

ELEMENTARY PUBLIC SCHOOL TEACHERS'  
COPING MECHANISMS USED DURING THE COVID-19 PANDEMIC IN NORTH TEXAS:  
A PHENOMENOLOGICAL STUDY

by

Timothy Michael Eastman

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

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APPROVED BY:

Matt Ozolnieks, Ed.D., Committee Chair

Meredith Park, Ed.D., Committee Member

### **Abstract**

The purpose of this transcendental phenomenological study was to describe elementary public school teachers' experiences coping with stress during the COVID-19 pandemic. Using Lazarus and Folkman's transactional model of stress and coping theory, the study answered the central research question: How do elementary public school teachers describe their experiences coping with stress during the COVID-19 pandemic? The sub-questions addressed: What psychological, physical, and emotional mechanisms are elementary public school teachers using to cope with stress during the COVID-19 pandemic? Purposeful sampling and maximum variation sampling were used to select 14 elementary public school teachers' who experienced teaching during the COVID-19 pandemic. The setting of the study was North Texas Independent School District. The data collection methods used included participant journaling, semi-structured interviews, and a focus group. The data was analyzed using Moustakas's data analysis which began with epoché, then transcendental-phenomenological reduction, imaginative variation, and synthesis of composite textural and composite descriptions. Two themes were identified through data analysis which included teacher stress and teacher coping mechanisms. Findings indicated that teachers had faced much adversity during the COVID-19 pandemic in ways such as students, technology, and instruction; however, they have been resilient throughout the pandemic. Psychological, physical, and emotional coping mechanisms have helped teachers cope with their stress. Implications for research suggested that helping teachers find adequate outlets to cope with their stress could be effective. Recommendations for future research are provided.

*Keywords:* coping, COVID-19, emotional, mental health, physical, psychological, stress, teachers

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### **Dedication**

I dedicate this to my wife, Nicole, and our children, Jack and Kaitlyn. Nicole, your unwavering support throughout this doctoral journey has been second to none! Thank you for always believing in me. Jack and Kaitlyn, you are exceptional children! Thank you for being patient with me through this journey. Jack and Kaitlyn, may you pursue knowledge throughout your lives.

Secondly, I dedicate this to all educators worldwide. I have learned that educators are resilient and unique! Keep working hard, and remember it is okay to take a day off! You are replaceable; your health is not. Teach like a champion!

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### **List of Abbreviations**

Centers for Disease Control and Prevention (CDC)

Coronavirus disease 2019 (COVID-19)

Institutional Review Board (IRB)

North Texas Independent School District (NTISD)

Novel coronavirus (2019-nCoV)

Personal protective equipment (PPE)

Research Review Board (RRB)

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

U.S. Food and Drug Administration (FDA)

World Health Organization (WHO)

## **CHAPTER ONE: INTRODUCTION**

### **Overview**

The purpose of this transcendental phenomenological study was to describe elementary public school teachers' experiences coping with stress during the COVID-19 pandemic. Teaching is considered one of the most stressful professions and even more stressful due to the COVID-19 pandemic (MacIntyre et al., 2020). Teachers are extremely valuable as they help shape and guide the world's future generations (Kumawat, 2020). Federal, state, and local education agencies are not prepared for sudden school closures resulting from the rapid spread of COVID-19 (Quezada et al., 2020), enhancing teacher stress. The following sections provide essential background information, including historical, social, theoretical context, situation to self including empirical significance, theoretical significance, practical significance, the problem statement, purpose statement, the significance of the study, research questions, definitions pertinent to the research, and summary.

### **Background**

COVID-19 is a reasonably new disease; however, it has proven catastrophic (Yi et al., 2020). COVID-19 has impacted every facet of human life globally (Haleem et al., 2020), such as but not limited to healthcare (Sturdy et al., 2020), food availability (Jafri et al., 2021), economy (McKee & Stuckler, 2020), mental health (Shah, 2020), and education (Baker et al., 2021). The historical, social, and theoretical contexts will provide in-depth research about the true impact of COVID-19.

### **Historical Context**

The coronavirus disease 2019 (COVID-19) is a new disease that has not been seen in humans before 2019 (Center for Disease Control and Prevention [CDC], 2021c). COVID-19 is

caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2 virus) (World Health Organization [WHO], 2020c). The first confirmed case of COVID-19 was in December 2019 in Wuhan, Hubei, China (Vannabouathong et al., 2020), and the first death in Wuhan, China, was reported in January 2020 (Yi et al., 2020). On January 30, 2020, the WHO (WHO: Regional Office for Europe, 2020) announced the novel coronavirus (2019-nCoV) as a public health emergency of international concern. The WHO (WHO: Regional Office for Europe, 2020) has only declared a public health emergency of international concern five other times since the inception of the International Health Regulations in 2005. There are four variants of COVID-19 in the United States: Alpha, Beta, Gamma, and Delta (Table 1) (CDC, 2021g).

**Table 1**

*COVID-19 Variants*

Variant	Name	Country of the first detection	USA detection
B.1.1.7	Alpha	United Kingdom	December 2020
B.1.351	Beta	South Africa	January 2021
P.1	Gamma	Japan/Brazil*	January 2021
B.1.617.2	Delta	India	March 2021

*Note:* Adapted from *What You Need to Know About Variants*, by Centers for Disease Control and Prevention, 2022 (<https://www.cdc.gov/coronavirus/2019-ncov/variants/variant.html>). In the public domain.

\*The Gamma variant was detected at one of the airports in Japan from an inbound Brazilian passenger (CDC, 2021f).



The five other public health emergencies of international concern included the Swine flu (H1N1) in April 2009, the poliovirus in May 2015, Ebola virus in August 2014, Zika virus in February 2016, and the Ebola virus in July 2016 (Rasmussen, 2020). The WHO (2020a) declared a global pandemic on March 11, 2020. The WHO (2021c) has reported 214,468,601 confirmed COVID-19 cases globally and 4,470,969 deaths. Thus far, the United States of America (USA) has 38,158,495 confirmed COVID-19 cases and 628,456 deaths (WHO, 2021c). The state of Texas accounts for 2,988,190 confirmed cases and 55,251 COVID-19 related deaths (Texas Department of State Health Services, 2021a). Globally, 4,953,887,422 people have been fully vaccinated, 361,192,198 have been fully vaccinated in the USA (WHO, 2021c), and 16,355,817 people have had at least one vaccine in Texas, and 13,604,236 Texans have received both vaccinations (Texas Department of State Health Services, 2021b).

There are three vaccines available to combat COVID-19: Pfizer-BioNTech, Moderna, and Johnson & Johnson. However, the Johnson & Johnson vaccine administration was halted for a brief period due to a blood clotting disorder caused by the vaccine (Weiland et al., 2021). The first COVID-19 vaccination is a two-dose regimen manufactured by, Pfizer-BioNTech, approved on December 11, 2020, by the U.S. Food and Drug Administration (FDA, 2020). The Pfizer vaccine is available for individuals 16 years and older (FDA, 2020). The second COVID-19 vaccine manufactured by Moderna is a two-dose regimen approved by the FDA (2021) on December 18, 2020. The third vaccine, a single-dose vaccine made by Johnson & Johnson, was released on March 12, 2021 (CDC, 2021a). The Moderna vaccine was available for individuals 18 years and older (FDA, 2021). Common side effects people have experienced from the vaccines “include pain, redness, and swelling” of the arm as well as “tiredness, headache, muscle pain, chills, and fever” (CDC, 2021h, para. 3). People who are fully vaccinated can still be

infected and spread COVID-19; however, breakthrough cases requiring hospitalization is rare compared to unvaccinated individuals (Bahl et al., 2021).

The virus is spread through person-to-person contact when people are within a distance of fewer than six feet via respiratory droplets produced when an infected person with COVID-19 coughs, sneezes, talks, sings or breathes (CDC, 2020b; WHO, 2020c). The incubation period of COVID-19 ranges from two to 14 days (Mayo Clinic, 2021). La, Shih, Ko et al. (2020) found that the mean incubation period of COVID-19 was 6.4 days, and Lauer et al. (2020) found that the median incubation period was 5.1 days, and 97.5% of infected people showed symptoms did so within 11.5 days. The most common COVID-19 symptoms reported consist of fever, cough, and fatigue (Mayo Clinic, 2021); however, other symptoms that may persist are shortness of breath, muscle aches, sore throat, congestions, nausea, and diarrhea (CDC, 2021a). However, some individuals who test positive for COVID-19 are asymptomatic (Delgado-Gallegos et al., 2020; Rasmussen & Popescu, 2021).

Older adults are more susceptible to severe outcomes such as hospitalization, admittance to an intensive care unit, the assistance of a ventilator to help breathe, and possibly death related to COVID-19 (CDC, 2021e). The CDC (2021e) reported that eight out of ten deaths in the USA are from adults 65 years and older (Table 2). American Indians, Asians, African-Americans, and Hispanic individuals are more likely to contract COVID-19, be hospitalized, and have a higher mortality rate than white individuals (CDC, 2021e). Older adults have a greater risk of contracting COVID-19 (Pearman et al., 2021), whereas Griffith et al. (2020) found that males have a greater risk of contracting COVID-19 and a higher mortality rate from COVID-19 (Griffith et al., 2020). In addition, pregnant women are at a greater risk of severe illness if they contract COVID-19 than non-pregnant women (CDC, 2021f)

**Table 2***Risk for COVID-19 Infection, Hospitalization, and Death by Age Group*

Compared to 5-17-year-olds	0-4 years old	5-17 years old	18-29 years old	30-39 years old	40-49 years old	50-64 years old	65-74 years old	75-84 years old	85+ years old
Cases	<1x	Reference group	2x	2x	2x	2x	1x	1x	2x
Hospitalizations	2x	Reference group	6x	10x	15x	25x	40x	65x	95x
Death	1x	Reference group	10x	45x	130x	440x	1300x	3200x	8700x

*Note:* From *Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity*, by Centers for Disease Control and Prevention, 2022 (<https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/hospitalization-death-by-age.html>). In the public domain.

The COVID-19 pandemic has caused an extended exposure to stress worldwide (Algeri et al., 2020; Cummings et al., 2021). Individuals have experienced a drastic increase in physical, psychological, and emotional stress (Park et al., 2020; Pedrosa et al., 2020). The most significant stressors during the COVID-19 pandemic included the infection of loved ones (Mertens et al., 2020), changes in daily living routines, and loss of jobs and income (Park et al., 2020). COVID-19 has elevated fear, anxiety, and depression amongst individuals (Taylor et al., 2020).

COVID-19 is not the first pandemic (Feehan & Apostolopoulos, 2021; Mackowiak, 2021) nor the first natural disaster (Arato et al., 2020; Dhawan, 2020) or violent school event that has negatively impacted teachers' mental health (Berlanda et al., 2019; Draucker, 2020). Natural disasters result from severe weather, such as winter storms, floods, tornadoes, hurricanes,

earthquakes, and wildfires, that present a substantial threat to human health and safety (Department of Homeland Security, 2018). Hurricane Harvey impacted Texas (Amadeo, 2019) and Louisiana (Edwards, 2017) in late August 2017, which impacted the mental health of students and teachers (Texas Education Agency [TEA], 2017). Hurricane Irma also impacted education in Florida in September 2017 (Hammerschlag et al., 2017). School shootings have similarly impacted educators' mental health (Novotney, 2018), such as but not limited: Columbine High School located in Littleton, Colorado, in 1999; Virginia Tech University located in Blacksburg, Virginia in 2007; Sandyhook Elementary located in Newton, Connecticut, in 2017; and Marjorie Stoneman Douglas High School located in Parkland, Florida, in 2018 (Naval Postgraduate School's Center for Homeland Defense and Security, 2021).

Pandemics (Atterberry, 2020; Pruitt, 2020), natural disasters (Ayala, 2019), and school shootings have caused schools to be flexible and adaptable in order to cater to the health and safety of students, teachers, and staff (Fiddiman et al., 2018). The Spanish flu in 1918 caused schools to implement increased safety measures such as wearing masks, teaching outdoors (Atterberry, 2020), isolating sick students, and sending students home who had fevers (Pruitt, 2020). Many urban schools closed during the Spanish flu pandemic; however, Chicago and New York City kept public schools open (Atterberry, 2020). In Los Angeles, California, public schools designed and adopted a mail-in homework approach for high school students to complete their assignments during the 1918 pandemic (Stern et al., 2009). Stern et al. (2009) also indicated that teachers enrolled in professional development classes during the mandatory school closures during the 1918 pandemic to enhance their pedagogical skills. A 2019 tornado destroyed schools in Dallas Independent School District in Dallas, Texas, which caused staff and students to be moved to different buildings to continue the 2019-2020 academic year (Ayala, 2019). School

shootings have resulted in schools installing metal detectors and employing school resource officers (Green & Hernandez, 2018). Many schools have shifted to a holistic approach that focuses heavily on creating and cultivating positive school environments and social-emotional learning to curb violence (Fiddiman et al., 2018). Historically, programs and outlets have been implemented to help teachers cope with stressful events (De Cordova et al., 2019). After Hurricane Harvey in August 2017, TEA (2017) suggested mental health services be available for teachers. Acton and Glasgow (2015), De Cordova et al. (2019), and TEA (2017) emphasize the importance of creating and maintaining relationships with colleagues, which has been deemed helpful in coping with stress.

### **Social Context**

COVID-19 has severely impacted the social aspect of many peoples' lives (Algeri et al., 2020; Osofsky et al., 2020). Many Americans have implemented safety measures to slow and reduce the spread of COVID-19 (Kramer, 2020). Stay-at-home orders were issued by 42 of the 50 states between March 2020 to April 2020 (Wang et al., 2021). Arkansas, Iowa, Nebraska, North Dakota, Oklahoma, South Dakota, Utah, and Wyoming did not issue a stay-at-home order during the pandemic (Wang et al., 2021). The CDC (2021d; 2021e) and the WHO (2020d) encourage individuals two years old and older to wear masks in public places and during social gatherings. The CDC (2020c) and the WHO (2021b) recommend that individuals ensure a social distance of six feet inside and outside while interacting with individuals, not from their immediate household.

The pandemic has severely impacted families (Feinberg et al., 2021), students (Terada, 2020), and teachers (Jain et al., 2021). Most schools worldwide began to close in spring 2020

(Buonsenso et al., 2021; Kaden, 2020). The unprecedented school closure movement has impacted 1.5 billion learners throughout 169 countries (Buonsenso et al., 2021).

The Texas governor, Gregg Abbott (2020a), issued executive order GA-08 on Thursday, March 19, 2020, temporarily ordering all schools to close in Texas. Schools in Texas began to close on March 23, 2020, as many school districts in Texas were on spring break. Governor Abbott (2020b) issued a new executive order GA-14 on Tuesday, March 31, 2020, extending the closure of in-person learning until May 4. Governor Abbott (2020d) filed a third executive order GA-16 on Friday, April 17, 2020, stating all private and public schools will be closed for in-person learning for the remainder of the 2019-2020 academic year. Monday, May 18, 2020, executive order GA-23 specified that schools could reopen June 1, 2020, for in-person instruction and summer school enrichment programs (Abbott, 2020e).

Family gatherings have been discouraged with family members that do not live in the same household (Lebow, 2020) to significantly decrease individuals' chances of becoming infected and spreading COVID-19 (CDC, 2021b). Some families have been forced to live close to each other, whereas friends and extended family relationships have been strained (Naser et al., 2020). Many families reported an increase in family disputes who live together, including spousal arguments, parents and children, and siblings (Levkovich & Shinan-Altman, 2021; Mikocka-Walus et al., 2021).

Elementary school students were impacted by the pandemic both academically and socially. Students' social interactions with peers were reduced to nearly half due to the immediate transition to online learning (Abuhammad, 2020). Students were forced to navigate a new learning environment and platforms, which created anxiety due to the sudden shift from in-person learning to virtual (Middleton, 2020). The sudden change was challenging for parents in

various ways, such as balancing their job and taking a more active role in their children's learning (Kuhfeld et al., 2020). Many students from low-socioeconomic families did not have sufficient internet access or technology to participate in online learning (Baker et al., 2021; Bonal & González, 2020).

Teachers were forced to abruptly pivot from face-to-face teaching to teaching online in the spring of 2020 (Jones & Kessler, 2020). Many teachers struggled with the sudden pivot as they were not used to using online platforms such as Google Classroom, Seesaw, and Zoom (Almonacid-Fierro et al., 2021). Teachers spent an average of four or more hours preparing for online lessons (Federkeil et al., 2020). Educators have been impacted by the lack of social interaction with their students (Davis & Phillips, 2021; Hebebcı et al., 2020) and colleagues (Bulińska-Stangrecka & Bagieńska, 2021). More than 50% of teachers are considering leaving the profession than before the beginning of the COVID-19 pandemic (CDC Foundation, 2021). Educators who teach 100% in person are less likely to suffer from depression and anxiety than their colleagues who teach virtually or hybrid (CDC Foundation, 2021).

### **Theoretical Context**

Stress is not a new concept, nor is coping with stress. This study seeks to identify elementary public school teachers' experiences coping with stress during the COVID-19 pandemic. Lazarus and Folkman's (1984) transactional model of stress and coping theory supports the idea that individuals must identify the stressor and then decide if it is worthy of addressing, known as primary appraisal based on if the encounter is classified as irrelevant, benign-positive, or stressful (Lazarus and Folkman, 1984). A stressful appraisal can take different forms, such as harm/loss, threat, and challenge. Harm/loss is past tense, meaning that the encounter has already impacted the person, threat equates to potential loss, and a challenge

has growth potential. Next, the person determines a particular coping mechanism to alleviate the stressor, known as the second appraisal (Lazarus & Folkman, 1984). As a result, this showed effective and healthy coping styles and mechanisms that will assist educators in selecting healthy coping styles and mechanisms and expanding Lazarus and Folkman's (1984, 1987) transactional model of stress and coping theory.

### **Problem Statement**

The problem is that COVID-19 has created new and unique stressors for teachers (Aperribai et al., 2020; Beames et al., 2021; Collie, 2021; Federkeil et al., 2020; Kaden, 2020; Khlaif et al., 2020; Kim et al., 2021; Kumawat, 2020; MacIntyre et al., 2020; Ozamiz-Etxebarria et al., 2021; Panisoara et al., 2020). Teacher workloads increased due to the rapid transformation from in-person learning to virtual learning (MacIntyre et al., 2020; Oliveira et al., 2021; Sánchez-Pujalte et al., 2021). Educators encountered a learning curve related to various online pedagogical practices, instructional models, and learning platforms (i.e., Zoom, Google Classroom, Seesaw) (Jain et al., 2021; Khlaif et al., 2020). Teachers faced new challenges of policies (i.e., two students in the bathroom at a time, scheduled bathroom times for classes), mandates (i.e., social distancing in the halls, lunchroom, classrooms, and playgrounds), and hybrid learning related to COVID-19 when schools reopened for the 2020-2021 academic year (Pressley, 2021a). Aperribai (2020) identified that the lack of teacher relationships with colleagues, students, and parents had increased teacher stress. The current literature focuses on individuals and teachers internationally who have experienced complete lockdowns due to COVID-19 coping with stress (Aperribai et al., 2020; Casagrande et al., 2020; Di Renzo et al., 2020). Therefore, the gap in the literature has been identified as limited research on how public



school educators in the USA cope with psychological, physical, and emotional stress caused by COVID-19.

### **Purpose Statement**

The purpose of this transcendental phenomenological study was to describe elementary public school teachers' experiences coping with stress during the COVID-19 pandemic. At this stage in the research, coping will be generally defined as an individual's ability to manage stress (Herman et al., 2020). The theory guiding this study is Lazarus and Folkman's (1984) transactional model of stress and coping.

### **Significance of the Study**

Teaching was a highly stressful profession pre-COVID-19 (Harmsen et al., 2018; Ramberg et al., 2019; Smetackova et al., 2019). COVID-19 has intensified teachers' stress (Kim et al., 2021; Kumawat et al., 2020; MacIntyre et al., 2020), anxiety (Jiang et al., 2020; Ozamiz-Etxebarria et al., 2020), and depression (Lizana et al., 2021; Santamaria et al., 2021; Taylor et al., 2020). Educators must be aware of healthy coping mechanisms. Healthy coping mechanisms can improve educators' overall mental health (Baker et al., 2021; Pressley, 2021b) and ultimately positively impact their students' most essential stakeholders (Bottiani et al., 2019). This transcendental phenomenological study has empirical, theoretical, and practical significance for students, teachers, administrators, superintendents, and educational leadership.

### **Empirical Significance**

Various studies focus on the impact of COVID-19 educators' mental health in different parts of the world (Akour et al., 2021; Beames et al., 2021; Cheng & Lam, 2021, Kim & Ashbury, 2020). However, few studies focus on the impact of COVID-19 on educators' mental health in the USA and the subsequent coping mechanisms used to maintain or improve their

overall mental health (Baker et al., 2021; Pressley, 2021b). This study addressed the empirical gap in the research by understanding how educators effectively cope with stress. It is imperative to understand how teachers cope with psychological, physical, and emotional stress caused by COVID-19 within the pandemic's confines. Healthy teachers are most productive, resulting in better student performance and well-being (Benevene et al., 2019).

### **Theoretical Significance**

Lazarus and Folkman's transactional model of stress and coping provides a framework to understand better the phenomenon being studied. How individuals interpret stress and cope with the identified stressors is the crux of Lazarus and Folkman's (1984) transactional model of stress and coping. When people encounter a transaction with the environment and deem it stressful, they will determine what coping mechanisms are available and select the best coping mechanism to deescalate the situation. This study will add to the theoretical significance by understating how educators in North Texas use Lazarus and Folkman's (1984) transactional model of stress and coping with the stressors of the COVID-19 pandemic.

### **Practical Significance**

Teacher stress can lead to adverse outcomes for students, such as lack of motivation and interest in learning (Bottiani et al., 2019; Oberle et al., 2020), low academic achievement, and a more significant occurrence of student disruptive behaviors (Herman et al., 2018). Teacher stress can also negatively affect the overall education system by increased absenteeism and teacher attrition (Herman et al., 2020). Teachers who are in good mental, emotional, and physical health are more likely to be productive and effective (Adams, 2019; Engels et al., 2019). This study will benefit educators by providing examples of healthy (Di Trani et al., 2020; Ferreira et al., 2021; Ogueji et al., 2021) and unhealthy coping mechanisms (Gurvich et al., 2020; MacIntyre et al.,

2020). In addition, it is practical for educators to understand what coping mechanisms are available and what coping mechanisms help alleviate their stress. Furthermore, the study will help national, state, and local educational agencies better support educators in the future regardless of whether the pandemic persists.

### **Research Questions**

This transcendental phenomenological study focused on elementary public school teachers' experiences coping with stress during the COVID-19 pandemic and was guided by the transactional model of stress and coping theory (Lazarus & Folkman, 1984, 1987). The study was guided by one central research question and three sub-questions. According to Creswell and Poth (2018), the central question serves as a broad, all-encompassing question that addresses the studied phenomenon. "Qualitative research questions are open-ended, evolving, and nondirectional" (Creswell & Poth, 2018, p. 137). The goal of the sub-questions was to further break down the central research question into smaller, more intimate parts (Creswell & Poth, 2018). The sub-questions will help depict teachers' coping mechanisms as the most used and favored.

#### **Central Research Question**

What are the lived experiences of public elementary teachers coping with stress during the COVID-19 pandemic?

#### **Sub-Question One**

What psychological mechanisms are elementary public school teachers using to cope with stress during the COVID-19 pandemic?

#### **Sub-Question Two**

What physical mechanisms are elementary public school teachers using to cope with stress during the COVID-19 pandemic?

### **Sub-Question Three**

What emotional mechanisms are elementary public school teachers using to cope with stress during the COVID-19 pandemic?

#### **Definitions**

1. *Asymptomatic* – An infected person who does not demonstrate any symptoms (WHO, 2020c).
2. *Coping* – Coping is an individual’s ability to manage stress (Herman et al., 2020).
3. *COVID-19* – COVID-19 is a disease caused by the SARS-CoV-2 virus (WHO, 2020b).
4. *Mental health* – Mental health includes emotional, psychological, and social well-being, which impacts how people think, feel, and behave (U.S. Department of Health & Human Services, 2020)
5. *Social distancing* – Social distancing is where individuals maintain at least a six-foot space between each other to reduce the spread of COVID-19 (CDC, 2020c).
6. *Stress* – “Stress is emotional, cognitive, and physiological experience when environmental demands exceed an individual’s resources to adapt” (Herman et al., 2020, p. 70).

#### **Summary**

COVID-19 has created new stressors for teachers (Aperribai et al., 2020; Collie, 2021). This transcendental phenomenological study describes elementary public school teachers’ experiences coping with stress during the COVID-19 pandemic in North Texas. Understanding

how teachers cope with stress during the COVID-19 pandemic will generate practical ideas for fellow educators to alleviate stress (Baker et al., 2021). This study will help local, state, and national education agencies support their teachers' mental health (MacIntyre et al., 2020; Pressley, 2021a).

## **CHAPTER TWO: LITERATURE REVIEW**

### **Overview**

A systematic review of the literature was conducted to explore the impact of the COVID-19 pandemic and its relation to teachers' mental health and teachers' subsequent coping mechanisms. This chapter contains current literature related to the topic of study. In the first section, the theory relevant to COVID-19 and teachers' mental health, such as Lazarus and Folkman's (1984) transactional model of stress and coping theory, will be discussed, followed by a synthesis of recent literature regarding stress related to teaching within a pandemic, teachers' mental health, and coping. Lastly, the literature surrounding the impact of COVID-19 on teachers' mental health and the healthy and unhealthy coping mechanisms used by teachers will be addressed. This chapter reveals a gap in the literature about the impact of COVID-19 on teachers' mental health in the United States of America and how teachers in the USA have coped with stress during the COVID-19 pandemic. Thus, gaining a better understanding of how the pandemic has impacted teachers' mental health and the subsequent coping mechanisms used will help health care providers, school districts, and school leaders promote effective ways for teachers to manage, cope, and improve their mental health.

### **Theoretical Framework**

This literature review will examine how the phenomenon, the COVID-19 pandemic, and its relation to teachers' mental health and teachers' subsequent coping mechanisms relates to the

work of Lazarus and Folkman's (1984) transactional model of stress and coping theory. Lazarus and Folkman's (1984) theory will be viewed through mental health and coping lenses. Lazarus and Folkman (1984) focus on how people manage stress. The COVID-19 pandemic has enhanced teacher stress; therefore, Lazarus and Folkman's (1984) theory of transactional model of stress and coping theory can fit the parameters of this study. This study will provide additional support for Lazarus and Folkman's (1984) transactional model of stress and coping theory by exploring and describing elementary public school teachers' experiences coping with stress during the COVID-19 pandemic. Lazarus and Folkman's (1984) transactional model of stress and coping theory will guide the researcher's questions to bridge the gap between the existing literature and the problem of study.

### **Transactional Model of Stress and Coping Theory**

Lazarus and Folkman's (1984, 1987) transactional model of stress and coping is a multifaceted process that includes the product of a stressor by the environment and the individual's response to the stressor. Lazarus & Folkman's (1984) theory consists of cognitive appraisal, secondary appraisal, coping, and reappraisal. A human being continuously scans and interprets each transaction within their environment to determine if it is stressful and relevant to their well-being, known as a cognitive appraisal (Folkman et al., 1986; Lazarus & Folkman, 1984, 1987). There are three kinds of cognitive appraisal: primary appraisal, secondary appraisal, and reappraisal (Lazarus & Folkman, 1984, 1987). "These terms suggest, erroneously, that one is more important (i.e., primary) than the other, or that one precedes the other in time" (Lazarus & Folkman, 1984, p. 31). A primary appraisal is used to determine the significance of the encounter relating to the individual's well-being by classifying it as "irrelevant, benign-positive, or stressful" (Lazarus & Folkman, 1984, p. 32). If a transaction with the environment is irrelevant,

the encounter does not significantly affect the individual's well-being (Lazarus & Folkman, 1984). A benign-positive appraisal is classified as an encounter that yields or will yield a positive outcome (Lazarus & Folkman, 1984). There are three different forms of stress appraisals: "harm/loss, threat, and challenge" (Lazarus & Folkman, 1984, p. 32). Harm/loss would be classified as an injury, illness, or a life-altering event (Lazarus & Folkman, 1984). Threat refers to imminent harm or loss, which evokes negative emotions, whereas the challenge appraisal focuses on adaptation, growth, and positive emotions (Lazarus & Folkman, 1984).

Secondary appraisal determines what coping mechanisms are available and necessary to manage the situation effectively (Lazarus & Folkman, 1984, 1987). Coping actions are enacted if deemed essential due to the secondary appraisal (Folkman et al., 1986; Lazarus & Folkman, 1984, 1987). Coping mechanisms that are enacted can either be positive or negative depending on the individual's ability to cope with the situation at hand (Lazarus & Folkman, 1984, 1987). Lazarus and Folkman (1984, 1987) express two forms of coping: emotion-focused and problem-focused. Emotion-focused coping strategies often occur when an individual believes that nothing can be done to modify or improve the condition and focuses on an individual's emotions (Folkman et al., 1986; Lazarus & Folkman, 1984, 1987). However, problem-focused coping strategies aim to manage and solve the stressor (Folkman et al., 1986; Lazarus & Folkman, 1984, 1987). After a coping mechanism is used, an individual will reappraise the transaction to decide if the coping strategy was successful or unsuccessful and determine if the transaction moved from stressful to either irrelevant or benign-positive (Lazarus & Folkman, 1984). If the coping strategy is deemed unsuccessful, the individual may adapt and potentially enact another coping mechanism.

Educators experienced stress in their personal and professional levels due to the COVID-19 pandemic. However, teachers are individuals; therefore, each teacher copes and reacts to stress differently. Many studies that focus on stress and coping relating to educators and COVID-19 use Lazarus and Folkman's (1984) transactional model of stress and coping theory (Collie, 2021; Gaeta et al., 2021; Kim & Ashbury, 2020; MacIntyre et al., 2020) in the same manner the researcher plans on using it to frame the study. Thus, Lazarus and Folkman's (1984) transactional model of stress and coping theory is an appropriate lens to view the coping mechanisms elementary public school teachers in North Texas, specifically in NTISD, used during the COVID-19 pandemic.

### **Related Literature**

Education has undergone a massive overhaul as a result of the COVID-19 pandemic, thus impacting the mental health of educators (Aperribai et al., 2020; Federkeil et al., 2020; Kaden, 2020; Khlaif et al., 2020; Kim et al., 2020; Kumawat, 2020; MacIntyre et al., 2020; Ozamiz-Etxebarria et al., 2021; Panisoara et al., 2020). A teacher's well-being and ability to cope with stress healthily are imperative for teachers to fully fulfill their obligation as educators (MacIntyre et al., 2019). The massive education overhaul in Texas began Thursday, March 19, 2020, as the Governor of Texas, Greg Abbott (2020a), signed an executive order to temporarily close all schools beginning March 20, 2020, through April 3, 2020. Governor Abbott (2020b) issued a new executive order on Friday, April 17, 2020, which officially closed brick and mortar schools for the remainder of the 2020-2021 school year. Mental health and coping related to the uniqueness of teachers' stress amid the COVID-19 pandemic will be reviewed. The common themes identified within the literature are teachers' mental health, specifically cognitive,



behavioral, and emotional well-being, followed by psychological, physical, and coping mechanisms.

### **Teachers' Mental Health**

Teaching is considered one of the most stressful professions and even more stressful due to the COVID-19 pandemic (Lizana et al., 2021; MacIntyre et al., 2020). The COVID-19 pandemic has impacted educators' homeostasis as educators are considered essential workers (Beames et al., 2021). Nevertheless, many educators experienced difficulties satisfying their need for safety due to the virus's contagious nature (Sanche et al., 2020), the mortality rate (Dubey et al., 2020), and widespread fear (Alsolais et al., 2021; Arato et al., 2020). Educators' inability to feel safe ultimately affects their role as teachers in reaching the apex of their full potential (Lever et al., 2017). Stress impacts teachers' mental health, affects their effectiveness as educators (Adams, 2019; Baker et al., 2021; Sánchez-Pujalte et al., 2021), and impairs areas of their personal life such as self-management and emotional awareness (Sánchez-Pujalte et al., 2021). Teachers have experienced acute changes in their personal lives (Aperribai et al., 2020; Palumbo et al., 2021) and professional lives (Dayal & Tiko, 2020; Kaden, 2020) due to the COVID-19 pandemic, thus impacting their mental health in areas such as cognitive, behavioral, and emotional well-being (Federkeil et al., 2020). However, more resilient educators reported fewer COVID-19 worries and lower levels of anxiety and depression (Barzilay et al., 2020). Rabacal et al. (2020) stated that teachers' safety was most impacted, whereas teachers' mental health was the least impacted. Social isolation (Ammar, Trabelsi, Brach, et al., 2020) and isolation from family and loved ones perpetuated loneliness, particularly in younger adults compared to middle-aged and older adults (Varma et al., 2021), adversely impacting people's mental health (Holingue et al., 2020; Mikocka-Walus et al., 2021). Prowse et al. (2021) added to

the research by finding that females' mental health was more affected by social isolation and loneliness than males. Conversely, educators who lived with one or more people reported higher stress levels than educators who lived by themselves (Delgado-Gallegos et al., 2021). However, the pandemic increased family time for several households (Carroll et al., 2020; Purwanto et al., 2020), forcing people to adapt to a slower pace of life, which positively impacted people's mental health (Calvano et al., 2021).

Palumbo et al. (2021) noticed that people who worked from home found it more challenging to maintain a work-life balance due to the temptation to work more, ultimately affecting their overall mental health. However, teachers in Indonesia who worked from home during the pandemic enjoyed saving money on gas, limiting the time in the car, which reduced stress levels due to not driving in traffic (Purwanto et al., 2020). In addition, preventive measures such as social distancing and working from home were necessary to reduce the spread of COVID-19 and make people feel safe (Purwanto et al., 2020); however, these measures enhanced feelings of isolation and stress (Levkovich & Shinan-Altman, 2021). Comparably, individuals who had to quarantine due to testing positive for COVID-19, been exposed to someone who tested positive, or suspects they are infected with COVID-19 demonstrated higher levels of depression and anxiety (Meyer et al., 2020).

Professionally, the abrupt, drastic change in March 2020 resulted from school closures in the form of instructional delivery, which was in-person learning pre-pandemic to virtual learning, greatly affected teachers' mental health (Baker et al., 2021; Hidalgo-Andrade et al., 2021). Many school districts and schools were unprepared for this sudden shift as they lacked technological infrastructure (Al Lily et al., 2020; Chaturvedi et al., 2021; Hebebcı et al., 2020; Khlaif et al., 2020), which resulted in many teachers, students (Almazova et al., 2020; Rabaglietti et al.,

2021), and families were unprepared (Anakwe et al., 2021). Similarly, many teachers were unfamiliar with online pedagogical practices (Almazova et al., 2020); therefore, educators had to spend more time preparing for lessons (Khlaif et al., 2020; Lizana et al., 2021), which further exacerbated their mental health (Baker et al., 2021) and physical health (Pozio-Rico et al., 2020). Teachers who were considered digital natives were not always digitally literate; however, those who regularly incorporated technology in their teaching were more prepared for the sudden shift to virtual teaching and learning (König et al., 2020; Song & Chen, 2019) and experienced less stress and emotional anguish and greater enjoyment (Hidalgo-Andrade et al., 2021; Purwanto et al., 2020). Likewise, Song and Chen (2019) discovered that older adults who valued technology were more open to receiving technological assistance from their colleagues.

Federkeil et al. (2020) discovered that most teachers spent an average of over four hours preparing for virtual lessons and online assessments (Davis & Phillips, 2021); however, the longer they taught from home, the more they enjoyed it, and the more accomplished educators felt (Kumawat, 2020; Sokal et al., 2020). Nevertheless, various educators struggled to teach from home because they lost their motivation and were easily distracted by what they ordinarily do at home (Purwanto et al., 2020). Nevertheless, many teachers who had higher levels of depression and stress were more likely to be less satisfied teaching online (Truzoli et al., 2021). Teachers who worked more than six hours a day reported higher stress levels than teachers who worked four or fewer hours a day (Delgado-Gallegos et al., 2021). Rabaglietti et al. (2021) note that, in addition to their teaching job, many teachers had simultaneous commitments, such as providing educational support for their children and other parental responsibilities, leading to increased stress. Davis and Phillips (2021) and Rabaglietti et al. (2021) added that teachers had difficulty setting boundaries and detaching from online communication with various stakeholders after

regular working hours. Conversely, Pressley (2021b) and Pressley and Ha (2021) noticed that teachers who taught virtually regardless of teaching experience had a lower instructional efficacy than those who taught an in-person or a hybrid instructional model. Likewise, some teachers expressed difficulty replicating some of the learning experiences online, especially when students were unable to or did not feel comfortable turning on their cameras to engage in lessons (Davis & Phillips, 2021).

Teachers' mental health was further impacted when many schools and school districts reopened during the 2020-2021 academic year with various academic instructional models such as in-person learning (Kim et al., 2021; Ozamiz-Etxebarria et al., 2021; Wakui et al., 2021), hybrid (Pressley, 2021a), synchronous and asynchronous (Pressley, 2021c). A Chinese study yielded that nearly 11% of the participants were diagnosed with post-traumatic stress disorder (PTSD) after returning to work during the COVID-19 pandemic (Tan et al., 2020). Many teachers had an increased workload due to preparing multiple lesson plans for in-person students and distance learners (Pressley, 2021c) coupled with continuously wearing personal protective equipment (PPE) such as face masks, which further impacted educators' mental health (Delgado-Gallegos et al., 2021). There is little research about the COVID-19 pandemic and its relation to the phenomenon of teachers' mental health and subsequent coping mechanisms teachers use to alleviate and manage stress.

### ***Gender and Age***

Studies conducted in Australia (Gurvich et al., 2020; Stanton et al., 2020), Austria (Pieh et al., 2020), Chile (Lizana et al., 2021), China (Jiang et al., 2020; Li et al., 2020; Wang et al., 2020), Germany (Federkeil et al., 2020), Greece (Parlapani et al., 2020; Stachteas & Stachteas, 2020), Iran (Moghanibashi-Mansourieh, 2020; Mohammadzadeh et al., 2020), Italy (Favieri et

al., 2021), Serbia (Kostić et al., 2021), Spain (González-Sanguino et al., 2020; Santamaria et al., 2021), Switzerland (Sánchez-Pujalte et al., 2021), United Kingdom (Kim & Ashbury, 2020; Pieh et al., 2021) and the United States (Prowse et al., 2021) all agree with females displayed higher stress levels than males during the COVID-19 pandemic. Women reported more stressors than men during the pandemic (Jean-Baptiste et al., 2020). Conversely, Ozamiz-Etxebarria et al. (2020) indicated that men in northern Spain had higher stress levels than females. Jean-Baptiste et al. (2020) reported that men in the USA reported higher levels of mental illness. Nabe-Nielsen et al. (2021) found that males in Denmark had a lower fear of transmitting COVID-19 to others, although males in India demonstrated a greater overall fear than females (Jain & Jah, 2020).

Female educators who have maternal responsibilities at home demonstrated a higher level of stress (Hong et al., 2021; Jiang et al., 2020), especially those who had children ranging from zero to eight years old (Cameron et al., 2020), than female educators who did not have maternal responsibilities (Nienhuis & Lesser, 2020). However, van der Velden et al. (2020) suggest that single parents, regardless of gender, have a higher stress level than married parents. On the contrary, Sutarto et al. (2021) found that people who worked from home during the COVID-19 pandemic, regardless of increased family commitments and household responsibilities, reported less stress. Single individuals, divorced individuals, and widowers experienced higher stress levels than married couples (Ferreira et al., 2021; Le et al., 2020). However, Sutarto et al. (2021) reported that unmarried individuals had higher anxiety, depression, and stress levels than newlyweds, divorced, separated, and widowed. Males, single individuals, and individuals ranging from 20-30 years old were more likely to suffer from PTSD (Kar et al., 2021). Both genders were equally fearful of contracting COVID-19 at work and transmitting it to individuals they lived with at home (Nabe-Nielsen et al., 2021).

Women showed more COVID-19 symptoms than men (Gao et al., 2020; Huang & Zhao, 2020; Lai, Ma, Wang et al., 2020; Liu et al., 2020; Qiu et al., 2020; Santamaría et al., 2021); however, Ozamiz-Etxebarria et al. (2020) found symptomatology was more prevalent in younger adults and individuals who had underlying and preexisting medical conditions. Males reported being lonelier than females, younger people were lonelier than middle-aged people (Varma et al., 2021), and middle-aged people were lonelier than older people (Barreto et al., 2021). However, Losada-Batlar et al. (2021) found females lonelier than males (Losada-Baltar et al., 2021). Older adults demonstrated greater fear of death than young and middle-aged adults (Choi & Bum, 2020) and reported higher stress levels (Pearman et al., 2021). Conversely, Jain et al. (2020) discovered that younger educators reported higher stress levels due to a combination of teaching and balancing family responsibilities. However, Jain et al. (2020) and Pearman et al. (2021) believe most older adults are better prepared to cope with challenges such as COVID-19 due to an array of life experiences. The research varied regarding which age category's mental health was the most impacted by COVID-19 (Table 3).

**Table 3**

*Age Groups, Gender, Location Most Affected by COVID-19*

Author(s)	Gender	Age group	Location
Daly et al. (2020)	Both	18-34	United Kingdom
Karr et al. (2021)	Both	20-30	Worldwide
Moghanibashi-Mansourieh (2020)	Both	21-40	Iran
Nwachukwu et al. (2020)	Both	< 25	Canada
Favieri et al. (2021)	Both	< 35	Italy

Pieh et al. (2020)	Both	< 35	Austria
Pieh et al. (2021)	Both	< 35	United Kingdom
Huang and Zhao (2020)	Both	≤ 35	China
Lizana et al. (2021)	Female	< 44	Chile

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*Note.* The table describes age groups, gender, and location most affected by COVID-19. Author information is available in the reference section.

### ***Race***

African American and Caucasian teachers exhibited nearly the same number of stressors during the COVID-19 pandemic; however, some varied considerably by race (Baker et al., 2021). The stressors identified by the African American teachers centered around two themes which were health and caregiving, whereas Caucasian teachers identified were centered around work (Baker et al., 2021). African American (Muñoz-Price et al., 2020) and Hispanic individuals (Vahidy et al., 2020) were more likely to be infected by COVID-19 than Caucasian individuals. During the pandemic, Asian-Americans were subject to racism, discrimination, verbal threats, and physical violence because COVID-19 originated in China, which significantly impacted Asian-Americans' mental health (Hahm et al., 2021; Jean-Baptiste et al., 2020; Nguyen et al., 2020). Stroud and Gutman (2021) did not find any differences in mental health amongst different races.

### ***Behavioral Health***

The COVID-19 pandemic has impacted people's physical activity levels (Anyan et al., 2020; Jacques-Aviñó et al., 2020; Robinson et al., 2021), resulting in lower amounts of energy (Srivastav et al., 2021). Ellis et al. (2020) found the amount people exercised pre-pandemic

decreased from seven and half hours to six and half hours during the COVID-19 pandemic. People who reported a reduction in physical activity during the COVID-19 pandemic also reported poor sleep quality (Costi et al., 2021), irritability (Ammar, Mueller, Trabelsi, et al., 2020), worse mood states (Chang et al., 2020; Timme et al., 2020), and lower reported life satisfaction (Eek et al., 2021). Some of those behaviors influenced by stress included a reduction in physical activity (Ong et al., 2021), increased food consumption (Modrzejewska et al., 2021; Ozamiz-Etxebarria et al., 2020; Owen et al., 2020; Robinson et al., 2021), and decreased food consumption (Casacchia et al., 2021). Anyan et al. (2020) and Jiang et al. (2020) suggested that reduced physical activity levels (Giuntella et al., 2021) and a lack of social activities yielded higher levels of anxiety and depression (Stanton et al., 2020). In contrast, studies in Canada (Petersen et al., 2021), Taiwan (Chang et al., 2020), and the United Kingdom (Rogers et al., 2020) found that most individuals maintained their pre-pandemic exercise frequency or lack of exercise (Meyer et al., 2020). However, some individuals experienced an increase in physical activity in Australia (Stanton et al., 2020), Spain (León-Zarceño et al., 2021), Sweden (Eek et al., 2021), and the United Kingdom (Rogers et al., 2020). Similarly, individuals in Jordan who regularly participated in physical activities such as biking, weightlifting, and swimming did not report any changes (Alomari et al., 2020). Likewise, people could not continue their regular exercise routine at a fitness facility due to COVID-19 restrictions adapted by participating in outdoor activities such as cycling, walking, hiking, at-home workouts, or new physical activities (Petersen et al., 2021). Eek et al. (2021) found that people who lived in smaller towns were more likely to reduce physical activity than those in big cities. People who exercised for 30 minutes in the moderate to the vigorous threshold or 15 minutes in the vigorous threshold were less likely to suffer from depression and anxiety (Schuch et al., 2020). Nevertheless, Nienhuis and Lesser



(2020) found that women who had to alter their modality of physical activity were less likely to be physically active and reported elevated anxiety levels. Nonetheless, research conducted by McCarthy et al. (2021) in the United Kingdom and Meyer et al. (2020) in the United States found that physically active people before the pandemic and meeting 150 minutes of weekly physical activity recommendations self-reported nearly a 35% decrease in physical activity during the COVID-19 pandemic.

People who were forced to be quarantined due to testing positive for COVID-19 or potentially had the virus lessened their physical activity levels by nearly 45% (Meyer et al., 2020). Bird et al. (2021) and Petersen et al. (2021) reported that people found pleasure and happiness in their ability to partake in unstructured outdoor physical activities. Some families scheduled outdoor physical activities to increase their physical activity and the amount of time they spent outside as a family (Carroll et al., 2020). Nevertheless, families with school-aged kids participated in more physical activity (Rogers et al., 2020). According to Marchant et al. (2021), individuals below 30 years old were more likely to use eHealth exercise platforms such as applications, websites, and videos to meet their physical activity needs than non-eHealth users during the pandemic. Moreover, physically active adults during the pandemic reported better overall mental health (Jacob et al., 2020). Nonetheless, most individuals reported increased sedentary behaviors such as watching television, electronics usage, surfing the internet (Alomari et al., 2020), and playing video games (Asmundson et al., 2020).

Jacques-Aviñó et al. (2020) reported that females and older adults (Smith, Jacob, Butler, et al., 2020) engaged in more daily physical activity during the COVID-19 pandemic. In contrast, Carroll et al. (2020), McCarthy et al. (2021), Nienhuis and Lesser (2020), and Olavarria et al. (2020) reported that men were more physically active throughout the pandemic. McCarthy et al.

(2021) and Rogers et al. (2020) added that younger adults were more likely to increase or decrease their physical activity patterns than adults over 70 during the COVID-19 pandemic. However, a study that surveyed individuals in 14 countries found that persons aged 18-29 and above 70 had the most significant exercise reduction during the pandemic (Wilke et al., 2021). People who exercised four or more days reported better moods than those who exercised for three or fewer days per week (Chang et al., 2020; Timme et al., 2020). The number of steps people took in the USA dropped (Dunton et al., 2020) by more than 40% from late March 2020 to mid-April 2020; however, the number of steps people took steadily increased in early May 2020 (Tison et al., 2020). The reduction in steps was more significant for Latinos than other ethnicities and individuals from lower-income households (Dunton et al., 2020). People who were active in their neighborhoods, parks, and trails reported more steps (Dunton et al., 2020).

Overall, the amount of participation in team sports (i.e., baseball, basketball) and individual sports (i.e., running, golf) and activities (i.e., walking, cycling, lifting weights) has decreased during the COVID-19 pandemic (Choi & Bum, 2020). Choi and Bum (2020) found that individuals who participated in group sports reported a higher level of COVID-19 phobia than people who participated in individual sports. However, Uroh and Adewunmi (2021) yielded that people who compete in individual sports have higher physiological stress levels. Athletes who regularly participated in sports were less likely to be hospitalized if they contracted COVID-19 and more likely to have a positive medical outcome than non-athletes (Halabchi et al., 2020).

Persons who consumed a healthy diet pre-pandemic reported declining healthy dietary behaviors during the pandemic (Ammar, Trabelsi, Brach, et al., 2020). Individuals who consumed an unhealthy diet during the pandemic noticed an increased weight gain (Di Renzo et al., 2020; Ingram et al., 2020; Reyes-Olavarria et al., 2020; Scarmozzino & Visiolo, 2020).

Specifically, people reported consuming fried food three or more times per week, low water consumption, and an inactivity period of six hours or more per day (Reyes-Olavarria et al., 2020). In opposition, Reyes-Olavarria et al. (2020) found that individuals who reported eating fish one to two times a week and engaged in physical activity four or more times per week maintained or decreased their weight. Caucasian males with a high body mass index (BMI) had a poor diet; however, non-white individuals were less physically active during the pandemic (Robinson et al., 2021). Almandoz et al. (2020) and Sidor and Rzymiski (2020) revealed that individuals with a higher BMI were less likely to consume healthy food such as fruits and vegetables, more likely to eat dairy and fast food, and are more likely to gain weight (Robinson et al., 2021). Individuals who were considered obese who regularly exercised pre-pandemic and throughout the pandemic were less likely to exercise during mandated stay-at-home orders and, as a result, reported an increase in weight (Almandoz et al., 2020). Robinson et al. (2021) added that people with high BMIs, diagnosed with hypertension, asthma, or a disability were less likely to engage in physical activity (Rogers et al., 2020). Scarmozzino and Visioli (2020) claim fruits and vegetables were not appealing to many during the COVID-19 lockdown in Italy.

Paradoxically, the sale of prepackaged meals in Italy declined nearly half (Scarmozzino & Visioli, 2020). COVID-19 related stress was also a contributing factor in a person's decreased consumption of fruit and vegetables, which was offset by an increase in comfort foods (Sadler et al., 2021). Similarly, another study reported a decline in ordering takeout and visiting fast-food chains in Canada (Carroll et al., 2020). However, cooking and eating more meals at home increased in Canada (Carroll et al., 2020) and the USA (Almandoz et al., 2020). Furthermore, people who reported unhealthy changes in their diet also described poor sleep quality (Costi et al., 2021; Ammar, Trabelsi, Brach, et al., 2020).

Carroll et al. (2020), Rolland et al. (2020), and Smith, Jacob, Trott, et al. (2020) found that females engaged in more screen time than males. Smith, Jacob, Trott, et al. (2020) noticed that individuals under 34 watched more television irrespective of their gender and the marital status during the COVID-19 pandemic. People explained that their increase in screen time was due to boredom which was secondary to the limitations caused by the COVID-19 pandemic (Wagner et al., 2021). Heightened screen time adversely impacted people's mental health, such as anxiety and depression (Meyer et al., 2020); therefore, some people tried to reduce their screen time to maintain a positive mental state (Wagner et al., 2021).

Tobacco usage (Constant et al., 2020; Sidor & Rzymiski, 2020) increased for some during the COVID-19 pandemic (Stanton et al., 2020), especially for females (Jacques-Aviñó et al., 2020; Rolland et al., 2020). However, Bommele et al. (2020) found that some smokers smoked more, whereas others smoked less during the pandemic. Bommele et al. (2020) noticed that various severely stressed people who smoke reduced the number of cigarettes. Females also reported using tobacco more than males (Jacques-Aviñó et al., 2020), whereas Jean-Baptiste et al. (2020) found that males used tobacco more. According to Klemperer et al. (2020), half of their participants did not report a change in smoking; however, a quarter reduced the amount of tobacco consumption, and a third noted that COVID-19 motivated them to quit smoking. People's reasoning for smoking more included increased stress, loneliness, boredom, and reduced visits to establishments outside of the home. On the other hand, people who smoked less cited living a healthier life, less human interaction, fear of contracting the coronavirus, and the ability to recover quicker from COVID-19 if tested positive (Bommele et al., 2020).

Alcohol consumption increased for some during the COVID-19 pandemic (Jacob et al., 2021), specifically for populations who reported decreased physical activity (Reyes-Olavarria et

al., 2020). The amount of alcohol increased when individuals lived with children (Ingram et al., 2020), and alcohol consumption increased for those individuals who classified themselves as alcoholics compared to persons who did not classify themselves as alcoholics (Sidor & Rzymiski, 2020). According to Rutledge et al. (2021), an alcoholic consumes four or more drinks in a day or a drink a day for four or more consecutive days. Jacob et al. (2021) found that increased alcohol consumption was most common in individuals under 34 years old and males (Rutledge et al., 2021). Nevertheless, Rolland et al. (2020) concluded that people between 30-49 were more likely to increase their alcohol consumption. People who reported a decline in alcohol and tobacco usage were more likely to have significant depression, anxiety, and stress symptoms (Jacob et al., 2021; Stanton et al., 2020). Alcohol consumption decreased for some; however, those who decreased their alcohol usage reported increased coffee and tea drinking (Scarmozzino & Visiolo, 2020).

Teachers experienced increased sleep disruptions due to the stress and mood disturbances related to COVID-19 (Cellini et al., 2020; Ingram et al., 2020; Ozamiz-Etxebarria et al., 2020; Gao & Scullin, 2020; Jacobs et al., 2021). People who experienced changes in their sleep patterns reported being overly fatigued (Casacchia et al., 2021). Females were more likely to have worse sleep quality (Costi et al., 2021), insomnia (Kostić et al., 2021), and more sleep disturbances than men (Casagrande et al., 2020). Shechter et al. (2020) found that 71% of their participants suffered from sleep disturbances, equating to nearly 25% categorized as severe to very severe, and 45% classified their sleep disturbances as moderate. Conversely, Giuntella et al. (2021) and Trabelsi et al. (2021) found that individuals increased their amount of sleep and sleep quality by an average of 20 minutes (Ong et al., 2021). However, Prowse et al. (2021) research yielded that increased sleep duration negatively impacted mental health. People who encountered

sleep disturbances were more likely to have significant depression, anxiety, stress symptoms (Cheng et al., 2021; Stanton et al., 2020), deep reflective episodes, and affected their overall daily and personal well-being (Lee, 2021; Lee & Sibley, 2019). Cheng et al. (2021) contributed COVID-19 information seeking via online platforms as one of the causes of sleep disturbances amongst adults. Sleep deprivation also impairs executive functioning, such as one's ability to focus and long-term memory (Skurvydas et al., 2020). Nevertheless, Lee and Sibley (2019) did not find a positive correlation with individuals who had extended sleep and improved psychological well-being; however, they found that people who slept longer had an increased probability of depression. People who had PTSD reported lower sleep quality (Casagrande et al., 2020); on the other hand, those who reported better sleep quality reported lower levels of PTSD (Liu et al., 2020).

### ***Cognitive Health***

Teachers are considered front-line workers or essential workers, and many teachers fear COVID-19 for various reasons that negatively impact their cognitive health (Aperribai et al., 2020; Nabe-Nielsen et al., 2021). Jiang et al. (2020) found that depression and anxiety symptoms quickly increase when a significant disease outbreak occurs. Additionally, individuals who repetitively embodied negative thoughts about the pandemic were more likely to have significant anxiety symptoms (Racine et al., 2021). Recent findings indicated that the COVID-19 pandemic had impacted individuals' cognitive health, such as executive functioning, lack of focus, information processing (Fiorenzato et al., 2021), and concentration (Kochuvilayil et al., 2021). The more time individuals thought about COVID-19, the further it affected their cognitive health (Huang & Zhao, 2020; Jiang et al., 2020; Racine et al., 2021). First et al. (2021), Holingue et al. (2020), and Mertens et al. (2020) added to the body of research by discovering that people who

used the internet to conduct searches about COVID-19 and used social media to post about COVID-19 further exacerbated their cognitive health.

Compulsive checking, such as looking for signs or symptoms of COVID-19 and taking one's temperature, also impacted teachers' cognitive functioning (Delgado-Gallegos et al., 2020). Teachers were more likely to develop posttraumatic stress disorder (PTSD) if they tested positive for COVID-19 and developed symptoms of COVID-19 compared to educators who tested positive for COVID-19 that were asymptomatic (Fan et al., 2021). Some proactive and protective measures people took to avoid being infected by COVID-19, such as excessive hand washing and sanitizing items, were significantly linked to increased stress and depression (Zhang et al., 2020). Fan et al. (2021) also found PTSD was higher amongst teachers who had a family member or relative die due to being infected by COVID-19. People who had severe PTSD due to COVID-19 reported higher levels of depression, anxiety, and overall stress (Le et al., 2020). Teachers' cognitive health was additionally affected by being terrified of contracting COVID-19 (Akour et al., 2020; Levkovich & Shinan-Altman, 2021; Liu et al., 2020), infecting members of their families with COVID-19 (Delgado-Gallegos et al., 2020; Islam et al., 2020), and the overall well-being of family members (Baker et al., 2021; Talidong & Toquero, 2020). Professionally, many teachers struggled with new instructional models, technology integration (Chen & Lam, 2021), and increased work stress, which affects their behavior (Casagrande et al., 2020; Rodríguez-Rey et al., 2020). However, as the pandemic persisted, some people's fear of COVID-19 noticeably decreased, whereas anxiety and depression levels slightly decreased (Bendau et al., 2021).

### ***Emotional Well Being***

COVID-19 has impacted teachers' emotional well-being (Aperribai et al., 2020; Kumawat, 2020). Individuals who do not have preexisting mental health diagnoses are highly likely to experience emotional distress during the pandemic (Holingue et al., 2020). However, individuals diagnosed with preexisting mental health conditions are more likely to have elevated stress and anxiety levels (Guo et al., 2021). Anxiety and loneliness were also elevated when stay-at-home orders were mandated (Tull et al., 2020). Ozamiz-Etxebarria et al. (2020) conducted a study in Spain that found that pre-school and elementary teachers reported higher anxiety levels. Pre-school and elementary educators reported a lower perceived quality of life related to feelings of being unsafe in educational settings due to difficulty of social distancing amongst themselves and their students (Mondragon et al., 2021). However, a study conducted in Sweden by Vlachos et al. (2021) discovered that elementary school teachers are less likely to contract COVID-19 than secondary school teachers. Kim and Asbury (2020) and Baker et al. (2021) discovered that teachers experienced high levels of emotional stress regarding their inability to help students from disadvantaged backgrounds, and teachers also worried about the overall health and safety of their students (Dayal & Tiko, 2020). Similarly, Baker et al. (2021) found that Caucasian teachers become more aware of student stressors because of teaching online such as learning about a student's family member passing away from complications of COVID-19.

Many teachers also mentioned the emotional aspect of how much they missed having physical, in-person interactions and forming relationships with their students (Davis & Phillips, 2021; Hebebcı et al., 2020; Ozamiz-Etxebarria et al., 2020). COVID-19 has impacted teachers' professional (Bulińska-Stangrecka & Bagińska, 2021) and personal relationships (Aperribai et al., 2020; Kim & Ashbury, 2020; MacIntyre et al., 2020). Teachers experienced intensified fear and anxiety due to the increased amount of parent feedback relating to the content and delivery



of their lessons (Cheng & Lam, 2021). Educators reported being emotionally exhausted due to the workload and stress caused by the COVID-19 pandemic (Collie, 2021; Kumawat, 2020; Pogere et al., 2019), which affects educators' effectiveness (Adams, 2019; Baker et al., 2021) and ultimately impacts the students (Ramberg et al., 2019). Teachers also reported having a shorter temper and being more reactive to situations due to their increased stress levels stemming from COVID-19 (Islam et al., 2020).

### **Coping Strategies**

MacIntyre et al. (2020) define coping as a process of responding to a situation using one or more strategies necessary to return to homeostasis. Teachers react to stress and cope with stress in various ways (Baker et al., 2021; Federkeil et al., 2020; Kim & Ashbury, 2020; MacIntyre et al., 2020). Reilly et al. (2021) and Wasil et al. (2021) found that people generally selected coping mechanisms that they considered effective in dealing with stress. According to Hidalgo-Andrade et al. (2021), most teachers used more than one coping strategy. Ethnicity (Fluharty & Fancourt, 2021) and religion (Fenn et al., 2021) were not predictors, nor did they impact the type of coping strategies people employed. The coping strategies are classified as either healthy coping mechanisms or unhealthy coping mechanisms (Federkeil et al., 2020; Stallman et al., 2021). The COVID-19 pandemic has restricted some of the coping mechanisms individuals use to alleviate stress (Baker et al., 2021); however, the restrictive nature of COVID-19 has forced some individuals to create new coping activities and routines (Talidong & Toquero, 2020).

Wu et al. (2020) proposed three coping styles: problem-focused, emotion-focused, and avoidance, whereas MacIntyre et al. (2020) referred to two coping styles: approach and avoidant strategies. Although approach strategies and problem-based strategies are different terms, Wu et

al. (2020) and MacIntyre et al. (2020) use similar definitions to define the two. Wu et al. (2020) refer to emotion-focus, whereas Macintyre et al. (2020) refer to emotion-focus coping as avoidant strategies. Fluharty and Fancourt (2021) added a fourth coping strategy: socially supportive coping. According to Elomaa et al. (2020), examples of socially supportive coping mechanisms include the expression of feelings to colleagues, family, friends, and emotional encouragement; however, this coping mechanism was the least used due to the restrictions of the COVID-19 pandemic (Fluharty & Fancourt, 2021). Socially supportive coping was found to decrease depression and help people adapt to stressful situations (Zhang et al., 2020). Socially supportive coping was also found to help people recover from COVID-19 (Zhang et al., 2020). Problem-focused coping is a strategy dedicated to solving the problem or significantly reducing the problem's existence, whereas emotion-focused coping aims to reduce stress through emotional responses (Wu et al., 2020). Individuals who employ a problem-based coping style may use active coping, planning, acceptance, positive reframing (MacIntyre et al., 2020; Yang, 2021), and instrumental support (Fluharty & Francourt, 2021; Jain & Jha, 2020).

Emotion-focused coping examples include but are not limited to smoking, drinking alcohol, venting (Guo et al., 2020; Yang, 2021), taking medication (Ye et al., 2020), disengagement, and self-distraction (Gurvich et al., 2020; MacIntyre et al., 2020). People who led more sedentary lifestyles tended to use emotion-based coping strategies (Mohammadzadeh et al., 2020). Avoidant coping strategies are defined as deflecting or avoiding the problem (MacIntyre et al., 2020; Wu et al., 2020), which may lead to a greater chance of negatively impacting one's mental health (Passavanti et al., 2021). Individuals' ability to cope with stress directly impacts their physical, emotional, psychological well-being (Legg & Cohen, 2020).

There is little research about the phenomenon of the COVID-19 pandemic and its relation to teachers' mental health and teachers' coping mechanisms used in the USA.

### ***Healthy Coping Mechanisms***

Federkeil et al. (2020), Kim and Ashbury (2020), and MacIntyre et al. (2020) found that, on average, teachers use healthy coping mechanisms to combat stress; however, some individuals did not partake in any form of coping (Shechter et al., 2020). Educators utilized a critical coping mechanism by defining boundaries between work and home life, which was accomplished by partaking in a hobby outside of work (Elomaa et al., 2020). Ecuadorian teachers' most frequently used coping strategies included social and emotional supports, healthy consumption and living, leisurely activities, and mental health-focused activities (Hidalgo-Andrade et al., 2021). In contrast, teachers worldwide most frequently used proactive coping strategies, instrumental support and guidance, problem-based coping, and positive redirection (MacIntyre et al., 2020), whereas the most used coping strategies used in a global study were being optimistic and staying busy (Kar et al., 2021). Highly optimistic individuals were better able to cope with the stressors during the COVID-19 pandemic because the positive outlook yielded positive emotions (Leslie-Miller et al., 2021). Teachers used faith-based (Kar et al., 2021) and religious activities such as listening to religious talks in India (Fenn et al., 2021), prayer in Jordan (Akour et al., 2020), Bible studies in the Philippines (Baloran, 2020), and religious supports in the USA (Park et al., 2020, Shechter et al., 2020). Alsolais et al. (2021) reported that individuals with a solid religious position and relationship could cope more effectively with stressors and mental clarity.

Educators reported spending an increased amount of time with family (Akour et al., 2020; Baker et al., 2021; Carroll et al., 2020; Mariani et al., 2020; Talidong & Toquero, 2020)

and friends (Juvonen et al., 2021) served as a beneficial coping mechanism. Family support decreased loneliness which helped decrease depression (Di Trani et al., 2020; Ferreira et al., 2021). If teachers could not spend time with family members in person, they communicated using cell phones, social media, and different communicative networks (Ammar, Chtourou, Boukhris, et al., 2020; Talidong & Toquero, 2020; Wagner et al., 2021); however, Losada-Baltar et al. (2021) found that people who communicated with extended family members during the pandemic reported an increase in stress. Females were more likely than males to communicate with family and friends (Fenn et al., 2021) via video conferencing (Prowse et al., 2021). Barron Millar et al. (2021) found that younger adults and females (Prowse et al., 2021) were more likely to cope with their anxiety using social media. Some individuals coped with their stress by reducing their time watching the news and engaging on social media (Reilly et al., 2021). Although, females in India coped by reading about COVID-19 prevention (Fenn et al., 2021). Teachers coped with social isolation globally by using socially focused strategies such as creating and cultivating community support groups amongst their colleagues informal and formal ways (Akour et al., 2020; Baker et al., 2021; Kim & Ashbury, 2020; Shechter et al., 2020). Persons also coped by partaking in talk therapy, talking about their thoughts and emotions to a trusted friend (Kar et al., 2021; Kochuvilayil et al., 2021), or a qualified psychotherapist (Shechter et al., 2020). Some educators watched television (Guo et al., 2020; Talidong & Toquero, 2020; Wagner et al., 2021), watched movies (Asmundson et al., 2020; Fenn et al., 2021), spent time on various social networking platforms (Akour et al., 2020; Baloran, 2020; Talidong & Toquero, 2020), and played video games via a computer or gaming console (Asmundson et al., 2020; Ogueji et al., 2021; Wagner et al., 2021) as ways to cope and lower their stress, relax, and improve their overall mental health (Ellis et al. 2020; Johannes et al.,

2021). Some female educators coped by hosting and participating in virtual events such as trivia nights, happy hours, and lunch and dinner dates with family and friends (Guy & Arthur, 2020). Many educators coped by engaging in a new hobby (Talidong & Toquero, 2020), such as learning a new language and playing a musical instrument (Yen et al., 2021). Reading, writing, cleaning, shopping online (Asmundson et al., 2020), shopping in person (Passavanti et al., 2021), and knitting (Hidalgo-Andrade et al., 2021) were other coping mechanisms used by people during the pandemic.

Hidalgo-Andrade et al. (2021) and Ogueji et al. (2021) found that individuals cope with stress by eating healthy, consuming a balanced diet (Du et al., 2020), engaging in exercise (Kochuvilayil et al., 2021), spending time in nature (Elomaa et al., 2020; Mathias et al., 2020), and reducing the amount of sedentary time (Cheval et al., 2021). Similarly, people coped by cooking at home (Coulthard et al., 2021), trying new recipes (Asmundson et al., 2020), including their children in meal preparation (Carroll et al., 2020), consuming more fruits and vegetables (Scarmozzino & Visiolo, 2020), and spending time in their garden (Fullana et al., 2020). Aperribai et al. (2020) reported that teachers who engaged in physical activity were more optimistic and experienced less anxiety and depression (Anyan et al., 2020; Mohammadzadeh et al., 2020). Zhang et al. (2020) found an optimistic attitude and a calm demeanor were effective coping strategies necessary to reduce pandemic stress and the possibility of depression. Fenn et al. (2021) and Jacques-Aviñó et al. (2020) discovered that females were more likely than males to use physical activity as a healthy coping mechanism, whereas other studies found males more likely to use physical activity as a coping mechanism (Carroll et al., 2020; McCarthy et al., 2021; Nienhuis & Lesser, 2020; Olavarria et al., 2020). Individuals who exercise were more likely to employ problem-based coping (Mohammadzadeh et al., 2020) and described fewer depressive

symptoms (Garnot et al., 2021). Jacobs et al. (2021) suggest that people who continued to exercise and sleep the same amount they did pre-pandemic were more likely to utilize healthier coping strategies. Pet ownership and interactions were reported to enhance mood and provide emotional support (Shoesmith et al., 2021). Shoesmith et al. (2021) also reported that individuals who owned pets had more contact with the outdoors and increased participation in exercise.

Female educators in Italy took part in mindfulness meditation centered around Buddhist principles that improved their overall mental health and clarity (Matiz et al., 2020). Similarly, individuals who participated in breathing exercises (Dib et al., 2020), meditation (Hidalgo-Andrade et al., 2021), mindfulness (Barron Millar et al., 2021; Priyanka & Rasania, 2021), relaxation techniques, Tai Chi (Du et al., 2020), visualizations (Ozamiz-Etxebarria et al., 2021), and yoga (Fullana et al., 2020), and were shown to reduce anxiety and improve participants overall mental health (Bartos et al., 2021). Aromatherapy coupled with music therapy decreased stress and anxiety in a study conducted in South Korea (Son et al., 2019). Many individuals found comfort and stress relief in listening to music with and without words, which enhanced people's moods (Vidas et al., 2021). Music with words reduced loneliness, created a feeling of togetherness, and allowed people to disconnect from reality (Granot et al., 2021). Balcony singing was a popular way to cope with stress and maintain social bonds while maintaining social distance and adhering to COVID-19 health guidelines in Spain, Brazil, and Italy (Granot et al., 2021).

MacIntyre et al. (2020) found approach coping more beneficial in alleviating stress than avoidant coping. Approach coping is directed towards a threat such as COVID-19, whereas avoidant coping is where someone withdraws or pretends the threat is non-existent (MacIntyre et al., 2020) rather than address the problem (Wu et al., 2020). Portuguese educators who were

genuinely concerned about their students' overall well-being tended to use an adaptive coping strategy (Pogere et al., 2019). On the other hand, mentally and physically exhausted teachers were more likely to use an emotional-based coping strategy (Pogere et al., 2019). Garbóczy et al. (2021), Gurvich et al. (2020), Wu et al. (2020), and Yang (2021) discovered that positive reframing, which focuses on taking an adverse event and thinking about it more positively, is a helpful coping mechanism. Many individuals in China used problem-based coping, which included reading, educating themselves about COVID-19, staying home (Wu et al., 2020), active coping, and instrumental support (Yang, 2021). Similarly, Du et al. (2020) and Fenn et al. (2021) research found that many individuals in China and India coped by adapting social distancing practices and increasing their hygiene, such as washing hands, wearing masks, temperature checking, and self-monitoring for symptoms to protect themselves and others from COVID-19. In contrast, individuals from Australia coped by reducing the amount of television they watched, read, used social media, and listened to the radio regarding information about COVID-19 (Kochuvilayil et al., 2021).

The use of problem-based coping was associated with fewer mental health problems (Guo et al., 2020; Mohammadzadeh et al., 2020; Wu et al., 2020; Yang, 2021), a positive increase in psychological health, specifically happiness and resilience (MacIntyre et al., 2020), and overall well-being (Götmann & Bechtoldt, 2021). However, Ferreira et al. (2021) discovered that problem-based coping only reduced anxiety and depression in individuals with a previous mental health diagnosis. Gurvich et al. (2020) and MacIntyre et al. (2020) found that individuals alleviated stress utilizing humor and acceptance. Females were more likely than males to employ healthy coping approaches such as problem-focused (Fluharty & Fancourt et al., 2021; Wu et al., 2020; Yang, 2021). Similarly, older adults used more proactive coping mechanisms (i.e., avoid

small and large group gatherings) associated with lower reported stress levels (Pearman et al., 2021). Moreover, many people coped with their stress by participating in something that distracted them (Reilly et al., 2021) or a hobby they deemed enjoyable (Elomaa et al., 2020; Kochuvilayil et al., 2021).

### ***Unhealthy Coping Mechanisms***

Constant et al. (2020), Federkeil et al. (2020), and MacIntyre et al. (2020) found that avoidance coping was common in situations that yielded adverse outcomes that involved various internal emotions such as anxiety, anger, sadness, and loneliness. Avoidant coping was also associated with negative well-being (Dawson & Golijani-Moghaddam, 2020) and increased stress levels (Kostić et al., 2021). Avoidant coping mechanisms include but are not limited to self-blame, venting, behavioral disengagement, and self-distraction (Gurvich et al., 2020; MacIntyre et al., 2020). Guo et al. (2020) and Wu et al. (2020) discovered emotion-based coping mechanisms such as crying, yelling, denial, humor, self-blame, smoking, and drinking alcohol led to increased mental health problems such as anxiety (Mohammadzadeh et al., 2020), depression (Di Trani et al., 2020), and anger (MacIntyre et al., 2020). Rolland et al. (2020) determined increased stress levels were associated with a higher percentage of addictive-related coping strategies such as snacking, screen time, alcohol consumption, and tobacco usage. Individuals who used blaming as a coping mechanism were negatively attributed to overall well-being (Göttsmann & Bechtoldt, 2021).

During the pandemic, most teachers used unhealthy coping strategies at some point, such as watching too much television or not pursuing goals they set earlier in the year (Aperribai et al., 2020). The least used coping strategies teachers deemed unhealthy were disengagement, alcohol abuse, and denial (MacIntyre et al., 2020). Similarly, Akour et al. (2020) found that



nearly 10% of educators used some form of medicinal drug to cope with their stress at some point during the pandemic, especially those diagnosed with the anxiety-related disorder (Asmundson et al., 2020). Some individuals reported increased alcohol consumption (Stanton et al., 2020; Sidor & Rzymiski, 2020) and tobacco usage during the pandemic (Bommele et al., 2020; Constant et al., 2020). People who used alcohol as a coping mechanism were deemed less capable of finding positivity throughout the pandemic and subsequently less able to cope (Chodkiewicz et al., 2020). Jacques-Aviñó et al. (2020) and Rodriguez et al. (2020) reported that women were more likely than men to use alcohol, but Jean-Baptiste et al. (2020) found that men used alcohol more than females as a means of coping with stress. Prowse et al. (2021) determined that an increasing number of males coped using cannabis, alcohol, and nicotine, negatively impacting their mental health. Males were more likely than females to employ emotion-based coping approaches such as substance abuse, denial, and self-blame (Wu et al., 2020; Yang, 2021). Conversely, León-Zarceño et al. (2021) found that women were more likely to use emotional-based coping strategies such as mental disconnection. In a study conducted in the United Kingdom, females and younger adults used avoidant coping mechanisms (Fluharty & Fancourt, 2021).

Various individuals coped with their stress by overeating and snacking in areas such as Australia (Owen et al., 2020), Canada (Chee et al., 2020), Italy (Scarmozzino & Visiolo, 2020), Poland (Modrzejewska et al., 2021; Sidor & Rzymiski, 2020), United Kingdom (Robinson et al., 2021), and the USA (Sadler et al., 2021). Chee et al. (2020), Coulthard et al. (2021), and Sidor and Rzymiski (2020) concluded that overeating and snacking were more prevalent in individuals who were overweight and obese. Coulthard et al. (2021), Prowse et al. (2021), and Rolland et al. (2020) found that females were more likely to employ emotional eating as a mechanism to cope

with their stress regardless of body habitus. However, Chee et al. (2020) found that females snacked on more healthy foods than males, such as fruits and vegetables. People who reported high levels of COVID-19 stress coped by eating an increased number of foods high in fat, high in carbohydrates (Prowse et al., 2021), high in sodium (Chee et al., 2020), and sweets, such as chips, chocolate, and ice cream (Scarmozzino & Visiolo, 2020).

### **Summary**

COVID-19 has significantly impacted teaching and learning (Akour et al., 2020; Baker et al., 2021; Day et al., 2021; Federkeil et al., 2020; Kaden, 2020; Kumawat, 2020). It has forced education at the national, state, and local levels to rethink instructional models and implement various policies and procedures to keep staff, students, and families safe (Kuhfeld et al., 2020). The pandemic has deeply impacted teachers' mental health (MacIntyre et al., 2020; Ozamiz-Etxebarria et al., 2021); therefore, research has been conducted on how teachers cope with the pandemic. The research found that teachers can adopt healthy or unhealthy coping mechanisms (Federkeil et al., 2020; Stallman et al., 2021). Teachers who can differentiate between healthy and unhealthy coping mechanisms and implement healthy coping strategies may be more productive and efficient in their personal and professional lives (Legg & Cohen, 2020; MacIntyre et al., 2020). Healthy coping behaviors mentioned were exercise (Anyan et al., 2020), support groups (Baker et al., 2021), church (Akour et al., 2020; Baloran, 2020; Park et al., 2020), family (Baker et al., 2021; Talidong & Toquero, 2020), friends (Juvonen et al., 2021), and pets (Shoemith et al., 2021). Negative coping behaviors mentioned included drugs (Akour et al., 2020), alcohol (Chodkiewicz et al., 2020), excessive eating (Modrzejewska et al., 2021; Owen et al., 2020), sedentary behavior such as watching excess amounts of television (Aperribai et al., 2020), and being physically inactive (Anyan et al., 2020; Robinson et al., 2021). However, most

of the research was conducted outside of the United States (Bartos et al., 2021; Matiz et al., 2020; Ozamiz-Etxebarria et al., 2021; Priyanka & Rasania et al., 2021), where entire countries were locked down for extended periods such as Austria (Pieh et al., 2020), Italy (Cellini et al., 2020), Greece (Parlapani et al., 2020), Norway (Anyan et al., 2020), Spain (González-Sanguino et al., 2020; Santamaria et al., 2021), and the United Kingdom (Kim & Ashbury, 2020), which is the research gap. Lazarus and Folkman's (1984, 1987) transactional model of stress and coping theory is paramount in assisting educators in identifying stressors and, secondly, identifying coping strategies necessary to cope with the identified stressor in a healthy, productive manner.

However, mental health has been studied within teaching; however, not to this magnitude regarding mental health within a pandemic. Teachers are essential workers (Aperribai et al., 2020; Nabe-Nielsen et al., 2021) and bear a massive responsibility to educate the future of America amid a pandemic. Teaching has evolved quickly in a short period of time (Baker et al., 2021; Hidalgo-Andrade et al., 2021). Examining the impact of COVID-19 on teachers' mental health will allow national, state, and local educational agencies to better support educators in the future regardless of whether the pandemic persists. Many educators are selfless and work extremely hard to provide the future of America with the best education possible to be successful as they navigate life. Furthermore, teachers need to understand various healthy coping mechanisms that can help alleviate stress and anxiety, ultimately leading to a more productive educator, leading to more positive outcomes in the classroom (Ozamiz-Etxebarria et al., 2021).

## **CHAPTER THREE: METHODS**

### **Overview**

The purpose of this transcendental phenomenological study was to describe elementary public school teachers' experiences coping with stress during the COVID-19 pandemic. The data collection methods used include participant journaling, semi-structured interviews, and focus groups. Edmund Husserl, a German philosopher, is recognized as the primary developer of transcendental phenomenology (Spiegelberg, 1994). The major components of transcendental phenomenology include epoché, transcendental-phenomenological reduction, imaginative variation, and meanings of synthesis and essences (Moustakas, 1994). Chapter three provides a thorough description of the research design, research questions, setting, participants, procedures, researcher's role, data collection, trustworthiness, ethical considerations, and a chapter summary.

### **Research Design**

The researcher selected a qualitative study applying a transcendental phenomenological research method to describe elementary public school teachers' experiences coping with stress throughout the COVID-19 pandemic. Qualitative research is the study of a societal or human problem as a whole guided by thoughtfully formulated research questions to collect data in a natural setting via interviews and conversations, which in turn are analyzed, interpreted, and reported (Moustakas, 1994). Moustakas (1994) described qualitative research as a way to access participants' emotions by concentrating on the totality of the experience, which can help the researcher better understand the phenomenon being studied. Phenomenology focuses on participants' lived experiences of the phenomenon being studied (van Manen, 2014). Transcendental phenomenology focuses on the participants' experiences of the phenomenon

while the researcher sets aside their prejudgments and experiences, known as epoché (Moustakas, 1994).

The qualitative method is appropriate because the researcher wanted to gain an in-depth and first-hand account of elementary public school teachers' experiences coping with stress throughout the COVID-19 pandemic (Moustakas, 1994). A phenomenological approach was appropriate for this study because the researcher wanted to understand and describe the essence of elementary public school teachers' experiences coping with stress throughout the COVID-19 pandemic (Moustakas, 1994). Finally, a transcendental approach was selected because the author wanted to set aside their prejudgments and experiences and focus specifically on the participants' lived experiences (Moustakas, 1994).

### **Research Questions**

The central research question and the subsequent sub-questions guided this transcendental phenomenological study.

#### **Central Question**

What are the lived experiences of public elementary teachers coping with stress during the COVID-19 pandemic?

#### **Sub Question One**

What psychological mechanisms are elementary public school teachers using to cope with stress during the COVID-19 pandemic?

#### **Sub Question Two**

What physical mechanisms are elementary public school teachers using to cope with stress during the COVID-19 pandemic?

#### **Sub Question Three**

What emotional mechanisms are elementary public school teachers using to cope with stress during the COVID-19 pandemic?

### **Setting and Participants**

This study's setting was North Texas Independent School District (NTISD-pseudonym), a large suburban and urban school district in North Texas. NTISD is one of the largest school districts in Texas and is ranked in the country's top 15 biggest school districts. This study consisted of current elementary public school teachers in feeder pattern three of the NTISD and experienced teaching during the COVID-19 pandemic. This section will provide an in-depth description of the research setting and participants.

#### **Setting**

NTISD was selected because of the diverse teacher population and teachers' experiences navigating the COVID-19 pandemic personally and professionally. The county the school district is in covers over 900 square miles. NTISD employs over 22,000 individuals, including professional and support staff, precisely over 10,000 teachers (Table 4). There are 230 schools which consist of 147 elementary schools, 35 middle schools, 38 high schools, and ten multi-level schools consisting of over 145,000 students (Table 4).

**Table 4**

#### *NTISD Teacher and Student Demographics*

Ethnicity	Teacher percentage (%)	Student percentage (%)
Black/African American	33.5%	20.80%
Hispanic/Latino	31.7%	70.66%
White	28.6%	1.04%
Asian	3.2%	.11%

American Indian/Alaskan	.7%	.06%
Hawaiian/Pacific Islander	.2%	2.36%
Two or more	2.2%	1.04%

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*Note.* Adapted from <https://schools.texastribune.org/districts/dallas-isd/> and <https://www.dallasisd.org/Page/2609>. In the public domain.

The board of trustees establishes the policies and provides oversight by which the schools operate. NTISD is divided into nine geographical districts, and each trustee is responsible for one of the districts. The superintendent reports to the board of trustees. The chief of school leadership reports to the superintendent, and the two deputy chiefs of school leadership report to the chief. The next layer consists of 21 executive directors who report to their respective deputy chiefs of school leadership. Each executive director oversees a particular feeder pattern composed of elementary schools, middle school(s), and high school. The feeder patterns' goal is to keep students together from elementary to middle school and high school. The building principals report to their assigned executive director. Each school has an administrative team that consists of a principal, vice-principal(s), counselor(s), and school-based instructional coaches in mathematics and language arts.

### **Participants**

Participants in this study consisted of current elementary public school teachers in feeder pattern three of the NTISD and experienced teaching during the COVID-19 pandemic. The suggested number of participants for a phenomenological study varies from one (Padilla, 2003) to 325 (Polkinghorne, 1989). However, some literature provides a more concise range recommendation such as three to 10 (Dukes, 1984), five to 25 (Polkinghorn, 1989), whereas Mason (2010) suggests multiples of 10. The number of participants will range from 10-15 or

until data saturations are achieved, which Lowe et al. (2018) and Polkinghorn (2005) defined as data that does not add or produce additional themes; therefore, additional data collection is unnecessary (Saunders et al., 2018).

### **Researcher Positionality**

The researcher's motivation for conducting this study originated from multiple interactions with colleagues and students and observations of their interactions with students throughout the 2020-2021 academic year. The researcher's colleagues voiced how stressful it was to teach during the COVID-19 pandemic. The researcher witnessed firsthand how stressful it was for teachers transitioning from the district-required four weeks of virtual learning to a hybrid instructional model in October 2020. Teachers' stress continued throughout the 2020-2021 and into the 2021-2022 academic years. The researcher wondered how their colleagues are coping with the stress surrounding teaching in a pandemic and other stressors related to COVID-19. Therefore, the researcher selected a transcendental phenomenological study because it focuses more on the participants than the researcher, and it allows participants to describe their lived experiences (Creswell & Poth, 2018).

### **Interpretive Framework**

The researcher assumes a social constructivist interpretive framework that focuses on participants' experiences and views of dealing with stress throughout the pandemic as their primary data source (Creswell & Poth, 2018). In essence, social constructivism is one's journey to seek and better understand the world they live in (Creswell & Poth, 2018; Patton, 2002). Therefore, learning is constructed in a non-linear fashion.

### **Philosophical Assumptions**

Many researchers have their own philosophical assumptions about the topic they are



studying. Therefore, it is paramount that their assumptions are disclosed within qualitative research (Creswell & Poth, 2018). There are three philosophical assumptions: axiological, epistemological, and ontological (Creswell & Poth, 2018).

### ***Ontological Assumption***

An ontological assumption focuses on reality (Creswell & Poth, 2018). An ontological notion allows each public elementary school teacher in NTISD to describe and share their realities and perspectives of COVID-19 (Creswell & Poth, 2018). I believe in a singular reality which is Jesus Christ. However, this phenomenon is not linear, as teachers have experienced multiple realities and perspectives throughout the COVID-19 pandemic.

### ***Epistemological Assumption***

An epistemological assumption focuses on “what counts as knowledge and how knowledge claims are justified” (Creswell & Poth, 2018, p. 19). In order to gain knowledge relating to elementary public school teachers’ experiences coping with stress during the COVID-19 pandemic, I must develop a relationship with the participants and try to lessen the distance between the researcher and the participants (Creswell & Poth, 2018). Developing a relationship with the participants allows the participants to feel comfortable and gain objective knowledge (Creswell & Poth, 2018).

### ***Axiological Assumption***

An axiological assumption speaks to the researcher’s values (Creswell & Poth, 2018). I must disclose their values and how they could potentially impact the study (Creswell & Poth, 2018). I value education, mental health, and physical fitness. I am a public school teacher and have experience teaching throughout the COVID-19 pandemic. I will disclose the above to the participants and engage in epoché and bracketing before conducting the semi-structured

interviews, focus groups, and data analysis and synthesis.

### **Researcher's Role**

I repatriated to Jacksonville, Florida, from Grand Cayman, Cayman Islands, British West Indies in February 2020. I took a job teaching middle school physical education and ninth-grade health; however, I only worked in person for about a month until the school was forced to go virtual due to the COVID-19 pandemic. Then, I moved to North Texas in July 2020 due to a job opportunity to teach elementary physical education. The staff working days and professional development days began virtually, and then the superintendent announced that the first four weeks of school would be virtual. I did not interact with many of my colleagues when we were virtual; however, my interactions increased when we returned in person, and soon after, some students returned. The school district elected a synchronous instructional model, which is stressful. Teachers imposed new district and school policies and procedures such as only two people in the bathroom at the same time, sanitizing of hands throughout the day, reminding students to keep their masks on and above their noses, and ensuring students practice social distancing by standing on circles that were placed six feet apart throughout the school, necessary to keep all stakeholders safe in addition to trying to manage new instructional methods and platforms. My colleagues voiced how stressful it was teaching in person during COVID-19, significantly when the positive cases increased daily in North Texas. I witnessed firsthand how stressful it was for teachers transitioning to virtual learning in spring 2020 to starting the 2020-2021 academic year virtual to transitioning to a hybrid learning model in October 2020.

I served as the primary data collection instrument in this transcendental phenomenological study (Creswell & Poth, 2018), including participant journaling, semi-structured interviews, and focus groups. I have taught for 11 years in places such as Michigan,

Grand Cayman, Cayman Islands, British West Indies, Florida, and Texas. I currently teach elementary physical education at a school within NTISD, where the participants were recruited. I am biased that individuals must employ healthy coping mechanisms when dealing with stressful events in life.

### **Procedures**

This study followed Moustakas's (1994) procedures for conducting a transcendental study which included: identifying a phenomenon of study, setting aside any prejudgments, bias, and experiences about the phenomenon being studied, and collecting data from individuals who have experienced the phenomenon. Participants in this study consisted of current elementary public school teachers in feeder pattern three of the NTISD that experienced teaching during the COVID-19 pandemic. After securing approval from the Institutional Review Board (IRB) from Liberty University (Appendix A) and the NTISD's Research Review Board (RRB) (Appendix B), the researcher contacted school principals whose schools are a part of feeder pattern three to seek permission to send a recruitment email (Appendix C) to elementary school teachers. The email to each school principal will contain NTISD's RRB approval letter (Appendix B), which will help gain their support. Next, the researcher will recruit the participants for the study by sending a recruitment email (Appendix D) to elementary school teachers in feeder pattern three, including a Google Form (Appendix E). Each participant will sign and return a consent form (Appendix F).

The three data collection methods for this study were participant journaling (Chabon & Lee-Wilkerson, 2006), semi-structured interviews (Moustakas, 1994), and focus groups (Patton, 2002). Participants chose to journal by writing, typing, or using a recording device. The semi-structured interviews and focus group occurred using Microsoft Teams which were digitally

recorded using multiple devices. The benefit of using a web-based conferencing platform such as Microsoft Teams provides flexibility and is time efficient to the researcher and the participants (Creswell & Poth, 2018). Semi-structured interviews were conducted at times that were convenient for the participants. The semi-structured interviews lasted approximately one hour each. The focus groups took place after the completion and data analysis of the semi-structured interviews. The focus group consisted of four to six participants who took part in the semi-structured interviews. The focus group lasted approximately one hour. The focus group interview occurred using Microsoft Teams at an agreed, convenient time for the participants. The one-on-one interviews and the focus group were transcribed verbatim using Otter.ai and were checked for accuracy by comparing the transcription to the audio recording. The researcher coded the transcripts by hand, which helped identify and analyze the themes.

The data analysis followed the data analysis model outlined by Moustakas (1994). Moustakas's (1994) data analysis begins with epoché, phenomenological reduction, and imaginative variation. The researcher began the data analysis by entering into epoché, which equates to setting aside one's prejudgments and bias (Moustakas, 1994). Then, the researcher used horizontalization by identifying "significant statements, sentences, or quotes" (Creswell & Poth, 2018, p. 79) in all three data collection methods: journaling, semi-structured interviews, and focus group, which helps gain a better understanding of how the participants experienced the phenomenon. Then, the researcher clustered the horizons to form themes (Moustakas, 1994). Next, the researcher constructed a composite textural description of the participants' experiences using the themes (Moustakas, 1994). Then, the researcher created a composite structural description of how the setting influenced each participant throughout the phenomenon (Moustakas, 1994). Finally, once all three data collection methods were analyzed, the researcher

synthesized the composite textural and composite structural descriptions, providing a comprehensive understanding of the phenomenon (Moustakas, 1994). This study achieved triangulation by using multiple data collection methods to enhance the accuracy and consistency (Patton, 1999). Triangulation was achieved in this study using journaling, semi-structured interviews, and a focus group.

### **Permissions**

The permissions included IRB approval from Liberty University (Appendix A), RRB from NTISD (Appendix B), site approval from four building principals in feeder pattern number three (Appendix C), and consent forms from each of the participants (Appendix F). Before submitting their IRB application via Cayuse, the researcher first obtained approval from NTISD RRB's (Appendix B) and the four building principals (Appendix C). The researcher's IRB application was submitted when the researcher successfully defended their prospectus.

### **Recruitment Plan**

The eligibility criteria for the sample consisted of current elementary public school teachers in feeder pattern three of the NTISD that experienced teaching during the COVID-19 pandemic. The sample pool was 182 educators. The number of participants in this study will range from 10 to 15 (Creswell & Poth, 2018). The participants for this study were selected using purposeful sampling. Purposeful sampling is practical when all the participants have experienced the phenomenon (Creswell & Poth, 2018), which Patton (2002) refers to as "information-rich cases" (p. 231). The eligibility criteria for the sample consisted of current elementary public school teachers in feeder pattern three of the NTISD that experienced teaching during the COVID-19 pandemic. A Google Form was sent to elementary teachers in NTISD (Appendix F), which contained questions about age, gender, race, ethnicity, years of teaching experience, grade

level, degree attainment, and their experiences with COVID-19. Interested educators filled out the Google Form and submitted it to the researcher. Maximum variation sampling was used, which allowed for various distinctions based on specific characteristics (Creswell & Poth, 2018; Guest et al., 2013; Patton, 2002). The researcher selected 14 participants using maximum variation sampling. After the teachers were selected, the researcher sent each participant a consent form (Appendix F) via email to sign and send back.

### **Data Collection Plan**

This qualitative transcendental phenomenological study's three data collection methods included journaling, semi-structured interviews, and focus groups. Three data collection methods were used to triangulate the data sources, enhancing a study's credibility and trustworthiness (Patton 1999, 2002). The first method of data collection conducted was participant journaling. The second data collection method was semi-structured interviews, preceded by the third method, which was a focus group. Interviews are the most common form of data collection in phenomenological studies (Creswell & Poth, 2018; Jamshed, 2014).

#### **Journaling**

The first qualitative data collection method used in this study was journaling. "The journal is a tool to reopen the possibilities of learning and living" (Janesick, 1999, p. 510). Chabon and Lee-Wilkerson (2006) explain journaling as a written means to elaborate on personal experiences, observations, and thoughts about a particular event or a series of events. Journaling may encourage and inspire participants to share experiences and feelings they are not comfortable to verbally articulate in semi-structured interviews nor focus group setting (Chabon & Lee-Wilkerson, 2006); however, participants' vulnerability may add to the data collected from the semi-structured interviews and focus groups (Swenson, 2004). Journaling was appropriate for

this study because it allowed the research participants to reflect and further explore (Janesick, 1999) at their own pace about their experiences coping with stress throughout the COVID-19 pandemic. Journaling by participants could be handwritten (Chabon & Lee-Wilkerson, 2006), typed into a Google Form (Bennett & Pye, 2002; Hayman et al., 2012), or verbally recorded on a cell phone (Matlala & Matlala, 2018) depending on the preference of the participant. The participants were asked to complete two journal entries.

### ***Journal Prompts***

1. Describe a stressful situation when the educator was working or teaching virtually from home (Day et al., 2021; Dhawan, 2020; Mehta, 2021; Rapanta et al., 2020).
2. Explain a situation when the educator was teaching when their hardware or software malfunctioned, which caused them stress (Asgari et al., 2021; Dragano & Lunau, 2020; Zalat et al., 2021).

### ***Journal Prompts Data Analysis Plan***

Transcripts were transcribed verbatim using Otter.ai if participants used a handheld recording device. After completing the transcriptions, the researcher checked each transcription for accuracy by cross-checking the transcriptions with each journal recording and making corrections. Once the transcriptions were completed, the researcher emailed each participant who journaled via handheld recorder containing their journal transcript to check for accuracy, known as member checking. Moustakas's (1994) data analysis begins with epoché, then phenomenological reduction, and imaginative variation. The researcher focused solely on the focus group transcriptions known as bracketing (Moustakas, 1994). The next part of the reduction is horizontalizing (Moustakas, 1994). The researcher viewed each journal entry with a fresh perspective and equal value (Moustakas, 1994). Then, the researcher eliminated non-

essential and redundant statements leaving only the horizons or codes of the journal entries (Moustakas, 1994). Horizontalizing is a cyclical process. New horizons may appear each time horizontalizing is done (Moustakas, 1994). The horizons were then be clustered into themes and organized into a textural description of the phenomenon (Moustakas, 1994). The third step is imaginative variation. Imaginative variation includes different meanings and perspectives, creating a list of structural qualities, developing structural themes, and composing a composite structural description. The researcher strived to obtain different meanings by viewing the phenomenon through different lenses, vantage points, and angles (Moustakas, 1994). The last step in Moustakas's (1994) data analysis is synthesizing the composite textural and composite structural descriptions, which provides a comprehensive understanding of the phenomenon. The synthesis of the composite textural and the composite structural description occurred once all three data collection methods were analyzed.

### **Semi-structured Interviews**

Interviews are the primary data collection method within qualitative studies (Creswell & Poth, 2018; Moustakas, 1994). "The purpose of interviewing, then, is to allow us to enter into the other person's perspective" (Patton, 2002, p. 341). Informal interviews are ideal for gathering participants' lived experiences (Moustakas, 1994). Therefore, the researcher built rapport with the interviewee by making them comfortable and relaxed, which is crucial in fostering a trusting environment, allowing participants to answer the interview questions openly, honestly (Moustakas, 1994), and in their own words (Patton, 2002). The 19 interview questions were open-ended, which allowed the interviewee to elaborate and provide a comprehensive account of their experiences coping with stress throughout the COVID-19 pandemic (Moustakas, 1994). The semi-structured interview questions addressed the central question and three sub-questions



(Creswell & Poth, 2018). Before each interview, the researcher engaged in epoché (Moustakas, 1994). Epoché allows the researcher to set aside any prejudgments or biases regarding the topic of study, allowing the researcher to approach each interview with a fresh perspective (Moustakas, 1994).

Interviews were conducted individually with each of the participants. The interviews were conducted using Microsoft teams due to the district's protocol of no face-to-face meetings due to increased COVID-19 cases. Each participant was sent an interview invitation via Liberty Outlook email with the agreed time, date, and the link to the Teams platform for their virtual interview. The Microsoft Teams interviews were recorded using the recording feature on Teams. The interview questions may change as a result of the participant journal responses.

### ***Semi-structured Interview Questions***

1. Please introduce yourself – degrees earned, teaching experience, current teaching assignment, duration of it, and school assignment
2. What were your experiences coping with stress before the COVID-19 pandemic? CRQ
3. What were your experiences with teaching right when the pandemic started? CRQ
4. What were the most stressful experiences with teaching during the pandemic? CRQ
5. How did your stress differ from when the pandemic started to the beginning of the 2020-2021 academic year? CRQ
6. How was your stress different from the 2020-2021 academic year to the start of the 2021-2022 academic year? CRQ
7. What coping mechanisms do you use consistently and why? CRQ
8. What were your biggest challenges in coping with stress during COVID-19? CRQ
9. What coping strategies did you try that you did not try before the pandemic? CRQ

10. How did you cope with stress psychologically during the pandemic? SQ1
11. How did you cope with stress physically during the pandemic? SQ2
12. How did you cope with stress emotionally during the pandemic? SQ3
13. How have your coping mechanisms changed as a result of COVID-19? CRQ
14. What, if any, coping mechanisms did you use that was unhealthy? CRQ
15. What, if any, coping mechanisms did you use that was healthy? CRQ
16. What did you learn about yourself during the COVID-19 pandemic? CRQ
17. What would you have done differently during the pandemic? CRQ
18. What coping mechanisms would you like to try? CRQ
19. Is there anything else you would like to tell me about your stress and COVID-19? CRQ

Question one served as an ice breaker that allowed the participants to feel comfortable (Moustakas, 1994), and it is a question that many have answered multiple times in the past. The interview questions start broad and become more specific. Questions two, three, and four focus on teaching during the pandemic. Question two will allow the interviewee to recall what it was like teaching as the WHO (2020a) declared a pandemic in March 2020. Questions three and four focus on identifying stressful teaching experiences during the pandemic (Pressley, 2021a) and how stress differs from the beginning of the pandemic to the 2020-2021 academic year (Pressley, 2021b; Santamaría et al., 2021).

Questions five through nine shift the focus from teaching to how participants cope with stress. The questions about how each participant copes with stress start broad and become more specific. Question five is essential because COVID-19 has proven stressful and limited how people manage stress (Aperribai et al., 2020; Herman et al., 2020), leading to question six. Due to the limited options of coping with stress during COVID-19, some individuals have tried new

coping methods (Park et al., 2020). Questions seven, eight, and nine are the research sub-questions. These questions are pointed and precise. Question ten will allow the interview participants an opportunity to add anything that they might have forgotten or want to add (Moustakas, 1994) regarding their experiences with stress, coping, and COVID-19.

### ***Individual Interview Data Analysis Plan***

Each of the interviews was transcribed verbatim using Otter.ai. After the transcriptions were complete, the researcher checked each transcription for accuracy by cross-checking the transcriptions with each interview and made the necessary corrections. Once the transcriptions are completed, the researcher sent an email to each participant containing their interview transcript to check for accuracy, known as member checking. Moustakas's (1994) data analysis begins with epoché, then phenomenological reduction, and imaginative variation. The researcher entered into epoché before starting the interview data analyses. Epoché is a "Greek word meaning to refrain from judgment, to abstain from or stay away from the everyday, ordinary way of perceiving things" (Moustakas, 1994, p. 33). Then, the researcher focused solely on the interview transcriptions known as bracketing (Moustakas, 1994). The next part of reduction is horizontalizing (Moustakas, 1994). The researcher viewed each interview statement with a fresh perspective and equal value (Moustakas, 1994). Then, the researcher eliminated non-essential and redundant statements leaving only the horizons of the interviews (Moustakas, 1994). The horizons or codes will then be clustered into themes and organized into a textural description of the phenomenon (Moustakas, 1994). The third step is imaginative variation. Imaginative variation includes different meanings and perspectives, creating a list of structural qualities, developing structural themes, and composing a composite structural description. The researcher strived to obtain different meanings by viewing the phenomenon through different lenses,

vantage points, and angles (Moustakas, 1994). The last step in Moustakas's (1994) data analysis is synthesizing the composite textural and composite structural descriptions, which provides a comprehensive understanding of the phenomenon. The synthesis of the composite textural and the composite structural description occurred once all three data collection methods were analyzed.

### **Focus Groups**

The third data collection method used for this study was a focus group. A focus group is, in essence, interviews; however, participants can listen and internalize others' responses to questions and make additional comments in response to others (Patton, 2002). Focus groups are small groups that allow the researcher to engage in an in-depth discussion on a specified topic (Guest et al., 2013) that generates collective views and perspectives of the participants (Chadwick et al., 2008). The focus groups are appropriate for this study because they provide checks and balances and dive deeper into the themes revealed from the semi-structured interviews (Patton, 2002). Therefore, the focus group questions may change after the researcher analyses the semi-structured interview and reveal journaling data and themes (Patton, 2002). The focus groups will occur either in person or Microsoft Teams, while each method will be recorded. The focus group participants will participate in the semi-structured interviews as well. The focus group questions will be peer-reviewed.

### ***Focus Group Questions***

1. Please introduce yourself – degrees earned, teaching experience, current teaching assignment, duration of it, and school assignment
2. How do you think teachers handled stress during the pandemic? CRQ
3. How do you think teachers were affected psychologically? SQ1

4. How do you think teachers were affected physically? SQ2
5. How do you think teachers were affected emotionally? SQ3

Question one will serve as an ice breaker for the participants in the focus group. Focus groups are group discussion that helps gather and generate rich participant perspectives about the questions (Gill et al., 2008). Teaching is one of the most stressful jobs (MacIntyre et al., 2020). The pandemic brought a new level of stress on teachers due to different content delivery methods, safety, and procedures necessary to maintain health and safety (Pressley, 2021a). Question two will allow for dialogue and perspectives that may not have been covered in semi-structured interviews. Questions three through five are the inverse of the research sub-questions, which ask about elementary public school teachers' psychological, physical, and emotional coping mechanisms to cope with stress during the COVID-19 pandemic in North Texas. Three through five focus on how teachers were affected psychologically, physically, and emotionally (Algeri et al.; 2020; Casagrande et al., 2020; Pedrosa et al., 2020)

### ***Focus Group Data Analysis Plan***

The focus group interview was transcribed verbatim using the otter.ai. After the transcriptions are complete, the researcher will check each transcription for accuracy by cross-checking the transcriptions with each focus group session, making any necessary corrections. Once the transcriptions are completed, the researcher will send an email to each participant of the focus groups containing their focus group transcript to check for accuracy. Moustakas's (1994) data analysis begins with epoché, then phenomenological reduction, and imaginative variation. The researcher will focus solely on the focus group transcriptions known as bracketing (Moustakas, 1994). The next part of reduction is horizontalizing (Moustakas, 1994). The researcher will view each focus group statement with a fresh perspective and equal value

(Moustakas, 1994). Then, the researcher will eliminate non-essential and redundant statements leaving only the horizons of the focus group transcriptions (Moustakas, 1994). The horizons or codes will then be clustered into themes and organized into a textural description of the phenomenon (Moustakas, 1994). The third step is imaginative variation. Imaginative variation includes different meanings and perspectives, creating a list of structural qualities, developing structural themes, and composing a composite structural description. The researcher strives to obtain different meanings by viewing the phenomenon through different lenses, vantage points, and angles (Moustakas, 1994). The last step in Moustakas's (1994) data analysis is synthesizing the composite textural and composite structural descriptions, which provides a comprehensive understanding of the phenomenon. The synthesis of the composite textural and the composite structural description will occur once all three data collection methods are analyzed.

### **Data Synthesis**

After the data is collected and analyzed, each data collection method will be synthesized using the model outlined by Moustakas (1994). Moustakas's (1994) data synthesis begins with epoché, then transcendental-phenomenological reduction, imaginative variation, and synthesis of composite textural and composite descriptions. Epoché occurs when the researcher sets aside their prejudgments and experiences and "allowing things, events, and people to enter anew into consciousness, and to look and see them again, as if for the first time" (Moustakas, 1994, p. 85). Epoché does not happen suddenly; however, the process requires patience and focus (Moustakas, 1994). It is challenging to achieve epoché perfectly, but the process of epoché can substantially decrease prejudgments and biases (Moustakas, 1994). The researcher will set aside their prejudgments by partaking in reflexive journaling (Ahern, 1999; Moustakas, 1994), which will

enhance the trustworthiness of this study (Lincoln & Guba, 1985). Appendix K will contain the researcher's reflexive journal.

The second data analysis procedure is a transcendental-phenomenological reduction encompassing horizontalization, clustering the horizons into themes, and organizing the horizons and themes into a coherent textural description of the phenomenon (Moustakas, 1994).

Horizontalizing occurs when the researcher views each statement with a fresh perspective and equal value (Moustakas, 1994). Then, the researcher will eliminate non-essential and redundant statements leaving the horizons (Moustakas, 1994). The horizons are then clustered into themes and organized into a textural description of the phenomenon (Moustakas, 1994).

Moustakas's (1994) third step is imaginative variation. Imaginative variation includes different meanings and perspectives, creating a list of structural qualities, developing structural themes, and composing a composite structural description. The researcher strives to obtain different meanings by viewing the phenomenon through different lenses, vantage points, and angles (Moustakas, 1994). The goal of imaginative variation is to attain a structural description of the "how," which highlights the "what" of the experience (Moustakas, 1994, p. 98).

Finally, the fourth step is the synthesis of composite textural and composite descriptions, which is satisfied when the researcher synthesizes the structural and textural descriptions to describe the phenomenon's essence (Moustakas, 1994). Moustakas (1994) believes that the "essences of any experiences are never totally exhausted" (p. 100). Furthermore, the phenomenon's essence is a mere perspective of the researcher when the study is conducted (Moustakas, 1994).

## **Trustworthiness**

Trustworthiness is comprised of four components: credibility, dependability, transferability, and confirmability (Lincoln & Guba, 1985). Trustworthiness is the notion of one's research "worth paying attention to" (Lincoln & Guba, 1985, p. 230). All of the names of participants and locations are pseudonyms to safeguard the confidentiality of the research participants and sites. Each component of trustworthiness is addressed below.

### **Credibility**

Credibility is the accuracy and truth of an individual's research findings (Korstjens & Moser, 2018). Lincoln and Guba (1985) believe member checks are the most critical aspect of a study's credibility. Credibility was established by using member checks and triangulation of data. Data triangulation was achieved using three data collection methods: participant journaling, semi-structured interviews, and focus groups (Lincoln & Guba, 1985). Member checks were conducted by each participant, which entailed reviewing their transcripts of the interviews. Member checking allows the participants to verify the data collected and add or clarify the data collected (Elo et al., 2014). All participants took an active part in member checking. Triangulation was fulfilled by using three methods of data collection: interviews, focus groups, and participant journaling (Patton, 1999, 2002).

### **Transferability**

Transferability is the ability for the findings to be extrapolated and shifted to other research studies (Elo et al., 2014; Korstjens & Moser, 2018). Transferability was attained by providing a thick, rich description throughout the study (Creswell & Poth, 2018; Lincoln & Guba, 1985). This study may be transferred to various educational agencies worldwide and different vocations to understand how their employees cope with stress.



**Dependability**

Dependability refers to the stability of findings over time (Elo et al., 2014; Korstjens & Moser, 2018), and the study could be replicated (Lincoln & Guba, 1985). Dependability was achieved using an audit trail (Appendix J). The study includes an in-depth, step-by-step process of the study's procedures.

**Confirmability**

The crux of confirmability is objectivity and neutrality within the research findings (Elo et al., 2014; Lincoln & Guba, 1985; Shenton, 2004). Confirmability will be obtained by using triangulation (Lincoln & Guba, 1985), reflexive journaling (Appendix K), and an audit trail (Appendix J) (Nowell et al., 2017). Triangulation will be used to satisfy confirmability, which will allow for multiple data collection methods such as journaling, interviews, and focus groups to eliminate researcher bias (Nowell et al., 2017; Patton, 2002; Shenton, 2004).

**Ethical Considerations**

The study will not begin until the researcher has received IRB and NTISD's RRB approval. Each participant will sign an informed consent form that will outline the study's purpose and state that participation is voluntary (Creswell & Poth, 2018). The interview transcripts will be stored in a folder placed in a locked filing cabinet. The electronic form of the transcripts will be held in a password-protected website called Dropbox and in the researcher's Google Drive for three years. The school district and each participant will be assigned pseudonyms to maintain confidentiality.

**Summary**

The central research question, "How do elementary public school teachers describe their experiences coping with stress during the COVID-19 pandemic?" guided this study, leading to a

qualitative research design. The transcendental phenomenological methodology was appropriate for the study because the researcher wanted to understand the issue by giving teachers a platform to voice their lived experiences (Moustakas, 1994). The study will include a range of public school elementary teachers from a predominantly suburban, urban school district in North Texas named NTISD.

The data collection methods will include participant journaling, semi-structured interviews, and focus groups. The study will use a data analysis model outlined by Moustakas (1994), including epoché, transcendental-phenomenological reduction, imaginative variation, and composite textural and composite descriptions. Trustworthiness will be addressed, consisting of four components: credibility, dependability, transferability, and confirmability (Lincoln & Guba, 1985).

## **CHAPTER FOUR: FINDINGS**

### **Overview**

The purpose of this transcendental phenomenological study was to describe elementary public school teachers' experiences coping with stress during the COVID-19 pandemic. The purpose of Chapter Four is to present the results of the study. The chapter provides a table (Table 5) containing pertinent participant information followed by in-depth individual descriptions of the 14-participants in paragraph form who took part in the study. The results section consists of two themes, and each theme contains three subthemes. The chapter also includes responses to the central research question and the three sub-questions and concludes with a summary.

### **Participants**

Fourteen elementary public school teachers' who experienced teaching during the COVID-19 pandemic participated in this study. Purposeful sampling and maximum variation sampling were used for this study. Participants were selected from a feeder pattern in NTISD. Potential participant email addresses were found on each school's websites, totaling 182. Participant recruitment emails were sent to 182 participants; however, only two completed the inventory and signed the electronic consent. Therefore, follow-up emails were sent four days later to potential participants, and 16 more elementary public school teachers completed the inventory; of those, 14 teachers signed the consent form. One educator did not complete the journal prompts, and another did not respond to emails to schedule a one-on-one interview. The 14 participants ranged in age from 26 to 61, 11 were female, and three were male. A detailed description of each participant can be found in the table below (Table 6). All of the participants believed COVID-19 was real. Twelve out of the fourteen participants received at least one dose of a COVID-19 vaccination.

**Table 5***Teacher Screening Questions and Responses*

Did you test positive for COVID-19?		Did anyone in your family test positive for COVID-19?		Did you have to quarantine during COVID-19?		Did any of your students test positive for COVID-19?		Did any of your students have to quarantine?		Did anyone that you know die from COVID-19?		Do you believe COVID-19 is real?		Are you vaccinated against COVID-19?	
Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
0	14	7	7	6	8	11	3	12	2	7	7	14	0	12	2

**Table 6***Teacher Participants*

Teacher	Gender	Race	Ethnicity	Highest Degree Earned	Years Taught	Content Area	Grade Level(s)
Alli	Female	White	Not Hispanic or Latino	Bachelor's Degree	8	All	2
Boris	Male	White	Hispanic or Latino	Master's Degree	6	All	1
Brooke	Female	White	Not Hispanic or Latino	Bachelor's Degree	9	All	2
Damian	Male	White	Hispanic or Latino	Bachelor's degree	9	Math	4/5
Fanny	Female	White	Hispanic or Latino	Master's degree	20	All	Kinder
Chrystal	Female	Black or African American	Not Hispanic or Latino	Bachelor's Degree	5	All	Wrap-around Intervention Network

Karina	Female	White	Hispanic or Latino	Bachelor's Degree	1	Science & Social Studies	6
Lisette	Female	White	Hispanic or Latino	Bachelor's Degree	15	All	Kinder
Makayla	Female	White	Asian	Master's Degree	7	All	Pre-K
Marcy	Female	White	Hispanic or Latino	Master's Degree	12	Library & keyboarding	2-6
Mayleen	Female	White	Hispanic or Latino	Doctorate	7	All	Pre-K
Valentina	Female	White	Hispanic or Latino	Bachelor's Degree	6	Math	6
Violeta	Female	White	Hispanic or Latino	Master's Degree	21	Instrumental Music	4-6
William	Male	White	Not Hispanic or Latino	Bachelor's Degree	9	All	Special Education

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## Alli

Alli was a 31-year old white female who held a bachelor's degree in elementary education. She had taught for eight years, and her teaching assignment was second grade. Alli also had experience teaching kindergarten, third grade, and fourth grade. Alli needed more coping mechanisms as a result of COVID-19. Some of the coping mechanisms she used were talking to her mom, mindfulness strategies, breathing exercises, working out, and yoga. Alli stopped drinking caffeinated beverages and switched to drinking things such as "organic wild mushroom teas to make sure I'm not overstimulated." She also enjoyed drinking "sleeping time tea to help me go to bed." Alli described that when she was "very stressed," she would "just like binge sweet foods, like candies, cookies, cakes, ice creams, and then I'll just, I'll just eat only sweets." A coping mechanism that Alli had not tried but would like to try in the future was to

visit a spiritual therapist to read her “aura or my energy is like, and maybe how I could change those things about myself.”

### **Boris**

Boris was a 45-year old white male who identified as Hispanic or Latino. He earned a master’s degree in psychology. Boris taught first-grade bilingual and had experience teaching pre-K, which spanned six years. Before being a classroom teacher, Boris was a school counselor for 15 years in Spain.

He used to cope with stress by running and using the elliptical; however, since the pandemic began, he stopped exercising. However, Boris explained, “I started to diet, which has been helpful. So I am just kind of following the diet to keep my weight to make me feel good.” As a result of the pandemic, Boris has “started to take things less serious” and “not to try to be perfect.” Boris has spent more time at home during the pandemic “because that’s what my body and my brain wanted or needed.” He admitted he drinks “so much coffee” and acknowledged it is an unhealthy coping mechanism; however, overall, Boris stated, “I’m pretty healthy. A coping mechanism that Boris would like to try in the future is to live in the moment “without worrying about something that is coming.”

### **Brooke**

Brooke was a 30-year-old white female who had taught for nine years. She earned a bachelor’s degree in early childhood education and taught second grade. Brooke also had experience teaching kindergarten and first grade. Her coping mechanisms have not changed drastically due to the COVID-19 pandemic, yet she joined an online Bible study and formed a book club with her college friends. At the beginning of the pandemic, Brooke explained,

I live by myself. So sometimes it's hard to like, this has been like a really isolating experience, just I go home, and I'm by myself. So now we're to the point where like, we can, you know, go out and about, not as much as we are used to.

She coped with stress by staying active such as working out, taking her dogs to the dog park, and crafting. Brooke explained that “stress eating” was an unhealthy coping mechanism she used to cope with stress. She would like to try journaling and meditation in the future to cope with her stress.

### **Chrystal**

Chrystal was a 37-year-old African-American female who earned a bachelor's degree in criminal justice. She taught in the Wrap-around Intervention Network (WIN), which serviced students with intrapersonal or interpersonal conflicts that interfered with their learning or peers' learning and danger to self or others. Chrystal's coping mechanisms throughout the pandemic included prayer, reading scripture, journaling, and reading educational material to educate her students' parents. She would like to travel in the future to cope with her stress.

### **Damian**

Damian was a 36-year-old white male born in Mexico, “which is really important.” He identified as Hispanic or Latino. Damian earned a bachelor's degree in technology and obtained his alternate certification through NTISD alternative certification program. He taught for nine years and had experience teaching language arts, science, and math. Damian taught fourth and fifth-grade math. He coped with stress by dancing, going to happy hour, and hanging out with friends. As a result of COVID-19, Damian tried new coping strategies such as going to restaurants with outdoor seating, drive-in movies, and spending time with friends at the park.

The pandemic has taught Damian that he tries to help people more than they try to help him. A new coping mechanism he would like to try is working out at the gym.

### **Fanny**

Fanny was a 47-year old white female kindergarten teacher who identified as Hispanic or Latino. Fanny taught in Mexico and the United States for a combined 20 years. She earned a master's degree in interdisciplinary studies. Fanny relied heavily on her faith to cope with stress. She declared, "I'm a Catholic." She found comfort in praying daily and reciting the Rosary Prayer. At times during the pandemic, Fanny faced challenges coping with her stress as she shared, "there was no time for myself and not enough hours in the day" due to her responsibilities at home and work were overwhelming at times and "never-ending." A new coping mechanism she has used since the beginning of the pandemic was walking outdoors. An unhealthy coping strategy Fanny used to cope with stress was eating potato chips with "lemon and Tajin." Her healthy coping strategies included yoga and walking. In the future, Fanny would like to try biking to cope with her stress.

### **Karina**

Karina was a 26-year old white female who identified as Hispanic or Latino. She received her bachelor's degree in Chicana/o studies and education. The 2021-2022 academic year was her first year as a teacher of record. Karina began to cope with her stress during the pandemic by doing yoga because she could do it at home. She thought yoga was easy until she tried it. Karina explained, "It was really difficult for me because I'm not that flexible, which, like, definitely helped me like my flexibility." Her alcohol consumption has increased during the pandemic; however, she added, "I don't drink like an abundant amount of alcohol." A coping mechanism Karina would like to try in the future is journaling.



**Lisette**

Lisette was a 41-year old white female who identified as Hispanic or Latino. Lisette had 15 years of teaching experience and taught bilingual kinder. She had also experienced teaching first grade, third through fifth-grade science, and social studies. Lisette held a bachelor's degree in industrial engineering from a university in Venezuela. Throughout the pandemic, she coped with stress by ordering takeout from her favorite restaurant, online shopping, movie nights with her family, and planning future vacations. Lisette added, "I'm always hunting for something I like until it's in the lower price." She started to use agendas to manage her time, track her goals for the week, and manage her stress. Lisette used one for her personal life and one for her professional life, and it made her feel accomplished when she "crossed out" one of her weekly goals. In the future, Lisette would like to try downhill skiing and hiking to cope with her stress.

**Makayla**

Makayla was a 38-year old white female pre-k teacher who identified as Asian. She held a bachelor's degree in childhood learning development and a bachelor's degree in psychology. Makayla previously worked in private education as a pre-k teacher and a high school college counselor. The 2021-2022 academic year was her first year as the teacher of record in a public school system; however, she completed her student teaching in NTISD during the 2020-2021 academic year. Makayla relied heavily on solitude which allowed her to reflect on life and "just think about how thankful I am." Overall, she describes herself as an "optimistic person." She also enjoyed driving around while listening to music. Makayla tried new coping mechanisms such as watching Netflix and documentaries to relieve her stress during the pandemic. She admitted that her coping strategies changed as she no longer could try new restaurants, coffee

shops, or travel by herself due to her fears of COVID-19. She shared, “So that’s actually really sad to think about it.” Makayla would like to exercise and practice yoga to cope with her stress in the future.

### **Marcy**

Marcy was a 48-year old white female librarian who identified as Hispanic or Latino. She held a bachelor's degree in advertising and a master's degree in library science. She completed her alternate certification through NTISD. Marcy taught for 12 years and had experience teaching first, second, and fifth grades within NTISD. As a result of the pandemic, Marcy began to cope with stress by using mindfulness apps such as calm and headspace. She also coped by “mindless watching t.v. or escaping in a book.” She is more cognisant of self-care, especially “sleep, relaxation, and downtime.” Marcy described “overeating junk food” as an unhealthy coping mechanism and would like to try journaling in the future to help alleviate stress. Marcy believed her most significant challenge in coping with stress was time due to family demands at home and job demands. She has learned from the pandemic that “my family and I get along really well.” Marcy continued, “It wasn't, you know, 100% bliss, but we, yeah, we got along, and we kind of learned how to navigate within a space.”

### **Mayleen**

Mayleen was a 38-year old white female pre-k teacher who identified as Hispanic or Latino. She earned a doctorate in educational leadership from a university in Puerto Rico. Mayleen’s past teaching assignments included bilingual second-grade, fourth-grade, fifth-grade, and middle school Spanish. She has taught for seven years. Mayleen coped with her stress by doing “a lot of outdoor activities” such as sailing, boating, and kayaking. She also relieved her stress by salsa dancing and listening to “Hispanic music, specially salsa from Puerto Rico.”

Mayleen found comfort in talking to her mom “several times a day” and spending time with friends. Mayleen acknowledged she used unhealthy coping mechanisms at times to relieve her stress, such as drinking alcohol, smoking marijuana, and “being with people I shouldn't be. For example, guys that I should not be with.” She admitted that her unhealthy coping mechanisms are “kind of pointless.” The pandemic has taught her that,

Life is very precious. That we have to take care of my own take care of the ones I love.

And, you know, just live every day to the fullest. Because we never know what's going to happen tomorrow.

### **Valentina**

Valentina was a 45-year old white female who was Hispanic or Latino. She earned a bachelor's degree in law and completed her alternate certification through NTISD alternative certification program. Prior to teaching, she practiced law in Brazil. Valentina taught fifth and sixth-grade math. She had six years of teaching experience and previously taught bilingual second and third grades. Valentina consistently coped with stress by exercising and being active at her church. Her coping mechanisms did not change due to COVID-19; however, she stated, “I had to develop more discipline to do the same mechanisms.” Valentina developed an accountability partner who helped her stay on track fitness-wise. She explained that her healthy coping strategies included exercise and “intentional” time with her family. Valentina mentioned that her family is often in the same space; however, they scheduled activities that they could “actually pay attention to each other,” such as board games and nature walks. At times, she used unhealthy coping mechanisms, such as binge-watching t.v. and sleeping more than usual. Valentina described the consequences of her unhealthy coping strategies, “Then you know, and at the same time, take your time from your family, from your spouse, from prayer, from God,

because you're numbing yourself.” Valentina would like to try yoga and some meditation in the future to cope with her stress.

### **Violeta**

Violeta was a 61-year old white female instrumental music teacher. She identified as Hispanic or Latino. Violeta earned a master's degree in music and viola performance and a master's degree in library sciences. She had 21 years of teaching experience and taught various levels such as elementary, middle school, high school orchestra, library, and high school music history. Prior to the pandemic, Violeta used to travel extensively to alleviate stress. She explained, “We've been to all of the continents.” Violeta consistently coped with her stress during the pandemic by walking her dogs and playing games on her iPad, such as Homescapes, Gardenscapes, and Cooking Dash. She occasionally embarked on driving vacations and traveled to their second home in the Pacific Northwest. Violeta revealed that eating was an unhealthy coping strategy, and walking was a healthy coping mechanism she used to cope with her stress. She would like to try weightlifting in the future to cope with her stress.

### **William**

William was a 38-year old white male who taught special education. He holds a bachelor's degree, majored in history, and minored in American studies. William earned his alternative teaching certification through Texas Teachers and taught for nine years. His previous teaching assignments included self-contained autism teacher for elementary and high school. One of the coping mechanisms William used throughout the pandemic to cope with his stress was to play video games. When he experienced work-related stress, he explained, “the first thing I do is just turn on the PC or something and just play online with people.” William believed the “best coping mechanism” has been to “unplug,” which he defined as disconnecting from work

communication, social media, and not reading the news. As a result of the pandemic, he tried meditation as a form of stress release, which he did intermittently; however, William stated, “I’d like to think it works.” An unhealthy coping mechanism that he used at times was going to happy hour on Fridays and having drinks with friends. He admitted, “It’s not really sustainable. Because it is really just delaying the problem. Is when you wake up the next morning, problems are still there. Probably the worst coping mechanism.” He would like to try exercising to cope with his stress in the future. His most prominent source of stress during the pandemic was his parents’ health, as they had preexisting conditions. Due to his fear of getting them sick, William did not visit his parents prior to receiving his first COVID-19 vaccine. He further explained, “I was working with kids who were sneezing everywhere, and I didn’t want to infect them.”

## **Results**

The results of this study were yielded from analyzing three data collection methods: participant journaling, one-on-one interviews, and a focus group. My first data collection method was participant journaling on a Google Document. There were two journal prompts, and I cut and pasted each participant's responses in an Excel document organized by question number one and question number two. The participant interviews and the focus group transcripts were uploaded to Otter.ai for transcription. After completing the transcriptions, I listened to each interview and the focus group to ensure the transcripts were accurate. Then, I printed out the journal responses, transcripts from the one-on-one interviews, and the focus group. First, I began by bracketing out my experiences in coping with stress during the pandemic, which allowed me to focus solely on the participants' responses to reveal the true essence of the phenomenon. I read and reread the transcripts to understand and immerse myself in the participant's responses. Throughout reading the transcripts, I highlighted significant statements. Then, I read and reread

the highlighted statements and assigned a code to each statement by writing it in a notebook.

Next, I read and reread my initial codes and clustered similar codes together by writing those in my notebook. Two themes emerged as I clustered my codes: teacher stress and teacher coping mechanisms. Three subthemes emerged for each theme (Table 7).

**Table 7**

*Themes and Subthemes*

Teacher Stress	Teacher Coping
Students	Psychological Coping Mechanisms
Instruction	Physical Coping Mechanisms
Technology	Emotional Coping Mechanisms

**Teacher Stress**

Teacher stress has increased significantly due to the COVID-19 pandemic. Alli acknowledged, “the last two years are completely just a year that no teacher has ever experienced in their teaching career.” Teacher stress can significantly impact teachers’ performance and overall health. When asked what were the most stressful experiences with teaching during the pandemic, Brooke explained, “I think it’s unknowns and the uncertainties.” Lissette affirmed Brooke’s feelings by explaining, “We don’t know what is going to happen. This is still going on. We are just like, adjusting to the we’re expecting next.” Marcy described, “Were just, you know, making sure the kids or everybody really wore their masks, washed your hands, cleaned up, stay distance, maintain that that social distance. That was really stressful, just having to like, remind everybody, and remind myself.” Fanny commented that the beginning of the 2020-2021 academic year was very stressful due to the uncertainties of the virus, which led her to overexaggerate her safety precautions by wearing a “face shield and double mask.”

### ***Students***

Students were a cause of teacher stress throughout the COVID-19 pandemic. Teachers cared about the health and safety of their students and tried to do their best to keep their students safe. Teachers had to remind the students constantly to “wear the mask, wear the mask, wear the mask,” Boris said. Valentina added, “It was stressful to remind students to cover their mouth and noses constantly.” Mayleen affirmed Boris and Valentina by explaining, “we have to be reinforcer and keep on to the students wear your mask, don't touch. And then some of the kids would bump head with us because they didn't think it was a big deal.”

Students' academic progress or a lack thereof was a stressor for many teachers. Alli explained,

My biggest stress was students not participating in online learning. Out of 26 students, I would have about five students join our daily Zoom meetings, and the same students completed online assignments. The rest of my students were unable to complete work due to internet connectivity issues, lack of technology, or lack of effort.

Student behavior was a source of stress for teachers. Valentina added that student “behavior issues are increasing.” Alli agreed and explained,

We have students that haven't developed proper social skills in the last two years because they've only been on Zoom communicating. Children don't know how to get those skills and learn how those skills work. So we're dealing with students that have no proper social skills.

### ***Technology***

The pandemic forced teachers to implement and rely heavily on technology to do their job effectively. Many teachers were unfamiliar with how to use technology to the degree needed.

Karina explained, “It was a lot of just getting to know everything like, they're the websites, even though I am on the younger side of the age. It was, it was difficult just learning how to use technology in a different way.” Boris affirmed, “One of the things was to, to learn of the technology, programs, and resources to be able to teach online because we didn't have a lot of time to to be ready for that.” However, technology is not perfect. Lissette experienced poor internet connection while teaching virtually and as a result, she “ended up suspending the instruction; that was probably the worst feeling I ever experienced.” Valentina had similar experiences,

We had to improvise on the spot and do a different activity in those times. It was more stressful when my computer would malfunction and shut down at random moments because then students were left alone in the Zoom meeting, or the Zoom meeting would end.

### ***Instruction***

Instruction was a source of teacher stress. Teachers experienced many different instructional modalities throughout the pandemic, including virtual, synchronous, asynchronous, hybrid, and in-person. Teachers were not accustomed to teaching any other way than in-person. They relied on many pedagogical practices they learned in college and throughout their teaching career to teach their students. Makayla justified, “I have to find new ways to teach my students, you know, that's safe during the COVID environments. So, you know, that was very stressful and overwhelming.” Brooke added, “I almost feel like my identity as a teacher has a lot during the pandemic, just because I haven't been able to be the teacher that I am used to being.” William had a different perspective and stated,



Half my caseload would be online, and half the caseload will be in person. I think the stress that came along with that is that really can't because obviously, you're working with a group of third graders' resources. You could have like two kids sitting right here and two on the computer. They're both getting their minutes, but at the same time, neither one of them is really being served full extent.

### **Teacher Coping Mechanisms**

Coping mechanisms help teachers manage the various stressors of their profession. Alli explained, “coping mechanisms are a way to blow off steam and escape from the realities of life.” Valentina echoed Alli by stating that exercise helped her “pause my mind because I'll be focused on the exercise, how many repetitions you have to do, or the distance that you have to do it this way I, I can disconnect myself.” They are a way to reset and recharge which are necessary for teachers to be the best they can be and ultimately provide the best educational experiences for their students. The teacher used coping mechanisms varied because what worked for one educator may not have worked for the others. Lissette added, “truly small things makes a difference for me.” Coping with stress is an intimate journey. The COVID-19 pandemic has increased teacher stress; therefore, coping is even more critical now than ever. Alli was asked, “How have your coping mechanisms changed as a result of COVID-19?” and she explained,

Yeah, I think I need more coping mechanisms now than I did before COVID. Before COVID, it could just be, you know, taking my dog for a walk. And that was enough that I needed to just relax and let the day go. But now it's like, I need all of these coping mechanisms, you know, mindfulness, stretching, working out, you know, even medication sometimes, changing to different types of teas that I drink to help with all the stress that is going on.

### ***Psychological Coping Mechanisms***

Psychological coping mechanisms refer to strategies that alleviate mental stress. The teaching profession is mentally exhausting, and it is helpful when teachers can cope with their psychological stress. Teachers cope with their psychological stress in various ways. Karina, Makayla, Marcy, and Marcy have maintained a positive mindset throughout the pandemic. Brooke found it helpful by “talking it through, like doing as much research as I can.” Boris agreed as he found seeing a psychologist helpful and stated, “Just telling your feelings to someone that just that helps.” However, Lissette coped physiologically by “making a pedicure at home” and eating “a bag of popcorn makes me cope with stress too.” Alli had a different experience coping psychologically with her stress which she explained,

I would say I'm still struggling with coping with the stress psychologically. Because that's just where I have to change my mindset of making sure that I am maybe trying to do yoga once a week, or I try to do some meditation at least once a week to help with that stress, psychologically. So I'm definitely still trying to figure out how to cope with that stress because that's definitely where that anxiety is coming from. You know, I have been prescribed anti-anxiety medication, and I will only take it one I feel extreme stress because again, with that mental toughness, and never took medication, I had, you know, multiple sports injuries, and I never took medication because I can tough it out I can go through the pain But here I am, like relying on anti-anxiety medication because I'm so stressed.

### ***Physical Coping Mechanisms***

The second subtheme that was revealed was physical coping mechanisms. Physical coping mechanisms focus on the body. Teachers cope with their physical stress in numerous

ways. William and Lissette focused on eating healthier as a way to cope physically. Chrystal acknowledged, "which is not good. Is ball up and sleep or try to sleep which is not healthy."

Fanny mentioned that she coped with her stress physically by "walking and talking with my son. So, that was the time that we had to talk and to relax and to laugh." Alli frankly stated, "definitely working out."

### *Emotional Coping Mechanisms*

The third subtheme that was uncovered was emotional coping mechanisms. The focal point of emotional coping is alleviating one's stress through emotional stimulation. When asked, "How do you cope emotionally?" Brooke answered,

I just think like having like, making connections with people, like, for example, like I joined like a Bible study that does like that does virtual so just doing more virtual things, finding ways to do like me, and some friends. There's things I would have never gotten to experience if it wasn't because of COVID. Like, I would have never, like, joined a Bible study virtually. And like I like joined, like a book club with some friends from college.

And so I think that that kind of helped me emotionally just like having those friendships.

And even though I might have been physically alone, like, emotionally, I wasn't alone.

Makayla found comfort in spending time with her family; she explained, "so emotionally though, my husband is always with me at home and with my kids too. And I think I really depended on their support, then being next to me for you know, dealing with some of my emotions."

Valentina coped emotionally with her "therapy dog," whereas Mayleen found comfort in talking to her mom. However, Boris stated, "Pills help, sometimes, emotionally."

## Research Question Responses

One central research question and three sub-research questions guided this transcendental phenomenology study to better understand the phenomenon of how elementary public school teachers' experiences coping with stress during the COVID-19 pandemic.

### Central Research Question

What are the lived experiences of public elementary teachers coping with stress during the COVID-19 pandemic? All participants revealed unique and various ways they coped with stress throughout the COVID-19 pandemic. Lissette enjoyed listening to music and cooking. Lissette explained that she likes to play jazz when she eats because it feels like she is in a restaurant. Damian coped with his stress differently than Lissette, explaining, “I tried to sit down in my room. Try to not think about things.” Mayleen described the effectiveness of her coping mechanisms. She explained, “using those mechanisms physically, emotionally and psychologically. I've kept using them during this time, and they have helped.” The different coping mechanisms elementary teachers used during the pandemic were classified into three categories psychological, physical, and emotional, which were the sub-research questions.

### Sub-Question One

What psychological mechanisms are elementary public school teachers using to cope with stress during the COVID-19 pandemic? Elementary public school teachers used numerous psychological mechanisms to cope with stress during the COVID-19 pandemic (Table 8).

**Table 8**

*Psychological Coping Mechanisms Used By Elementary Public School Teachers*

Yoga	Positive mindset	Medication	Meditation
Breathing exercises	Cooking	Therapy	Watch t.v.

Prayer	Eating Popcorn	Home pedicures and manicures	Rest
Listen to music	Reduced news watching	Walking	Research about COVID-19
Reach out to friends	Knowing I'm not alone	Detachment	Reading
Drinking alcohol	Eating Sweets		

Psychological coping mechanisms were used the most amongst elementary public school teachers. Violeta coped psychologically by “walking more and cooking.” Mayleen found comfort in talking to her friends and co-teachers. Mayleen explained,

I especially called co-teachers. I have a lot of co-teacher friends, and then we would just vent out we would just okay, what do I do with this? He would give advice and listen to my own concerns that I wasn't alone. So that helped me a lot.

Brooke and Fanny tried to stay abreast with the current COVID-19 situation. Fanny stated, “I like to be informed of what's happening and how the virus is behaving, and how many people are affected. Marcy took a different stance, which was staying away from the news. Alli was “prescribed anti-anxiety medication, and I will only take it one I feel extreme stress.” At times, Valentina would watch excessive amounts of t.v. Karina coped by staying optimistic about her current situation. She continued, “looking at the positivity of like, okay, I'm going through this now (pandemic), but hopefully, this is the worst of it.”

### **Sub-Question Two**

What physical mechanisms are elementary public school teachers using to cope with stress during the COVID-19 pandemic? Elementary public school teachers in NTISD used several physical mechanisms to cope with their stress during the COVID-19 pandemic (Table 9).

**Table 9***Physical Coping Mechanisms Used By Elementary Public School Teachers*

Working out at the gym	More sleep	Driving around
Working out at home	Spending time with pets	Visiting friends
Yoga	Cooking	Taking supplements
Walking	Eat better	Unplug from technology
Dancing	Boating	Hiking

Physical coping mechanisms were the least used among elementary public school teachers. Five out of the 14 participants coped with their stress physically by walking, going to the gym, exercising at home, doing yoga, and stretching. Alli stated, “I work out about five days a week. And then my gym also has a yoga session on Sundays. So I’ll do yoga as well.” Brooke enjoyed going to the gym, where group workouts were the focal point. Lissette and William explained the importance of more sleep and naps to cope with stress. Two participants coped physically with spending time with their pets. “I like to take them to like the dog park and take them on a walk on the trails,” Brooke stated.

**Sub-Question Three**

What emotional mechanisms are elementary public school teachers using to cope with stress during the COVID-19 pandemic? Elementary public school educators used emotional mechanisms to cope with stress during the COVID-19 pandemic (Table 10).

**Table 10***Emotional Coping Mechanisms Used By Elementary Public School Teachers*

Practicing gratitude	Alone time	Listen to music	Prayer	Reflection
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Medication	Helping friends	Pet therapy	Reading the Bible	Therapy
Self-care	Outdoor activities	Journaling	Family support	Meditation
Drinking hot tea	Drinking alcohol	Watch t.v.	<u>Cannabidiol</u> <u>Vitamins</u>	

Emotional coping mechanisms were used the second most amongst elementary public school teachers. Damian coped emotionally by “helping my friends,” which allowed him to be “stress-free.” Teachers coped emotionally by spending time outdoors. Lissette was recharged by “being (in) my backyard with a candle.” Mayleen enjoyed going to the lake and spending time kayaking. Mayleen explained, “That would relax me emotionally because I would be in another environment.” Educators coped emotionally by spending time with their families and talking to their family members. Valentina enjoyed cooking with her family. Whereas Karina’s family lived in another state, she enjoyed talking to her parents. Teachers found emotional solace in meditation, positivity, and reflection. Marcy believed, “being grateful and practicing gratitude helped me emotionally.” Violeta discovered transcranial magnetic stimulation, which helped her emotionally by “relieving her anxiety.”

### **Summary**

The 14 participants ranged in age and teaching experience; however, they all taught during the COVID-19 pandemic. Each participant shared their experiences of coping with stress during the COVID-19 pandemic. The first theme was teacher stress which included three sub-themes: students, technology, and instruction. The second theme was teacher coping mechanisms and included three sub-themes of psychological coping mechanisms, physical coping mechanisms, and emotional coping mechanisms.

Psychological coping mechanisms were the most used, followed by emotional and physical coping mechanisms. Participants' psychological coping mechanisms included yoga, prayer, working out, listening to music, and watching t.v. Examples of participants' emotional coping mechanisms included drinking hot tea, journaling, pet therapy, and talking to family members. Participants' physical coping mechanisms included strategies such as working out, dancing, cooking, and boating. The data gathered from the participant journals, one-on-one interviews, and a focus group was used to answer the central research question: What are the lived experiences of public elementary teachers coping with stress during the COVID-19 pandemic?



## **CHAPTER FIVE: CONCLUSION**

### **Overview**

The purpose of this transcendental phenomenological study was to describe elementary public school teachers' experiences coping with stress during the COVID-19 pandemic. This chapter begins with the interpretation of the study's findings. Next, implications for policy and practice will be discussed, followed by theoretical and empirical implications. Subsequently, limitations and delimitations of the study will be outlined. Finally, recommendations for future research and a summary of the study will conclude this chapter.

### **Discussion**

This study aimed to reveal the essence of how public elementary teachers cope with stress during the COVID-19 pandemic. A phenomenological study was selected because I wanted to focus on the lived experiences (Creswell & Poth, 2018) of public elementary teachers coping with stress during the COVID-19 pandemic. The theoretical framework that guided my study was Lazarus and Folkman's (1984) transactional model of stress and coping. Lazarus and Folkman's (1984) transactional model of stress and coping is a process that includes the product of a stressor by the environment and the individual's response to the stressor. The discussion section focuses on the interpretation of findings, implications for policy or Practice, theoretical and empirical implications, limitations and delimitations, and recommendations for future research.

### **Interpretation of Findings**

The purpose of this transcendental phenomenological study was to describe elementary public school teachers' experiences coping with stress during the COVID-19 pandemic. Three methods were used to collect data: participant journaling, one-on-one interviews, and a focus

group. The data were coded, and two themes emerged: teacher stress and teacher coping mechanisms. Three subthemes emerged under teacher stress: students, technology, and instruction. Likewise, three subthemes emerged under teacher coping mechanisms: psychological, physical, and emotional.

### ***Summary of Thematic Findings***

There were two themes and three subthemes identified for each of the themes. The first theme identified from the data analysis was teacher stress, and the subthemes under teacher stress included students, technology, and instruction. The second theme that emerged from data analysis was teacher coping mechanisms, and the subthemes included psychological, physical, and emotional coping mechanisms.

**Teacher Adversity.** The participants all faced adversity while teaching during the COVID-19 pandemic. Teacher adversity came in various forms, such as COVID-19, family, students, technology, and instruction. Brooke was fearful of contracting COVID-19 and potentially infecting their students, whereas William did not visit his mother and father until he received his first COVID-19 vaccine. Teachers were expected to keep students engaged and maintain rigor during online, in-person, and hybrid learning to prepare them for the State of Texas Assessments of Academic Readiness. Teachers encountered adversity as teaching and learning changed quickly from in-person to online in March 2020. Karina explained that it was stressful to learn how to use technology differently. The participants faced adversity by adjusting their teaching methods and styles to work within the COVID-19 protocols set forth by NTISD. For example, Brooke enjoyed having her students work in groups; however, the pandemic made her rethink her teaching strategies.

**Teacher Resiliency.** Teacher resiliency helped teachers cope with their stress due to the COVID-19 pandemic and helped them to remain in the teaching field through these trying times. Some participants needed a coping mechanism, whereas others needed more than one. For example, Alli showed resiliency because she acknowledged she needed more and even new coping strategies to cope with her stress. All participants demonstrated resiliency by consistently answering the bell day in and day out and providing their students with the best education regardless of the COVID-19 pandemic. Makayla summed up how teachers were resilient during the pandemic and how they genuinely enjoyed the teaching profession. She said, “I think the end will be near. And even though it has been so difficult, I am just blessed to be in the teaching field.”

### **Implications for Policy or Practice**

The findings of this study highlighted how elementary public school teachers’ coped with their stress psychologically, physically, and emotionally during the COVID-19 pandemic. The findings of this transcendental phenomenological study have substantial practical, theoretical, and empirical significance for the education field. Teachers, administrators, superintendents, and educational leadership can use the results of this study.

### ***Implications for Policy***

Teachers’ stress has increased during the COVID-19 pandemic (Lizana et al., 2021; MacIntyre et al., 2020), resulting in an overall deterioration of teachers' mental health and overall wellbeing (Kim et al., 2022). Teachers and students are people; therefore, teacher and student well-being should be a focal point, not high-stakes testing. Helping teachers find adequate outlets to cope with their stress could prove effective (Sun et al., 2018). Moreover, helping teachers find adequate coping outlets could be accomplished by using district professional development days

and portions of staff meetings to focus on teachers' mental health by providing experiences that could provide stress relief and improve their social and emotional well-being.

Schools and school districts could survey teachers at the beginning and throughout the academic year to determine how to best support their staff (Ferren, 2021) socially, emotionally, and physically. School districts could implement workplace wellness programs, social-emotional learning programs, and mindfulness programs to help teachers navigate the stressors of their profession (Greenberg et al., 2016). Schools could have after-school fitness programs or keep employees abreast of current local fitness establishments and community fitness opportunities. Districts could partner with fitness centers to provide a discounted rate to school district employees.

### ***Implications for Practice***

Teachers should take an active approach to find healthy outlets to cope with their stress. Each educator is unique; therefore, coping mechanisms that alleviate stress may not have the same effect for another. Educators should have coping mechanisms they can use within an educational setting that does not require immense resources, such as breathing exercises, meditation, or talking to a colleague. Teaching professionals ought to have coping mechanisms they can use outside of teaching. It is helpful if teaching professionals have more than one coping strategy (Hidalgo-Andrade et al., 2021).

Teachers should take time out of their busy schedules to focus on self-care (McClintock, 2021) and strive for a work-life balance (Mayya et al., 2021). Individuals should strive to sleep seven or more hours per night (Watson et al., 2015), eat a balanced diet, and be physically active. Drinking enough water could improve educators' mental health (Haghighatdoost et al., 2018).

Professionals could set boundaries about not checking or answering emails after a specific time, leaving school at a particular time, and not over-committing to work obligations.

### **Theoretical and Empirical Implications**

The shared experiences of the 14 participants confirmed previous research about teacher stress and coping during the COVID-19 pandemic. All 14 participants described how stressful it has been teaching during the pandemic, which aligned with previous research in this study (Collie, 2021; Jakubowski & Sitko-Dominik, 2021; Jones et al., 2022, MacIntyre et al., 2020; Ozamiz-Etxebarria et al., 2021). Teachers needed coping mechanisms to cope with their stress during the COVID-19 pandemic (Akour et al., 2020; Baker et al., 2021; Federkeil et al., 2020; Gregersen et al., 2021; Kim et al., 2022). This study uncovered that teachers needed more than one coping mechanism to cope with their stress due to teaching during the COVID-19 pandemic. In addition, the study also revealed that teachers used psychological coping mechanisms the most preceded by emotional and lastly physical coping mechanisms. Furthermore, the study revealed that participants who disclosed unhealthy coping mechanisms such as binge eating sweets did not identify those as psychological, emotional, or physical coping mechanisms.

The 14 participants confirmed that Lazarus and Folkman's (1984) transactional model of stress and coping theory was an appropriate theoretical framework for this study. Each participant encountered stressors throughout the pandemic, and the participants decided if those stressors needed a coping strategy. Then, the teacher would assign a coping mechanism to the stressor available to them. If the stressor was relieved with the coping mechanism used, the participant could potentially use it in the future. If the coping mechanism were unsuccessful, the teacher would have selected another mechanism until the stressor was relieved. Participants

confirmed that if a coping mechanism were unsuccessful, they would try a new or different coping strategy.

### **Limitations and Delimitations**

Limitations are uncontrollable conditions that may be viewed or interpreted as potential weaknesses of the study. The gender representation was uneven as the sample consisted of three males and 11 females. Although the sample was ethnically diverse, there was a higher representation of Hispanic or Latino educators (65%). In contrast, only 21% identified as Caucasian, 7% African American or Black, and 7% Asian. COVID-19 has put tremendous strain on teachers, and some teachers may not have participated due to increased stress and workload. Another limitation was that participant recruitment took place in December 2021, when teachers potentially would have been tired and administering district-wide testing.

The primary delimitation in this study was the inclusion of only one feeder pattern in NTISD to recruit participants, which contained five elementary schools. I chose this particular feeder pattern because I taught at one of the schools, and my principal had working relationships with each principal. I selected a transcendental phenomenological study due to the focus of my research, which was to explore the lived experiences of elementary public school teachers' experiences coping with stress during the COVID-19 pandemic.

### **Recommendations for Future Research**

Recommendations for future research were centered on the limitations and delimitations and the findings of this study. The participants were selected from five elementary schools in North Texas. Future research may focus on recruiting participants in a broader geographical location or a different region within the United States. Participants could be recruited from various levels of schools, such as middle school, high school, community colleges, and

universities. Many of the participants had between five and 15 years of teaching experience; therefore, future research could focus on teachers who have under five years or over 15 years of teaching experience. Next, only one African American female and one Asian female took part in the study. Future research may expand by including a more diverse participant sample. Researchers could expand this study by using a different theoretical framework than Lazarus and Folkman's (1984) transactional model of stress and coping theory, such as Duckworth's (2016) theory of grit, Ryan and Deci's (2000) self-determination theory, or Bandura's (1977) theory of self-efficacy.

The study's findings suggested several directions for future research. First, participants shared that teaching in the COVID-19 pandemic was stressful for various reasons. A narrative study would be appropriate to explore individuals' accounts of their exact stressors during the pandemic. Second, participants shared that they used different coping mechanisms throughout the pandemic, and a case study would be appropriate to explore and focus on the teacher coping decision process. Third, participants had different stressors and different coping mechanisms throughout the pandemic. A grounded theory study would be appropriate to examine how a teacher's personality determines their stressors and coping mechanisms to generate a theory regarding personality and coping strategies.

### **Conclusion**

The COVID-19 pandemic has increased teacher stress, negatively affecting teachers' mental health and ultimately impacting their overall well-being (Beames et al., 2021). Schools and school districts were reactive to the COVID-19 pandemic. Teachers responded to their stress by enacting coping mechanisms that helped psychologically, physically, and emotionally. Teachers should have effective coping mechanisms to alleviate their stress.

Much of the research on teacher stress and coping was conducted in countries outside of the United States (Akouret et al., 2020; Almazova et al., 2020; Nabe-Nielsen et al., 2021). This study focused on public elementary teachers' lived experiences of coping with stress during the COVID-19 pandemic in North Texas. Listening to the participants describe their lived experiences provided an in-depth understanding of how elementary teachers coped with stress during the pandemic.

Two themes emerged due to phenomenological reduction: teacher stress and teacher coping mechanisms. The findings of this study align with Lazarus and Folkman's (1984) transactional model of stress and coping theory. The pandemic provided educators with tools to adapt to crises. In addition, the findings of this study demonstrate the importance of teacher self-care. School leadership, district leadership, and state leaders should prioritize teacher mental health. Furthermore, helping teachers find adequate outlets to cope with their stress could prove effective (Sun et al., 2018) for all stakeholders involved.



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## Appendix A

### IRB Approval

# LIBERTY UNIVERSITY

## INSTITUTIONAL REVIEW BOARD

December 6, 2021

Timothy Eastman  
Matthew Ozolnieks

Re: IRB Exemption - IRB-FY21-22-311 Elementary Public School Teachers' Coping Mechanisms Used During the COVID-19 Pandemic in North Texas: A Phenomenological Study

Dear Timothy Eastman, Matthew Ozolnieks,

The Liberty University Institutional Review Board (IRB) has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under the following exemption category, which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:104(d):

Category 2.(iii). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met:

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

**Your stamped consent form(s) and final versions of your study documents can be found under the Attachments tab within the Submission Details section of your study on Cayuse IRB.** Your stamped consent form(s) should be copied and used to gain the consent of your research participants. If you plan to provide your consent information electronically, the contents of the attached consent document(s) should be made available without alteration.

Please note that this exemption only applies to your current research application, and any modifications to your protocol must be reported to the Liberty University IRB for verification of continued exemption status. You may report these changes by completing a modification submission through your Cayuse IRB account.

If you have any questions about this exemption or need assistance in determining whether possible modifications to your protocol would change your exemption status, please email us at [irb@liberty.edu](mailto:irb@liberty.edu).

Sincerely,

**G. Michele Baker, MA, CIP**  
*Administrative Chair of Institutional Research*  
**Research Ethics Office**

## Appendix B

### NTISD RRB Approval



July 22, 2021

Mr. Timothy Eastman  
Liberty University  
1971 University Blvd  
Lynchburg, VA 24515

RE: A PHENOMENOLOGICAL STUDY OF ELEMENTARY PUBLIC SCHOOL TEACHERS' COPING MECHANISMS USED DURING THE COVID-19 PANDEMIC IN NORTH TEXAS

Dear Mr. Eastman:

The Research Review Board (RRB) of the [REDACTED] has reviewed and approved your proposal to conduct the above-referenced study. Based on the information provided, the Committee concludes that the study is Exempt and does not require the submission of a full research application.

It is our understanding that you have read and agreed to the terms described in the *Guidelines for Conducting Research in [REDACTED]*. Please note that all school and district information, wherever applicable, should remain confidential within the limits of the law. In addition, any data collected from [REDACTED] may be used solely for the purposes of the approved study.

Please provide the RRB with a copy of any data file constructed using [REDACTED] student or personnel information, and a copy of your final report, within 30 days following the completion of the study. **In all future communications, please use the study's reference number [REDACTED]**

On behalf of the committee, I wish you the best of luck with your study.

Sincerely,



## Appendix C

### Principal/Site Approval

[Redacted]

[Redacted]

October 19, 2021

Timothy M. Eastman  
Doctoral Candidate  
Liberty University  
1971 University Blvd  
Lynchburg, VA 24515

Dear Timothy M. Eastman,

After careful review of your research proposal entitled Elementary Public School Teachers' Coping Mechanisms Used During the COVID-19 Pandemic in North Texas: A Phenomenological Study. I have decided to grant you permission to contact our staff and invite them to participate in your study.



Check the following boxes, as applicable:

- I grant permission for Timothy M. Eastman to contact elementary teachers at [Redacted] Elementary School to invite them to participate in his research study.
- I am requesting a copy of the results upon study completion and/or publication.

Sincerely,

[Redacted Signature]

[Redacted]




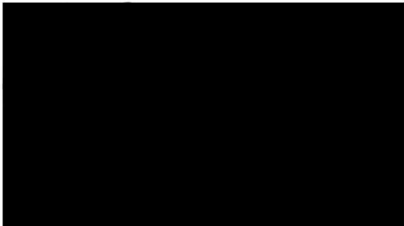

October 28, 2021

Timothy M. Eastman  
Doctoral Candidate  
Liberty University  
1971 University Blvd  
Lynchburg, VA 24515

Dear Timothy M. Eastman,

After careful review of your research proposal entitled Elementary Public School Teachers' Coping Mechanisms Used During the COVID-19 Pandemic in North Texas: A Phenomenological Study. I have decided to grant you permission to contact our staff and invite them to participate in your study.

Check the following boxes, as applicable:

- I grant permission for Timothy M. Eastman to contact elementary teachers at  Elementary School to invite them to participate in his research study.
- I am requesting a copy of the results upon study completion and/or publication.
- 
- 
- 



[Redacted]

[Redacted]

October 28, 2021

Timothy M. Eastman  
Doctoral Candidate  
Liberty University  
1971 University Blvd  
Lynchburg, VA 24515

Dear Timothy M. Eastman,

After careful review of your research proposal entitled Elementary Public School Teachers' Coping Mechanisms Used During the COVID-19 Pandemic in North Texas: A Phenomenological Study. I have decided to grant you permission to contact our staff and invite them to participate in your study.

Check the following boxes, as applicable:

I grant permission for Timothy M. Eastman to contact elementary teachers at [Redacted] Elementary School to invite them to participate in his research study.

I am requesting a copy of the results upon study completion and/or publication.

[Redacted]

[Redacted]

[Redacted]

[Redacted]

October 25, 2021

Timothy M. Eastman  
Doctoral Candidate  
Liberty University  
1971 University Blvd  
Lynchburg, VA 24515

Dear Timothy M. Eastman,

After careful review of your research proposal entitled Elementary Public School Teachers' Coping Mechanisms Used During the COVID-19 Pandemic in North Texas: A Phenomenological Study. I have decided to grant you permission to contact our staff and invite them to participate in your study.

Check the following boxes, as applicable:

I grant permission for Timothy M. Eastman to contact elementary teachers at [Redacted] to invite them to participate in his research study.

I am requesting a copy of the results upon study completion and/or publication.

Sincerely,

[Redacted Signature]

[Redacted]

## Appendix D

### Participant Recruitment Email

[Date]

[Recipient]

[Title]

[Company]

[Address 1]

[Address 2]

[Address 3]

Dear [Recipient]:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctorate in educational leadership. The purpose of my research is to describe elementary public school teachers' experiences coping with stress during the COVID-19 pandemic, and I am writing to invite eligible participants to join my study.

Participants must be current elementary public school teachers in Dallas Independent School District who teach in the Conrad feeder pattern that experienced teaching during the COVID-19 pandemic. If willing, participants will be asked to complete two journal entries, either recording them on a cell phone or written, a one-on-one virtual interview, and a virtual focus group with other participants. Participants will also be asked to review their one-on-one interview transcript for accuracy. It should take approximately three hours to complete the procedures listed. Names and other identifying information will be requested as part of this study, but the information will remain confidential using pseudonyms.

To participate, click on the link, <https://forms.gle/BjQPxVXXSAhUSi156>, and complete the Google Form. I will then contact you via email. If you have any questions, please contact me at [REDACTED] or [REDACTED].

If you choose to participate, you will need to sign the electronic consent document ([link](#)). The consent document will also be emailed to you after receiving your Google Form.

Sincerely,

Timothy M. Eastman  
Doctoral Candidate

[REDACTED]

**Appendix E****Teacher Interest Google Form**

1. Name

2. Age

3. Gender

Female

Male

4. Race

American Indian or Alaska Native

Asian

Black or African American

Native Hawaiian or Other Pacific Islander

White

5. Ethnicity

Hispanic or Latino

Not Hispanic or Latino

6. Highest level of education

Bachelor's

Master's

Education Specialist

Doctorate

7. Grade level currently teaching or position held

PK

Kinder

First

Second

Third

Fourth

Fifth

Functional Life Skills

Special Education

Art

Music

Physical education

Library

8. Years of classroom teaching experience

9. Did you test positive for COVID-19?

Yes

No

10. Did anyone in your family test positive for COVID-19?

Yes

No

11. Did you have to quarantine during COVID-19?

Yes

No

12. Did any of your students test positive for COVID-19?

Yes

No

13. Did any of your students have to quarantine?

Yes

No

14. Did anyone that you know die from COVID-19?

Yes

No

15. Do you believe COVID-19 is real?

Yes

No

16. Are you vaccinated against COVID-19?

Yes

No

17. What were the biggest challenges teaching during the COVID-19 pandemic?

## Appendix F

### Participant Consent Form

#### Consent

Elementary Public School Teachers' Coping Mechanisms Used During the COVID-19 Pandemic in North Texas: A Phenomenological Study

Timothy M. Eastman  
Liberty University  
School of Education

You are invited to participate in a research study. To participate, you must be a current elementary public school teacher in the Conrad feeder pattern of Dallas ISD that experienced teaching during the COVID-19 pandemic. Taking part in this research project is voluntary. Please take time to read this entire form and ask questions before deciding whether to take part in this research. Timothy Eastman, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

**Background Information:** The purpose of the study is to describe elementary public school teachers' experiences coping with stress during the COVID-19 pandemic. The results of this study will help school leaders and teachers better understand healthy coping mechanisms.

**Procedures:** If you agree to be in this study, I will ask you to do the following things:

1. Produce two journal entries. The journal entries can be handwritten, typed in a Google Form, or recorded using your cell phone. After completion, you will submit each journal entry to me via Dropbox or Google Drive. Each journal entry will take between five and ten minutes.
2. Take part in a personal interview. The interview will last about an hour and will include experiences about coping with stress during the COVID-19 pandemic. Interviews will be audio recorded for transcription. Written notes will also be taken. You will be given the opportunity to review your interview transcript for accuracy.
3. Take part in a focus group with other participants. All willing participants will take part in the focus group. The focus group will last about an hour. The focus group will be audio recorded for transcription. Written notes will also be taken.

**Benefits:** Participants should not expect to receive a direct benefit from taking part in this study. However, the results of this study may provide a deeper understanding of healthy coping mechanisms that one may use to cope with stress.

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

**Confidentiality:** The records of this study will be kept private. Published reports will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. Data collected from you may be shared for use in future research studies or with other researchers. If data collected from you is shared, any information that could identify you, if applicable, will be removed before the data is shared.

- Participant responses will be kept confidential through the use of a pseudonym.
- Interviews will be conducted in a location where others will not easily overhear the conversation.

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- Data will be stored on a password-locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews and focus groups will be recorded and transcribed. Recordings will be stored on a password-locked computer for three years and then erased. Only the researcher will have access to these recordings.
- Confidentiality cannot be guaranteed in focus group settings. While discouraged, other members of the focus group may share what was discussed with persons outside of the group.

**Voluntary Nature of the Study:** Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or Dallas Independent School District. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

**How to Withdraw from the Study:** If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you, apart from focus group data, will be destroyed immediately and will not be included in this study. Focus group data will not be destroyed, but your contributions to the focus group will not be included in the study if you choose to withdraw.

**Contacts and Questions:** The researcher conducting this study is Timothy M. Eastman. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at [REDACTED] or [REDACTED]. You may also contact the researcher's faculty sponsor, Dr. Ozolnieks, at [REDACTED].

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at [irb@liberty.edu](mailto:irb@liberty.edu).

*Disclaimer: The Institutional Review Board (IRB) is tasked with ensuring that human subjects research will be conducted in an ethical manner as defined and required by federal regulations. The topics covered and viewpoints expressed or alluded to by student and faculty researchers are those of the researchers and do not necessarily reflect the official policies or positions of Liberty University.*

**Statement of Consent:** By signing this document, you are agreeing to be in this study. Make sure you understand what the study is about before you sign. You will be given a copy of this document for your records. The researcher will keep a copy with the study records. If you have any questions about the study after you sign this document, you can contact the study team using the information provided above.

*I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.*

The researcher has my permission to audio-record me as part of my participation in this study.

\_\_\_\_\_  
Printed Subject Name

\_\_\_\_\_  
Signature & Date

Liberty University  
IRB-FY21-22-311  
Approved on 12-6-2021

## **Appendix G**

### **Journal Prompts**

1. Describe a stressful situation when the educator was working or teaching virtually from home
2. Explain a situation when the educator was teaching when their hardware or software malfunctioned, which caused them stress



## Appendix H

### Interview Questions

1. Please introduce yourself – degrees earned, teaching experience, current teaching assignment, duration of it, and school assignment
2. What were your experiences coping with stress before the COVID-19 pandemic?
3. What were your experiences with teaching right when the pandemic started?
4. What were the most stressful experiences with teaching during the pandemic?
5. How did your stress differ from when the pandemic started to the beginning of the 2020-2021 academic year?
6. How was your stress different from the 2020-2021 academic year to the start of the 2021-2022 academic year?
7. What coping mechanisms do you use consistently and why?
8. What were your biggest challenges in coping with stress during COVID-19?
9. What coping strategies did you try that you did not try before the pandemic?
10. How did you cope with stress psychologically during the pandemic?
11. How did you cope with stress physically during the pandemic?
12. How did you cope with stress emotionally during the pandemic?
13. How have your coping mechanisms changed as a result of COVID-19?
14. What, if any, coping mechanisms did you use that was unhealthy?
15. What, if any, coping mechanisms did you use that was healthy?
16. What did you learn about yourself during the COVID-19 pandemic?
17. What would you have done differently during the pandemic?
18. What coping mechanisms would you like to try?

19. Is there anything else you would like to tell me about your stress and COVID-19?

## **Appendix I**

### **Focus Group Questions**

1. Please introduce yourself – degrees earned, teaching experience, current teaching assignment, duration of it, and school assignment
2. How do you think teachers handled stress during the pandemic?
3. How do you think teachers were affected psychologically?
4. How do you think teachers were affected physically?
5. How do you think teachers were affected emotionally?

## Appendix J

### Audit Trail

Date	Task	Notes
December 6, 2021	IRB approval	I received IRB approval around 3:55 p.m. CST!
December 7, 2021	Began recruiting potential participants	I sent emails to teachers in two schools.
December 8, 2021	Continued sending emails to potential participants	I sent emails to teachers in one more school.
December 9, 2021	Continued sending emails to potential participants	I sent emails to teachers at the last school.
December 12, 2021	Sent follow up recruitment emails to potential participants	I sent a second email to each teacher in the four schools.
December 15, 2021	Began to send out links to the journal prompts	I sent out individual journal prompt links via Google Docs to participants who signed up for my study.
December 31, 2021	Started to send out invites for one-on-one interviews	I sent emails to some of the participants to begin scheduling interviews.
January 1, 2022	Began data analysis	I began analyzing journal prompts and cutting and pasting journal prompts into an Excel spreadsheet.
January 3, 2022	Began conducting one-on-one interviews	I interviewed two teachers via Microsoft Teams. I was nervous.
January 4, 2022	One-on-one interview conducted	I interviewed three teachers via Microsoft Teams.
January 6, 2022	One-on-one interview conducted	I interviewed one teacher via Microsoft Teams.

January 7, 2022	One-on-one interview conducted	I interviewed one teacher via Microsoft Teams.
January 8, 2022	One-on-one interview conducted	I interviewed one teacher via Microsoft Teams.
January 10, 2022	Continued conducting one-on-one interviews	I interviewed two teachers via Microsoft Teams.
January 11, 2022	One-on-one interview conducted	I interviewed one teacher via Microsoft Teams.
January 13, 2022	One-on-one interview conducted	I interviewed two teachers via Microsoft Teams.
January 14, 2022	One-on-one interview conducted	I interviewed one teacher via Microsoft Teams.
January 15, 2022	Began to code one-on-one interview transcripts	I began to code interview transcripts by hand.
January 28, 2022	Continued to code one-on-one interview transcripts.	I am starting to understand this process a bit more.
January 29, 2022	Continued to code one-on-one interview transcripts.	Getting easier
February 8, 2022	Sent emails to participants about being a part of the focus group.	Five participants responded to my email.
February 17, 2022	Conducted focus group	Focus group took place on Microsoft Teams. I enjoyed it!
February 19, 2022	Transcribed focus group transcript via Otter.ai	Listened to the focus group recording and followed along with the interview to check for accuracy.
February 19, 2022	Began to code focus group transcript	I began to code the focus group transcript by hand
February 21, 2022	Completed coding the focus group transcript	Coding completed by hand

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