experiences some level of stress which will influence individual well-being. Subsequently, teacher-focused alternatives to maintaining well-being may be used as a means to cope with the daily stress of teaching. Recent researchers suggested that teachers who practiced mindfulness and meditation handled traumatic work experiences with less stress compared to teachers who did not, which enabled them to maintain a positive well-being (Cook et al., 2017; Graham & Truscott, 2020). Additional evidence from Cook (2017) revealed that 90% of teachers reported they would incorporate mindfulness practices, 77% would replace negative thoughts with positive

thoughts, and 35% would incorporate relaxation techniques in their daily routine as a way to improve overall well-being. Virtanen et al. (2019) posited that teachers who were self-aware had consistently reported lower levels of exhaustion, improved job satisfaction, and an enthusiasm for teaching. Indeed there are studies that imply that mindfulness may provide support for improving teacher well-being; however, sustainable interventions must consider various teaching environments and the unique characteristics of each teacher to ensure they are able to mediate known stressors (Hobson & Maxwell, 2017).

Teacher Job Demands

There are various job demands related to secondary teachers that may influence how they experience the profession and how they respond to individual stress. Many job demands may result in emotional strain due to the work environment, a desire to leave the teaching profession, finding new ways to cope with stress, and an increase in job demands due to remote teaching during a pandemic. A number of job demands may play an important role in how teachers are able to carry out at their primary duties and responsibilities. This section will examine several factors that may impact the demands of teaching.

Emotional Impact on Teacher Stress

Stress may influence secondary teachers in various ways. Zhang, et al. (2019) conducted a statistical analysis which examined teacher burn out and the impact stress had on the emotional state of educators. Zhang et al. (2019) had two hypotheses: (a) job related stress will indirectly impact the way teachers cope with stress and (b) work stress will indirectly impact teacher exhaustion as a result of inadequate coping styles. The results of the study reported that different teacher coping styles determined their ability to

lessen the impact of various stressors (Zhang, et al., 2019). Moreover, Zhang et al. also found that teachers were able to mitigate job-tension when they chose to approach negative occupational situations with a positive attitude. Furthermore, teachers with 10 years or more experience benefited from positive coping strategies, whereas teachers with less than 10 years' experience did not. Similarly, teacher's mind-set protected them from the emotional impact of teaching regardless of how long they have been an educator (Zhang et al., 2019). Various sources of stress effect teachers differently at all stages in their career.

A sample of 117 secondary school teachers participated a cross-sectional design, where a self-reporting coping scale, teacher burn out scale, and psychological capital scale were administered to teachers to measure existing stress (Zhang, et al., 2019). The study found that teacher coping styles that were perceived to be positive for decreasing teacher burnout may not have worked if the chosen coping style was negative, which may have led to additional stress. To that end, the findings concluded that a negative coping style impacts teacher burnout and wellbeing whether directly or indirectly. A similar study of 760 teachers also used a self-reporting Likert scale, however Skaalvik and Skaalvik (2018) measured three stressors which included responding to demotivated students, preparation time for instruction, and attitude toward student discipline. The findings from the study showed job demands were a strong predictor for teacher wellness, while job resources were shown to predict participants' increased levels of wellness. Although Skaalvik, and Skaalvik (2018) and Zhang et al. (2019) viewed teacher supports and preventions differently, both studies used Likert scales to collect data to determine the possible correlations between known secondary teacher job demands and stress.

Nonetheless, each study and scale had a goal to decrease overall teacher physiological stress and improve teacher well-being (Skaalvik, & Skaalvik, 2018; Zhang, et al., 2019).

Recent research on the emotional impact on teacher stress reported an increase in tension among secondary teachers (García-Carmona, et al., 2019; Loh, & Liew, 2016).

There were various factors that may have contributed to the escalation in the level of stress and anxiety among middle and high school teachers. According to García-Carmona et al., (2019), results from participants varied from 28% reporting high levels of burnout to nearly 40% of participants stating they experienced severe levels of depolarization while teaching secondary students. Depolarization, or the presence of prolonged levels of occupational stress and anxiety are causing levels of depression to increase among secondary educators (García-Carmona, et al., 2019). As a result, teacher perception of their performance impacted their ability to proficiently carry out their duties and responsibilities. Prolonged stress coupled with exhaustion amounts to decrease personal accomplishment and diminished teacher efficacy (García-Carmona et al. 2019).

Emotional stress manifests differently depending upon teachers. Teachers reported that they had to suppress their personal beliefs about the best teaching strategies to use for improving student outcomes after being given directives that they perceived to be counterproductive, subsequently increasing emotional exhaustion (Loh & Liew, 2016; Skaalvik, & Skaalvik, 2018). Emotional stress teachers experience may not be detrimental to their well-being. The ability for educators to suppress their emotions may play an important role in restoring the teacher's desire to teach to the best of their ability. According to Loh and Liew (2016), teachers who were able to control their emotions consistently rewarded and corrected their students, which resulted in better student-

teacher relationships. Strong relationships are the catalyst for increased well-being and enthusiasm for teaching (Loh & Liew, 2016; Skaalvik, & Skaalvik, 2018), and help prevent teachers from exiting the field.

Secondary Teachers Exiting the Field

Gulzar and Rashid (2020) attributed workloads to the increase of stress in secondary school teachers, which impacted the overall effectiveness within the organization. The number of teachers leaving the profession are increasing due to consequences of occupational stressors (Zhang et al., 2019; Schonfeld et al., 2017). To that end, a comparison study involving 675 middle and high school teachers and 580 elementary teachers was conducted to explore the perceived stress experienced as a result of workload, conflicts at home, desire to stop teaching, and mental fatigue (Rajendran, et al., 2020). The purpose of the study was to explore how predictable certain stressors were on teachers and to investigate how various demands overlapped between secondary teachers and elementary teachers (Rajendran, et al., 2020).

Collecting multiple data points on a sample involves using various instruments to ensure the consistency and reliability of results when examining stress in secondary school teachers. As a result, several Likert scales were used to measure workload, negative student behavior, family influence on work, intentions for teachers to stop teaching, and teacher exhaustion. The study used the JD-R as the theoretical framework. The JD-R Theory was founded on the basis that individuals who are unable to recover from physiological and psychological job stress may experience high levels of job strain (Bakker & Demerouti, 2007). In an effort to research secondary teachers exiting the field, data was gathered from multiple surveys totaling 22 items, where each used either an

ordinal or nominal Likert scale ranging from 1-7-points. More specifically, the approach to collect workload data and student behavior information was accomplished using a five-item, 5-point Likert scale to evaluate how secondary school teachers perceived workload, pace, and student behavior. In addition, a five-item, 7-point psychometric Likert scale was used to collect teacher perceptions of family influence on job stress. Similarly, a three-item subscale was used to understand teacher's intent to stop teaching. Lastly, the frequency of perceived emotional exhaustion was examined using a nine-item, 7-point scale.

Rajendran et al. (2020) reported that teacher exhaustion coupled with educator's intent to exit the job showed a favorable association among measures of workload, negative student behavior, and family influence on work. However, the highest predictor for leaving the field of education among men and women sub-groups was teacher exhaustion (Rajendran, et al., 2020). Nonetheless, the study had limitations based on the participants' pre-existing perspective of their job environment (i.e., using teachers who want to leave the profession or are interested in the leaving the profession). To that end, teachers with a negative preconception may provide different results than teachers who are perceived to have a healthy well-being or perspective (Rajendran, et al., 2020).

Teachers in elementary and secondary public schools are leaving the teaching profession for various reasons. However, secondary teachers have presented the highest departure rates among all public-school divisions (Dupriez et al., 2016). A study conducted by Dupriez et al. (2016) suggested that teachers left their respective schools due to the socio-economic level of the students they served and the perception that the school climate was unacceptable for teaching. Similarly, Chambers et al. (2019) reported

that ineffective district leadership and unorganized operational practices were also identified as factors that contributed to teacher dissatisfaction leading educators to leave the field. Teachers are also continuing to leave the field due to decreased autonomy coupled with the perception that additional time is being taken away from them, which eliminates their opportunity to plan for upcoming lessons (Ferguson et al., 2017). Lastly, many researchers agree that depleted resources, increased class sizes, and large workloads have each been reported to have negatively increased emotional exhaustion which led to teachers leaving the profession (Chambers et al., 2019; Dupriez et al., 2016; Schonfield et al., 2017).

Teachers are not always leaving the profession due to the environment, leadership demands, or because they have lost the autonomy in teach how they want to teach. There is another contributing factor causing teachers to depart from the teaching field, which is teacher welfare. According to Schonfield et al. (2017), mental health and well-being among secondary teachers have been disproportionate to other occupations' reports of employee intentions to leave their respective professions. Conversely, highly qualified teachers who have taught for more than one year and learned how to mentally prepare for teaching each day remained in the profession longer than first year teachers who were not highly qualified and had yet to learn how to effectively prepare for teaching each day (Dupriez et al., 2016). Finally, Ferguson et al. (2017) noted when teachers felt mentally supported by friends within the workplace, they were less likely to leave. Social supports have also been reported to positively influence teachers to remain in the teaching field (Dupriez et al., 2016). School districts may benefit from creating a supportive faculty and staff community within each school where teachers can learn appropriate coping

mechanisms for facing stressful situations that may decrease the employee attrition rate.

Coping

Teachers' stress originates from various sources. Responding to the increasing mental health needs among teaching populations may help to minimize the negative impact it has on their well-being. As a result, the need to identify multiple strategies to cope are important for ensuring teacher well-being. Teachers' lack of effective coping skills was a contributing factor for educators' increased level of exhaustion in addition to them leaving the teaching field (Zhang et al., 2019).

Kebbi and Al-Hroub (2018) examined 100 regular education teachers and 39 exceptional education teachers' source of stress and the strategies used to manage that stress. The purposes of the study were to determine the strategies used to decrease high stress levels in teachers, determine the correlation between teachers' stress to strategies used to manage stress, and to determine the source of stress and the effects it has on all teachers working with students with exceptionalities (Kebbi & Al-Hroub, 2018). The researchers used a quantitative research design to collect and examine each item asked on the survey (Kebbi & Al-Hroub, 2018). Additionally, questionnaire results for the survey found that that core content teachers and exceptional education teachers showed no significant difference in how they perceived stress or the tools used to cope with stress. The study also revealed 0% of participants reported they experienced an extreme stressor, nearly, 17% of the participants reported sources of mild stress, and only 18% reported sources of moderate stress (Kebbi & Al-Hroub, 2018). Although study results indicated there was no consensus on sources of stress, participants concurred that high stress was reduced by incorporating individualized strategies that were effective for each teacher's

unique situation, such as time away from the job and leisure activities (Kebbi & Al-Hroub, 2018). Unfortunately, the study was limited in its ability to be generalized to larger populations as a result of the small sample size.

A teacher's ability to cope with various stressors directly impacts their health and well-being. Extensive inquiry has been conducted to better understand the coping strategies that were used by educators to respond to the stress associated with the teaching profession (Cancio et al., 2018; Eryilmaz & Basal, 2021; Hong et al., 2018; Kellmann & Heidari, 2020; Pogere et al., 2019; Zhang et al., 2019). According to Eryilmaz and Basal, (2021) teachers during the COVID-19 global pandemic who not only developed individual goals, but also stuck to their goals found a reduction in the level of stress experienced while teaching. In addition, a reduction of stress was also attributed to teachers who planned their school year to meet the needs of students (Pogere et al., 2019). Similarly, effective strategies used for improved teacher well-being were also based on teachers' perceptions of the stress they are experiencing. According to Zhang et al. (2019), the most prevalent approach used by teachers with the least amount of stress was the method of choosing an optimistic mindset rather than a pessimistic attitude toward negative occupational stressors. Additional coping strategies used by teachers to recover from a stressful work environment were to relax during weekends and holidays to mentally prepare for the upcoming week (Kellmann & Heidari, 2020; Maccagnan et al., 2019). Similarly, Zate et al. (2019) also found that mindfulness training significantly decreased stress, anxiety, depression, and emotional fatigue among teachers. Although various approaches to coping were found to have positive effects on

teacher well-being, over time the impact of many coping mechanisms diminished and no longer were effective (Kellmann & Heidari, 2020).

Teachers who could sustainably cope from occupational stress have learned to use more adaptive strategies to thrive in stressful settings. Educators who were able to tolerate demanding environments adjusted themselves or changed the source of the stress in order to properly cope (Cancio et al., 2018; Pogere et al., 2019). When teachers focused on the specific problem they had experienced and chose to pursue positive engagement opportunities with students, well-being improved. As a strategy to move from exhaustion to coping, groups of teachers chose to engage friends, family, and other staff members for support when stress began to escalate (Cancio et al., 2018; Hong et al., 2018; Pogere et al., 2019; Zhang et al., 2019). For teachers to have an improved degree of job satisfaction within the workplace, increasing strategies for coping with varying degrees of stress and stress recovery, especially after being thrust into emergency remote teaching at the onset of the COVID-19 pandemic, is needed.

Remote Teaching During a Pandemic

As a result of the COVID-19 pandemic, school districts moved quickly to ensure learning for all students despite temporary school closings. The stress and job demands associated with the sudden change in traditional teaching modalities forced districts to re-envision how schools will operate (Wilder, 2020). According to O'Loughlin (2020) millions of school-aged students were forced to be at home, however many families took their children to private schools, who were able to resume in-person learning, sooner than public schools. To that end, public schools began to develop comprehensive re-entry plans aimed at ensuring student safety and sustainable in-person learning. Consequently,

teacher effectiveness and school re-openings were impacted by student technology readiness, student equity, unknown teacher expectations, and teacher support for remote learning implementation.

Students who attended public school prior to the COVID-19 pandemic were among their peers receiving and being taught, in-person, by their teachers. However, student learning during the COVID-19 pandemic changed how students received instruction from teachers. Zali (2020) found that various stressors associated with the COVID-19 pandemic negatively impacted the remote learning student experience. First, students in less affluent areas did not have internet service available or computers necessary for teaching and learning to take place (Ghazali, 2020). As a result, students immediately lost access to direct instruction opportunities from their teachers. Secondly, Ghazali identified students as being computer illiterate and reported that many struggled with digital learning platforms. Ghazali also emphasized that students may have been familiar with technology, however using technology for academic purposes became problematic. Therefore, student engagement became inconsistent and unpredictable. Thirdly, students were expected to remain motivated while in an unpredictable learning environment, manage time, and remain on tasks during remote learning (Ghazali, 2020). Perhaps such behavior, manifested as off-task behavior, missing assignments, and failing grades, may have increased teacher stress. Despite widespread hurdles that may have compromised student learning during the COVID-19 pandemic, some students flourished, engagement improved, and teacher-to-student feedback was reported to have increased by nearly 40% (Kaden, 2020).

Preparing to shift teachers and students to remote learning is a complex task. Districts may need a technology infrastructure that will ensure an equitable transition for all students. The result of districts failing to establish a plan for emergency remote teaching may decrease opportunities for all students to receive appropriate academic support. To illustrate, Allen et al. (2020) found that a decrease in educational access among minority students highlighted pre-existing inequities known to have contributed to the learning gap between these populations and non-white students. Similarly, Samuels (2020) disputed that not only were minority students negatively impacted by not having a device or lacking internet access, exceptional education students and English Language Learners (ELL) were also not provided with adequate services. Furthermore, Allen et al. (2020) proposed that remote learning be removed from the learning modalities for students completely, because it contributes to inequitable learning among minority, ELL, and exceptional education students who are already behind in learning when compared to White students. The demands for exceptional education teachers were increased as a result of not having the technology to communicate consistently and effectively with students with disabilities, which may lead to burnout or teachers leaving the profession (Gulzar & Rashid, 2020).

It is clear that teaching and learning expectations have been challenged as a result of the COVID-19 pandemic. According to Samuels (2020), over 45 districts nationwide were unable to provide a clear vision for online teaching and student conduct required for leading schools to state standard proficiency. Sari and Nayir (2020) found that teachers were charged with not only controlling student behaviors online, but also guiding parents towards a shared commitment necessary to meet the students' needs. The added stress of

having to manage areas of conduct that were never relevant prior to the COVID-19 may negatively impact teachers' job satisfaction. Similarly, Baggaley (2020) suggested the added demand on teachers resulted from the short time given to create online courses, in addition to teachers not having prior experience teaching remotely, at the onset of the COVID-19 crisis. Despite the additional stress added to teachers during the early stages of emergency remote teaching, Kaden (2020) reported teacher anxiety was reduced once districts supplied personal laptops for each student to participate in online learning.

Although teachers were expected to educate students online, many teachers may not have been given the necessary training and support to implement and sustain effective online teaching. Wilder (2020) claimed that early iterations of teacher support during the COVID-19 pandemic were based on the education community recognizing the need for professional development. Moreover, Sari and Nayir (2020) conducted a study with 65 inexperienced distance learning teachers which revealed that also training administrators and teacher support staff would deepen the understanding needed by all stakeholders to ensure learning for all students. In summary, teachers during the COVID-19 pandemic became increasingly aware of their current instructional practices, then advocated for what they believed would decrease stress and increase effectiveness (Sari & Nayir, 2020).

Instruments

The studies within the review of literature measured multiple research variables to determine secondary teacher emotional exhaustion, coping mechanisms, and the occupational demands that impacted teacher well-being. In studies examining the effects of job stress on secondary teachers, researchers used instruments to assess participant experiences. For example, researchers identified the MBI-ES as a viable option to

investigate teacher well-being and has been used in various studies across the secondary educator landscape. In addition, Ryan et al. (2017) utilized the Teacher Stress Inventory (TSI) to collect participant data, across the United States, to explore the role that high-stakes testing and burnout played in educator turnover. Similarly, the Areas of Work life Survey (AWS), created by Maslach and Leiter (2008), was used to examine employee perceptions of the work environment and how it may impact employee fatigue.

Moreover, the Job Satisfaction Survey (JSS) has been used in research studies to capture opinions, perceptions of leadership, compensation, and self-efficacy of participants (Spector, 1985). Furthermore, the Intention to Leave (ITL) scale was used to measure to what degree educators wanted to leave the profession. Lastly, the Coping Orientation to Problems Experienced (COPE) Inventory was a tool that designed to interpret participant responses (Carver et al., 1989). Each instrument was reviewed because of its ability to quantify the beliefs and attitudes of participants in various studies involving secondary teachers and other employees alike.

MBI-ES

The MBI-ES is an instrument used to determine the source of stress and the degree to which stress has led to burnout in teachers and administrators within a school setting (Leiter & Maslach, 2006). To that end, numerous studies have used the MBI-ES inventory to measure the impact of well-being, emotional exhaustion, occupational stress, and workplace demands on teachers. First, Fabbro et al. (2020) used the MBI-ES in an international study involving 39 female teacher-participants to address burnout and inform researchers of the level of perceived exhaustion by teachers. The results indicated that mindfulness meditation training increased emotional awareness and decreased levels

of emotional fatigue among participants (Fabbro et al., 2020). Secondly, Akin (2019) used the MBI-ES instrument to determine factors that contributed to perceived occupational stressors in 460 married secondary teachers, revealing that there were no notable differences between emotional exhaustion in depersonalization, personal failure, or desensitization.

Similarly, Shaheen and Mahmood (2016) used the key components of the MBI-ES, depersonalization and emotional fatigue, to examine the emotionality of 424 secondary teachers' workplace demands based on participant demographics. The results showed higher reported stress levels in high school teachers due to the high-stakes exam preparation and complex behaviors associated with older students (Shaheen & Mahmood, 2016). Lastly, Makhdoom et al. (2019) used the MBI-ES inventory in a study involving 204 private and 160 public secondary school teachers ages 22-55 year old to determine how emotional exhaustion impacted teacher productivity. Makhdoom et al. found that teachers who perceive that they had failed to accomplish anything, personally, had an increase in behaviors leading to low work production, while emotional exhaustion contributed to depersonalization leading to abuse among teachers. The findings of these studies support that MBI-ES has been an intricate part in helping researchers determine overall levels of exhaustion, fatigue, and contributing factors to teacher burnout. The MBI-ES instrument will be used in the present study to measure how secondary teachers' occupational demands affect their well-being, specifically emotional exhaustion, personal accomplishments, and depersonalization.

Measuring Teacher Stress

There were various instruments used by researchers to measure secondary teacher

job stress, job satisfaction, and mechanisms used for coping. Measuring teacher stress includes multiple factors that contribute to the decrease in teacher well-being. Whether previous researchers chose to survey or utilize a scale to gather participant data, each instrument's purpose was to provide information to inform the findings of the teacher stress studies. To that end, Ryan et al. (2017) utilized the Teacher Stress Inventory to collect data from nearly 1,900 teachers in three states to examine the impact that high-stakes testing and emotional exhaustion has on teacher's attrition rate. In addition, the TSI not only provided teacher perceptions of the direct effects of stress, but also indirect effects of stress that may have contributed to teacher's increased levels of stress. Although the study provided data collected within the context of a major shift in mandated testing policies, it did not consider teacher responses within the context of a global pandemic, and therefore, is not a viable option for the present study.

The Areas of Work life Survey, created by Maslach and Leiter (2008), was developed to measure employee workplace perception and the role that it may play in contributing to employee exhaustion. The AWS was later used in 33 middle and high schools consisting of almost 680 participants (Masluk et al., 2018). The domains that were measured to determine teacher exhaustion were based on teacher workload, work life autonomy, community, fairness, values, and work life rewards and recognition. The researcher concluded that the AWS tool was effective in determining the work factors that contributed to an increase in secondary teacher emotional exhaustion (Masluk et al., 2018). Furthermore, the AWS works optimally when it is used in conjunction with predetermined interventions already prepared to respond to participant survey results. The AWS would be appropriate for this study; however, there are no interventions to

consider as a result of the findings and the instrument fails to consider unpredictable environmental changes in the results of the collected data.

The Job Satisfaction Survey has been used to capture participant's opinions about work environment, perceptions of leadership, self-efficacy, and compensation (Spector, 1985). The use of this survey provides a researcher with valuable information that will inform participant results based on various levels of perceived job satisfaction. A correlation study was conducted in a high-achieving socioeconomically disadvantaged school to examine if a teachers level of job satisfaction was impacted by being in an underprivileged school, although the school academically performed well. The results revealed a significant correlation among participants who responded that leadership, peer support, recognition, and pride around the work they are doing with students as key factors contributing to positive job satisfaction in overall poor communities (Matla, & Xaba, 2020). In addition, the JSS has provided valuable data to for researchers to determine how teacher's environmental stressors may have impacted how they interact with underserved student populations. While the JSS survey is effective for measuring secondary teachers' occupational stress, it does not provide survey questions to accommodate for the impact that the COVID-19 global pandemic may have had on the secondary teachers' perception of job satisfaction.

Job satisfaction may play an important role in the decision for teachers to leave the profession. A scale determining to what degree educators want to leave the profession is the Intention to Leave (ITL) scale. The ITL scale has been used to ascertain teacher-participants' desire to leave their current position for a different position based on their perceived job performance (Carmeli & Weisberg, 2006). Nonetheless, Carmeli and

Weisberg (2006) found that the results from using the ITL scale revealed that there was no correlation between participants' job satisfaction and their intent to leave the profession. As teachers potentially experience uncertain occupational conditions due to COVID-19, a decrease in efficacy may become more prevalent. As a result, the ITL scale may help to reveal teachers' desires to leave, but it is uncertain if the scale is appropriate to collect participant data in the context of a global pandemic.

Secondary teachers may be experiencing various uncertainties related to the potential impact of COVID-19 on teaching and learning. If the uncertainty of the school environment becomes a constant source of tension, then teachers may need to seek ways to cope with the new occupational stressors. The Coping Orientation to Problems Experienced (COPE) Inventory is a tool that was developed to understand coping responses in participants (Carver et al., 1989). The tool is valid for identifying not only scales, but subscales that may help to identify if the respondents' behavior can be contributed to a participant's desire to cope through avoidance or by adjusting their approach. A study conducted by Baumstarck et al. (2017) revealed that participants experiencing a single emotionally exhaustive event in their life indicated adequate psychometric properties meaning the tool provided evidence that the inventory accurately measured what it was supposed to measure. Due to fact that the COPE inventory has been used to measure participant responses during a traumatic event, it may not be adequate to measure participant's responses to how they cope with events that are ongoing and ever-changing as with teaching during the COVID-19 pandemic.

Due to the specificity of this study and the connection that COVID-19 has on impacting participant responses, there is no known comprehensive instrument available

that measures secondary teacher attitudes and beliefs during the COVID-19 global pandemic. The researcher will develop the Impact of Coronavirus Pandemic on Secondary Teachers Survey (IC-19PSTS), with the assistance of a formative and summative committee, which will help capture the beliefs and attitudes of secondary teachers during the COVID-19 global pandemic. Although there were multiple instruments that were reviewed in the literature, the survey instruments that helped to inform the development of a survey were the COPE inventory and the AWS. Both of the instruments have the ability to adequately measure and interpret teacher attitudes and beliefs around well-being. Many of the key components of the tools will inform the researchers' question-selection and development for the study.

Conclusion

The factors underpinning the increased job demands of secondary teachers due to the COVID-19, global pandemic emerged as two major themes: teacher job related stress (exhaustion and well-being) and teacher job demands (emotional strain of teaching, occupational demands, remote teaching, and coping with stress). Although these aspects of teacher job demands and job stress are important, they failed to address the impact of COVID-19, on teacher well-being, job demands, and coping with a global pandemic. When teachers connected with others and engaged in activities that were meaningful to them, it supported a decrease in perceived stress, provides a coping mechanism, and may contribute to an improved work-life balance.

The review of literature set the foundation for examining how school districts can support secondary school teachers' well-being during and after COVID-19 virus global pandemic. Also, the study provided perspectives on teachers' current job stress and

demands, in addition to how possible coping solutions helped mitigate the strain teachers may be experiencing due to the COVID-19 virus. Furthermore, the reviewed studies will establish a premise for IC-19PSTS by providing a context for the role COVID-19 played in negatively impacting secondary teachers' job stress and job demands.

The ensuing study was quantitatively oriented to best examine the impact of COVID-19 virus global pandemic, teacher well-being, job stress, and demands on secondary school teachers. Multiple studies used quantitative processes to explore the key factors in the review of literature. Many studies utilized a theoretical framework which collected data through multi-item surveys, scales, questionnaires, and inventories. Moreover, several of the studies used descriptive analysis for data interpretation. As a result, the findings from the studies were able to inform organizations, districts, and companies of the employee burnout and fatigue that may have otherwise been overlooked. The methods and approaches used in previous studies coupled with highly effective quantitative instruments also allowed researchers to collect valid and reliable data to inform studies. Therefore, a quantitatively framed study will be appropriate for the study.

Research Questions

The following research questions guide this study.

1. What is the relationship between secondary teachers' occupational demands and well-being, specifically emotional exhaustion, personal accomplishments, and depersonalization, as measured by the MBI-ES during the COVID-19 pandemic?
2. How are secondary teachers' coping mechanisms influenced by teachers' perceptions of occupational demands during the COVID-19 pandemic?

3. How are secondary teachers' coping mechanisms influenced by teachers' perceptions of well-being during the COVID-19 pandemic?

4. How are secondary teachers' perceptions of job demands, well-being and coping mechanisms affected by the primary method of instruction (i.e., face-to-face, blended, or fully virtual) during the COVID-19 pandemic?

Chapter 3: Methodology

This chapter is intended to present the quantitative research methodology that was used to investigate the impact of occupational demands, job stress, coping mechanisms, attitudes, and beliefs of secondary school teachers during the COVID-19 global pandemic. The purpose of this study is twofold: to determine (a) how occupational demands and coping mechanisms affected secondary teachers' well-being during the COVID-19 pandemic, and (b) how secondary teachers' perceptions of job demands, well-being, and coping mechanisms were affected by the primary method of instruction during the COVID-19 pandemic. Furthermore, data was collected to answer each research question through use of the (a) MBI-ES and (b) the IC-19PSTS.

This chapter is divided into three sections. The first section includes participants and sampling procedures used for the study. Secondly, the instruments for the study are discussed. Lastly, the design procedures to collect and analyze data are explained.

Participants

The target population for this study was American middle and high school teachers, located in the United States of America, who taught through the 2020-2021 school year during the COVID-19 global pandemic. Participants included male and female first year teachers through veteran teachers older than 18 years of age OF various races and ethnicities who taught in grades SIX through TWELVE during the COVID-19 global pandemic. There were 101 participants who completed a survey; however, one was removed because they did not meet the inclusion criteria and did not teach during the 2020-2021 school year leaving the total number of participants at 100. Convenience sampling and snowball sampling, nonprobability sampling methods,

were used to collect data from teachers with similar inclusion characteristics. The middle and high school teachers who were chosen for the sample were a subgroup of K-12 educators who taught students during the 2020-2021 school year.

The use of convenience sampling was appropriate for this study, because it used the participants who met the inclusion criteria with similar qualities and characteristics who were available and willing to participate in the study (Creswell & Guetterman, 2019). In tandem with the convenience sampling approach, snowball sampling was used to gather participant data. Snowball sampling allowed the researcher to potentially capture a large group of participants for the study (Creswell & Guetterman, 2019). As a result, the approach was used for secondary teachers to solicit other middle or high school teachers who taught during the 2020-2021 school year during the COVID-19 global pandemic. Collectively both sampling approaches allowed the researcher to collect data from Facebook, Twitter, and LinkedIn Groups. In addition, the researcher posted the survey flyer with a link to existing personal Facebook, Twitter, and LinkedIn pages and asked individuals who met the study criteria to also participate (see Appendix A). Participants were sent a text message with the appropriate link to complete the electronic survey. The digital survey was a Google form provided directly to Facebook groups and social media accounts or sent via email to participants willing to answer questions related to coping, attitude, and beliefs of teachers during a global pandemic and MBI-ES survey.

Instruments

Selecting appropriate instruments to capture the desired data to answer the proposed research questions is important for a cohesive study. A closer examination of a

tool created by the researcher and a commonly used tool to examine exhaustion among employees will be reviewed. This section will examine the two tools to better understand the impact of COVID-19 on secondary teachers' well-being.

Impact of COVID-19 Pandemic on Secondary Teachers Survey

Secondary teachers may be experiencing increased occupational demands and job-related stress as teachers work during the COVID-19 global pandemic. The Impact of COVID-19 Pandemic on Secondary Teachers Survey (IC-19PSTS) was developed by the researcher to capture secondary teachers' perceptions of occupational demands, coping mechanisms, and well-being based on their primary method of instruction, during the COVID-19 pandemic (see Appendix A). The survey development process included choosing a formative committee to help create the survey questions. The committee was an expert panel comprised of three individuals from across the country who have worked in secondary education. The formative committee informed the researcher of the most appropriate questions to ask to better understand how teachers coped with the COVID-19 global pandemic while teaching. Next, the researcher chose a summative committee comprised of three individuals including the dissertation chair, to help review, verify, approve, and validate the survey questions. The researcher worked with both committees, through several iterations and multiple changes to approve the final survey. The final survey instrument questions required respondents to recall their attitudes and beliefs related to the impact COVID-19 had on their teaching experiences. Each of the questions were curated to describe the perceptions of what participants regarded as most helpful in coping with what they may have viewed as stressful working conditions. Equally, the survey examined how participants chose to cope with the COVID-19 restrictions imposed

across America on secondary educators teaching environment.

In addition, the development of the IC-19PSTS included collaboration with both formative and summative committees who helped construct the survey. The purpose of the formative committee was to work with the researcher to initiate the process of developing the survey. Similarly, the summative committee was comprised of experts in the field of education who helped to verify the legitimacy of the survey. Moreover, the anonymous survey gathered participant responses by using a 5-point Likert scale to collect secondary teachers' intensity and feelings on the coping strategies used while teaching during the COVID-19 global pandemic. The IC-19PSTS is a self-administered online survey where secondary teachers completed statements based on their attitude or opinion while they taught during the COVID-19 global pandemic. The IC-19PSTS was an important component, which ensured that secondary teacher's perceptions about educating students remotely, in-person, or hybrid were captured. A pilot survey was conducted prior to administration with five potential participants. The pilot survey was essential to research design because it helped determine the viability of the study, provided data to inform the researcher of changes that needed to be made, and informed the researcher of a potential methodological framework that may be most effective to answer the studies research questions. The IC-19PSTS consisted of 19 questions, designed to capture secondary teachers' professional development support, demographic information, overall well-being, perceptions of job demands, and coping strategies used during the COVID-19 global pandemic.

Maslach Burnout Inventory - Educators

Furthermore, an additional data collection instrument was utilized for the study.

Mind Garden, an issuer of psychological assessments, provided 100 licenses to a PDF of the MBI-ES survey to be used for the study in conjunction with the IC-19PSTS. The MBI-ES, which is a 22-statement survey on job-related feelings, will be administered electronically using a Likert scale indicating the frequency by which the educator experienced the feeling, ranging from 0 (*never*) to 6 (*every day*). According to Maslach et al. (1986) the MBI-ES was developed to measure feelings of achievement by teachers, the emotion felt from impersonal responses from students to teachers, and teachers' feelings of emotional fatigue within an educational setting. The MBI-ES consisted of three sections based on participant responses (Maslach, 1986).

The validity and reliability for the MBI-ES was established over-time by developers seeking to understand various levels of stress among employees. The internal reliability of MBI-ES was reported to have had constant and reliable Cronbach alphas for three studies in the areas of emotional exhaustion, depersonalization, and personal accomplishment. More specifically, the internal reliability of the three studies were as follows: emotional exhaustion showed a Cronbach alpha range from .85-.90, depersonalization reported a Cronbach alpha between .63-.76, and personal accomplishment estimated a Cronbach alpha of .72-.79 (Iwanicki & Schwab, 1981; Gold, 1984; Chang, 2013). Based on reported data from other research on the content validity of the MBI-ES, each survey item has proved to measure the content that it was intended to measure.

Validity of the MBI-ES derived from past research conducted on relationships between experiences at work and burnout scales. Similarly, conflict, overworking, class, and environment correlated to the reduction in individual accomplishment, emotional

fatigue, and depersonalization further supporting MBI-ES validity (Koustelios & Tsigilis; Byrne, 1994). In addition, Chang (2013) conducted a study with 492 participants which showed an adequate association in the reduction of reported individual accomplishments ($r = .33, p < .01$), emotional fatigue ($r = .36, p < .01$), and depersonalization ($r = .29, p < .01$). Additional evidence of validity were reported in a study that included 521 primary teachers, which found that educators with students who have behavior concerns reported an increase in both depersonalization ($r = .20, p < .05$) and emotional fatigue ($r = .36, p < .05$), whereas there was a decrease in the reduction in individual accomplishment ($r = .27, p < .05$) among participants (Lambert et al, 2009). Based on the evidence of consistent validity and reliability of the MBI-ES over-time, the instrument has proven to be adequate for this study to examine the relationships between the experiences of secondary teacher's job pressure, depersonalization, and individual success.

Procedures

Concise procedures and sound research approaches enabled for clear communication of the data collected during the study. A framework to guide the data collection procedures are central to answering research questions. The research design, the data collection procedures, and the analysis of the collected data was examined in this section.

Design

The study used a cross-sectional survey research design to answer research questions about the occupational stress and job demands of secondary teachers during a global pandemic. A cross-sectional survey design was chosen to frame this study because it examined trends in data collected to understand the beliefs and attitudes about teacher-

participants at one point in time (Creswell & Guetterman, 2019). The 2020-2021 school provided the time frame for the survey data to be collected from participants.

Data Collection Procedures

IRB approval was required prior to conducting the study to minimize the potential risk involved with participants (Creswell & Guetterman, 2019). Upon Internal Review Board (IRB) approval from Nova Southeastern University the instrument was piloted. The pilot study included five participants. Each participant was recruited using social media platforms Facebook, Twitter, and LinkedIn educational groups. In addition, the researcher asked secondary teachers to participate in the pilot study via text, or in-person using the same verbiage from the social media platform recruitment. The flyer was posted in the social media groups and/or emailed/texted to those not on social media. The purpose of the pilot study was to provide the researcher with feedback led to alterations to data collection methods, improve question clarity, identify confusing questions, discuss if questions were presented in a logical order, and determine if questions were mutually exclusive and exhaustive.

During the pilot survey each participant was provided a letter, digitally prior to participation in the study acknowledging IRB approval, the purpose of the study, information explaining not only that participation will be voluntary, but also that maximal effort will be made to ensure participant anonymity. However, no identifiers, whether indirect or direct, were collected to minimize potential risks of harm. One survey, with two sections were accessible under one survey link for ease of completion by participants in the pilot study. The survey took take 5-10 minutes for each participant to complete. All access to participant responses will also be password-protected and

encrypted before being stored locally or in the cloud without participant IP addresses.

Upon completion of the pilot study, there were no recommended changes, as a result, the researcher proceeded with data collection as outlined below.

Upon completion of the pilot study several amendments were made prior to the completion of the final survey that was used in the study. Furthermore, the researcher mined social media platforms, which used existing educational interest groups via Facebook, Twitter, and LinkedIn. Participants were recruited to participate in the study by the researcher who posted the recruitment flyer on the respective social media platforms. In addition, the researcher emailed/texted the flyer to secondary teachers not on social media. Interested individuals were asked via the flyer to "click for consent and survey now" to gain access to Participation Letter and survey. After the Participation Letter was read and acknowledged by scrolling to the end of the form, the participant selected the "click here" button which gained them access to the online survey via Google Form. The Google Form contained both the MBI-ES and the IC-19PSTS which captured attitudes, beliefs, and mechanisms for coping during the COVID-19 global pandemic.

The researcher used the same approach to collect survey data for the study than that used in the pilot survey. The difference in the approach was that the social media platforms that were used were Facebook and Twitter and not LinkedIn. Additionally, the recruitment flyer was posted on the respective social media platforms. Similar to the pilot survey, the researcher emailed/texted the flyer to secondary teachers not on social media and were asked via the flyer to "click for consent and survey now" to gain access to Participation Letter and survey. After putting the flyer onto Facebook and Twitter, the process for secondary teachers to fully participate in the study were the same the one

used in the pilot study.

A series of weekly postings of the flyer were placed in Facebook and Twitter groups to solicit participants to respond to the surveys. A minimum of three posts, via social media platforms, were shared requesting participation to start and complete the survey. Each follow-up post was also a digital flyer which had links embedded into it where participants would gain access to acknowledgement of IRB approval, purpose of the study, voluntary acknowledgement, and agreement. After 19 days of solicitation and follow-up posts on social media platforms, 100 responses were collected. Once all participant responses were gathered, disaggregated, and data analysis was completed all collected information was permanently destroyed by deleting it from the home computer of the principal investigator. Lastly, after 36 months from the end of the study all data associated with the study was permanently deleted from both the local storage on of the home computer of the principal investigator and virtual storage.

Data Analysis Procedures

Data analysis began with a report of the number of participants that were provided the assessment via Google Forms, an online survey software, and the number of participants who completed the survey. The data was captured in a secure Google Form on a secure server until all 100 participants data was collected. Next, a descriptive analysis summary was completed based on the data collected on the independent and dependent variables. Furthermore, statistical analysis was conducted using the Statistical Package for the Social Sciences (SPSS) software to test inferential questions about the data.

Research Question 1. What is the relationship between secondary teachers’

occupational demands and well-being, specifically emotional exhaustion, personal accomplishments, and depersonalization, as measured by the MBI-ES during the COVID-19 pandemic?

H₀: There is no relationship between secondary teachers' occupational demands and well-being, specifically emotional exhaustion, personal accomplishments, and depersonalization, as measured by the MBI-ES during the COVID-19 pandemic.

H_a: There is a relationship between secondary teachers' occupational demands and well-being, specifically emotional exhaustion, personal accomplishments, and depersonalization, as measured by the MBI-ES during the COVID-19 pandemic.

Three Pearson Moment Product Correlations were used as the statistical test for this study to determine the relationship between secondary teachers' occupational demands and the affect it had on teacher well-being, specifically emotional exhaustion, personal accomplishments, and depersonalization, as measured by the MBI-ES during the COVID-19 pandemic.

Research Question 2. How are secondary teachers' coping mechanisms influenced by teachers' perceptions of occupational demands during the COVID-19 pandemic?

H₀: Secondary teachers' coping mechanisms do not influence teachers' perceptions of occupational demands during the COVID-19 pandemic.

H_a: Secondary teachers' coping mechanisms influence teachers' perceptions of occupational demands during the COVID-19 pandemic.

A Pearson Moment Product Correlation analysis was used as the statistical test for this study to determine the patterns among coping mechanisms influenced by teachers' perceptions of occupational demands during the COVID-19 pandemic.

Research Question 3. How are secondary teachers' coping mechanisms influenced by teachers' perceptions of well-being during the COVID-19 pandemic?

H₀: The null hypothesis states that secondary teachers' coping mechanisms do not influence teachers' perceptions of well-being during the COVID-19 pandemic.

H_a: In addition, the alternate hypothesis states that secondary teachers' coping mechanisms influence teachers' perceptions of well-being during the COVID-19 pandemic.

A Pearson Moment Product Correlation analysis was used as the statistical test for this study to determine the relationship among coping mechanisms influenced by teachers' perceptions of well-being during the COVID-19 pandemic.

Research Question 4. How are secondary teachers' perceptions of job demands, well-being and coping mechanisms affected by the primary method of instruction (i.e., face-to-face, blended, or fully virtual) during the COVID-19 pandemic?

H₀: Secondary teachers' perceptions of job demands, well-being, and coping mechanisms are not affected by the primary method of instruction (i.e., face-to-face, blended, or fully virtual) during the COVID-19 pandemic.

H_a: Secondary teachers' perceptions of job demands, well-being, and coping mechanisms are affected by the primary method of instruction (i.e., face-to-face, blended, or fully virtual) during the COVID-19 pandemic.

A one-way ANOVA's, was used to determine teachers' perceptions of job demands, well-being, and coping mechanisms affected by the primary method of instruction (i.e., face-to-face, blended, or fully virtual) during the COVID-19 pandemic.

Chapter 4: Results

Introduction

Over time the secondary educational system in America has provided continuity for educators to teach students. As a result, there has been a level of predictability as to what teachers may experience each day while in the classroom. However, the unique influence that the COVID-19 pandemic has had on public schools suggested that the American educational system may not have equipped teachers to respond to the barriers created by a global health crises (Ghazali, 2020). Trust and Whalen (2020) reported that 66% of teachers felt they were ill prepared to effectively support student learning during the COVID-19 pandemic due to having minimal experience integrating technology into their daily lessons, which resulted in increased levels of stress. The COVID-19 pandemic has been the greatest disruptor to modern education, negatively impacting teacher effectiveness, disturbing teacher work-life balance, resulting in a decline in job satisfaction, and an increased desire to leave the profession (McKim & Sorensen, 2020).

As a result, this study examined (a) how occupational demands and coping mechanisms affect secondary teachers' well-being during the COVID-19 pandemic and (b) how secondary teachers' perceptions of job demands, well-being, and coping mechanisms are affected by the primary method of instruction during the COVID-19 pandemic. In addition, this study looked at secondary school teachers who use one of three instructional methods. The teaching methods for this study included (a) face-to-face teaching where the teacher is teaching all students exclusively in the classroom; (b) exclusively online, or remotely, with no students in the classroom; or (c) a blended-model of instruction where teachers would simultaneously teach students both in person and

remotely. The problem addressed in this study was the increased job demands, due to the COVID-19 global pandemic, are negatively impacting job-related stress of suburban secondary school teachers in the southeast region of the United States.

The following chapter presents demographic characteristics of the participants such as gender distribution, age range by number of participants and race of participants in the study. In addition, the data collected on professional development offered to participants, years taught leading up to the study, and grade levels taught during the 2020-2021 school year will be discussed in this section.

Demographic Characteristics

Using the IC-19PSTS survey various participant attributes were captured as follows: participant gender, age, race, grade-level taught during the 2020-2021 school year, and total years of teaching experience at the time of the survey. Survey participants' demographic data was collected from 100 secondary teachers with various backgrounds from across America. For example, there were 85 female participants, 14 male participants, and one participant who preferred not to select a gender for the study.

However, the distribution of participant ages was more evenly dispersed among the population with 33 of the participant ages ranging between 35 to 44 years old. Meanwhile, 30% were 45 to 54 years old and 18% were 26 to 34 years old. Also, there were 17% of the population in study who were 55 to 64 years of age, whereas only 2% of the participants were 18 to 25 years of age (see Table 1).

Table 1*Summary of the Age Range and Number of Participants*

Age Range	Number of Participants	Percentage of N
18-25	2	2.0%
26-34	19	18.8%
35-44	33	32.7%
45-54	30	29.7%
55-64	16	16.8%
Total	100	100%

Data analysis showed that there were 80 participants who identified as White or Caucasian, 13 participants who were Black or African American, and 4 participants who identified as Hispanic or Latino, two Native American or Alaskan American participants, and two participants preferred not to say. Nevertheless, the study did not collect responses from participants who self-identified as Asian Pacific Islander, Multiracial or Biracial for this study, therefore all races were not represented in the study. Moreover, demographic data were also collected on what grade level or multiple grade levels each teacher taught each day during the COVID-19 pandemic (see Table 2).

Table 2*Participant Grade Levels Taught During 2020-2021 School Year*

Grade Level	Participants Teaching Each Grade Level	Percentage of N
Sixth Grade	37	36.6%
Seventh Grade	40	39.6%
Eighth Grade	46	45.5%
Ninth Grade	27	26.7%
Tenth Grade	27	26.7%
Eleventh Grade	29	28.7%
Twelfth Grade	32	31.7%
I did not teach 6 th – 12 th	0	0%

Note. $N = 100$. Each participant may have taught multiple grade levels during the 2020-2021 school year.

Professional development is common among the field of teaching, which is intended to provide ongoing support and guidance for educators to improve practices. Equally important was the professional development that was received in response to the COVID-19 pandemic. A professional development list was created by participants in the pilot group based on their perception of all available opportunities provided to teachers during the COVID-19 pandemic. The 100 participants were asked to select all of the professional development that applied to their level of support received from at either the school or district level. For example, social emotional learning, virtual classroom management, curriculum adaptation to virtual learning, instructional technology usage, hybrid-learning, and virtual implementation of accommodations in a general education population for special education students, and the adaption to virtual learning were all options to choose from on the survey (see Table 3).

Table 3

Professional Development Offered During COVID-19

District Professional Development	Participants	Percentage of N
Using Instructional Technology Tools	80	79.2%
Social Emotional Learning	46	45.5%
Adapting Curriculum and Instruction to a Virtual Environment	44	43.6%
Virtual Classroom Management	39	38.6%
Reengagement in a Hybrid Learning Environment	36	35.6%
Virtual Implementation of Special Education in General Education Environment	17	16.8%
I did not Receive District/School Level Support	14	13.9%

Note. $N = 100$. Each participant may have participated in more than one professional development during the 2020-2021 school year.

Furthermore, demographic data were also collected to determine how many total years each participant has been teaching. The total number of years teaching also included the 2020-2021 school year as (see Table 4).

Table 4

Total Number of Years Teaching

Range of Years Taught	Number of Participants	Percentage of N
0-4	6	6.0%
5-9	14	13.9%
10-14	20	19.8%
15-19	22	21.8%
20-24	18	17.8%
25-29	15	15.8%
30 or more	4	4.0%
Prefer not to say	1	1.0%
Total	100	100%

Data Analysis

Data was collected, analyzed and used to strengthen the purpose of the research, respond to research questions, and support the overall design of the study. A survey, cross-sectional research design was utilized to examine the impact of COVID-19 on secondary teacher's health and well-being. Moreover, the research design also provided a framework and clear approach to collecting data.

There were three variables measured within the survey used to answer the research questions. Each variable was based on the key components that underpinned teacher occupational demands as measured by MBI-ES survey (See Appendix B). More specifically, the three variables within the MBI-ES to measure job demands were Emotional Exhaustion, Depersonalization, and Personal Accomplishment. Variable one, Emotional Exhaustion (EE), according to Maslach (1986), can be identified as an individual emotionally overwhelmed with work responsibilities without adequately recovering. Survey Questions 1, 2, 3, 6, 8, 13, 14, 16, and 20 were combined to produce a

total EE score. Variable two, Depersonalization (DP) is characterized as an individual responding impersonally to the demands not only to other people, but also to the world around them (Maslach, 1986). Survey Questions 5, 10, 11, 15, and 22 were combined to produce a total DP score. Lastly, variable three, Personal Accomplishment (PA) is one's increased level of competence and overall perception of work success (Maslach, 1986). Survey Questions 4, 7, 9, 12, 17, 18, 19, and 21 were combined to produce a total PA score.

The researcher also collected survey data from each participant via the IC-19PSTS (See Appendix A), to specifically capture information related to secondary teachers' coping mechanisms used during the COVID-19 pandemic. Survey questions 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19 were combined to produce a well-being score. Coping is identified as the deliberate actions taken by secondary teachers in response to the sudden change in life and work routines caused by the COVID-19 global pandemic. Participants used a dropdown box to select one coping mechanism (from a list of 25 response options) corresponding to their primary, secondary, and third most frequently used coping mechanism, respectively. To operationalize the coping variable, five educators were asked to rate each of the 25 coping mechanism response choices and place them into one of three categories: healthy, unhealthy, or neutral. The categories were based on whether each of the educators felt the coping mechanism during the pandemic was healthy, unhealthy, or neutral. The five responses were tallied for each response option; the most frequent response from the five individuals for each category was used to score each coping mechanism as healthy (3 points), neutral (2 points), or unhealthy (1 point). For example, exercising was recognized as being healthy, while

social media was rated neutral, and drinking alcohol was identified as being unhealthy.

Each participants' primary, secondary, and third choices were then summed to produce an overall coping score for each participant. A coping scale was developed that ranged from 1-9. The higher the score (or the closer to 9) the healthier the participants' coping mechanisms; the lower the score, the more unhealthy the participants' coping mechanisms were. For example, if a participant chose to cope with the COVID-19 global pandemic by exercising (3 points), participating in leisure activities (3 points), and starting a new hobby (3 points) for a total of 9-points, that participant would be considered to have chosen healthy coping options. Additionally, if a participant chose isolation (2 points), medication (2 points), and traveling (2 points) for a total of 6-points, as options to cope during COVID-19, global pandemic, those choices would have suggested that their approach to coping was neither healthy nor unhealthy. Whereas, a participant who chose binge watching (1 point), drinking alcohol (1 point), and gambling (1 point) to cope with the impact of COVID-19 global pandemic would have been considered to have chosen unhealthy options to cope.

Data collection and analysis are critical when attempting to successfully make connections between multiple variables. The results of the study hinges on the researcher's ability to analyze and communicate the findings in a clear and concise manner. The study consisted of the participants completing one survey, with two sections, which led to a complex data analysis using the SPSS platform. As a result of the analysis, the findings of the survey as they related to the research questions are captured below.

Research Question 1

To answer Research Question 1, what is the relationship between secondary teachers' occupational demands and well-being as measured by the MBI-ES during the COVID-19 pandemic, three Pearson Product Moment Correlations (PPMC), were used to test the relationships between 100 secondary teachers' EE, PA, and DP and the affect it had on teacher well-being. The null hypothesis was that there is no relationship between secondary teachers' occupational demands and well-being, as measured by the MBI-ES during the COVID-19 pandemic. In addition, the alternate hypothesis stated that there was a relationship between secondary teachers' occupational demands and well-being, specifically emotional exhaustion, personal accomplishments, and depersonalization, as measured by the MBI-ES during the COVID-19 pandemic. A PPMC was conducted between EE and well-being. A significant, moderate negative correlation was found ($r = -.45, p < .001$) proposing that as EE increases, well-being decreases. Also, the PPMC analysis reported a significant relationship between PA and well-being ($r = .22, p = .03$); however, the correlation is weak. Lastly, a PPMC was conducted between DP and well-being; a significant, moderate, negative correlation found ($r = -.34, p < .001$), suggesting that as DP increases, well-being decreases. Therefore, the researcher rejected the null hypothesis.

Research Question 2

To answer Research Question 2, how are secondary teachers' coping mechanisms influenced by teachers' perceptions of occupational demands during the COVID-19 pandemic, three PPMC's were conducted. The null hypothesis is that secondary teachers' coping mechanisms did not influence teachers' perceptions of occupational demands during the COVID-19 pandemic. In addition, the alternate hypothesis is that secondary

teachers' coping mechanisms influenced teachers' perceptions of occupational demands during the COVID-19 pandemic. A significant, negative correlation was found between EE and coping ($r = -.28, p = .005$) proposing as participants EE increased they engaged in more unhealthy coping mechanisms. However, the correlation was weak so the results should be interpreted with caution. Additionally, a PPMC produced a significant, negative correlation between DP and coping ($r = -.28, p = .005$), suggesting that as participants DP increased they engaged in more unhealthy coping mechanisms. Also, the PPMC analysis reported that PA and coping were significantly correlated ($r = .24, p = .02$), suggesting that as PA increases, the use of healthy coping mechanisms also increase. Although the researcher rejected the null hypothesis, the correlations associated with RQ2 were weak and should be interpreted with caution.

Research Question 3

To answer Research Question 3, how are secondary teachers' coping mechanisms influenced by teachers' perceptions of well-being during the COVID-19 pandemic, a PPMC was conducted. A moderate positive correlation was found between coping mechanisms and well-being ($r = .38, p < .001$), proposing that as well-being increases, coping mechanisms increase. As a result of the analysis, the researcher rejected the null hypothesis.

Research Question 4

To answer Research Question 4, how are secondary teachers' job demands, perceptions of well-being, and coping mechanisms affected by the primary method of instruction (i.e., face-to-face, blended, or fully virtual) during the COVID-19 pandemic, five, one-way ANOVAs were conducted with primary method of instruction as the

independent variable, and well-being, coping, EE, DP, and PA as each of the five dependent variables. The null hypothesis stated secondary teachers' perceptions of job demands, well-being, and coping mechanisms are not affected by the primary method of instruction (i.e., face-to-face, blended, or fully virtual) during the COVID-19 pandemic. To that end, a One-way ANOVA revealed that there was not a significant difference among secondary teachers', EE regardless of whether they taught face-to-face, blended, or fully virtual ($F(2, 97) = .17, p = .85, \eta^2 = .10$). Nevertheless perceptions of well-being on teachers teaching blended ($M = 3.46, SD = 1.25$) were higher than both educators teaching face-to-face ($M = 3.42, SD = 1.38$) and teachers teaching fully virtual ($M = 3.15, SD = .97$). The results failed to reach significance.

Likewise, a one-way ANOVA revealed no significant difference among means for secondary teachers' PA regardless of whether they taught face-to-face, blended, or fully virtual, $F(2, 97) = 1.34, p = .27, \eta^2 = .10$. Although, observations of well-being on teachers teaching blended ($M = 4.27, SD = .90$), were higher than those teaching fully virtual ($M = 4.13, SD = .65$) and face-to-face ($M = 3.89, SD = 1.07$), the results failed to reach significance.

Also, a one-way ANOVA revealed no significant difference among means for secondary teachers' DP regardless of whether they taught face-to-face, blended, or fully virtual, $F(2, 97) = 2.44, p = .09, \eta^2 = .10$. Teachers teaching blended ($M = 1.69, SD = 1.48$), reported higher DP than those teaching fully virtual ($M = .60, SD = .33$) and face-to-face ($M = 1.21, SD = 1.06$); however, the results failed to reach significance.

Similarly, a one-way ANOVA revealed no significant difference among means for secondary teachers' well-being regardless of whether they taught face-to-face,

blended, or fully virtual, $F(2, 97) = .65, p = .52, \eta^2 = .10$. Though perceptions of well-being on teachers teaching fully virtual ($M = 2.69, SD = 1.02$) were higher than those teaching face-to-face ($M = 2.29, SD = .69$) or blended ($M = 2.36, SD = .74$), the results failed to reach significance.

Lastly, a one-way ANOVA revealed a non-significant difference among means for secondary teachers' coping mechanisms, regardless of whether they taught face-to-face, blended, or fully virtual, $F(2, 97) = .80, p = .45, \eta^2 = .10$. While coping mechanisms for teachers teaching in a blended ($M = 6.85, SD = 1.46$) format were slightly healthier than those teaching fully virtual ($M = 6.50, SD = 1.87$) or face-to-face ($M = 6.40, SD = 1.50$) the result failed to reach significance. Therefore, the researcher failed to reject the null hypothesis.

Additional Analysis

Further analysis was conducted on the impact that COVID-19 on secondary teachers' health and well-being, revealed correlations among variables not discussed as a part of answering the research questions. To that end, there were significant comparisons among the means for the amount of years taught and coping, $F(8, 91) = 2.18, p = .04, \eta^2 = .10$. Furthermore, there was a significant difference among the number of years taught and the participants ability to cope when teaching 0-1 year ($M = 9.00, SD = 0.0$), 2-4 years ($M = 5.20, SD = 1.30$), 5-9 years ($M = 6.07, SD = 1.69$), 10-14 years ($M = 6.90, SD = 1.59$), 15-19 years ($M = 6.50, SD = 1.87$), 20-24 ($M = 6.89, SD = 1.18$), 25-29 years ($M = 6.65, SD = 1.54$), and 30 or more years ($M = 6.00, SD = .82$). The data represents that teachers with less experience may be more comfortable with going between multiple modes of instruction. Additionally, district/school level professional

development received in response to the COVID-19 global pandemic in the area of re-engagement in a hybrid environment and coping was not significant ($r = .49, p = .24$), suggesting that as professional development for re-engagement in the area of hybrid learning slightly increase, participants ability to cope increases slightly. Also, district/school level professional development received in response to the COVID-19 global pandemic in the area of virtual implementation of accommodations for special populations in general education environment and PA produced a significant, positive correlation ($r = .02, p < .001$) proposing that as professional development supporting accommodating special education students within the general education setting increase, teachers experience a higher level of PA.

Summary

As a result of the COVID-19 global pandemic, secondary teachers were faced with multiple challenges both professionally and personally. The present study examined the increased job demands, due to the COVID-19 global pandemic and how it may have negatively impacted job-related stress in suburban secondary school teachers across the United States. As school districts began to respond to the overwhelming demands that were placed on teachers, many educators felt divided between two ways of thinking. One perspective was that teachers felt supported and accommodated by districts, while an alternative viewpoint was that educators felt controlled and unsupported by their central offices (Brelsford et al., 2020). Nonetheless, several districts provided professional development to address the perceived needs of educators teaching face-to-face, blended, and fully virtual to ensure that appropriate support was available. Many teachers are familiar with the necessity to continuously innovate to meet the needs of their students

while simultaneously coping with increased workloads (Starkey et al., 2021). However, teachers chose various coping mechanisms in response to job demands regardless of district support, years taught, age, race, or gender. To that end, the analysis of collected data revealed that teachers' well-being was directly related to the use of healthier coping mechanisms. Likewise, as PA increased, the use of healthy coping mechanisms also increased. Although many educators chose healthy and unhealthy choices to cope with the impact of COVID-19 on the teaching environment, many participants reported that professional development positively contributed to their overall feeling of PA. Perhaps the COVID-19 global pandemic has informed how districts may create professional development opportunities for educators to not only teach through increased job demands, but also maintain a positive well-being during an unpredictable school climate.

Chapter 5: Discussion

Introduction

The overall purpose of this study was twofold: (a) to determine how occupational demands and coping mechanisms affected secondary teachers' well-being during the COVID-19 pandemic, and (b) to determine how secondary teachers' perceptions of job demands, well-being, and coping mechanisms were affected by the primary method of instruction during the COVID-19 pandemic. Perhaps the worldwide spread of COVID-19 has not only changed the way educators teach, but also how educators cope with occupational stress. COVID-19 forced school district leaders to search for solutions to appropriately respond to the instructional, operational, social, and emotional needs of teachers. To that end, professional development opportunities emerged to support remote teaching, adjust daily school procedures, and target interventions to manage emotions uncovered by unexpected work stress brought on by COVID-19.

This study used a cross-sectional survey design to capture data from 100 male and female teachers of various races and ethnicities who taught in Grades 6 through 12 in the United States during the COVID-19 global pandemic. The participants were selected through convenience sampling and snowball sampling, methods. The middle and high school sample of teachers who volunteered were a subgroup of 6th -12th grade educators who taught students during the 2020-2021 school year. Participants were given one survey with two parts. The first part of the survey, IC-19PSTS, which consisted of 19 questions, was designed to capture secondary teachers' professional development support, demographic information, overall well-being, perceptions of job demands, and coping strategies used during the COVID-19 global pandemic. The second part of the

survey given to participants was the MBI-ES, consisting of a 22-statement survey on job-related feelings, using a Likert scale indicating the frequency by which the teacher educator experienced the feeling, ranging from 0 (*never*) to 6 (*every day*). A summary based on of the findings associated with job related stress and teacher job demands, the overall context of the study to current research, interpretations of the findings as it related to secondary teachers, implications for future work around the well-being of middle and high school teachers, limitations to the study, and future recommendations for the additional research will be discussed in the following sections.

Summary of Findings

The following overview will provide an explanation of the research results and analysis to provide important insight revealed during the in-depth investigation of the impact of COVID-19 on secondary teachers' health and well-being. There were four research questions that contributed to the data analysis of the 100 teacher responses outlined below.

Research Question 1

What is the relationship between secondary teachers' occupational demands and well-being, specifically EE, PA, and DP, as measured by the MBI-ES during the COVID-19 pandemic? The results from the analysis of data for Research Question 1 suggested that as EE increases, well-being decreases meaning that the more emotionally drained and exhausted teachers were, due to the changes involved with teaching during COVID-19, the lower their well-being. The sudden and abrupt stop-and-go of teaching coupled with the unfamiliarity of instructing students in an unpredictable environment as a result of COVID-19 may have contributed to the increased level of exhaustion, which directly

impacted teacher overall well-being in this study. Based on the results of 100 secondary teachers' responses from across the United States the EE exhaustion of teachers disrupted their well-being while teaching during the COVID-19 global pandemic. Additionally, PA was positively, but insignificantly related to well-being. The findings suggested that teachers who accomplished goals they set for themselves had a slightly greater well-being regardless of the ever-changing teaching environment. In other words, many teachers were in denial of the negative impact that COVID-19 was having on them and believed that the pandemic would end soon. Each teacher with this belief was experiencing depersonalization, which changed their ability to experience teaching as they once did, in addition to diminishing their overall well-being.

Research Question 2

How are secondary teachers' coping mechanisms influenced by teachers' perceptions of occupational demands during the COVID-19 pandemic? A significant negative correlation was revealed between EE and coping. The relationship demonstrates that secondary teachers who reported to be emotionally exhausted chose to engage in more unhealthy coping mechanisms than others who did not experience a heightened level of work-related fatigue. In addition, participants who showed an increased level of DP also chose to engage in more harmful coping mechanisms than others who did not experience a heightened level of EE. Conversely, the data showed that participants who felt they were accomplishing goals or making progress in their daily teaching practices chose healthier coping mechanisms, suggesting that the internal feeling that positive progress was being made also contributed to their desire to cope with stress in a positive way.

Research Question 3

How are secondary teachers' coping mechanisms influenced by teachers' perceptions of well-being during the COVID-19 pandemic? A moderate positive correlation was found between coping mechanisms and well-being. The analysis showed a trend that further suggested the selection of positive coping mechanisms as way to mitigate undesirable teaching conditions, positively impacts teachers' well-being. In addition, teachers that consistently maintained a positive well-being throughout the school year regardless of their circumstances, increased their chances for sustaining a positive work/life balance. Similarly, healthy coping mechanisms provided a different lens to view the challenges associated with COVID-19. In addition, as teachers perceived the world around them as positive and participated in encouraging activities, especially during crisis, well-being flourished benefiting teachers as education changed before their eyes.

Research Question 4

How are secondary teachers' perceptions of job demands, well-being and coping mechanisms affected by the primary method of instruction (i.e., face-to-face, blended, or fully virtual) during the COVID-19 pandemic? Teachers during the pandemic taught students in various ways. However, there were primary methods of instruction that were captured and analyzed to better understand how teacher well-being may have been impacted by COVID-19. The modes of instruction for this study were identified by teachers who taught face-to-face, blended, or fully virtual. To that end, the results of the one-way ANOVA failed to reach significance among participants' well-being, coping mechanisms, EE, PA, and DP based on the mode of instruction. Despite the complex

delivery methods and various approaches to remote learning during the 2020-2021 school year, participants in the study were not significantly impacted by the various modes of instruction that they were asked to use to meet the needs of secondary students during a global pandemic.

Interpretation of Findings

It is imperative that the health and wellbeing of teachers who taught during the COVID-19 global pandemic be examined to see the potential long-term emotional impact it may have had on teacher wellness (Gillespie et al., 2021). The current study examined the impact of COVID-19 on secondary teachers' health and well-being during the 2020-2021 school year. More specifically, the overall intent of the study was to determine how the COVID-19 virus not only impacted teaching and learning, but also influenced the way educators chose to cope with the additional stressors associated with a global pandemic. Moreover, the results showed that the majority of participants in the study regardless of age, gender, years taught, or race indicated various coping strategies used during the global pandemic which means that all the teachers in the study were having similar experiences in spite of their diverse backgrounds. According to Teng and Wu (2021) many teachers coped better when they understood the potential plan to help mitigate the impact of COVID-19. Nonetheless, coping strategies were relative to their reported level of well-being. For example, participants with a positive well-being chose healthy coping mechanisms, whereas teachers with a decreased level of well-being elected for more harmful ways to cope with increased levels of stress. The results based on the participant responses was expected based on the review of the current literature.

Similarly, teachers who were able to have teaching success, which contributed to

a feeling of accomplishment during the global pandemic, also reported the use of healthy coping mechanisms. Therefore, the findings supported the notion that teachers were at their best when they were able to teach students. Moreover, a commitment to student learning has shown to be a key component in the dispositions of high-performing teachers (West et al, 2020). Similarly, the ability to adapt in a way that allows them to continue to teach students contributes to a feeling of accomplishment. Not all teachers were able to make the adjustment, therefore many were unable to improve their well-being simply by having teaching success. The teachers who found a way to set and accomplish goals were able to create positivity in an unpredictable work environment. Nonetheless, as both unhealthy and healthy coping mechanisms were used to deal with various stress associated with COVID-19, many participants reported that professional development positively contributed to their feeling of accomplishment.

School districts have had to not only acknowledge, but also address the increase of teacher fatigue due to the impact of COVID-19. In a recent study, 444 educators showed an increase in anxiety and symptoms of depression which were linked to decreases in occupational wellness and emotional exhaustion (Peele & Wolf, 2020). To that end, many teachers reported to have experienced increased levels of exhaustion while teaching during the global pandemic. The findings also proposed that as exhaustion increased, well-being decreased. The results indicated that teachers who were unable to find a healthy way to cope with stress associated with COVID-19 were also faced with an overall decrease in health. It appears the participants in the study chose unhealthy coping habits (e.g., drinking alcohol, binge watching) to escape reality. The overarching meaning to this discovery was that teachers' well-being directly impacted their level of fatigue and

emotional fitness. The outcome was expected: as anxiety increased across participants, much of the data trended toward unhealthy coping behaviors.

Despite perceptions that teachers simply need to think that the world around them is good in order to teach during such an unfamiliar time in education, is not enough to stop the realities associated with the negative impact that a global pandemic may have had on teacher wellness. In order to mitigate the conditions created by COVID-19, many teachers coped by organizing groups that met to discuss what was needed to ensure that students had the best possible chance to succeed academically while in the global pandemic (Dayal & Tiko, 2020). Similarly, many of the participants in the study acknowledged that coping mechanisms were the difference in improving their teaching experience or diminishing the hard work and agility needed to thrive in uncertain conditions. Additional meaning gleaned from the findings suggested that healthy coping mechanisms such as spending time with family and exercising were activities that each teacher could do at home. This data showed that teachers looked for ways to either communicate with others within their sphere of influence or train their body to improve well-being. Therefore, a strong emphasis was placed on the home as a place of refuge for many teachers as the COVID-19 virus complicated their teaching practices.

The challenge impacting teacher health and well-being was due to the sudden transition from familiar face-to-face teaching pedagogical practices to an online teaching approach with no training (Nasr, 2020). With that said, the evidence of the teaching modality and how it impacted teacher well-being was not as predictable as other variables within the study. Face-to-face, blended, and fully virtual were options for participants to choose from to identify how they taught most of the 2020-2021 school year. Nonetheless,

many of the participants were not impacted by the various modalities. The predication was that the teachers would have issues with teaching both virtual and blended more than face-to-face. Perhaps the fact that most participants taught using a combination of all three methods of instruction, minimized any potential results. Possibly the confounding variable of teachers naturally connecting with other educators with similar experiences may have caused the data to be insignificant when participants were being asked what method was most often used to teach. Although there was a significant impact for teachers during the COVID-19 global pandemic, teachers adapted, learned, and grew into more diverse teachers (Nasr, 2020).

Although much of the results from the study were anticipated based on how the study was designed, there were some additional analysis that revealed correlations among variables not considered when attempting to answer the research questions. For example, the findings suggested that teachers who have less than 4 years of experience were uncomfortable with changing methods of instruction as compared to their veteran counterparts who more easily adapted to change. Perhaps the less experienced teacher has not had years of teaching in a traditional setting, and therefore, lacks the ability to shift from one modality to another without increasing levels of anxiety. Additional investigation pointed to the significance of professional development aimed at supporting teachers working with students with disabilities proved to contribute to teachers' overall feeling of accomplishment. Moreover, teachers want to have professional development that is meaningful and easily transferable to their work environment. Professional development has become a priority rather than an option for teachers during the COVID-19 global pandemic (Wong et al., 2021). While many of the items that were discussed in

this section were not used to answer research questions, the results were anticipated based on many teachers' desire to continue to grow professionally and apply what they learn to their teaching to improve their practice. Despite the existing literature on how teachers chose to cope, improve health, and maintain a positive well-being there is more recent literature that will help to add clarity to the findings of this study.

Context of Findings

While there is literature related to how educators' health and well-being have been impacted by the presence of COVID-19, the current study examined the effect that it has had within the context of secondary teachers. The findings of the study were influenced by the educators' approach to coping, method of teaching, and overall well-being, for teachers during the pandemic, in addition to professional development meant to mitigate the challenges associated with COVID-19. Much of the current research has emphasized the student experience during the global pandemic as a result of the COVID-19 virus, however many teachers have faced improbable challenges that no other educators have faced before. Due to that fact, no teachers have escaped the inevitability of constant change in teaching practices and modification of content due to the pandemic.

When there is change, whether in routine or environment, teachers are faced with how they will cope with the shift. However, the way in which teachers choose to cope will either help or hinder their ability to be an effective educator. The global pandemic has ushered in a drastically different set of stressors and considerations around safety practices and instructional expectations (Pressley, 2021). Furthermore, the sudden change from teaching students face-to-face to teaching remotely greatly influenced their ability to cope. Teachers who taught synchronously or taught students online in real-time, coped

better than teachers who taught students asynchronously, or provided assignments and recorded lessons for students to follow (Jelińska & Paradowski, 2021). Similarly, this study aligned with recent findings that teachers who engaged with students remotely, which best simulated a face-to-face learning experience, also chose healthy coping mechanisms. Additionally, the results of Jelińska and Paradowski (2021) highlighted the highest level of coping with the sudden change from traditional teaching to remote teaching was reported from secondary teachers. Perhaps the findings from this study and recent studies suggest that teachers prefer teaching students face-to-face, or to teach within a modality that allows them to interact directly with students.

Historically, teachers have been trained through education programs, alternative education classes, and through local regional educational centers in preparation to go into the teaching field. Teachers are expected to instruct, assess, mentor, monitor, and provide social and emotional support for students each day. However, very few programs or classes prepare teachers to maintain their own positive well-being. In the same way there are very few policies, if any that ensure districts address teacher well-being in a systematic and intentional way. According to Farley and Chamberlin (2021), district policies have done quite the opposite; as a result, the well-being of teachers across the educational landscape has been neglected. Much of the influence of district policies since the onset of the pandemic have compromised teachers' ability to teach more so than before the pandemic. For example, participants in this study often responded to the questionnaires through the lens of the policies that they had to adhere to while teaching during a pandemic. Many of the policies were restrictive in nature and very prohibitive. Although the current study did examine the teacher experience related to the shift in the

duties and responsibilities while in global pandemic, the restrictions did not present a causal relationship. Similarly, Farley and Chamberlin (2021) also provided evidence that there was no causal relationship among teacher well-being based on district policies that had been developed to mitigate the COVID-19 pandemic such as school closures and working remotely. It would be beneficial for district resources to be directed at positively impacting teacher well-being.

Secondary teacher well-being may be attributed to many stressors associated with the COVID-19 global pandemic. Specifically, secondary teachers have perceived to have an increase in anxiety between the months of October and June in addition to reporting a decrease in efficacy and belonging (Von der Embse & Mankin, 2021). Perhaps the educators in the current study were also experiencing a similar upturn at the time in which they provided responses to the questionnaires. Considering that the global pandemic began to impact most school districts in the month of March, the current study parallels what is believed to be some of the most challenging months during the school year. Consequently, there is alignment with the current research of Von der Embse and Mankin, (2021) and the current study which both showed evidence of rising stress levels during the teaching months August to June. Hence, the data shows that not only were teachers experiencing common stress associated with the teaching profession, but participants were also experiencing the challenging conditions created as a result of COVID-19. One condition, social isolation was due to the nature of remote learning, working from home, and no longer working collaboratively with other teachers. Among all responses in this study, the findings showed that when teaching from home, most participants agreed that isolation did influence their well-being. Isolation also changes

teachers' perspective on what school means to them. Teachers reported that they were now asked to exist in a role where there was no privacy or certainty of what tomorrow will bring, which further contributes to the decline in their well-being (Kralovec et al., 2021).

Similar to the current study, Baeriswyl et al. (2021) also used a self-reported survey to determine teacher exhaustion and yielded similar responses among a secondary school population when being asked if they felt that their workload had increased during the global pandemic. The researchers were seeking to determine if a teacher's workload would relate positively to emotional exhaustion. The findings showed that teacher fatigue was clearly related to workload although not directly. The cross-sectional survey also showed similar results in its responses, which suggested that participants strongly agreed that COVID-19 has increased the overall workload related to teaching and learning.

The conditions associated with teaching also played a key role in the degree of anxiety associated teacher stress. Nonetheless, teachers have found solace in the support of other teachers when dealing with increased levels of stress (Maas et al., 2021). Similar to the findings from the current study, where participants responded that they felt exhausted from the work they were doing in the classroom, Maas et al. (2021) also reported that teachers were experiencing an increase in the level of fatigue during the pandemic. Many teachers in the current study reported that nearly every day they were burned out from work or emotionally drained. Equally important are teachers in the urban sector of the educational community that also experienced significant levels of burnout and stress which contributed considerably to the decline in the mental health and well-being of teachers (Camacho et al., 2021). Due to the nature of the current study, it is

assumed that there were urban educators who contributed to participant responses which also align with the findings from the study. Although teachers were experiencing high levels of stress, they also experienced personal accomplishment in the midst of a global pandemic. With regard to personal accomplishment Camacho et al. (2021) suggested that districts and schools specifically aimed at providing various levels of support predicted higher levels of individual achievement for those who received ongoing support.

The current study revealed that professional development during the COVID-19 global pandemic was important for teacher personal accomplishment, positive health, and well-being. The researcher captured demographic data based on what the participants identified as professional development. A recent study identified professional development opportunities for teachers as useful tools for navigating the unfamiliar teaching terrain associated with emergency remote learning. Similar to this study, Juarez-Diaz and Perales (2021) reported that impact targeted sessions around helping teachers to facilitate online learning positively impacted well-being and overall teacher effectiveness in the classroom. Likewise, secondary teachers within the context of COVID-19 and its influence on the teaching profession showed that educators were more effective at teaching when specific attention was made in the development of skills that were directed at what they needed for an effective virtual learning environment (Rodríguez-Muñiz et al., 2021). Nearly 80% of the participants in the current study reported that there was a clear focus on professional development to improve instructional technology skills among all teachers. However, when compared to a study conducted by Dweikat and Zyoud (2021), professional development in the area of mindfulness and reflective

practices helped teachers to deliver instruction with a higher level of proficiency and increase overall self-confidence at a rate of nearly 85%. The comparison demonstrates that different professional development opportunities can be effective in not only improving teacher technology skills, but also teacher efficacy, which both contribute to improving the health and well-being of educators.

Although there are inherent stressors associated with any profession, the 2020 – 2021 school year has proven not only to be unpredictable, but to be an unforgettable school year for secondary teachers. There were multiple contributing factors that were identified as key concerns for educators while teaching during the COVID-19 global pandemic. For example, in a study examining teacher stress, educators teaching outside of their content area and classroom management were identified as workplace concerns that led to a decrease in well-being among participants (Fichett et al., 2021). While classroom management was a small component within the current study, there were no considerations for teachers' out-of-field and how that experience may have increased secondary teachers' level of stress. Views on who was experiencing the highest levels of stress due to COVID-19 range from novice teachers at the beginning of their career to veteran teachers who have been in the profession 15-19 years. Nonetheless, there were teachers who showed that they were better able to adapt to the abrupt change regardless of the placement or ability to manage the classroom. The current study revealed similar results, however, the results were specific only to younger participants who reported that they adapted more easily to sudden change. Conversely, a recent study contradicts those findings and suggested that older participants adapted more easily to the stress of sudden change (Raikou, 2021). Both this study and recent research has provided additional

perspectives on the impact that COVID-19 has had on educators and their ability not only to teach, but also adapt to the demands placed on their health and well-being.

The results of the findings for this study have multiple implications that will inform future educational leaders, school district responses to teacher stress, and the need to advance research to better understand how to proactively prepare teachers for potential stress and barriers to success in the COVID-19 educational era. The data collected will inform how to practically apply the findings to various educational settings, theoretically think through possible scenarios that may impact teacher wellness, and progress research on teacher coping mechanisms during a global pandemic.

Implications of Findings

There are various implications to the study that indicate how COVID-19 has impacted secondary teachers across the United States. The data collected and interpretations of the analysis has led to practical, theoretical, and research implications that will inform future educators of the impact that a global pandemic has had on secondary teachers. The sections below details how each implication may influence teachers, school leaders, and school districts to better understand how to provide the best possible health and well-being guidance and support.

Practical Implications

Not only has teaching and learning changed forever in the face of the COVID-19 global pandemic, teacher well-being has become a key factor in teacher effectiveness. This study and others like it have shown that there are multiple variables that contribute to teacher burnout, a desire to leave the profession, a decline in health, and a decrease in well-being. Based on the current research findings and previous studies around teacher

health and well-being, it is apparent that there should not only be a focus on improving teacher teaching practices, but also on improving teacher well-being. As a result, the findings show that teachers are not exempt from the stressors of the world. This idea supports the notion that districts must examine the support currently provided for educators to address the needs of the whole person, outside the scope of teaching.

Seldom have school districts actively sought to prepare teachers for anything more than educating students. It can be argued that now there is more to ensuring that teachers are ready to provide the highest quality instruction. The reality is that the teaching profession has changed, perhaps for the better, despite what may have been the most challenging professional experience for teachers. It is possible that teachers have learned what an increase in occupational stress, flexibility, and inevitable innovation in the face of constant change may do to their state of health and well-being (Raikou et al., 2021). The overarching challenge, now that there has been a re-focus on the deeper need for educators to be supported in other ways, will be how to intentionally address the concern. The findings of the study showed that teachers took it upon themselves to find various ways to cope during the pandemic. Some participant choices to cope were viewed as healthy whereas others were regarded as not healthy. As a result, school districts must leverage the findings to secure both the human and financial resources necessary to mitigate future challenges that may disrupt teacher health and well-being.

There will need to be a nearly 80% increase in the teacher workforce to meet the demand of the rising student population, however many teachers desire to leave the teaching field due to the belief that there are inadequate opportunities for support and well-being among the profession (Falecki & Mann, 2021). When teachers are left to cope

with job-related stress on their own, they also increase levels of work-related related fatigue and exhaustion. The far-reaching implications for districts failing to ensure a teacher wellness infrastructure is in place may also inadvertently be contributing to an already rapidly increasing rate of attrition and burnout among educators (Falecki & Mann, 2021). When districts are engaged in adding value to the teachers they employ, they are better equipping teachers to meet the needs of the schools and communities they serve.

Theoretical Implications

The results of the research conducted in this study suggested that targeted professional development was most beneficial when trying to mitigate the impact COVID-19 had on teacher health and well-being. The lessons learned from this type of interruption to the teaching profession will help to inform how districts may respond to future disruptions. The healthy coping methods teachers utilized, combined with professional development conducted during the global pandemic have implications for examining current district initiatives and advance conversations around potential teacher wellness reform opportunities.

Based on the JD-R Theory, individuals who cannot respond to physiological and psychological job stress may result in increased levels of occupational stress (Bakker & Demerouti, 2007). In addition, the JD-R Theory predicted that organizations would experience unwanted organizational outcomes when employees had undesirable experiences. To that end, countless teachers experienced life-changing events within the context of both the professional and personal arenas. Nevertheless, teachers found a way to initiate change within themselves, find alternative ways to meet students where they

were, in addition to learning how to rely on others for strength when times seemed unbearable. In theory an environment that allows access to robust professional development and opportunities to connect with peers will result in exceptional teacher wellness outcomes.

The application of the JD-R Theory to the findings within this study demonstrates the necessity for positive work environments. Moreover, ensuring that the work environment is curated with wellness as a key lever in the construction of programming or professional development that will lead to more positive teaching experiences for educators. The results underpin the findings from this study which show that teachers benefit from targeted professional development, find ways to cope with stress, learn how to reach students, and gravitate toward others to help them get through difficult times during their life.

Research Implications

In response to this study and the increasing literature related to the impact that COVID-19 has had on teachers across the country, school districts must face the reality that health plays on teacher wellness. The health and well-being needs of teachers have been deserted as academic accountability, testing requirements, and the emergence of districts focusing on students' social and emotional needs has risen. As a result, overall teacher wellness has not been viewed as a viable and legitimate teacher concern. Most often teacher wellness is not among initiatives designed to develop teachers. Historically, district resources have been directed at improving curriculum and instruction with the purpose of improving student academic outcomes.

The ability for teachers to cope with stressors is a skill that is acquired over time

through experiences which have prepared them to decide the most effective approach to deal with a specific situation. The current findings of the study have provided clarity on the need for professional development and possible coping methods that may be effective for future teachers facing similar stress. In addition, the research further showed that demographics did not play a significant role as to how stress was managed or the positive effect that professional development had on how teacher health and well-being during the global pandemic. In spite of school districts and local school leader's efforts to provide some level of support to teachers who have experienced a high level of stress, collectively attempts have been ineffective. Largely, these efforts have stifled initiatives leading to sustainable teacher health and well-being.

There may not be any existing benefits of COVID-19. However, it has forced the educational community to rethink various levels of teacher support, modes of instruction, and the direct impact that outside forces may have on teacher wellness. Similarly, the research also revealed the challenges teachers faced and how they should be supported if or when the next pandemic-like event takes place. Thus, it is critical that school districts across the United States develop local school board policies and levy legislators to enact laws around health and well-being to ensure teachers are equipped to prepare students for college and career pathways after high school.

Limitations of Study

There are threats to both internal validity and external validity of the study which may have informed the outcome of the study. Creswell and Guetterman (2019) stated that the internal validity of the study may be impacted by maturation, or that participants have grown to accept the situation over time, perhaps due to professional development or

district support directly in response to COVID-19. The COVID-19 pandemic evolved each day; therefore, teachers' experience would have changed depending on how each school district decided how and when teachers would return to school buildings. Additional pressure from the United States government to get students back into school would have also added additional pressure for district leaders to get students face-to-face with teachers again. The variation in teachers' return to work process may have influenced responses to the survey. In addition, there were threats to the external validity which may have resulted in the inability to generalize the results to any one population. According to Creswell and Guetterman (2019), the interaction of selection and treatment would have threatened the external validity of the study. As a result, the participants may have chosen to participate or not participate in the study which meant that the results may not be representative of the target population; therefore, generalizations about the results will be difficult to make.

After developing an original tool for the study, the researcher validated the instrument. Instrument validation is a multi-step process that involves the researcher determining the construct and content validity (Creswell & Guetterman, 2019). However, the limitation to the use of a developed instrument is that there has not been any previous data collected that can substantiate the instrument's usage. Similarly, there have been no internal consistency tests, construct validity scores, or other validation methods to ensure its effectiveness as found in previously established instruments. In addition, there was potential for response bias due to participants responding to the surveys based on what they believed the researcher wanted to hear as opposed to their honest response. Therefore, it is important to leverage not only valid and reliable instruments, but also

develop new tools that will provide real-time data to prepare educational leaders to lead through unpredictable environments.

Additional limitations also included the reality that school districts across the country were given the autonomy to do what they thought was best to meet the needs of their students, which meant that there were a wide range teaching modalities implemented throughout local districts. Due to that fact, opportunities for teachers to teach students online, face-to-face, hybrid, or a combination of all three may have limited the study in various ways. For example, if a teacher was asked to educate students exclusively online then shifted to a hybrid model for a few weeks and then moved to a face-to-face mode of instruction, that educator may have a different perception of their teaching experience during the COVID-19 global pandemic. Learning experiences equivalent to a traditional setting and alignment of digital tools with traditional tools were all due to teachers moving to some form of emergency remote teaching (Stewart, 2021). Subsequently, teachers were forced to respond to the demands that the COVID-19 global pandemic brought about, without warning, proper preparation, or clear guidance.

Many of the challenges were due to school districts not being equipped to support teaching students remotely or through a hybrid model. School districts restricted by human and financial resources or by an inadequate infrastructure to support virtual learning also limited how sustainable teaching would be over time. Though districts who previously provided laptops to students and staff prior to the global pandemic may have had the limit of technology minimized, the complexity of using it as the medium for teaching and learning remain a barrier for participants. Also, when teachers were asked to conduct classes through a hybrid model there still were the limits of physical space

needed to ensure that the transmission the COVID-19 virus was minimized. Not knowing the physical spaces, each teacher had to accommodate them while maintaining social distancing among students. Thus, due to the complexities of the situation and constant changes, it is difficult to understand how the COVID-19 virus impacted the participants' responses.

The overwhelming need to maintain not only the safety of students, but also the safety of teachers was a factor that may have contributed to the way that participants responded to the surveys. Likewise, participants feared that contracting the virus from members of the school community and taking it back into their respective homes also contributed to the limitations of the study. To that end, teachers in the study may have chosen not to attend work if they felt that the risk of exposing a vulnerable person living in the home was possible (Sundaram et al., 2021). If participants felt forced to attend work, they often were distant from other staff members to mitigate the likelihood of transmission, which also may have caused participants to view the surveys differently than someone who is not in that situation. Now that secondary teachers and have faced the difficult decisions in both life and work pertaining to COVID-19, researchers must determine what direction to go to best meet the needs of all educators.

Future Research Directions

The current study captured data from a wide-range of participants who self-reported their responses through an online platform. Future research should build from the current findings with specificity in the sample group. Specifically examining novice teachers in the profession, 1 to 4 years, may reveal valuable data and extend the current study's findings that suggested that novice teachers did not adjust well with change

during the pandemic. Similarly, expanding the sample size from 100 participants to include more of the overall teaching population across the United States would be beneficial to the generalizability of the findings within the novice teacher population. Also, future studies could gather information, in-person, through one-on-one interviews or naturalistic observations of novice teachers. More specifically, the ability to ask in-depth questions to educators will provide a deeper understanding of the various aspects of teaching and coping while in a global pandemic. Moreover, capturing and examining participants' perspectives on COVID-19 and its impact on their well-being will also provide rich data. This insight would be beneficial for extending the research and better understanding the nuances associated with a complex variable such as the COVID-19 global pandemic. A detailed one-on-one interview may also provide clarity and explanations as to why participants selected one response over another. Likewise, future research may include isolating the variable of school location to explore the different experiences among teachers in urban, suburban, or rural districts. The specificity of the sample group coupled with a qualitative methodology may provide a robust understanding of the nuances associated with COVID-19 and the impact it has had on the teaching profession.

The COVID-19 phenomenon and the potential emergence of new approaches to teacher pre-service pedagogy is worth a deeper examination. Suggestions for future research include investigating teacher preparation programs in a post-pandemic world. More specifically, examining the potential teacher-preparation needs that are necessary for educators to teach in an ever-changing educational landscape. A researcher may examine what course offerings have been modified to include not only how to teach

students in a remote setting, but also how to ensure teacher-candidates are equipped with tools to make certain they are able to sustain a positive health and well-being. The goal would be to follow pre-service teachers through the program, to a K-12 school setting, and through a year to determine the effectiveness of the teacher-preparation program in the midst of a global pandemic.

At the time of this study, the pandemic was actively impacting participants as they answered the questions within the survey, however the carnage left in the wake of the pandemic may not have been realized as much by participants at the time, but the coming months would reveal additional collateral damage. A limitation within the study was that participants feared that contracting the virus from members of the school community would expose individuals at their homes to the COVID-19 virus. At the time of this study there were no wide-spread vaccines available for all populations in the United States. Future studies could extend research examining the health and well-being of teachers with the vaccine compared to the health and well-being of teachers the without the vaccine and their ability to cope with teaching during the pandemic. Constructing the same study within the context of the vaccination as a key differentiator among participants may provide an entirely new perspective about the impact the COVID-19 has had on secondary teacher health and well-being. Furthermore, conducting a study examining how a series of coping with stress professional development trainings would impact the health and well-being of not only secondary teachers in the United States, but also in other countries would also benefit the larger educational community. The findings may add to the body of recent investigations on professional development and its positive impact on teachers' well-being and sense of accomplishment during a global pandemic.

Lastly, a follow-up study comparing the same teachers or teachers with similar demographics, administrators, and counselors from the 2021-2022 school year to the 2022-2023 school year to see if teachers' well-being changed as the pandemic continues to be evolve and be part American educational landscape.

Conclusion

The mental health and well-being of teachers is not only an education system problem, but also a human issue. A problem that is impacting all races, religions, and crosses all political lines. No matter the profession, everyone had to change how they work, entertain, and how they live life forever. The impact of diminished health and well-being within the context of teaching and learning has a ripple effect that will predictably impact student performance. A teacher who is not able to perform the necessary duties and responsibilities cannot positively impact their students, workplace, community or other teachers. As a result, the school system also undergoes a transformation due to teacher burnout, exhaustion, inadequate support, and unproductive professional development. As these practices persist across districts, the organization becomes ineffective. The subtle changes in teachers' ability to cope with stress is especially critical during a time of uncertainty and unpredictability. This instability will stifle how well teachers are able to grow and inspire students to perform at a high level.

In the past it has been common to view teachers as expendable, undervalued, and not worthy of the level of respect found in other professions. There has been little attention to the broader needs of teachers. Most of the consideration has gone to paying teachers more, which is great, but the teachers who are in the profession are committed to the needs of students rather than a desire to be rich. Historically, school districts have

extended reactionary solutions for teachers rather than preventative measures to mitigate the rising health and well-being needs of teachers. A proactive approach will not eliminate all the issues associated with teacher wellness, but it will provide protection, nourishment, skills, and vision to explore viable options to help them cope with high stress situations. School districts who choose to embed teacher wellness into the fabric of the organization will benefit by having adults who can leverage solution-based options that contribute to a healthier version of themselves.

This study will contribute to the body of scholarly work focused on informing, empowering, and improving the health and well-being of teachers. The beneficiary of these findings will be the educational community, state and local school districts charged with ensuring that student learning is taking place at high levels each day. Furthermore, the results discussed and presented here will also contribute to the counseling, social work, and psychological community to add perspective for future clients who are in the field of education. This study may also inspire other practitioners to tackle the complex world of health and well-being and its impact on teachers. Intervention, data collection, and supporting effective teaching practices are the key district actions needed to make it through an unprecedented time in American educational history (Kush et al., 2021). If the educational community is serious about the future of our country, the time is now to get serious about the health and well-being of our teachers.

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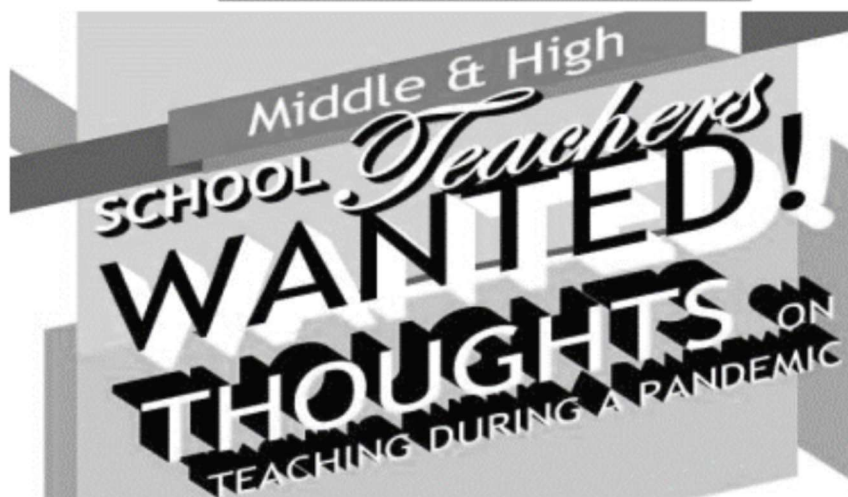
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Appendix A

Survey Flyer



Title of the Study: *The Impact of COVID-19 on Secondary Teachers' Health and Wellbeing*



Basic Purpose of Study: My name is James Thornton, Principal Investigator (PI) and doctoral student at Nova Southeastern University. I am conducting a research study which will focus on how job demands, mode of instruction, and coping has affected middle.

Eligibility: You are being asked to take part in this research study because you are either a **middle school teacher** or **high school teacher** who taught through the 2020-2021 school teachers' wellbeing during the COVID-19 global pandemic.

Survey Length: approximately 4-10 minutes | **Contact:** jt2015@mynsu.nova.edu
Participants will not be compensated for participating in taking the survey

[Click for Consent and Survey Now](#)

Appendix B

Maslach Behavior Inventory – Educators Survey (MBI-ES)

MBI for
Educators
Survey

Christina Maslach, Susan E. Jackson & Richard L. Schwab

The purpose of this survey is to discover how educators view their job and the people with whom they work closely.

Instructions: On the following page are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, write the number "0" (zero) in the space before the statement. If you have had this feeling, indicate how often you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

How often: 0 - Never 1 - A few times a year or less 2 - Once a month or less
3 - A few times a month 4 - Once a week 5 - A few times a week 6 - Every day

Example: How often 0-6

Statement:

1. _____ I feel depressed at work.

If you never feel depressed at work, you would write the number "0" (zero) under the heading "How often." If you rarely feel depressed at work (a few times a year or less), you would write the number "1." If your feelings of depression are fairly frequent (a few times a week but not daily), you would write the number "5."

MBI - Educators Survey - MBI-ES: Copyright ©1986

Christina Maslach, Susan E. Jackson & Richard L. Schwab.

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working closely
with my
students.

19. I have
accomplished
many worthwhile
things in this job.

20. I feel like I'm
at the end of my
rope.

21. In my work, I
deal with
emotional
problems very
calmly.

22. I feel
students blame
me for some of
their problems.

Appendix C

Impact of COVID-19 Pandemic on Secondary Teachers Survey (IC-19PSTS)

Impact of COVID-19 Pandemic on Secondary Teachers Survey & Maslach Behavior Inventory - Educators Survey

The Impact of COVID-19 Pandemic on Secondary Teachers Survey (C-19PSTS) was developed to capture secondary teachers' perceptions of occupational demands, coping mechanisms, and well-being based on their primary method of instruction, during the COVID-19 pandemic.

The purpose of the Maslach Behavior Inventory - Educators Survey for Educators Survey (MBI-ES) is to discover how educators view their job and the people with whom they work closely.

* Required

Impact of COVID-19 Pandemic on Secondary Teachers Survey- Professional Development During COVID-19

1. 1. What district/school level professional development did you receive in response to the COVID-19 global pandemic? Select all that apply. *

Check all that apply.

- Social Emotional Learning
- Virtual Classroom Management
- Using Instructional Technology Tools
- Re-Engagement in a Hybrid Learning Environment
- Adapting Curriculum and Instruction to a Virtual Environment
- Virtual Implementation of Accommodations for Special Populations in a General Education Environment
- I did not receive district/school level professional development in response to the COVID-19 global pandemic

Demographic Information

Please answer the following questions to the best of your ability.

2. 2. Which of the following best describes your gender? *

Mark only one oval.

- Female
 Male
 Not Listed
 Prefer not to say

3. 3. What is your current age? *

Mark only one oval.

- 18-25
 26-34
 35-44
 45-54
 55-64
 65 and over

4. 4. Which of the following best describes you? *

Mark only one oval.

- Asian or Pacific Islander
 Black or African American
 Hispanic or Latino
 Multiracial or Biracial
 White or Caucasian
 Native American or Alaskan Native
 Prefer not to say

5. 5. During the 2020-2021 school year, what grade level did you teach? Select all that apply.

Check all that apply.

- 6th
 7th
 8th
 9th
 10th
 11th
 12th
 I did not teach 6-12th grade during the 2020-2021 school year

6. 6. Including the 2020-2021 school year, how many total years have you been teaching? *

Mark only one oval.

- 0-1
 2-4
 5-9
 10-14
 15-19
 20-24
 25-29
 30+
 Prefer not to say

Skip to question 7

**Impact of COVID-19
Pandemic on Secondary
Teachers Survey - Job
Demands & Well-Being**

When responding, please consider your feelings and attitudes regarding the impact of the Coronavirus pandemic as a secondary teacher during the 2020-2021 academic school year.

7. 7. Please select all methods of instruction that you utilized during the 2020-2021 school year. *

Check all that apply.

- Face-to-Face
 Blended
 Fully Virtual

8. 8. Select primary method of instruction during the 2020-2021 school year. *

Mark only one oval per row.

	Face-to-Face	Blended	Fully Virtual
Select one	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Rate how much you agree, disagree, or does not apply to your teaching experiences during the 2020-2021 school year. *

Mark only one oval per row.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Does not apply
9. When teaching from home, I felt isolated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I was concerned about my mental health.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I felt my workload had increased.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I was concerned about my physical health.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. I believe my students' learning gaps have increased.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I did not feel confident teaching students in a blended format (i.e., virtual and face-to-face simultaneously).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. As a result of COVID-19, I felt teaching students face-to-face restricted my teaching style.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. I felt less confident engaging students online.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Impact of COVID-19 Pandemic on Secondary Teachers Survey - Coping Mechanisms

10. 17, What was your PRIMARY coping mechanism used during the COVID-19 global pandemic during the 2020-2021 school year? Choose from the drop down box. *

Mark only one oval.

- Binge Watching (TV Watching)
- Co-Workers
- Drinking Alcohol
- Exercising
- Family
- Following COVID-19 Protocols
- Gambling
- Isolating
- Leisure Activities
- Meditating
- Medication
- Mental Health Professionals
- Mindfulness
- New Hobby
- Online Shopping
- Over-Eating
- Recreational Drug Usage
- Socializing
- Social Media
- Spiritual
- Supplements/Vitamins
- Under-Eating
- Video-Calls
- Traveling
- Tobacco Use

11. 18. What was your 2nd main coping mechanism used during the COVID-19 global pandemic during the 2020-2021 school year? Choose from the drop down box. *

Mark only one oval.

- Binge Watching (TV Watching)
- Co-Workers
- Drinking Alcohol
- Exercising
- Family
- Following COVID-19 Protocols
- Gambling
- Isolating
- Leisure Activities
- Meditating
- Medication
- Mental Health Professionals
- Mindfulness
- New Hobby
- Online Shopping
- Over-Eating
- Recreational Drug Usage
- Socializing
- Social Media
- Spiritual
- Supplements/Vitamins
- Under-Eating
- Video-Calls
- Traveling
- Tobacco Use

12. 19. What was your 3rd main coping mechanism used during the COVID-19 global pandemic during the 2020-2021 school year? Choose from the drop down box. *

Mark only one oval.

- Binge Watching (TV Watching)
- Co-Workers
- Drinking Alcohol
- Exercising
- Family
- Following COVID-19 Protocols
- Gambling
- Isolating
- Leisure Activities
- Meditating
- Medication
- Mental Health Professionals
- Mindfulness
- New Hobby
- Online Shopping
- Over-Eating
- Recreational Drug Usage
- Socializing
- Social Media
- Spiritual
- Supplements/Vitamins
- Under-Eating
- Video-Calls
- Traveling
- Tobacco Use