

**Mindfulness and Teacher Well-Being: A Quantitative Analysis of Headspace's Impact  
on Burnout, Stress Levels, and Job Satisfaction in a Public School Setting**

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## **Abstract**

This quantitative research study investigated the impact of the Headspace mindfulness application on perceived burnout, stress levels, and job satisfaction among K-12 public school teachers and instructional coaches in the Haysville Public School District, a suburban district in Kansas. Thirty-three educators participated during the 2024-2025 school year, using the Headspace mindfulness application over a four-week intervention period. A short-term longitudinal experimental design was employed, with pre- and post-surveys measuring participants' experiences.

The findings indicate that mindfulness applications such as Headspace can significantly reduce burnout and stress levels among educators. These results illustrate the potential for school districts to integrate mindfulness practices as a proactive approach to supporting overall staff well-being. Since the Headspace mindfulness application is free for educators, it presents itself as an accessible resource for districts aiming to promote mental health and job satisfaction among the workforce.

## **Dedication**

I would like to dedicate this dissertation to the following people. First and foremost, to my husband, John Reed, who has been my biggest cheerleader throughout my educational journey. Your belief in me and encouragement to pursue my dreams mean the world to me. Thank you for your endless patience, understanding, and love. I couldn't have done this without you. I love you more than words can express!

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## **Chapter 1**

### **Introduction**

Teachers spend the majority of their waking hours engaged in teaching within educational environments, a profession identified as the most stressful in the human service industry (Greenburg et al., 2016). The issue of teacher attrition has become a significant problem within the field of education as research indicates teachers continue to leave the profession due to stress and an inability to cope with teaching conditions (Scott, 2019).

When teachers reach a point where they believe they cannot continue with those conditions, they may leave the field (Scott, 2019). Several contributing factors to this growing problem include workload and classroom demands, lack of resources, classroom management challenges, standardized testing, administrative pressures, technological advancements, teacher evaluation systems, emotional demands, and financial security (Agyapong et al., 2022). Given these challenges, the incorporation of mindfulness-based practices, such as those offered through applications like the Headspace mindfulness application, may provide teachers with essential tools for managing stress, thus highlighting the need for studies exploring the effectiveness of mindfulness interventions in educational settings.

### **Background**

“Teachers are asked to do more with less” (Kerska, 2011, p. 20). More students are entering school, needing more social and emotional support than academics. The need for additional school support for mental health, social-emotional learning, behavioral support, and parent communication has increased steadily.

Teachers are left balancing a heaping platter of responsibility on their own. At the same time, students, parents, administrators, and the state and federal departments continue to add more to that platter. Lever et al. (2017) summarize studies that list the most common sources of teacher stress as including:

- Student behavioral challenges
- High-stakes testing
- Workload
- Large class sizes
- Inadequate resources and pay
- Poor physical space
- High responsibility for others
- Lack of training for actual work experience

For teachers, trends in student behavioral challenges have continued to rise since 2019. Effective behavior management strategies are vital to keeping a classroom in order (Scott, 2019). In the 21st century, more students are starting grade school without the social skills to interact with others. Students are becoming increasingly aggressive with their peers and teachers. Scott (2019) stated that “teachers may find themselves in situations they are not familiar with and have never been taught what they should do” (p. 20). Students struggle with the stamina to focus or complete tasks in the classroom, thus increasing behaviors that disrupt not only their learning but the learning of their peers. Lever et al. (2017) state that staff can experience secondary traumatic stress and compassion fatigue from their dealings in the classroom. Scott (2019) found that if teachers relate high personal accomplishments to their classroom

management abilities, they may experience deep dissatisfaction with teaching and themselves.

In addition to managing these behavioral challenges, teachers must administer many tests throughout the school year. School districts require diagnostic tests to determine the student's knowledge of a specific subject matter, which allows teachers to plan for instruction. The state can also require these tests depending on specific initiatives that draw their focus for the year. In addition, districts require formative tests to provide teachers with feedback on instructional strategies in the classroom and to guide them in improving student learning. School districts require common assessments to monitor student growth and achievement according to district and state goals around academic standards. Finally, the state and federal education departments require summative assessments each year as a culminating test of student knowledge and skills in specific grade-level subject areas. "When teachers do not believe they are making a difference in the lives of their students or perceive that they are achieving very little which matters to them, they may begin to feel lost" (Scott, 2019, p. 17). Teachers may view the lack of student progress as their shortcomings (Scott, 2019).

Overworked administrators can lead to added stress on teachers. Alson's (2019) findings stated that a working environment teachers perceived as hazardous was the primary source of stress. The additional stress begins at the federal and state levels with new laws, processes, and procedures mandated for public school systems to implement. These requirements place pressure on district-level administration, which, in turn, holds building-level principals accountable for these requirements. Administration sets the tone and culture for the building, and when they are stressed, it

filters down to the teachers and paraeducators. Fernandez-Batanero et al. (2021) stated that perfectionism can cause unnecessary stress on people, noting that “in the field of education, perfectionism has been a growing and worrying phenomenon for experts and authorities” (p. 12). Educational institution leaders and managers look at teachers’ performance with their critical and fundamental concerns (Alson, 2019).

“The stress of teaching takes its biggest toll on a teacher’s well-being, effectively shutting them down when they feel drained from their work” (Scott, 2019, p. 14). According to Alson (2019), teachers can feel lethargic, anxious, worried, angry, annoyed, and generally emotionally drained at the end of the day. “Burnout was best predicted by teachers’ self-esteem, happiness within the school district, and how satisfied they were with their work” (De Stasio et al., 2017, p. 475). Maslach et al. (2001) define professional burnout as compromising three core dimensions: exhaustion, cynicism, and reduced professional efficacy.

Since 2020, educational changes have presented increased demands and challenges around technological advancements, quality assurance, and cost maximization, placing teachers under immense pressure to meet the expectations of internal and external stakeholders (Alson, 2019). Educational technology has become essential in the pedagogical education process as well as in the professional growth of teachers (Fernandez-Batanero et al., 2021). Fernandez-Batanero et al. (2021) also found that teachers are exhausted due to all the innovation and use of new technology, which requires more attention. Agyapong et al. (2022) emphasized that as teachers’ workloads increased, their working hours invariably increased, resulting in a surge in stress, which can lead to anxiety and depression (p. 18). Teachers can feel pressure to

use educational technology while not feeling prepared to do so (Fernandez-Batanero et al., 2021).

Instructional coaches assist teachers with district initiative implementation. Coaches engage with individual teachers and groups of educators, taking on the responsibility of building teacher capacity (Woulfin & Rigby, 2017). Instructional coaches are the middleman between district and building administration and teachers, relaying messages, expectations, and other pertinent information to assist teachers in the classroom (Woulfin & Rigby, 2017). Knight (2021) states that coaches are expected to have a deep knowledge of effective teaching practice and balance that knowledge between support and dialogue with teachers to ensure real-life learning occurs. The National Center for Systematic Improvement (2016), as cited by REL West (2019), suggested that improved teacher practice results from a positive teacher and instructional coach relationship. “Coaches carry out numerous responsibilities, and their content knowledge and learning community knowledge can support individual and system-level improvement aligned with the goals of both evaluation and ambitious instructional reform” (Woulfin & Rigby, 2017, p. 2). This additional responsibility can add to the stress, burnout, and job satisfaction when paired with the fact that instructional coaches are contracted as teachers with six addendum days for these increased tasks.

In addition to job-related stressors, teachers and instructional coaches also experience stress caused by a lack of financial security (Alson, 2019). One of the key factors contributing to the undervaluation of educators is the comparatively low pay scale in education. “Teachers are paid less than their college-educated peers in other

professions, a trend that is only getting worse over time” (Will, 2022, p. 1). According to the National Center for Educational Statistics (NCES), the average annual salary for public school teachers in the United States during the 2021-2022 school year was \$66,397 (2023). Allegretto (2022) noted that teachers earn 23.5% less compared to other professions regarding similar levels of education and expertise. “This means that, on average, teachers earn just 76.5 cents on the dollar compared to what similar college graduates earn working in other professions” (Allegretto, 2022, p. 6).

Multiple sources (Zenner et al., 2014; Porter et al., 2022; Leland, 2015) describe the use of mindfulness techniques in the classroom and their positive effects on students. Believing that mindfulness is understood as the foundation of education, Zenner et al. (2014) explain that mindfulness techniques can regulate attention and emotions by training children’s minds to stop wandering and to self-motivate while in school. Porter et al. (2022) state that mindfulness techniques are skills that have therapeutic effects on children and adolescents. Leland (2015) suggests mindfulness can help students learn new, healthier responses and problem-solving skills.

### **Statement of the Problem**

Several contributing factors lead teachers to professional burnout, leading to chronic turnover rates in the educational field. De Stasio et al. (2017) identified several risk factors contributing to teacher burnout and turnover, including behavior difficulties in increasingly diverse classrooms, a lack of instructional time to teach the curriculum effectively, and large class sizes. The insufficient support offered to individual teachers is one of the most significant factors of burnout (De Stasio et al.,

2017). Scott (2019) states that while student-teacher relationships are essential, administrative interactions with teachers are also crucial. Overall, “teachers who are pleased with decisions and support provided by school administrators show more positive attitudes about their occupation” (Grayson & Alvarez, 2008, as cited in Scott, 2019, p. 25).

Candeias et al. (2021) report that stress emerges as a significant predictor of teacher burnout; citing staff support may increase the morale of teachers, causing them to stay in the profession while also indicating that higher burnout levels correlate with greater vulnerability to stress. “The current problem is that stress among teachers plays a significant role in their emotional well-being (anxiety, stress, and depression) and job satisfaction” (Hettinga, 2022, p. 2).

Chronic stress and burnout are associated with undesirable personal and professional outcomes for teachers (Roeser et al., 2013). Minshew (2019) states that mindfulness can improve stress management for teachers. When teachers use mindfulness, they can increase a positive learning environment in their classroom, which can help them feel more job satisfaction (Jennings, 2015). As with children in their classrooms, mindfulness training allows teachers to be aware of their emotions (Garey, 2024). The need for mindfulness training is increasing for teachers to reduce stress, increase present-moment awareness, and enhance self-efficacy and overall well-being (Garro et al., 2023). Jennings (2015) lists seven ways mindfulness can help teachers.

1. Understand and own emotions
2. Communicate effectively with students



3. Manage difficult students
4. Create a positive learning environment
5. Strengthen student relationships
6. Slow down
7. Build community

Lever et al. (2017) state that educators would benefit from wellness programming since they are in a profession with a uniquely high level of stress and burnout, continuing with the statement that 50% of employers with 50 or more employees in the United States have wellness promotion initiatives. Locating research to support mindfulness strategies' effects on teachers proved difficult, only producing three to five articles. More specifically, research on mindfulness-based smartphone-delivered interventions still needs to be completed (Seniglova, 2021). Zarate et al. (2019) conclude their findings by recommending that future researchers look at how mindfulness practices impact burnout and teacher attrition rates. While literature indicates a growing impact of mindfulness training for teachers, it is unknown in the Haysville School District if there is a correlation between teacher burnout, stress, and job satisfaction.

### **Purpose of the Study**

This study aimed to determine the effects of using the Headspace mindfulness application on overall teacher well-being, specifically teacher burnout, stress levels, and job satisfaction. The primary focus was to investigate how mindfulness activities, such as guided meditation, breathing exercises, and other mindfulness practices offered through the Headspace mindfulness application, influence these aspects of

well-being.

This quantitative study examined whether teachers' and instructional coaches' participation in these structured mindfulness activities through an online application will lead to measurable changes in burnout, stress levels, and job satisfaction. The mindfulness activities, designed to cultivate present-moment awareness and emotional regulation, are grounded in well-established mindfulness-based stress reduction (MBSR) techniques.

This study aimed to provide empirical evidence on the potential benefits of integrating mindfulness activities into professional development programs for education, ultimately contributing to strategies that enhance teacher well-being and retention.

### **Significance of the Study**

Scott (2019) explains that there is never a “one-size-fits-all” framework for teacher burnout, and the strategies used to support teachers in ways that might prevent and alleviate teacher burnout's effects are not universal solutions for all teachers. Scott (2019) emphasizes, “What works for some will rarely work for all” (p. 24). This study will provide K-12 teachers and instructional coaches in a suburban public school setting support via a coping resource, a mindfulness application known as Headspace (Headspace, Inc., 2023), to help determine the overall effect of teacher well-being, specifically, burnout, stress, and job satisfaction, after participating in mindfulness activities with their students. The participants will use the Headspace mindfulness application and participate in mindfulness activities during the day.

The results of this study indicate that the Headspace mindfulness application

can have a positive impact on teachers' and instructional coaches' well-being and potentially benefit additional stakeholders. By decreasing feelings of burnout and stress levels, educators are in a position to create a more supportive educational experience for their students. These improvements may promote greater engagement and academic success among students as the classroom environment becomes more conducive to learning. Furthermore, positive outcomes experienced by educators could encourage their colleagues to explore the use of mindfulness applications such as Headspace, which builds momentum for adopting this type of initiative. If word-of-mouth endorsements spread within and across schools and districts, administrators may consider implementing mindfulness initiatives to support staff and students. Such initiatives could contribute to creating a more resilient school culture. Finally, the community stands to benefit from these results. When staff and students integrate mindfulness practices into their daily lives, the ripple effect may extend to their families and the community, creating overall well-being and awareness of mindfulness and mental health resources.

### **Delimitations**

Lunenburg and Irby (2008) define delimitations as “the self-imposed boundaries set by the researcher on the purpose and scope of the study” (p. 134). This study includes the following delimitations.

- This study was delimited to the K-12 licensed suburban public school teachers and instructional coaches employed by one Midwest suburban public school district.
- The study was limited to the Headspace mindfulness application.

- The study was limited to 33 participants.
- The data collected was delimited to only pre/post-stress level surveys.

### **Assumptions**

An assumption is something accurate or factual (Merriam-Webster, 2023). Furthermore, Merriam-Webster (2023) states that an assumption is a starting point for a course of action. This study was based on the perspectives and viewpoints of teachers and instructional coaches who responded to a pre- and post-survey and volunteered to participate in the study. The researcher made the following assumptions before conducting this quantitative research study.

- All participants were assumed to understand the survey items and response options.
- The participants were assumed to complete all required data collection procedures and answer all questions openly and honestly.
- It was assumed that participants would use the Headspace mindfulness application with fidelity during the data collection period of four weeks, and the timeline was sufficient to produce measurable effects on burnout, stress levels, and job satisfaction.
- It was assumed that all participants would complete the pre- and post-survey
- It was assumed that the sample of participants was diverse enough to capture a range of perspectives and experiences, providing a comprehensive understanding of the phenomena being studied.
- It was assumed that external factors (e.g., workload and personal life) affecting burnout, stress levels, and job satisfaction did not sway the participants' use of

the Headspace mindfulness application or the responses to the survey.

- It was assumed that participants' responses were confidentially maintained, encouraging participants to answer the survey freely without fear of repercussions.

## **Research Questions**

### ***RQ1***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived levels of burnout after using the Headspace mindfulness application for four weeks?

### ***RQ2***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived stress levels after using the Headspace mindfulness application for four weeks?

### ***RQ3***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived job satisfaction after using the Headspace mindfulness application for four weeks?

## **Definition of Terms**

The following terms are operationally defined for this to assist the reader as they could be used in various ways:

### ***Anxiety***

Anxiety is a feeling of worry, nervousness, or unease, typically about an imminent event or something with an uncertain outcome (Merriam-Webster, 2019).

***Burnout***

Burnout is a “consequence of extended exposure to specific job demands like intense physical, affective, and cognitive strain, and includes exhaustion, cynicism, and reduced professional efficacy” (Lesener et al., 2020, p.2).

***Depression***

Depression is a mood disorder marked by varying degrees of sadness, despair, and loneliness, typically accompanied by inactivity, guilt, loss of concentration, social withdrawal, sleep disturbances, and sometimes suicidal tendencies (Merriam-Webster, 2023).

***Instructional Coach***

Western Governors University (2023) defines an instructional coach as someone who serves as a mentor or role model for teachers and works with them to improve the quality of instruction to increase student achievement.

***Job Demands***

Job demands are job aspects that require sustained effort and are associated with physiological and psychological costs (Bakker & Demerouti, 2017, as cited in Tummers & Bakker, 2021).

***Job Resources***

Job resources refer to aspects of the job that are functional in achieving work goals, stimulating personal growth and development, and reducing job demands and their associated physiological and psychological costs (Crawford et al., 2010).

### ***Job Satisfaction***

Job satisfaction is a feeling of fulfillment or enjoyment that a person derives from one's job (Merriam-Webster, 2019).

### ***Meditation***

Meditation is a mental exercise that involves contemplating, reflecting, or reaching a heightened level of spiritual awareness (Merriam-Webster, 2023).

### ***Mindfulness***

Mindfulness is maintaining a nonjudgmental state of heightened or complete awareness of one's thoughts, emotions, or experiences on a moment-to-moment basis (Merriam-Webster, 2023). Kabat-Zinn (2001) describes mindfulness as paying attention on purpose, in the present moment, and nonjudgmentally enhancing awareness (Kabat-Zinn, 2001).

### ***Stress***

Stress is a physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation (Merriam-Webster, 2023).

### ***Well-being***

Well-being is the state of successful performance across the life course integrating physical, cognitive, and social-emotional functions that result in productive activities deemed significant by one's cultural community (Pollard & Davidson, 2001, p. 10).

### **Organization of the Study**

The study is organized into five chapters. Chapter 1 contains an introduction to the study, a statement of the problem, the purpose of the study, the significance of the

study, delimitations, assumptions, research questions, and the definition of terms.

Chapter 2 reviews the connected literature, including the history of mindfulness and the development of the Headspace mindfulness application. Chapter 3 explains the methodology utilized during the current study and explains the participants, instruments used, limitations, data collection, and analysis. Chapter 4 reports the results of the study. Chapter 5 includes a summary of the study, significant findings related to the research literature, conclusions, and recommendations for future research.



## **Chapter 2**

### **Review of the Literature**

Chapter 2 reviews the literature on mindfulness's history, the recent popularity of mindfulness in school programs, and mindfulness-based interventions used in education. This chapter also covers the development of the Headspace mindfulness application, known for guided meditations and mindfulness exercises. The literature review intends to analyze the research and reveal the existing gap regarding this topic. The conceptual and theoretical frameworks are detailed, including discussions about Maslow's Hierarchy of Needs and the Job Demands-Resources (JD-R) Framework and how it fits into the study. Topics reviewed in this chapter include the definition and history of mindfulness, the rising popularity of mindfulness in education, mindfulness strategies and benefits for students in the classroom, teacher job satisfaction and burnout, mindfulness and stress-based reduction in adults, and the Headspace mindfulness application.

#### **Search Criteria**

To narrow the scope of the research and develop themes, the Baker University Library, specifically EBSCOhost, was used to find specific articles and literature related to the topic. In addition, Google and Google Scholar were used to search for gaps in the research. Articles were obtained from May 2023 to April 2024. The following criteria were used for screening articles:

- The full text was available.
- Texts were published in English.

- Dissertations, articles, reviews, book chapters, editorials, and websites were selected.
- The core topic of mindfulness includes its history and strategies in medical, corporate, and educational settings.
- Study populations include school districts, teachers, and students.
- Studies on mindfulness training in a variety of settings were selected.
- Studies on public school teachers' perceptions of mindfulness with students were included.
- Teachers' perceptions of job satisfaction, stress, and burnout were selected.

### Literature Table

Table 1 lists the themes relevant to this research.

**Table 1**

#### *Themes and Related Sources*

| Theme                     | Sources                                                                                                                                                                                                                            |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conceptual Framework      | Adiele & Abraham, 2013; Fisher & Royster, 2016; Gonzalez, 2021; Hettinga, 2022; Leland, 2015; Mcleod, 2024; Reavis, 2023; Tummers & Bakker, 2021                                                                                   |
| Theoretical Framework     | Bakker & de Vries, 2020; Cavanaugh et al., 2000; Crawford et al., 2010; Demerouti & Bakker, 2011; Felver, 2015; Hardison 2022; Lee, 2019; Lesener et al., 2020; Lever et al., 2017; Taris & Schaufeli, 2015; Tummers & Baker, 2021 |
| Definition of Mindfulness | Field, 2023; Headspace Inc., 2023; Kabat-Zinn, 2003; Lever et al., 2017; Parsons et al., 2017; Roeser et al., 2013; Silva & Spann, 2024; Sun, 2014; Tang et al., 2015; The History of Mindfulness, 2024; Zarate et al., 2019       |

| Theme                                             | Sources                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| History of Mindfulness                            | Cao Ho My, 2021; Hettinga, 2022; The History of Mindfulness, 2024; Hsu, 2023; Kabat-Zinn, 2003; Parsons et al., 2017; Sun, 2014; Tang et al., 2015                                                                                                                                             |
| Mindfulness-Based Stress Reduction in Adults      | Hettinga, 2022; Hsu, 2023; Kabat-Zinn, 2003; Parsons et al., 2017; Parsons, 2023; Sun, 2014                                                                                                                                                                                                    |
| The Rising Popularity of Mindfulness in Education | Armstrong, 2019; Bell & Troy, 2022; Crane et al., 2020; D'Alessandro et al., 2022; Desai et al., 2018; Huberty et al., 2019; Lever et al., 2017; Parsons, 2023; Sheinman et al., 2018; TeachThought Staff, 2022                                                                                |
| Teacher Job Satisfaction or Burnout               | Felver, 2015; Hettinga, 2022; Maslach et al., 2001; Parsons, 2023; The Gradient Learning Poll, 2023; Tummers & Bakker, 2021                                                                                                                                                                    |
| Mindfulness Applications                          | Armstrong, 2019; Balagam, 2022; Bell & Troy, 2022; Cleveland & Sharp, 2019; Dresden & Kubala, 2021; Glass, 2022; Huberty et al., 2019; Gonzalez, 2021; Leland, 2015; Main, 2015; NBA Communications, 2018; Oswald, 2017; Parsons, 2023; Plaza, 2013; Seniglova, 2021; TeachThought Staff, 2022 |

As a result of this research, it was determined that there was a gap in the effects of mindfulness strategies on teachers, specifically, the effects of mindfulness on stress, burnout, and overall well-being.

### Conceptual Framework

Maslow's Hierarchy of Needs is a theory proposed by Abraham Maslow, "A Theory of Human Motivation" (Reavis, 2023). This motivational theory in psychology serves as the conceptual lens for this study. Maslow's five needs listed on a pyramid include: "physiological, safety-security, belongingness, esteem, and self-actualization." According to Maslow, the needs selected for this study were arranged

in a hierarchy, with the survival (physiological) needs at the bottom and the more creative (self-actualization) needs at the top (Mcleod, 2024). Thus, if the physiological and safety needs are met, a person will feel a lack of belonging, leading to a natural desire to meet that need (Reavis, 2023).

**Figure 1**

*Maslow's Hierarchy of Needs*



*Note.* This figure shows a visual representation of Maslow's Hierarchy of Needs obtained from Reavis, L.G. (2023). Exploring Elementary Teacher Persistence in a Micropolitan Area Through the Lens of Maslow's Hierarchy of Needs: A Qualitative Study. ProQuest Dissertations & Theses Global: The Humanities and Social Sciences Collection.

<https://bakeru.idm.oclc.org/login?url=https://www.proquest.com/dissertations-theses/exploring-elementary-teacher-persistence/docview/2847189035/se-2>

Teachers are trained in college to recognize this hierarchy within their classrooms. The conceptual framework for this study is designed to prove that teachers could use mindfulness strategies to recognize this hierarchy in themselves and be able to identify their own needs. Hettinga (2022) states that as educators deal with the world's increasing complexity and uncertainty, it is vital to have an outlet to help maintain mental health and promote job satisfaction. Teachers have individual motives based on needs, desires, and expectations, which create energy around the behavior toward achieving goals (Adiele & Abraham, 2013). In addition, Gonzalez (2021) expresses that when teachers' needs are met, they can focus on anything that will improve their teaching. Adiele and Abraham's (2013) study revealed that the following factors have affected teacher motivation: satisfaction of hunger needs, shelter needs, security needs, belongingness, love, friendship, and affection needs. This study is designed to fill the gap in determining the impact levels when using mindfulness to maintain mental health and promote job satisfaction.

Participants for this study include classroom teachers and instructional coaches in a suburban public school district. The school district employs nine instructional coaches (PreK-12), who are mentors and role models for teachers to improve instruction and student academic success and are on the front lines of training and support for all teachers. Instructional coaches assist teachers with helping students in curriculum, instruction, assessment, and behavior. Essentially, instructional coaches support teachers so that teachers can support students. Leland (2015) gleans that mindfulness training has been shown to help coaches more effectively connect and motivate those they coach. This study aims to investigate the impact of mindfulness

practices on the well-being of instructional coaches, with a focus on enhancing their ability to effectively engage with teachers. Additionally, it will explore the influence of mindfulness on teachers and its subsequent effect on their capacity to foster meaningful connections with students. By examining these dual relationships, the study seeks to contribute to understanding mindfulness as a tool for improving professional and interpersonal dynamics in educational settings.

According to Fisher & Royster's 2016 study

Teachers express a strong desire for greater respect within the profession and seek solace in social interactions with colleagues, family, friends, or pets. They also emphasize the importance of self-care, highlighting the need for higher salaries, adequate time for tasks like grading and planning, and comprehensive health and retirement benefits. Furthermore, the most fundamental needs identified include sufficient sleep, regular exercise, professional development, and additional pedagogy courses in college. These findings closely align with Maslow's hierarchy, accentuating the significance of respect, association, security, and support for teachers. (p. 11)

“Resources lead to the motivational process: having job resources leads to more motivation, resulting in increased work engagement” (Tummers & Bakker, 2021, p.2).

Once the teachers and instructional coaches are trained in mindfulness, the resource becomes accessible to all participating, as everyone can be present without judgment.

## **Theoretical Framework**

The theoretical framework for this study is the Job Demands-Resources (JD-R) Framework. The JD-R Framework investigates the relationship between employee well-being and its antecedents and outcomes (Lesener et al., 2020). This framework can be used across various occupations and correlates with the purpose of this study. All jobs have specific job demands and demands provide specific job resources. The JD-R Framework states that different job demands, and job resources can interact and predict organizational outcomes (Demerouti & Bakker, 2011).

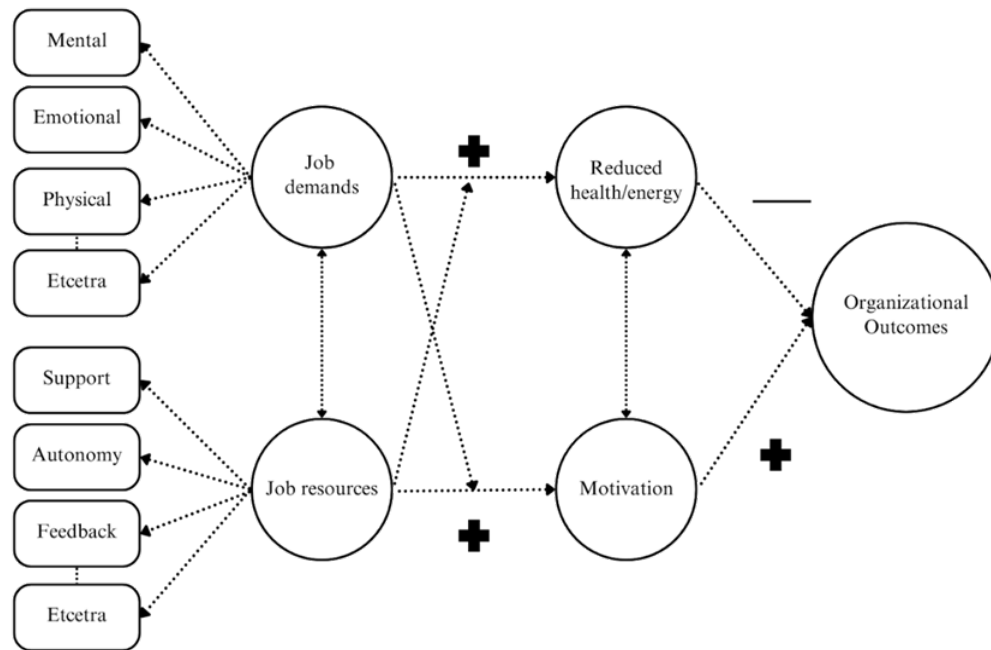
Cavanaugh et al. (2000) identified two types of stressors: challenge and hindrance. Challenge stressors are perceived as demands that have the potential to promote mastery, personal growth, or future gains. In contrast, hindrance stressors are seen as demands that can thwart personal growth, learning, and goal attainment. Employees view challenge demands as opportunities to learn, achieve, and demonstrate the type of competence to be rewarded. Bakker and de Vries (2020) explain that high-performance work behaviors may be advantageous and engaging.

Conversely, hindrance demands are perceived as constraints, barriers, or obstacles that impede progress toward achieving goals and attaining rewards. Crawford et al. (2010) posit that both challenge and hindrance demands are associated with burnout. The additional effort required to manage these demands increases strain, which manifests as exhaustion and frustration, ultimately leading to employee burnout. This framework suggests that the accumulation of such demands over time depletes personal resources, contributing to the deterioration of employee well-being. Taris and Schaufeli (2015) identify a limitation of this model, stating that the JD-R

model describes which concepts are related to each other and why each concept is related to each other but does not specify how they are related to each other. Lee (2019) states that the JD-R model has become increasingly complex, with each study citing another limitation: the model has yet to address chronic job discrimination due to aging and the globalization of the workforce.

This study is designed to research the Headspace mindfulness application and, if using this application as a resource, can add staff support and alleviate the mental, emotional, and physical job demands of a public school teacher. Bakker and de Vries (2020) explained that individuals who are burned out feel exploited and exhausted by the same job that created enthusiasm. As a result, they are no longer interested in making a positive contribution. Knowing the Headspace mindfulness application cannot lessen the job demands of a teacher; the JD-R model can be used to determine how the application can impact those demands, increase job satisfaction, decrease burnout, and improve overall well-being. However, not all job demands are created equal (Taris & Schaufeli, 2015). Crawford et al. (2010) support a refined job demands-resources model that requires differentiating job demands as challenges and hindrances to connect the relationships between engagement and those demands. Tummers and Baker (2021) stated that if we know which job demands and resources need attention or are positively affected, we can provide resources for staff to improve conditions. Figure 2 below illustrates the JD-R Model.



**Figure 2***Job Demands-Resources Framework Model*

*Note.* This figure shows the progression of the Job Demands-Resources Framework with antecedents and outcomes from Demerouti, E., & Bakker, A. B. (2011). The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology*. <http://sajip.co.za/index.php/sajip/article/view/974>

The relationship between job demands, job resources, stress, and burnout in education is influenced by various factors. Demerouti and Bakker (2011) refer to job demands as various organizational aspects, such as physical, psychological, or social demands that require sustained cognitive and emotional effort. Bakker and de Vries (2020) explain that when employees have demands expected of them related to a specific task at work, they focus on that demand directly, neglecting activities that would generally sustain their mental health. Examples of job demands in education include:

- High work pressure to teach students and score well on district and state assessments with inadequate resources Felver (2015) and Lever et al. (2017).
- Irregular working hours include planning and preparing for specific lessons, grading assignments and assessments, and extracurricular responsibilities Hardison (2022). reported findings from teachers who stated they work a median of 54 hours per week.
- An unfavorable work environment that includes high-class sizes, inadequate resources, and behavioral issues of students Felver (2015) and Lever et al. (2017).

Demerouti and Bakker (2011) refer to job resources as physical, social, psychological, or organizational aspects that allow workers to achieve work goals, reduce job demands, and increase personal growth, learning, and development. Lee (2019) correlates the JD-R model with the relationship between psychological well-being and job demands and resources through the process of both job demands and how it affects burnout and job resources, such as self-esteem and optimism, and how it influences engagement. Taris and Schaufeli (2015) state that personal resources, defined as “positive self-evaluations that are linked to resiliency and refer to individuals’ sense of their ability to control and impact upon their environment successfully” (p. 165), strongly resemble job resources. To incorporate personal resources into job resources, Taris and Schaufeli (2015) recommend the following:

- Consider them as “antecedents of strain and motivation” (p. 165) associated with high engagement levels and lower burnout levels.
- Consider them as “moderators of associations between job characteristics and

work outcomes” (p. 166), which could affect the magnitude of job resources and outcomes.

- “Mediate the relations between job characteristics and outcomes” (p. 166), which could lead to higher levels of engagement.
- Consider them as possible “antecedents of work characteristics” (p. 166) affecting the work environment by altering the workers’ perceptions or factually.

For this study, the job resource used to assist with job demands is a mindfulness application that will give teachers the tools to manage stress, improve focus, and enhance overall well-being.

### **Definition of Mindfulness**

In this increasingly fast-paced world, mindfulness is the act of being fully present and engaged, free from distractions and judgment (Headspace Inc., 2023). Kabat-Zinn (2003) defined mindfulness as the ability to pay specific attention to the present moment nonjudgmentally. Mindfulness can be viewed as one component of meditation (Zarate et al., 2019). Cullen (2011), as cited by Roeser et al. (2013), describes mindfulness as an attitude of warmhearted curiosity toward the present. The creators of the Headspace mindfulness application, Headspace Inc., claim mindfulness is being aware of our thoughts and feelings without getting caught up in them (2023). Parsons et al. (2017) stated that mindfulness is a state of mind that most people can attain, but it needs practicing to maintain for more extended periods of time. The History of Mindfulness (2024) describes the practice as leading to a place where people can let thoughts and feelings come and go as needed. Mindfulness is the ability

to step back and be present during any situation, which can be helpful in challenging situations or difficult circumstances (Headspace, Inc., 2023).

Mindfulness decreases stress, enhances performance, and helps participants gain insight and awareness through observing one's mind (Parsons et al., 2017). It does not mean those practicing mindfulness never get angry in stressful conditions. Headspace Inc. explains that mindfulness is a way of making people aware of those thoughts and emotions, no matter how unpleasant, and allows them to choose how to handle them in the moment (2023). Mindfulness provides a better chance of reacting calmly when faced with challenges or stressful situations (Headspace Inc., 2023). Lever et al. (2017) provided results that those who participated in mindfulness programs showed increased self-compassion, self-regulation, and sleep quality.

### ***Mindfulness vs. Meditation***

Mindfulness and meditation are terms that are often interchangeable but differ (Field, 2023). Both are popular techniques used to boost mental clarity as well as viable therapies to combat anxiety, stress, and depression (Silva & Spann, 2024). They both also have benefits in the areas of pain relief, anxiety, stress, depression, and general mental wellness (Silva & Spann, 2024). Mindfulness is a mental state in which an individual's awareness is focused on the present, whereas meditation is a tool people can use to develop a regular practice of mindfulness (Field, 2023). Furthermore, mindfulness can be practiced anywhere, whereas meditation requires an intentional focus (Silva & Spann, 2024).

Meditation is a form of mental training that aims to provide individuals with core psychological capacities such as emotional self-regulation (Tang et al., 2015).

Meditation calms people down and achieves emotional balance (Field, 2023). It connects the mind and body to bring peace (Silva & Spann, 2024). Meditation encompasses practices that include mindfulness, mantra, yoga, and tai chi (Tang, 2015). Field (2023) adds meditation practices such as breath awareness, loving-kindness, visualization, movement, body scan, and focus. Meditation is viewed as helpful but not imperative to cultivate one's mindfulness propensity (Brown & Ryan, 2004, as cited in Sun, 2014). Overall, although the terms mindfulness and meditation are used reciprocally, meditation is a practice that incorporates mindfulness and requires specific time to be set aside to practice the techniques. In contrast, mindfulness does not require particular timeframes (Field, 2023).

### **History of Mindfulness**

Mindfulness has been practiced for thousands of years, whether on its own or part of a larger tradition (Thera, 1975, as cited in Hettinga, 2022). These religious origins gave meaning beyond simply being present (The History of Mindfulness, 2024). It is often spoken precisely as insight meditation, meaning a deep, non-conceptual seeing into the mind's and world's nature (Kabat-Zinn, 2003). The origins of mindfulness include various religious and secular traditions that trace back to Hinduism, Buddhism, Christianity, and Islam (Cao Ho My, 2021). The following sections provide details about the history and origins of mindfulness.

### ***Ancient Mindfulness***

Although many associate the beginning of mindfulness with Buddhism, the history goes much further back. Hettinga (2022) states that mindfulness was first linked to the yoga practices of Hindu people, dated sometime between 2300BC and

1500BC, near modern-day Pakistan. In Hindu scripture, essential elements of modern mindfulness are frequently referenced. These elements include meditation, silence, and acceptance (Cao Ho My, 2021). Cao Ho My (2021) continues by stating that while practicing yoga exercises, Hindu people achieve meditative consciousness, where the mind becomes very still and merges with an object of focus. Hacker and Davis, 2006, as cited in Hettinga 2022, explain that Hinduism and Buddhism were not only formed in the same region but also share common concepts of living in harmony through the universe's natural order. Buddhism, however, uses mindfulness as a religion and philosophy to lead followers to a path free of misinformation or enlightenment (Tang et al., 2015).

“Historically, mindfulness has been called the heart of Buddhist meditation” (Thera, 1962, as cited in Kabat-Zinn, 2003, p. 145). Buddhism was founded around 400-500 BC by Siddhartha Gautama, referred to as Buddha (Cao Ho My, 2021; Hettinga, 2022). It underlies all streams of Buddhist meditative practices (Kabat-Zinn, 2003). Through Buddhism, mindfulness meditation is about achieving the state of ultimate consciousness, which allows connecting with a higher purpose in life (Cao Ho My, 2021). Sun (2014) summarizes that in Buddhism, mindfulness contemplates the four domains of body, feelings, states of mind, and experiential phenomena. Cao Ho My (2021) further states that Buddhist practitioners encourage using mindfulness techniques beyond formal meditation and transfer these techniques to everyday activities such as walking, sitting, and working. These practices are believed to lead to the extinction of suffering and the attainment of nirvana (Sun, 2014). Buddhism split into Theravada and Zen Buddhism when Buddha died (Parsons et al., 2017).

Nevertheless, as educated by the Buddha, mindfulness is the foundation upon which all further forms of the tradition rests (Kabat-Zinn, 2003).

### ***Mindfulness Practices in Christianity and Islam***

Although most influenced by Hinduism and Buddhism, mindfulness has roots in Christianity and Islam (Trousselard et al., 2014, as cited in Cao My Ho, 2021; Hettinga, 2022). Eckhart Tolle (1999), as cited in Cao My Ho (2021) and Hettinga (2022), summarized mindfulness in Christianity as the innermost *I Am*, as Jesus proclaimed. *I Am* refers to the *Christ within* or the essence of every life form (Tolle, 1999, as cited in Cao My Ho, 2021). Mindfulness could also be referred to as the “Holy Spirit,” as told by Brother Lawrence’s 2004 book *Practicing the Presence of God*, as cited in Hettinga (2022) and The History of Mindfulness (2024).

“Muraqabah,” meaning having continuous awareness, or that Allah is always watching, is Islam's interpretation of the practice (Al-Jawziyya, 2016 as cited in Hettinga, 2022; The History of Mindfulness, 2024; and Cao My Ho, 2021). Islam’s intention behind being mindful encompasses the fundamental premise that there is a pure core, or the Fitrah, within each person (Al-Jawziyya, 2016, as cited in Hettinga, 2022; The History of Mindfulness, 2024; and Cao My Ho, 2021). Hettinga (2022) cites Lawrence (2004) by stating that the people of Islam access the Fitrah through mindfulness practices.

### ***Mindfulness Practices in the West***

Multiple sources (Cao My Ho, 2021; Hettinga, 2022; Hsu, 2023; The History of Mindfulness, 2024) credit the introduction of mindfulness to the West to Kabat-Zinn, who, in the 1970s, brought the concept out of religious contexts and into more

academic and medical fields. Under the teachings of Thich Nhat Hanh and his book, *The Miracle of Mindfulness*, Kabat-Zinn learned the foundation for developing secular mindfulness (Hettinga, 2022; Sun, 2014). The goal of secular mindfulness was to reduce stress and enhance the ability of the mind to focus (Cao My Ho, 2021). Even though mindfulness has been around for a multitude of years, secular mindfulness is the usage that has made a substantial impact (Sun, 2014).

Kabat-Zinn founded the Center for Mindfulness at the University of Massachusetts Medical School (Kabat-Zinn, 2001). Mindfulness has since spread through meditative practices in the United States through meditative practices, yoga, and awareness training (Parsons et al., 2017). Kabat-Zinn's work of the de-Buddification of mindfulness still offered the wisdom and heart of Buddhist mindfulness meditation without Buddhism (Kabat-Zinn, 2010, as cited in Sun, 2014). In the last 30-40 years, yoga has become increasingly popular, as well as other practices such as Tai Chi (Cao My Ho, 2021). Tai Chi has gained popularity by allowing those who struggle with "stillness" a different way to practice mindfulness (Chaskalson, 2014, as cited in Hettinga, 2022). Today, mindfulness is not limited to religion or spiritual contexts and has become available to people of all backgrounds (Hsu, 2023).

### **Mindfulness-Based Stress Reduction in Adults**

By learning mindfulness under several Buddhist teachers, Kabat-Zinn developed his Mindfulness-Based Stress Reduction (MBSR) program, a popular and secular way to train others in mindfulness (Hettinga, 2022). The Mindfulness-Based Stress Reduction (MBSR) program was created in 1979 by Jon Kabat-Zinn through an



outpatient stress reduction clinic at the University of Massachusetts Medical Center (Kabat-Zinn, 2003). The MBSR program was designed to make mindfulness's benefits more accessible for the Western audience with less spiritual emphasis (Hsu, 2023). Initially, MBSR was created to complement a patient's medical treatment (Kabat-Zinn, 2003). MBSR is an eight-week group training program focused on reducing suffering from stress-related symptoms, illness, anxiety, and chronic pain (Kabat-Zinn, 1991, as cited in Hettinga, 2022). The main goal is to teach people to develop mindfulness in weekly meetings ranging from two to three hours (Parson et al., 2017).

Kabat-Zinn's Mindfulness-Based Stress Reduction (MBSR) program was developed to promote self-regulation, emphasizing the tendency for individuals to be largely disconnected from their bodily experiences and daily lives (Sun, 2014). As Parsons (2023) notes, "MBSR's primary focus is on fostering a direct, experiential understanding of the interactions between the body, mind, and body-mind dynamics" (p. 27). The formal mindfulness training component includes sitting meditation, which centers on maintaining focused attention on the breath and cultivating nonjudgmental awareness of mental distractions (Roeser, 2013, as cited in Hettinga, 2022). Additionally, the program incorporates mindful yoga, where participants engage in a series of postures designed to enhance physical strength, balance, and flexibility while also heightening body awareness. This physical practice fosters attentiveness, enabling individuals to apply mindfulness to their everyday activities (Hettinga, 2022; Parsons, 2023).

## **The Rising Popularity of Mindfulness in Education**

The education field continues to evolve to align with the ever-changing needs of the student population. Armstrong (2019) claims that students are experiencing stress levels never before seen in the history of education. The statistics listed by Armstrong (2019) create an urgency for all students, from preschool-aged to high school seniors. The American Psychological Association (2021) explains that if student stress is left unaddressed, it can disrupt the student's behavior, physical and emotional well-being, school success, and friendship, stating that stress can be expressed differently in school depending on the student's age. As a result, the education field has had to rethink classroom approaches to ensure students are in the right mindset to learn. Thus, teachers are learning more about mindfulness strategies they can incorporate into everyday instruction. "Studies have shown that youth benefit from learning mindfulness in terms of improved cognitive outcome, social-emotional skills, and well-being (Parsons, 2023).

### ***Mindfulness Strategies and Benefits for Students in the Classroom***

Mindfulness-based practices in grade schools have been associated with an improvement not only in classroom behavior but also in students' cognitive skills (D'Alessandro et al., 2022). Sheinman et al. (2018) emphasized the benefits of integrating mindfulness into the school's curriculum, which can influence children's coping strategies and responses to everyday challenges. Desai et al. (2018) further stated that mindfulness is valuable and practical and leads to sustainable well-being.

According to Armstrong (2019), some teachers think of mindfulness as just another program they must squeeze into an already overcrowded school day. Lever et

al. (2017) associated mindfulness training as a source that reduces stress, depression, and anxiety. When teachers started using mindfulness techniques in the classroom to begin their day, Armstrong (2019) reported that mindfulness significantly contributed to developing those self-control abilities vital for their success, providing vast returns with only a few minutes of daily classroom practice (p. 20). Desai et al. (2018) pointed out that mindfulness is the basis for creating change and being open to novel ideas. Sheinman et al. (2018) explained that children's mindfulness-based experiences could be transformed into various cognitive, emotional, physical, and behavioral outcomes.

In addition to elementary and secondary classrooms, the research surrounding mindfulness in students has also stretched to post-secondary. Huberty et al. (2019) noted that college students had felt overwhelming anxiety and depression, making it difficult to function, and have had suicidal ideation. As a result, "implementing stress reduction programs on college campuses has become a priority" (Huberty et al., 2019, p. 2). Although it is difficult to instill change in institutions with longstanding traditions, TeachThought Staff (2022) states that teachers may be helping students develop their brains by incorporating quiet time in the classroom. Bell and Troy (2022) extend the benefits of mindfulness and meditation to include guarding areas of the brain related to decision-making, planning, and problem-solving. The harmful effects of stress can attack the brain functions. Bell and Troy (2022) conclude their point by indicating that "meditation can help to slow, stop, or even reverse the mental decline that occurs naturally as people age" (p. 5). Overall, there is a multitude of research supporting the addition of mindfulness and meditation in all classrooms,

ranging from early childhood to college-aged students.

Interest in incorporating mindfulness into schools has grown significantly, driven by early evidence suggesting that mindfulness is both attainable and well-received in educational settings. Research indicates that mindfulness practices can equip children and young people with valuable skills that enhance self-regulation, mental health, and overall well-being (Crane et al., 2020).

### **Teacher Job Satisfaction or Burnout**

Teachers in contemporary classrooms encounter numerous challenges, including but not limited to insufficient compensation, overcrowded classrooms, increased instances of student behavioral issues, students with significant academic deficits, and escalating pressures from standardized testing (Felter, 2015). According to Parsons (2023), educators comprise approximately four percent of the U.S. workforce. The Gradient Learning Poll (2023) revealed that the primary motivation for individuals entering the teaching profession is to make a positive impact on students and the broader community. However, reports from the American College Test (ACT) and the U.S. Department of Education (USDOE) in 2014 indicated a decline in the number of college students pursuing careers in education (Parsons, 2023). Moreover, Hettinga (2022) suggests that teacher job satisfaction may play a critical role in influencing long-term career stability within the profession.

Burnout happens when “one is cynical about the value of one’s occupation and doubtful of one’s capacity to perform” (Maslach et al., 1996, p. 20, as cited in Tummers & Bakker, 2021). Characteristics of burnout consist of feeling overwhelmed, emotionally drained, decreased self-efficacy, and inability to meet the

demands of the job (Maslach et al., 2001.) The Gradient Learning Poll (2023) surveyed 639 teachers and school leaders nationwide and found that many teachers are unsatisfied with their occupations and are considering leaving the education field. The poll found, “Only 27% of teachers say it is very likely that they will teach five years from now” (Gradient Learning Poll, 2023, p. 3). Having high teacher turnover places an enormous burden on school districts (Parsons, 2023).

### **Mindfulness Applications**

Interest in mobile applications for health promotion and self-management is growing (Plaza et al., 2013). According to (Meeker, 2014, cited in Mani, 2015), smartphone usage is growing rapidly, accounting for 25% of total web usage. Even with the growing popularity of mobile device usage, mindfulness-based interventions delivered via smartphones have limited scientific research (Seniglova, 2021). It is unclear whether mindfulness apps can provide the same benefits as the positive effects of face-to-face mindfulness-based training programs (Mani, 2015). The allure of using smartphones to deliver mindfulness-based interventions is based on the time-saving aspect it provides. Parsons (2023) states that though several mindfulness training programs are effective, they require many hours of professional development and training for teachers, a luxury they do not have. The need for mindfulness intervention smartphone applications may be highly beneficial for decreasing teacher burnout (Seniglova, 2021).

According to Zarate et al. (2019)

School districts may consider purchasing mindfulness apps for their educators as part of their wellness initiative or begin using these tools during

professional development days. The culture of burnout acceptance needs to stop being the norm within our educational system, and promoting wellness through practices such as mindfulness can and should become commonplace for educators in all settings (p. 1712).

Therefore, this study aims to further explore the areas of burnout, job satisfaction, and overall well-being of teachers after using a mindfulness app-based intervention.

Classroom teachers can use several meditation and mindfulness applications. Huberty et al. (2019) cited a study that found 560 mobile mindfulness apps in Apple iTunes and the Google Play Store. Table 2 lists the various apps teachers can use when incorporating mindfulness and meditation into their day. This list contains the application's name, compatible platforms, the price, and a brief description, if applicable (TeachThought Staff, 2022).

**Table 2**

*Meditation Apps for Children in the Classroom*

| <b>Name of App</b>           | <b>Compatible Platforms</b> | <b>Price</b>                          | <b>Description</b>                                                                                                                                             |
|------------------------------|-----------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Smiling Mind                 | iOS and Google Play         | Free with paid support and curriculum | State-of-the-art technology platform with hundreds of guided meditations and mindfulness activities that can be used in the classroom and at home              |
| Moshi: Sleep And Mindfulness | iOS and Google Play         | Free with In-App Purchases            | Guided meditations to help kids relax, reduce anxiety, and manage negative thoughts<br><br><a href="https://www.moshikids.com/">https://www.moshikids.com/</a> |

| <b>Name of App</b>             | <b>Compatible Platforms</b> | <b>Price</b>                 | <b>Description</b>                                                                                                                                                                                                |
|--------------------------------|-----------------------------|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Buddhify                       | iOS and Google Play         | \$4.99 with In-App Purchases | It is not made specifically for children but includes 80-plus custom meditations<br><a href="https://buddhify.com/">https://buddhify.com/</a>                                                                     |
| Simple Habit                   | iOS and Google Play         | Free with In-App Purchases   | Wellness and sleep therapy sessions with coaching by world-renowned experts personalized by the way individuals live their life<br><a href="https://www.simplehabit.com/">https://www.simplehabit.com/</a>        |
| DreamyKid                      | iOS and Google Play         | Free for schools             | Made just for kids with sessions including Body Scan, ADD, and ADHD<br><a href="https://dreamykid.com/school-teachers-2/">https://dreamykid.com/school-teachers-2/</a>                                            |
| Ninja Focus: Kids' Mindfulness | iOS and Google Play         | Free with In-App Purchases   | N/A<br><a href="https://www.ninjafocus.com/">https://www.ninjafocus.com/</a>                                                                                                                                      |
| Insight Timer                  | iOS and Google Play         | N/A                          | Users can log meditation time, join an online community of meditations, or set a timer for peace                                                                                                                  |
| Stop, Breathe, & Think         | iOS and Web Browser         | Free with In-App Purchases   | Best suited for the ten and up crowd and ideal for individual use, participants can track progress and earn reward stickers<br><a href="http://www.stopbreathethink.com/kids/">www.stopbreathethink.com/kids/</a> |
| Well Beyond Meditation         | iOS                         | Free with In-App Purchases   | This is geared towards the elementary crowd; five meditations are offered, ranging from three to 14 minutes<br><a href="https://wellbeyond.com/kids/">https://wellbeyond.com/kids/</a>                            |

| Name of App                    | Compatible Platforms | Price                                                                   | Description                                                                                                                         |
|--------------------------------|----------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Calm                           | iOS and Google Play  | Free with teacher application                                           | Mindfulness and meditation exercises for PreK-12th grade<br><a href="https://www.calm.com/schools">https://www.calm.com/schools</a> |
| Meditation for Kids            | iOS and Google Play  | \$.99                                                                   | This app is no longer supported                                                                                                     |
| Ten Percent Happier Meditation | N/A                  | Free trial                                                              | <a href="https://www.tenpercent.com/">https://www.tenpercent.com/</a>                                                               |
| Balance                        | N/A                  | N/A                                                                     | <a href="https://www.balanceapp.com/">https://www.balanceapp.com/</a>                                                               |
| Oak: Meditation and Breathing  | iOS                  | Free with In-App Purchases                                              | <a href="https://www.oakmeditation.com/">https://www.oakmeditation.com/</a>                                                         |
| Mindfulness Coach              | iOS                  | Free                                                                    | N/A                                                                                                                                 |
| Headspace                      | iOS and Google Play  | Free with extras for subscribers, \$12.99 per month or \$69.99 annually | <a href="https://www.headspace.com/">https://www.headspace.com/</a>                                                                 |

### ***Headspace***

One educational technology tool, the Headspace mindfulness application, is leading the charge in providing mindfulness in various settings, including the classroom. The Headspace mindfulness application was founded in 2010 as an events company, according to Dresden and Kubala (2021). Dresden and Kubala (2021)



continued with their definition, stating that the company transformed into an online application providing meditation for adults and children to help with anxiety, stress, and finding a work-life balance. In 2020, the Common Sense Privacy Program, a nonprofit organization that evaluates educational technology advocating for online privacy and safety issues for children, described the Headspace mindfulness application as a collection of relaxing sleep casts, music, and sounds to help people cope with whatever tomorrow brings. According to Glass (2022), the Headspace mindfulness application is a tool that helps create life-changing habits to support mental health. NBA Communications (2018) reports that through its core suite of meditation apps and online offerings, the Headspace mindfulness application is a global leader in meditation and mindfulness. Balagam (2022) states that the Headspace mindfulness application has an easy-to-use interface that takes the seriousness and intimidation out of meditation. It can help relax the mind, improve focus, and reduce stress by 14% in ten days. Armstrong (2019) states that the Headspace mindfulness application was the top-scoring app in a study of over 560 designed for mindfulness practice. The Headspace mindfulness application CEO Russell Glass (2022) boasts that the technology is used in 190 countries worldwide, with over 70 million members and 600,000 reviews. Cleveland and Sharp (2019) recommend the Headspace mindfulness application for elementary, middle, and high school students. Their recommendations also state that the difficulty level is accessible for all users and free to use with a paid option if users wish to upgrade their subscription for an increased experience. “The Headspace mindfulness application is a great way to begin a mindfulness practice. The app is informative and engaging”

(Cleveland & Sharp, 2019, p. 23). The Headspace mindfulness application technology includes educational videos for meditation, stress relief, sleep, movement, and focus. The videos are colorful and animated, including a teacher who guides the mindfulness lesson. Cleveland and Sharp (2019) continue their review by commenting that educational videos are fun, complemented by humorous animation. Participants can search for specific mindfulness topics to customize the experience. Teachers for each lesson are listed along with their biography for those who desire to know more about them. Headspace partnered with the National Basketball Association (NBA) in 2018 to offer mental training content to “better prepare athletes at all levels for competition” (NBA Communications, 2018, p. 1). NBA Communications (2018) promotes the partnership because mindfulness training allows them to be more aware of themselves and in the moment. This partnership leveraged the Headspace mindfulness application as one of the leading educational technologies for mindfulness to date.

To experience the benefits of the Headspace mindfulness application, users will go to the website and create an account. There are free content and paid pieces for users who wish to purchase a subscription. Balagam (2022) explains that the Headspace mindfulness application works for all IOS and Android devices, and the content is free for everyone. Balagam (2022) continues that the app can track progress, include others through a buddy feature, and nudge users to remind them to practice.

On the other hand, there are some disadvantages to the Headspace mindfulness application technology. Balagam (2022) notes that although a free trial exists, users must enter a credit card and commit to an auto-renewal subscription. Balagam (2022) says that some users find the content repetitive and tend to focus on introductory

courses. If users require more advanced content, it is recommended that they purchase a subscription that is higher than other meditation apps (Balagam, 2022). According to Glass (2022), a subscription to the Headspace mindfulness application can be purchased monthly, costing \$12.99, or annually, costing \$69.99. The annual subscription is considered the best value as it costs \$5.83 a month, less than half the monthly subscription cost. Parsons (2023) states that most mindfulness-based programs are costly and not affordable.

TeachThought Staff (2022) listed the Headspace mindfulness application as an option on their list of mindfulness and meditation apps for teachers. The Headspace mindfulness application was also included on a list of mindfulness and relaxation apps for kids with anxiety by Oswald (2017). Oswald's (2017) list focused more on mindfulness applications parents could use at home to lessen their children's anxiety. Including the Headspace mindfulness application, four of the apps listed by TeachThought for classroom use were also on Oswald's list for at-home use. In addition to the apps listed in Table 2, Bell and Troy (2022) listed a few alternatives to the Headspace mindfulness application if students seek alternatives, including working with a licensed therapist or mental health coach. Since the Headspace mindfulness application does not offer any medical advice, in times of crisis, the use of BetterHelp or Talkspace is recommended by Bell and Troy (2022) for a more advanced teletherapy option.

Leland's (2015) findings illustrated a connection between mindfulness and student success. Leland (2015) states that mindfulness has decreased bullying and assisted students with learning disabilities. This literature review confirms the need for

mindfulness and meditation strategies in education; according to Bell & Troy (2022), the Headspace mindfulness application is one of the most popular meditation and mindfulness apps, and there is a plethora of other applications to use for mindfulness and meditation in the classroom, so it is encouraged to find what works best for both the teacher and students.

This chapter provided an overarching review and analysis of existing research related to the history of mindfulness, its use in public school classrooms, and the available applications. While there are studies on the impact of mindfulness on students, very few studies focus on the effects of these practices on teachers. This study will address the gap in the literature. The following chapter provides the methodology, research design, and details, including the setting, sampling procedures, instruments, interview protocol, data collection procedures, analysis, and synthesis.

## **Chapter 3**

### **Methods**

Teachers spend most of their waking hours in educational environments. According to Greenburg et al. (2016), teaching has been identified as the most stressful profession in the human service industry. Public education teachers face many challenges impacting their feelings of burnout, stress levels, and job satisfaction. Minshew (2019) states that mindfulness can improve stress management for teachers. The researcher designed a study to investigate the effects of using the Headspace mindfulness application on overall teacher well-being, specifically focusing on teacher burnout, stress levels, and job satisfaction.

This chapter provides elements of the methodologies for the current study. First, the research design and setting of the study are presented, followed by the procedures used for sampling and choosing participants. The use of instruments is detailed, along with the data collection and analysis process. Acknowledgment of limitations and a summary concludes the chapter.

#### **Research Design**

There are a multitude of differences between qualitative and quantitative research. Qualitative research explores participants' perspectives of specific experiences in their settings (Creswell & Creswell, 2018). This form of research uses a more inferential style that allows the researcher the flexibility to seek more profound meaning to the data reported (Creswell & Creswell, 2018). Quantitative research uses statistical procedures and structures to test theories based on the reported numerical data (Creswell & Creswell, 2018). This research requires more participants to obtain

enough data to test the hypothesis (Creswell & Creswell, 2018). The prime difference between the two methods is that qualitative research focuses on the experience as reported by the participants, and quantitative research focuses on relationships between numerical variables (Cresswell & Creswell, 2018).

This research aimed to examine the impact of using the Headspace mindfulness application on teachers' overall well-being, specifically on burnout, stress levels, and job satisfaction. The study centered on how structured mindfulness activities, such as guided meditations, breathing exercises, and other mindfulness practices offered through the Headspace mindfulness application, affect these aspects of well-being.

Employing a quantitative research approach, the study investigated whether the engagement of teachers and instructional coaches in these mindfulness activities through the app significantly changes their feelings of burnout, stress levels, and overall job satisfaction. The mindfulness activities were based on established mindfulness-based stress reduction (MBSR) techniques to foster present-moment awareness and emotional regulation, explained in greater detail in the measurement section.

Quantitative research incorporates survey and experimental design (Creswell & Creswell, 2018). Both forms of research encompass measuring responses and relationships with numerical data as the outcome. Survey research studies a smaller portion of participants to determine a greater effect on the population, whereas experimental research focuses on specific treatments or interventions to influence the overall outcome (Creswell & Creswell, 2018). An experimental research design was

selected for this study. The experimental research design identifies attitudes, opinions, or trends of public school teachers who used the Headspace mindfulness application to identify the impact on burnout, stress, and job satisfaction (Creswell & Creswell, 2018). Short-term longitudinal studies collect data over time after implementing an intervention that changes the participants' environment (Creswell & Creswell, 2018). This researcher chose a longitudinal, experimental research design method to measure the impact of burnout, stress, and job satisfaction on a group of participants using the Headspace mindfulness application.

Over four weeks, participants used the Headspace mindfulness application daily and followed a curated program of mindfulness exercises. They reported their feelings of burnout, stress levels, and job satisfaction before and after the intervention. The study sought to provide evidence on the benefits of incorporating mindfulness activities into professional development for educators to improve teacher well-being and retention.

### **Selection of Participants**

USD 261, Haysville Public School District is a suburban school district in south-central Kansas. According to NICHE (2021), the Haysville School District has 5,777 students in grades PreK-12 with a student-to-teacher ratio of 15 to 1. Participants for this study were recruited through voluntary sampling, a method in which individuals self-select to participate in the research.

Voluntary sampling is commonly used in studies where the target population can be clearly defined, but random sampling is not feasible due to accessibility or logistical constraints (Moss et al., 2020). Voluntary sampling is advantageous in this

context because it allows for the inclusion of individuals who are genuinely interested in the intervention (i.e., using the Headspace mindfulness application) and are likely to engage with fidelity during the course of the study. Moss et al. (2020) state that because the researcher does not control the composition of participants during voluntary sampling, the people who volunteer for the study may be very different from those who do not volunteer. Despite these limitations, voluntary sampling is a quick and inexpensive way to collect data (Moss et al., 2020). This sampling method is effective for this study in assessing experiences such as changes in burnout, stress levels, and job satisfaction among teachers and instructional coaches.

The research took place during four weeks of the fall semester of the 2024-2025 school year. The participants decided to participate in the data collection process, understanding that they would be using the Headspace mindfulness application and would be surveyed before they began using the application and again at the end of the data collection window. Based on the responses generated from the email, the participants were selected.

### **Measurement**

The researcher used various sources to create the instrument for this study. These sources have been vetted for reliability and validity, and the researcher chose questions that fit with this specific study to collect the data from the participants in the areas of burnout, stress levels, and job satisfaction before and after using the Headspace mindfulness application. The same survey will be given before and after the intervention with the application.



### *Pre- and Post-Survey*

The pre- and post-survey (Appendix A) was created and distributed using Google Forms, an online survey part of Google Workspace. The 48-question pre- and post-survey given to all participants covered the following sections:

- Demographics: This included five short answer questions identifying the participants' age, gender, years of experience, grade level, and content area.
- Measures of burnout: The researcher used fifteen questions from the Oldenburg Inventory (OLBI) developed by Demerouti (1999). The OLBI assesses the two core dimensions of burnout from work: exhaustion and disengagement. Exhaustion refers to feelings of being overtaxed from work, a need for rest, feelings of emptiness, and overall physical exhaustion. Disengagement refers to cynical attitudes about one's work and distancing oneself from one's occupation. This inventory relates to this study's measurement of burnout of the participants before and after they use the Headspace mindfulness application. The researcher obtained access to the Oldenburg Burnout Inventory from NovoPsych on September 1, 2024.
- Measures of stress: In an effort to keep the survey manageable for the participants and to eliminate questions that overlapped each other, the researcher used fourteen questions from two surveys that had already been developed to measure participants' stress levels.
  - Four questions from the first source used by the researcher were The Perceived Stress Scale - 10 items (PSS-10) developed by Cohen et al. (1983). This ten-item questionnaire was widely used to assess stress

levels in young people and adults aged 12 and above. It evaluates the degree to which an individual has perceived life as stressful over the previous month. This directly aligns with the four-week intervention period for this study and will assist the researcher in determining if the Headspace mindfulness application affected the stress levels of these participants. The researcher obtained permission from ePROVIDE by Mapi Research Trust for the use of the Perceived Stress Scale - 10 items (PSS-10) on September 1, 2024.

- Ten questions from the second source used by the researcher were the Teacher Stress Inventory developed by Fimian and Fastenau (1990). This 49-item survey assesses occupational stress in teachers. This survey contains factors representing the sources and manifestations of teacher stress. This directly correlates with the participants in this study as they are public school teachers and instructional coaches. The researcher obtained permission from Dr. Michael J. Fimian on September 1, 2024.
- Measures of job satisfaction: The researcher used fourteen questions from the Job Satisfaction Survey (JSS) developed by Spector (1985). This 36-item survey assesses employee attitudes and aspects of the job. The areas that are predominately focused on in the JSS are pay, benefits, rewards, promotion, coworkers, supervision, nature of work, communication, and operating procedures. These questions correlate with the researcher's data collection process about job satisfaction in this study. The Job Satisfaction Survey was

obtained on August 15, 2024, and can be used free of charge for noncommercial educational and research purposes (Spector, 1985).

The pre-survey questions were intended to create baseline data for all participants. The post-survey questions were the same as the pre-survey questions, with the intent of capturing the impact of the Headspace mindfulness application on their professional well-being. The use of the surveys will provide the data to answer all three research questions.

### **Data Collection Procedures**

The researcher, serving as the Assistant Superintendent for Learning Services in the school district where the participants worked and were selected, initiated the study by submitting a detailed research proposal to the Baker University Internal Review Board (IRB). Approval for the study was obtained on October 26, 2024, ensuring that the study adhered to the ethical guidelines and followed Baker University's code of conduct (Appendix D).

The researcher emailed teachers and instructional coaches requesting volunteers to participate in the study. The researcher had access to the participants' emails as staff members and sent an invitation to the PreK-12 teachers and instructional coaches. The invitation (Appendix C) explained the study's purpose and expectations, outlining specific requirements for the study, and asked for volunteers. The invitation also explained why their participation mattered, noted that their participation was voluntary and confidential, and outlined how they could sign up. This email included a link to a Google Form with the same study information and a place to indicate whether they would be willing to participate in the study or not, citing

an electronic signature. As participants were identified, the informed consent document (Appendix B) was sent through inter-school mail to review, sign, and return to the researcher. This document reiterated the study's purpose, inclusion criteria, participation requirements, and confidentiality statement. Participants were allowed to proceed with the study once the signed consent form was received.

After finalizing the participant lists and receiving all signed consent forms, the researcher emailed the first survey using Google Forms to all participants to collect baseline data on their perceived feelings of burnout, stress levels, and job satisfaction. Following the baseline data collection, the researcher scheduled virtual meetings with the participants in a group format to ensure the Headspace mindfulness application was downloaded and functioning correctly on their preferred devices. The researcher provided a demonstration on how to use the app and shared a Loom video via email for reference during the intervention period. Participants were thanked for their participation, given the researcher's contact information for any questions, and reminded of the study timeline.

Over the four-week study period, the researcher checked in with participants via email to monitor engagement with the Headspace mindfulness application, providing support as needed to resolve any technical issues and to encourage consistent use of the app. After the four-week intervention, the researcher emailed the second survey to the participants. Upon receiving all survey responses, the researcher transferred the data from Google Forms to a Google Sheet and then uploaded the information to the Statistical Package for Social Sciences (SPSS) for analysis. This process involved compiling the baseline results and the results after the data

completion window for thorough analysis.

Ethical considerations required voluntary participation, and participants could withdraw from the study at any point. Informed consent, obtained in writing, ensured participants were fully informed about the study and their rights (Denzin & Lincoln, 2011, as cited in Bird, 2023). Data collected was kept confidential, and survey questions were designed to be unbiased and free from discriminatory language. Only the researcher had access to the data, and reporting of findings maintained participant confidentiality. The overall timeframe for this study is listed below.

- Three weeks before the study:
  - Obtained IRB approval.
  - Finalized study materials (informed consent forms, surveys, and Loom video).
  - Prepared email invitations and informational materials.
- Two weeks before the study:
  - Sent email invitations to PreK-12 teachers and instructional coaches explaining the study and the expectations and asking for volunteers.
  - Collected responses from individual staff members.
- One week before the study:
  - Finalized participant lists.
  - Sent initial Google Form survey to all participants for baseline data.
  - Ensured that all participants completed the Google Form for baseline data.
  - Scheduled virtual meetings with participants to ensure the Headspace

mindfulness application was downloaded and functioning.

- Distributed the Loom video for participants to reference if they have questions about the Headspace mindfulness application.
- Study Period Week 1:
  - Sent a welcome to week one email to all participants.
  - Ensured all participants had started using the Headspace mindfulness application and knew how to use it.
  - Monitored participant engagement and addressed any technical issues or questions.
- Study Period Week 2:
  - Sent a welcome to week two email to all participants.
  - Continued monitoring participant engagement and provided support as needed.
  - Worked with the Headspace mindfulness application technology support team to ensure participants did not have to pay after the first week of use.
  - Sent a mid-study reminder to encourage consistent usage of the app.
- Study Period Week 3:
  - Sent a welcome to week three email to all participants.
  - Continued to provide support and monitor engagement.
- Study Period Week 4:
  - Sent a welcome to the final week email to all participants.
  - Reminded participants that the study was nearing completion and

reinforced the importance of consistent app usage.

- Prepared the final survey and any additional materials for post-study data collection.
- Post Study Week:
  - Sent the final Google Form survey to the participants.
  - Followed up with participants who had not completed the final survey.
  - Collected all survey responses.
  - Transferred data from Google Forms to Google Sheets for analysis.
  - Reloaded SPSS onto the laptop and transferred data for statistical analysis.
  - Started data analysis.

### **Data Analysis and Hypothesis Testing**

The data was placed into a Google Sheet for classification and organization and then transferred to the SPSS software to run the analytic testing. According to Creswell and Creswell (2018), there are six steps in presenting data analysis in quantitative research.

#### ***Participant Identification***

In October and November 2024, the researcher initiated the process of identifying the participants for the study. This process began after collecting responses to an email invitation sent to potential participants. The researcher carefully determined the final number of participants, ensuring an appropriate sample size that would allow for meaningful data collection for the study.

### ***Mitigating Response Bias***

The researcher implemented several key strategies to minimize response bias and ensure the integrity of the data collected. First, confidentiality was emphasized to all participants, reassuring them that their responses would remain anonymous and protected. The survey itself was meticulously crafted to include straightforward, clear, and simple language, avoiding any complex or leading questions that might influence the participants' answers. This careful design was intended to elicit honest and unbiased responses, providing a reliable foundation for the study's findings.

### ***Descriptive Data Analysis***

Once the data was collected, the researcher conducted a thorough descriptive analysis, examining both the independent and dependent variables associated with each question in the study. Drawing on the methodology outlined by Creswell and Creswell (2018), this analysis included calculating key statistical measures such as the mean, standard deviation, and range for each variable. Additionally, the researcher diligently checked for missing data and identified questions that participants may have inadvertently skipped or chosen not to answer. This comprehensive approach ensured that the dataset was complete and ready for further analysis.

### ***Scale Evaluation***

To ensure an efficient survey process, the researcher employed multi-item scales that measured levels of agreement and frequency. These scales were carefully selected for their established reliability and validity in similar research settings, thus ensuring the consistency and accuracy of the data collected (Creswell & Creswell, 2018). While these measures were not specifically designed to reduce the cognitive



load during survey completion, they were chosen to maintain a balance between capturing nuanced data and minimizing participant fatigue.

Quantitative research uses numerical data to analyze the research conducted in this study. The survey questions showed reliability through the consistency of wording in each section. Each question is clear, concise, and free of ambiguous terms that participants may interpret differently. Questions contained rating scales that were appropriate and consistently applied. The use of well-constructed scales ensured that the responses were both reliable and valid, providing a strong basis for subsequent statistical analysis.

The time interval between the pre- and post-survey was consistent among all participants to ensure an accurate measure of their responses. Clear, explicit instructions were provided for the participants on how to complete the survey. Finally, the survey was administered consistently during the pre- and post-survey to ensure participants' experiences were accurately reflected.

### ***Statistical Testing***

The researcher applied a series of statistical tests to evaluate the effects of the Headspace mindfulness application on participants' burnout, stress levels, and job satisfaction. Independent samples *t*-tests were used to compare the pre- and post-test scores, allowing the researcher to assess changes in these variables before and after the intervention. The independent samples *t*-tests were conducted instead of paired samples *t*-test because participants' responses were collected anonymously, making it impossible to match pre-survey and post-survey responses from the same individuals. These tests provided critical insights, highlighting the impact of the Headspace

mindfulness application on the participants.

### ***Reporting the Results***

The findings from the statistical tests were reported in a clear and systematic manner, with a strong emphasis on transparency and comprehensiveness. The researcher detailed the results of each test, including test statistics,  $p$ -values, effect sizes, and confidence intervals. The outcomes were presented in the context of the study's hypotheses, with a clear statement on whether each hypothesis was supported.

### ***Hypothesis Testing***

#### ***RQ1***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived levels of burnout after using the Headspace mindfulness application for four weeks?

**H1.** There is a significant change in the perceived levels of burnout among K-12 suburban public school teachers and instructional coaches after using the Headspace mindfulness application for four weeks.

**H0.** There is no relationship between using the Headspace mindfulness application and the perceived levels of burnout among K-12 suburban public school teachers and instructional coaches.

The researcher conducted an independent samples  $t$ -test to address RQ1. The researcher selected the independent samples  $t$ -test because the participants were the same before and after the intervention; the burnout area was measured on continuous scales, and the assumption could be made that the differences between pre- and post-scores were normally distributed. An independent samples  $t$ -test compared the means

of the pre- and post-intervention scores to assess whether there was a statistically significant difference in burnout levels. The significance level ( $\alpha$ ) was set at 0.05, meaning there was a 5% risk of concluding that the intervention had an effect when, in fact, it did not (“Guidelines and Examples,” 2022). If the  $p$ -value from the analysis were less than 0.05, the null hypothesis would be rejected, indicating that using the Headspace mindfulness application significantly changed the burnout levels among the participants (“Guidelines and Examples,” 2022).

## ***RQ2***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived stress levels after using the Headspace mindfulness application for four weeks?

**H2.** There is a significant change in the perceived stress levels among K-12 suburban public school teachers and instructional coaches after using the Headspace mindfulness application for four weeks.

**H0.** There is no relationship between using the Headspace mindfulness application and the perceived stress levels among K-12 suburban public school teachers and instructional coaches.

The researcher conducted an independent samples  $t$ -test to address RQ2. The researcher selected the independent samples  $t$ -test because the participants were the same before and after the intervention; stress levels were measured on continuous scales, and the assumption was made that the differences between pre- and post-scores were normally distributed. An independent samples  $t$ -test compared the means of the pre- and post-intervention scores to assess whether there was a statistically significant

difference in stress levels. The significance level (alpha) was set at 0.05, meaning there was a 5% risk of concluding that the intervention had an effect when, in fact, it did not (“Guidelines and Examples,” 2022). If the  $p$ -value from the analysis were less than 0.05, the null hypothesis would be rejected, indicating that using the Headspace mindfulness application significantly changed the stress levels among the participants (“Guidelines and Examples,” 2022).

### ***RQ3***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived job satisfaction after using the Headspace mindfulness application for four weeks?

**H3.** There is a significant change in the perceived job satisfaction among K-12 suburban public school teachers and instructional coaches after using the Headspace mindfulness application for four weeks.

**H0.** There is no relationship between using the Headspace mindfulness application and the perceived job satisfaction among K-12 suburban public school teachers and instructional coaches.

The researcher conducted an independent samples  $t$ -test to address RQ3. The researcher selected the independent samples  $t$ -test because the participants were the same before and after the intervention; levels of burnout were measured on continuous scales, and the assumption could be made that the differences between pre- and post-scores were normally distributed. An independent samples  $t$ -test compared the means of the pre- and post-intervention scores to assess whether there was a statistically significant difference in job satisfaction. The significance level (alpha) was set at 0.05,

meaning there was a 5% risk of concluding that the intervention had an effect when, in fact, it did not (“Guidelines and Examples,” 2022). If the  $p$ -value from the analysis were less than 0.05, the null hypothesis would be rejected, indicating that using the Headspace mindfulness application significantly changed job satisfaction among the participants (“Guidelines and Examples,” 2022).

### **Limitations**

Merriam-Webster (2023) defines limitations as a point beyond which a person or thing cannot go. The researcher has considered the following limitations of this study.

- This study was limited to four weeks. This relatively short duration might not capture long-term effects or changes, which could affect the comprehensiveness and reliability of the findings.
- Headspace was the only mindfulness application used in this study; thus, the findings might be specific to the Headspace mindfulness application and may not reflect the effectiveness of other mindfulness tools or practices.
- Participants were trained and given a video on using the Headspace mindfulness application. As a result, their usage could be limited to their comfort level with the application.

### **Summary**

The high attrition rate among public school teachers is an issue in education. “Numerous studies have been conducted to predict the causes of this phenomenon” (Bird, 2023, p. 63). To address this critical issue, the researcher designed a quantitative study to investigate the effect of the Headspace mindfulness application

on burnout, stress levels, and job satisfaction among public school teachers and instructional. By linking the identified causes of teacher attrition to potential interventions, this study aims to explore whether mindfulness practices can mitigate these challenges. This chapter begins by detailing the research design, emphasizing the use of quantitative methods to gain a comprehensive understanding of the problem. It then describes the selection of participants from the Haysville School District, where a group of staff members volunteered to participate in the study using the Headspace mindfulness application. The instruments and surveys developed for data collection are explained, including demographic questions and measures of burnout, stress, and job satisfaction. The data collection procedures, including obtaining IRB approval, informed consent, and survey administration, are also covered. Based on steps for a quantitative framework, the data analysis process and strategies for ensuring reliability and trustworthiness are outlined. The researcher's role and potential biases are acknowledged, and the chapter concludes by discussing the study's limitations. Numerical values for categorical variables are analyzed and presented in Chapter 4.

## **Chapter 4**

### **Results**

The purpose of this study was to examine the effects of the Headspace mindfulness application among public school teachers and instructional coaches in a suburban public school setting over the course of four weeks. Specifically, this study aimed to identify if using the Headspace mindfulness application impacted burnout, stress levels, and job satisfaction. This chapter presents the quantitative findings related to the three research questions, which examined the public school teachers' and instructional coaches' use of the Headspace mindfulness application and how it impacted burnout, stress levels, and job satisfaction through pre- and post-survey questionnaires.

#### **Descriptive Statistics**

The analysis presented is based on quantitative survey data obtained from 33 respondents. Initially, the number of respondents equaled 34. However, one participant left the study in the middle of the data collection window, resulting in 33 participants who completed both the pre- and post-survey. Participants' demographic variables included age range, gender, number of years taught, school level (early childhood, elementary, middle, or high), and subject or content area.

Most respondents were in the 50-59 age range (33%), with the second largest number of respondents coming from the 30-39 age range (27%). The middle age range of the participants was 40-49 (18%), and the age ranges with the least number of respondents were 20-29 (15%) and 60-69 (6%). The majority of the respondents (approximately 94%) identified as females, while the remaining 6% identified

themselves as males. Most respondents have been in the education profession for 0-9 years (33%) or for 10-19 years (33%). The remainder of the respondents reported they have been in the education profession for 20-29 years (24%) and 30-34 years (9%). Approximately 55% of the respondents were elementary (K-5) teachers, and 45% were secondary (6-12) teachers. Lastly, 43% of the respondents taught the four core subjects: English Language Arts (ELA), History Government Social Studies (HGSS), Mathematics, and Science; 21% reported that they taught Special Education; 18% taught non-elective courses; 12% identified as Instructional Coaches; and 6% taught English for Speakers of Other Languages (ESOL). Table 3 lists the descriptive statistics of the respondent's characteristics.

**Table 3**

*Frequency Table Showing Participants' Demographic Variables*

| Variables                 | Frequency | Percent |
|---------------------------|-----------|---------|
| <i>Age Range</i>          |           |         |
| 20-29                     | 5         | 15      |
| 30-39                     | 9         | 27      |
| 40-49                     | 6         | 18      |
| 50-59                     | 11        | 33      |
| 60-69                     | 2         | 6       |
| <i>Gender</i>             |           |         |
| Female                    | 31        | 94      |
| Male                      | 2         | 6       |
| <i>Years in Education</i> |           |         |
| 0-4                       | 1         | 3       |



| Variables                       | Frequency | Percent |
|---------------------------------|-----------|---------|
| 5-9                             | 10        | 30      |
| 10-14                           | 6         | 18      |
| 15-19                           | 5         | 15      |
| 20-24                           | 2         | 6       |
| 25-29                           | 6         | 18      |
| 30-34                           | 3         | 9       |
| <i>Teaching Level</i>           |           |         |
| Elementary (K-5)                | 18        | 55      |
| Secondary (6-12)                | 15        | 45      |
| <i>Content/Subject Area</i>     |           |         |
| Core (ELA, HGSS, Math, Science) | 14        | 43      |
| ESOL                            | 2         | 6       |
| Instructional Coach             | 4         | 12      |
| Non-Core (Electives)            | 6         | 18      |
| Special Education               | 7         | 21      |

*Note.* N=33

### **Hypothesis Testing**

An independent samples *t*-test was conducted to address RQ1 and the possible hypotheses.

#### ***RQ1***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived levels of burnout after using the Headspace mindfulness application for four weeks?

**H1.** There is a significant change in the perceived levels of burnout among K-12 suburban public school teachers and instructional coaches after using the Headspace mindfulness application for four weeks.

**H0.** There is no relationship between using the Headspace mindfulness application and the perceived levels of burnout among K-12 suburban public school teachers and instructional coaches.

The independent samples *t*-test was selected because it relies on several assumptions to ensure the validity of the results. First, it assumes that the subjects in the two groups are independent, meaning participant's scores are not influenced by another participant. This assumption was met as the study included distinct groups of teachers and instructional coaches who participated individually using the Headspace mindfulness application. Second, the dependent variable, perceived burnout, was measured on a continuous scale, aligning with the requirements of the independent samples *t*-test. Finally, the independent samples *t*-test requires equal variances between groups, which can be verified using Levene's test for equality of variances. Each of these assumptions was carefully considered to confirm the statistical test's appropriateness and the findings' validity.

The independent samples *t*-test results for RQ1 indicated a statistically significant difference between the two means,  $t = -2.542$ ,  $df = 64$ ,  $p = .013$ . Since  $p < .05$ , the null hypothesis was rejected. The burnout mean before the intervention ( $M = 2.47$ ,  $SD = .512$ ) was statistically significantly lower than the burnout mean after the intervention ( $M = 2.77$ ,  $SD = .426$ ), indicating that the intervention had a statistically significant difference in participants' perceived levels of burnout. Levene's test for

equality confirmed that the assumption of equal variances was met,  $F = 2.233$ ,  $p = .140$ . The magnitude of this difference was a medium effect size with Cohen's  $d = 0.471$ .

An independent samples  $t$ -test was conducted to address RQ2 and the possible hypotheses.

### ***RQ2***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived stress levels after using the Headspace mindfulness application for four weeks?

**H2.** There is a significant change in the perceived stress levels among K-12 suburban public school teachers and instructional coaches after using the Headspace mindfulness application for four weeks.

**H0.** There is no relationship between using the Headspace mindfulness application and the perceived stress levels among K-12 suburban public school teachers and instructional coaches.

The independent samples  $t$ -test was selected because it relies on several assumptions to ensure the results. First, it assumes that the subjects in the two groups are independent, meaning participant's scores are not influenced by another participant. This assumption was met as the study included distinct groups of teachers and instructional coaches who participated individually using the Headspace mindfulness application. Second, the dependent variable, perceived stress levels, was measured on a continuous scale, aligning with the requirements of the independent samples  $t$ -test. Finally, the independent samples  $t$ -test requires equal variances

between groups, which can be verified using Levene's test for equality of variances. Each of these assumptions was carefully considered to confirm the statistical test's appropriateness and the findings' validity.

The independent samples *t*-test results for RQ2 indicated a statistically significant difference between the two means,  $t = -2.608$ ,  $df = 64$ ,  $p = .011$ . Since  $p < .05$ , the null hypothesis was rejected. The mean stress levels before the intervention ( $M = 2.90$ ,  $SD = .631$ ) were statistically significantly lower than the mean stress levels after the intervention ( $M = 3.26$ ,  $SD = .493$ ), indicating that the intervention had a statistically significant difference in participants' perceived stress levels. Levene's test for equality confirmed that the assumption of equal variances was met,  $F = 1.368$ ,  $p = .246$ . The magnitude of this difference was a large effect size with Cohen's  $d = 0.566$ .

An independent samples *t*-test was conducted to address RQ3 and the possible hypotheses.

### ***RQ3***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived job satisfaction after using the Headspace mindfulness application for four weeks?

**H3.** There is a significant change in the perceived job satisfaction among K-12 suburban public school teachers and instructional coaches after using the Headspace mindfulness application for four weeks.

**H0.** There is no relationship between using the Headspace mindfulness application and the perceived job satisfaction among K-12 suburban public school teachers and instructional coaches.

The independent samples *t*-test was selected because it relies on several assumptions to ensure the validity of the results. First, it assumes that the subjects in the two groups are independent, meaning participant's scores are not influenced by another participant. This assumption was met as the study included distinct groups of teachers and instructional coaches who participated individually using the Headspace mindfulness application. Second, the dependent variable, perceived job satisfaction, was measured on a continuous scale, aligning with the requirements of the independent samples *t*-test. Finally, the independent samples *t*-test requires equal variances between groups, which can be verified using Levene's test for equality of variances. Each of these assumptions was carefully considered to confirm the statistical test's appropriateness and the findings' validity.

The independent samples *t*-test results for RQ3 indicated no statistically significant difference between the two means,  $t = -1.432$ ,  $df = 64$ ,  $p = .079$ . Since  $p > .05$ , the null hypothesis was accepted, revealing that the Headspace mindfulness application did not lead to a statistically significant change in participants' job satisfaction. The mean job satisfaction before the intervention ( $M = 3.05$ ,  $SD = .425$ ) and after the intervention ( $M = 3.18$ ,  $SD = .345$ ) were similar, indicating no statistically significant difference in participants' perceived stress levels. Levene's test for equality confirmed that the assumption of equal variances was met,  $F = .604$ ,  $p = .440$ . The magnitude of this difference was a medium effect size with Cohen's  $d = 0.387$ , though it did not reach statistical significance.

### Additional Analyses

Although independent samples *t*-tests provided insights into the effects of the Headspace mindfulness application on burnout, stress, and job satisfaction, examining the relationship between these variables is imperative. To further examine the initial findings, Pearson's correlation coefficient was used to explore potential relationships between burnout, stress, and job satisfaction changes. Understanding these possible relationships can provide a deeper understanding of how these variables interact, highlighting whether improvements in one domain (e.g., stress levels) are linked to improvements in another domain (e.g., burnout). These insights can be critical for future interventions to improve public school teachers' and instructional coaches' well-being.

Pearson correlation coefficient analyses were conducted to explore the relationships between changes in burnout, stress levels, and job satisfaction following the four-week intervention using the Headspace mindfulness application.

- Burnout and Stress Levels: The correlation coefficient ( $r = .109$ ,  $n = 33$ ,  $p = .544$ ) indicated that there was no statistically significant relationship between the decrease in burnout and stress levels.
- Burnout and Job Satisfaction: The correlation coefficient ( $r = .669$ ,  $n = 33$ ,  $p < .001$ ) provided evidence for a strong, positive, statistically significant relationship between the decrease in burnout and the increase in job satisfaction. This means that the decreases in burnout were associated with increases in job satisfaction.
- Stress Levels and Job Satisfaction: The correlation coefficient ( $r = -.118$ ,  $n =$

33,  $p = .512$ ) indicated no statistically significant relationship between the decrease in stress levels and an increase in job satisfaction.

### **Summary**

Chapter four contained the results of the data analysis and hypothesis testing related to the use of the Headspace mindfulness application and public school teachers' and instructional coaches' perceptions of burnout, stress levels, and job satisfaction. The results of the independent samples *t*-tests and Pearson correlation coefficients were presented. These findings indicated a statistically significant relationship between the Headspace mindfulness application and the respondents' perceptions of burnout and stress levels. However, there was no statistically significant relationship between the Headspace mindfulness application and the respondents' perceptions of job satisfaction. Prior to conducting the *t*-tests, the assumptions of normality and homogeneity of variance were checked and found to be met. These findings also suggest that improvements in one area (e.g., stress levels) were connected to improvements in another area (e.g., burnout), highlighting the potential for using mindfulness interventions such as the Headspace mindfulness application to support public school teachers and instructional coaches' well-being. Chapter five includes a summary of the research study, major findings, connections to the literature, implications for action, recommendations for further study, and conclusions.

## **Chapter 5**

### **Interpretations and Recommendations**

Chapter 5 provides an overview of the problem, the purpose statement, the research questions, and the methodology. Chapter 5 also addresses the major findings of the study, implications for action as a result of the findings, and recommendations for future research in the field.

#### **Study Summary**

The first section of this chapter provides an overall summary consisting of the overview of the study and the limited research that exists relating to the effects of using mindfulness applications on public school teachers' and instructional coaches' well-being, specifically burnout, stress levels, and job satisfaction. In addition to the overview, a section containing an explanation of the purpose of the study is provided. The next section provides the methodology used in the study. The final section contains the major findings of the study.

#### ***Overview of the Problem***

As stated in Chapters 1 and 2, limited research exists on the effects of mindfulness applications on public school teachers' and instructional coaches' well-being, specifically burnout, stress levels, and job satisfaction. A literature review yielded only three to five articles addressing the mindfulness strategies of these educator populations. Specifically, the Haysville School District has not studied mindfulness strategies and the perceived effects on burnout, stress, levels, and job satisfaction.

“The current problem is that stress among teachers plays a significant role in



their emotional well-being (anxiety, stress, and depression) and job satisfaction” (Hettinga, 2022, p. 2). Chronic stress and burnout are associated with undesirable personal and professional outcomes for teachers (Roeser et al., 2013). Mindfulness, defined as the ability to step back and be present during any situation, can be particularly beneficial in challenging or difficult circumstances (Headspace, Inc., 2023). Research suggests that mindfulness can improve stress management for teachers (Minshew, 2019) while guarding areas of the brain related to decision-making, planning, and problem-solving (Bell & Troy, 2022).

The Headspace mindfulness application offers structured activities, such as guided meditation and breathing exercises, to promote mindfulness practices. Studies have highlighted its benefits as an engaging and accessible tool to cultivate mindfulness (Armstrong, 2019; Balagram, 2022; Cleveland & Sharp, 2019; Glass, 2022; NBA Communications, 2018). TeachThought Staff (2022) also recognized the Headspace mindfulness application as a valuable resource for teachers seeking mindfulness and meditation solutions.

While much of the existing research focuses on the benefits of mindfulness for youth, including improved cognitive outcomes, social-emotional skills, and well-being (Crane et al., 2020; Parsons, 2023), there is a growing need to understand how these practices impact educators. This study addresses this gap by exploring how mindfulness practices can enhance the well-being of public school teachers and instructional coaches. Specifically, it explores the influence of the mindfulness activities delivered through the Headspace mindfulness application on perceptions of burnout, stress levels, and job satisfaction within the Haysville School District. The

findings aim to provide a foundation for future interventions and professional development strategies tailored to educators.

### ***Purpose Statement and Research Questions***

As stated in Chapter 1, this study seeks to evaluate the effects of the Headspace mindfulness application on the well-being of teachers and instructional coaches, focusing on burnout, stress levels, and job satisfaction. Specifically, the study examines how mindfulness practices, including guided meditation, breathing exercises, and other activities offered through the Headspace mindfulness application, influence these critical aspects of overall well-being. The research questions for this study are as follows:

#### ***RQ1***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived levels of burnout after using the Headspace mindfulness application for four weeks?

#### ***RQ2***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived stress levels after using the Headspace mindfulness application for four weeks?

#### ***RQ3***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived job satisfaction after using the Headspace mindfulness application for four weeks?

Through a quantitative approach, the study investigated whether participation in structured, evidence-based mindfulness activities delivered through the Headspace mindfulness application resulted in measurable improvements in these areas. The findings aimed to provide insights into the role of mindfulness in professional development, offering actionable strategies to improve teachers' well-being, support retention, and address challenges in the educational profession.

### ***Review of the Methodology***

This quantitative research study was conducted in a suburban school district and used a short-term longitudinal, experimental research design method. The study took place over four weeks, and the participants reported their feelings of burnout, stress levels, and job satisfaction using a pre- and post-survey before and after the intervention. Voluntary sampling was used to recruit participants for the study. The population for this research study included general and special education teachers and instructional coaches from grades kindergarten through 12 in a suburban public school district. This school district consists of six elementary schools, two middle schools, one high school, one alternative high school, and one day school. Each building was represented as a result of the volunteer sampling. A list of all certified staff members in the school district was generated from predefined lists in the school district's electronic mail system.

The pre- and post-surveys were created and distributed using Google Forms. The survey consisted of four sections:

- **Demographics:** This section identified the participants' age, gender, years of experience, grade level, and content area. Each participant had an option to

select, prefer not to say, for each area. None of the participants selected the prefer not to say option.

- Measures of burnout: This section consisted of questions from the Oldenburg Inventory (OLBI) developed by Demerouti (1999), which assessed exhaustion and disengagement, two core dimensions of burnout from work.
- Measures of stress: This section consisted of questions from The Perceived Stress Scale (PSS-10) developed by Cohen et al. (1983) and the Teacher Stress Inventory developed by Fimian and Fastenau (1990). This section assessed the perception of stress over four weeks and the sources that manifest stress for teachers.
- Measures of job satisfaction: This section consisted of questions from the Job Satisfaction Survey (JSS) developed by Spector (1985), which assessed employee attitudes and aspects of the job.

The pre-survey questions were intended to create baseline data for all participants. The post-survey questions are the same as the pre-survey questions, with the intent of capturing the impact of the Headspace mindfulness application on their perception of burnout, stress levels, and job satisfaction. The dependent variables analyzed in this research study were the perceived burnout, stress levels, and job satisfaction after using the Headspace mindfulness application.

The data was placed into a Google Sheet for classification and organization, then moved to the SPSS software program for analytical testing. Independent samples *t*-tests were used to compare the pre- and post-survey scores in each of the three areas: burnout, stress levels, and job satisfaction. Independent samples *t*-tests were

conducted instead of paired samples *t*-tests because participants' responses were collected anonymously, making it impossible to match pre-survey and post-survey responses. These tests highlighted the impact of the Headspace mindfulness application on the participants' perceived levels of burnout, stress levels, and job satisfaction. A Pearson's correlation coefficient test was used to examine the initial findings further and explore potential relationships between burnout, stress, and job satisfaction changes. Understanding these possible relationships can provide a deeper understanding of how these variables interact with each other, for example, whether improvements in one domain (e.g., stress levels) are linked to improvements in another domain (e.g., burnout).

### ***Major Findings***

The results of this study demonstrated a positive impact of integrating mindfulness activities into the daily routines of public school teachers and instructional coaches. After four weeks of using the Headspace mindfulness application, it was determined that participants experienced reduced burnout and stress levels. However, there was no evidence to suggest that the Headspace mindfulness application significantly increased job satisfaction. These findings highlight the potential of using mindfulness practices to enhance educator well-being by addressing burnout and stress.

The study also provided findings on the relationships among the dependent variables of burnout, stress levels, and job satisfaction. Since the independent samples *t*-test revealed statistically significant results in the areas of stress and burnout, Cohen's *d* was calculated to further examine the magnitude of these effects. The

findings indicated that as the participants' perceived burnout decreased, their job satisfaction increased. However, no statistically significant relationships were found between burnout and stress levels or between stress levels and job satisfaction. The results are further broken down into the subsequent paragraphs.

### **Findings Related to Literature**

The following section provides a comprehensive analysis of this study. In each subsection, the specific research question and results were presented. In addition, correlations to the literature review and the conceptual and theoretical framework were included. Statistical significance and correlations were featured as well. Together, these analyses provided a cohesive understanding of the study's findings, their alignment with existing research, and their implications within the broader conceptual and theoretical framework.

The conceptual framework used for this study was Maslow's Hierarchy of Needs. Maslow's Hierarchy of Needs was a theory proposed by Abraham Maslow, "A Theory of Human Motivation" (Reavis, 2023). The intent behind this framework was for educators to recognize the need for this hierarchy within themselves, not just within their students in their classroom.

The theoretical framework used for this study was the Job-Demands Resources (JD-R) Model. Lesener et al. (2020) explained the JD-R Model as a framework for investigating the relationship between employee well-being and its antecedents and outcomes. The JD-R Model gave the following examples of job demands in education:

- High work pressure taught students to score well on district and state assessments with inadequate resources Felver (2015) and Lever et al. (2017).

- Irregular working hours included planning and preparing for specific lessons, grading assignments and assessments, and extracurricular responsibilities Hardison (2022). reported findings from teachers who stated they work a median of 54 hours per week.
- An unfavorable work environment that included high-class sizes, inadequate resources, and behavioral issues of students Felver (2015) and Lever et al. (2017).

The intent behind using this framework for educators was to determine if the Headspace mindfulness application was a resource that would positively impact the job demands and perceived burnout, stress levels, and job satisfaction for educators.

### ***Results and Literature from Research Question 1***

The first research question from this study examined the extent to which K-12 suburban public school teachers and instructional coaches reported changes in their perceived levels of burnout after using the Headspace mindfulness application for four weeks. The results of this study indicated a statistically significant difference between the two means of the pre- and post-survey. The burnout mean before the intervention ( $M = 2.47, SD = .512$ ) was statistically significantly lower than the burnout mean after the intervention ( $M = 2.77, SD = .426$ ). Based on the pre- and post-survey question structure and the number assigned to each response, higher scores indicate lower levels of burnout. Therefore, intervention makes a statistically significant difference in participants' perceived levels of burnout. The magnitude of this difference was a medium effect size with Cohen's  $d = 0.471$ . As a result, using the Headspace mindfulness application contributed to a meaningful reduction in perceived burnout.

Mindfulness practices, such as those offered by the Headspace mindfulness application, have been proven through this study to help public school teachers and instructional coaches use resources to decrease burnout. Gonzalez (2021) expressed that when teachers' needs are met, they can focus on anything that would improve their teaching. "Resources lead to the motivational process: having job resources leads to more motivation, resulting in increased work engagement" (Tummers & Bakker, 2021, p.2). This study's results supported the aforementioned research by using the Headspace mindfulness application as an effective resource for mitigating burnout.

The JD-R model further contextualizes these findings, as burnout often arises when job demands outweigh available resources (Demerouti & Bakker, 2011). Lee (2019) correlates the JD-R model with the relationship between psychological well-being and the balance between job demands and resources. The decrease in burnout observed in this study illustrated how mindfulness practices could enhance teachers' psychological resources, such as emotional regulation and self-efficacy, ultimately reducing burnout and improving overall well-being.

The findings of this study align with broader concerns of public school teacher and instructional coach burnout and turnover. The Gradient Learning Poll (2023) revealed that many educators are dissatisfied with their jobs, with only 27% expressing confidence that they will remain teaching five years from now. High turnover not only affects teacher well-being but also places significant burdens on school districts, including staffing challenges and financial strains (Parsons, 2023). Based on this, mindfulness interventions, such as those delivered through smartphones and computers, like the Headspace mindfulness application, may offer a promising



solution. Seniglova (2021) indicates the potential of these tools in decreasing burnout and supporting mental health. The results of this study demonstrated that the Headspace mindfulness application can be a valuable resource for reducing burnout, contributing to a growing body of evidence that supports mindfulness-based interventions in educators.

### ***Results and Literature from Research Question 2***

This study's second research question tested the extent to which K-12 suburban public school teachers and instructional coaches reported changes in their perceived stress levels after using the Headspace mindfulness application for four weeks. The results indicated a statistically significant difference between the pre- and post-surveys' two means. The mean stress levels before the intervention ( $M = 2.90$ ,  $SD = .631$ ) were statistically significantly lower than the mean stress levels after the intervention ( $M = 3.26$ ,  $SD = .493$ ), with higher scores reflecting lower stress levels. The magnitude of this difference was a medium effect size with Cohen's  $d = 0.493$ . As a result, using the Headspace mindfulness application made a positive difference in the participants' perceived stress levels.

Maslow's Hierarchy of Needs emphasizes the importance of addressing foundational needs such as safety and emotional well-being, not only for students but also for educators. Teachers have individual motives based on needs, desires, and expectations, which create energy around the behavior toward achieving goals (Adiele & Abraham, 2013). Stress reduction directly supports these foundational needs by enhancing emotional security and creating the conditions necessary for higher-order needs, such as self-actualization, to be pursued. Adiele and Abraham (2013) further

identified critical motivators for teachers, including the satisfaction of hunger, security, belongingness, love, friendship, and affection needs.

Stress among public school teachers and instructional coaches often arises when the demands of their roles overshadow the activities and practices they typically use to support their mental well-being. Bakker and de Vries (2020) explain that when employees face specific task-related demands, they tend to focus directly on those tasks, neglecting activities that could sustain their mental health. This can increase feelings of stress and burnout, especially when they are balancing high expectations in a demanding work environment.

In the context of stress levels, the personal resources discussed by Taris and Schaufeli (2015) are critical. They define personal resources as “positive self-evaluations that are linked to resiliency” and emphasize how these resources are crucial for managing stress and reducing burnout (p. 165). The Headspace mindfulness application served as a job resource that helped build personal resources by promoting resilience, focus, and emotional regulation. As Taris and Schaufeli (2015) suggested, personal resources not only helped individuals cope with work demands but also mitigated the impact of stress, which enhanced their ability to manage high-stress situations. This is consistent with the findings of this study, where mindfulness practice helped participants reduce their stress levels and effectively cope with the demands of their roles.

Mindfulness practices, such as those offered by the Headspace mindfulness application, have effectively reduced stress. According to Headspace Inc. (2023), mindfulness involves being aware of one’s thoughts and feelings without becoming

overly engaged or overwhelmed. This process can help educators detach from their work-related stressors and create space to manage their emotions, thus reducing stress levels. Research by Level et al. (2017) further supported this study, showing that mindfulness training can effectively reduce stress levels, depression, and anxiety, suggesting that mindfulness techniques like those used in the Headspace mindfulness application may significantly alleviate perceived stress levels among public school teachers and instructional coaches.

### ***Results and Literature from Research Question 3***

The third research question from this study examined the extent to which K-12 suburban public school teachers and instructional coaches reported changes in their perceived job satisfaction after using the Headspace mindfulness application for four weeks. The results of this study indicated no statistically significant difference between the two means of the pre- and post-survey. The mean job satisfaction before the intervention ( $M = 3.05$ ,  $SD = .425$ ) was not significantly lower than the mean job satisfaction after the intervention ( $M = 3.18$ ,  $SD = .345$ ), with higher mean scores reflecting increased job satisfaction. The effect size was small, with Cohen's  $d = 0.161$ . As a result, using the Headspace mindfulness application did not have a positive impact on the participants' perceived job satisfaction.

Using Maslow's Hierarchy of Needs as the conceptual framework, teachers are encouraged to focus on their own needs as well as those of their students. Hettinga (2022) emphasizes that as educators deal with the world's increasing complexity and uncertainty, it is vital to have an outlet to help maintain mental health and promote job satisfaction. According to Headspace, Inc. (2023), mindfulness, defined as the ability

to step back and be present in any situation, can be especially helpful in managing the challenging circumstances teachers often face. However, in this study, the Headspace mindfulness application did not serve as such an outlet for participants.

When exploring job satisfaction, the role of personal resources is also evident. Taris and Schaufeli (2015) describe these resources as “positive self-evaluations that are linked to resiliency” and suggest that they play a significant role in enhancing engagement and satisfaction (p.165). Taris and Schaufeli (2015) argue that such resources can act as moderators of work outcomes, improving an individual’s ability to manage job demands and increase job satisfaction by reducing stress and enhancing focus. Despite this, participants in this study did not report higher job satisfaction, which contrasts with the expectation that building personal resources, such as mindfulness, could positively impact their work environment and experience.

Fisher and Royster (2016) stated that teachers seek greater respect within the profession and value social interactions with colleagues, family, and pets. They also emphasize the importance of self-care, including adequate sleep, regular exercise, professional development, and health benefits. These needs align closely with Maslow’s Hierarchy, particularly in the levels of self-esteem, belonging, and safety, all of which are vital to job satisfaction. However, the findings from this study did not support Fisher and Royster’s (2016) conclusions that mindfulness, specifically through the Headspace mindfulness application, would positively impact job satisfaction by promoting mental health and addressing critical self-care needs, such as improved sleep and stress reduction.

## **Conclusions**

As discussed in Chapter 1, public school teachers and instructional coach retention in education is becoming increasingly problematic. Educators often find themselves at the bottom of a mountain, bracing for an avalanche of responsibilities to reach them while striving to create a safe and effective learning environment for their students. They shoulder the immense pressure, working tirelessly to shield their students from feeling the burdens they carry. The imbalance between work demands and personal well-being has led to heightened levels of burnout, stress, and dissatisfaction among educators.

The findings of this study highlight the potential for mindfulness applications, such as Headspace to support educators in navigating these challenges. This research provides actionable insights for educational leaders within public school districts seeking to address these issues by illustrating reductions in perceived burnout and stress levels. Addressing the issue of burnout in education requires a systemic change in culture, but this study offers a starting point for that change. By prioritizing wellness and self-care initiatives, providing tools such as the Headspace mindfulness application, and fostering a culture of care and support, public school districts can take meaningful steps to assist in restoring balance to educators' lives and ultimately improve retention rates. It will be essential to explore future research further to expand upon this study's findings, hopefully paving the way for sustainable improvements in educator's overall well-being. The following section provides implications for action.

## ***Implications for Actions***

The findings of this study provide actional recommendations for public school

districts and educators. Based on the results, districts could benefit from offering access to mindfulness applications, such as Headspace, to support educators in reducing perceived burnout and stress levels. Since the Headspace mindfulness application is free for all educators, it is an ideal starting point for districts looking to implement mindfulness practices.

Zarate et al. (2019) suggest

School districts may consider purchasing mindfulness apps for their educators as part of their wellness initiative or begin using these tools during professional development days. The culture of burnout acceptance needs to stop being the norm within our educational system, and promoting wellness through practices such as mindfulness can and should become commonplace for educators in all settings (p. 1712).

### ***For District Leadership***

District-level leadership should consider training on mindfulness applications to effectively design and implement district-wide mindfulness initiatives. Establishing a committee of education stakeholders could help plan the rollout, accountability measures, and evaluation processes to determine whether the initiatives prove to have similar reductions in burnout and stress levels, as observed in this study.

### ***For Public School Teachers and Instructional Coaches***

Public school teachers and instructional coaches may benefit from professional development focused on using mindfulness applications such as Headspace. This professional development could include how to use mindfulness in the classroom to support students, how to utilize mindfulness during staff meetings, and within their

current content/subject area professional learning community (PLC) time.

Instructional coaches, in particular, may benefit from additional training in mindfulness techniques and applications to support staff and lead building-level implementation efforts. Through this training, instructional coaches could help formalize mindfulness practices and assist teachers in embedding them into their daily classroom routines.

### ***Recommendations for Future Research***

A key recommendation for future research is to replicate this study with a larger and more diverse sample size. This recommendation would allow researchers to explore additional demographic factors, such as the differences in the impact of mindfulness on secondary public school teachers versus elementary public school teachers, male versus female participants, and various age groups. If the sample size was large enough, future studies could also examine the influence of mindfulness based on the participants' years of experience and the specific content or subject areas that the participants identify within the field on perceived burnout, stress levels, and job satisfaction. Such demographic comparisons could provide valuable insights into implementing mindfulness practices such as the Headspace mindfulness application to meet the unique needs of different educator groups. A final recommendation for future research is to incorporate qualitative data from the participants to provide deeper insights into the study.

### ***Concluding Remarks***

The researcher investigated three research questions, each examining changes in perceived burnout, stress levels, and job satisfaction among K-12 suburban public

school teachers and instructional coaches after using the Headspace mindfulness application. The findings demonstrated that incorporating mindfulness practices can positively influence educator's overall well-being, providing a potential pathway to addressing the ongoing challenges of burnout and stress levels in public education.

This study contributes to prior research that supports mindfulness practices as an accessible tool for educators to use among themselves and not just with their students in their classrooms. Educational leaders and school districts have an opportunity to support educators' overall well-being by creating a culture that prioritizes wellness and mental health among the staff. This culture will benefit not only the educators within the school district but the overall quality of education for the students.

Future research is essential to build on these findings, specifically through larger and more diverse participant samples. It is also imperative to explore the long-term effects of mindfulness interventions such as the Headspace mindfulness application in educational settings. As challenges in education continue to grow and become more prevalent, mindfulness applications such as Headspace may be a resource that offers a restoration of balance and sustainability to the teaching profession.

Ultimately, this study highlights the importance of taking actionable steps to support those at the heart of education: our public school teachers and instructional coaches. If educational leaders and school districts invest in the well-being of their educators, they will ensure a brighter future not just for them but for the students and the communities they serve.



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## Appendices

## Appendix A: Interview Questions

**Directions:** Please answer the following questions.

| Demographics                                                                                   | Multiple Choice Answers                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. What age range best describes you?                                                          | a. 20-29<br>b. 30-39<br>c. 40-49<br>d. 50-59<br>e. 60-69<br>f. 70+<br>g. Prefer not to say                                                                                                                                                                  |
| 2. What is your gender                                                                         | a. Male<br>b. Female<br>c. Prefer not to say                                                                                                                                                                                                                |
| 3. How many total years have you been in education as a certified teacher/instructional coach? | a. 0-4<br>b. 5-9<br>c. 10-14<br>d. 15-19<br>e. 20-24<br>f. 25-29<br>g. 30-34<br>h. 35-39<br>i. 40+<br>j. Prefer not to say                                                                                                                                  |
| 4. What level do you primarily teach?<br>(Select all that apply)                               | a. Early Childhood (3 yr.-4 yr.)<br>b. Elementary (K-5th)<br>c. Middle (6th-8th)<br>d. High (9th-12th)<br>e. Prefer not to say                                                                                                                              |
| 5. What subject(s) do you primarily teach?<br>(Select all that apply)                          | a. English/Language Arts<br>b. English for Speakers of Other Languages<br>c. History/Government Social Studies<br>d. Instructional Coaching<br>e. Mathematics<br>f. Non-Core Elective Classes<br>g. Science<br>h. Special Education<br>i. Prefer not to say |



***RQ1***

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived levels of burnout after using the Headspace application for four weeks?

**Directions:** Please answer the following questions based on your job experience.

| <b>Burnout</b>                                                                 | <b>Strongly Agree</b> | <b>Agree</b> | <b>Disagree</b> | <b>Strongly Disagree</b> |
|--------------------------------------------------------------------------------|-----------------------|--------------|-----------------|--------------------------|
| 6. I always find new and interesting aspects in my work.                       |                       |              |                 |                          |
| 7. There are days when I feel tired before I arrive at work.                   |                       |              |                 |                          |
| 8. It happens more and more often that I talk about my work in a negative way. |                       |              |                 |                          |
| 9. I can tolerate the pressure of my work very well.                           |                       |              |                 |                          |
| 10. Lately, I tend to think less at work and do my job almost mechanically.    |                       |              |                 |                          |
| 11. I find my work to be a positive challenge.                                 |                       |              |                 |                          |
| 12. During my work, I often feel emotionally drained.                          |                       |              |                 |                          |
| 13. Over time, one can become disconnected from this type of work.             |                       |              |                 |                          |
| 14. After working, I have enough energy for leisure activities.                |                       |              |                 |                          |

| <b>Burnout</b>                                                     | <b>Strongly Agree</b> | <b>Agree</b> | <b>Disagree</b> | <b>Strongly Disagree</b> |
|--------------------------------------------------------------------|-----------------------|--------------|-----------------|--------------------------|
| 15. Sometimes, I feel sickened by my work tasks.                   |                       |              |                 |                          |
| 16. After my work, I usually feel worn out and weary.              |                       |              |                 |                          |
| 17. This is the only type of work that I can imagine myself doing. |                       |              |                 |                          |
| 18. Usually, I can manage the amount of my work well.              |                       |              |                 |                          |
| 19. I feel more and more engaged in my work.                       |                       |              |                 |                          |
| 20. When I work, I usually feel energized.                         |                       |              |                 |                          |

**RQ2**

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived stress levels after using the Headspace application for four weeks?

**Directions:** Please answer the following questions based on your job experience.

| Stress Levels                                                                                                           | Never | Almost<br>Never | Some-<br>times | Fairly<br>Often | Very<br>Often |
|-------------------------------------------------------------------------------------------------------------------------|-------|-----------------|----------------|-----------------|---------------|
| 21. In the last month, how often have you felt that you were able to control what you feel is important at work?        |       |                 |                |                 |               |
| 22. In the last month, how often have you felt nervous or stressed at work?                                             |       |                 |                |                 |               |
| 23. In the last month, how often have you felt things are going your way at work?                                       |       |                 |                |                 |               |
| 24. In the last month, how often have you found that you could not cope with all the things that you had to do at work? |       |                 |                |                 |               |
| 25. I feel that there is little time to prepare for my lessons/ responsibilities.                                       |       |                 |                |                 |               |
| 26. I feel I have too much work to do.                                                                                  |       |                 |                |                 |               |
| 27. I feel the pace of the school day is too fast.                                                                      |       |                 |                |                 |               |
| 28. I feel there is too much administrative paperwork in my job.                                                        |       |                 |                |                 |               |

| Stress Levels                                                                                | Never | Almost<br>Never | Some-<br>times | Fairly<br>Often | Very<br>Often |
|----------------------------------------------------------------------------------------------|-------|-----------------|----------------|-----------------|---------------|
| 29. I feel that my personal priorities are being shortchanged due to time demands from work. |       |                 |                |                 |               |
| 30. I feel I am not emotionally/intellectually stimulated on the job.                        |       |                 |                |                 |               |
| 31. I feel I lack opportunities for professional improvement.                                |       |                 |                |                 |               |
| 32. I feel like I attempt to teach students who are poorly motivated.                        |       |                 |                |                 |               |
| 33. My work brings about anxious feelings.                                                   |       |                 |                |                 |               |
| 34. I feel that I have to do more than one thing at a time to get things accomplished.       |       |                 |                |                 |               |

**RQ3**

To what extent do K-12 suburban public school teachers and instructional coaches report changes in their perceived job satisfaction after using the Headspace application for four weeks?

**Directions:** Please answer the following questions based on your job experience.

| <b>Job Satisfaction</b>                                                                   | <b>Strongly Agree</b> | <b>Agree</b> | <b>Disagree</b> | <b>Strongly Disagree</b> |
|-------------------------------------------------------------------------------------------|-----------------------|--------------|-----------------|--------------------------|
| 35. I feel I am being compensated fairly for my work, including salary and benefits.      |                       |              |                 |                          |
| 36. I feel that my efforts at work are recognized and rewarded.                           |                       |              |                 |                          |
| 37. I have opportunities for professional growth and advancement.                         |                       |              |                 |                          |
| 38. Organizational procedures help rather than hinder my ability to perform my job well.  |                       |              |                 |                          |
| 39. I am satisfied with my relationships at work, including my coworkers and supervisors. |                       |              |                 |                          |
| 40. I sometimes feel my job is meaningless.                                               |                       |              |                 |                          |
| 41. Communication within the district is effective.                                       |                       |              |                 |                          |
| 42. My supervisor is unfair to me.                                                        |                       |              |                 |                          |
| 43. I like doing the things I do at work.                                                 |                       |              |                 |                          |

| Job Satisfaction                                        | Strongly Agree | Agree | Disagree | Strongly Disagree |
|---------------------------------------------------------|----------------|-------|----------|-------------------|
| 44. The goals of this organization are not clear to me. |                |       |          |                   |
| 45. I feel supported by those around me.                |                |       |          |                   |
| 46. I feel a sense of pride in doing my job.            |                |       |          |                   |
| 47. I have too much paperwork.                          |                |       |          |                   |
| 48. My job is enjoyable.                                |                |       |          |                   |

**Note.** The Job Satisfaction Survey used scale selections consisting of Disagree Very Much, Disagree Moderately, Disagree Slightly, Agree Slightly, Agree Moderately, Agree Very Much. For consistency, the scale selections from the Oldenburg Burnout Inventory were used.

## **Appendix B: Informed Consent Form**

### **Title of the Study:**

Mindfulness and Teacher Well-Being: A Quantitative Analysis of Headspace's Impact on Burnout, Stress Levels, and Job Satisfaction in Public Schools

### **Researcher:**

Jennifer Reed

Doctoral Candidate, Baker University

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### **Purpose of the Study:**

The purpose of this study is to examine the effects of the Headspace mindfulness application on burnout, stress levels, and job satisfaction among public school teachers and instructional coaches. Participation will involve completing pre- and post-surveys that measure burnout, stress, and job satisfaction.

### **Procedures:**

If you agree to participate, you will be asked to:

1. Complete a pre-survey that will take approximately 10–15 minutes.
2. Use the Headspace mindfulness application over a period of four weeks.
3. Complete a post-survey that will take approximately 10–15 minutes.

### **Voluntary Participation:**

Your participation in this study is entirely voluntary. You may choose to withdraw at any time without any consequences.

### **Confidentiality:**

All information obtained in this study will be kept confidential. Data will be collected

anonymously, and no personal identifiers will be linked to your responses. The results of this study will be reported in aggregate form to protect your identity.

**Risks and Benefits:**

There are minimal risks associated with participating in this study, such as temporary discomfort when answering questions about stress or burnout. Potential benefits include increased awareness of personal stress levels and job satisfaction and the opportunity to contribute to research that may inform future support strategies for educators.

**Compensation:**

There is no monetary compensation for participating in this study. However, your participation is valuable to understanding the impacts of mindfulness on educators' well-being.

**Contact Information:**

If you have any questions about this study, you may contact the researcher at [jenniferareed@stu.bakeru.edu](mailto:jenniferareed@stu.bakeru.edu) or 316-285-2557.

**Consent:**

By continuing with the survey, you acknowledge that you have read and understand the information provided above, and you voluntarily agree to participate in this study.

Electronic Signature:

Please indicate your consent by selecting “I Agree” below.

- I Agree
- I Do Not Agree



## **Appendix C: Study Invitation**

### **Participant Invitation**

**Note:** *Sent to USD 261 Haysville Public Schools teachers and instructional coaches.*

**Subject:** Invitation to Participate in a Research Study on Mindfulness, Stress, and Job Satisfaction

**Dear Teachers and Instructional Coaches,**

I hope this message finds you well. My name is Jennifer Reed, and I am a doctoral candidate at Baker University. I am conducting a research study examining the effects of the Headspace mindfulness application on burnout, stress levels, and job satisfaction among public school teachers and instructional coaches.

Your participation will provide valuable insights into how mindfulness can support educators in managing stress and improving job satisfaction. By contributing to this study, you will help inform strategies that could benefit educators like yourself in the future.

Your participation in the study involves the following:

- Completing a short pre-survey (approximately 10–15 minutes)
- Using the Headspace mindfulness application over four weeks
- Completing a post-survey (approximately 10-15 minutes)

Participation in this study is voluntary and confidential. Your involvement is entirely voluntary, and you may withdraw at any time without any consequences. All information will be kept confidential and reported only in aggregate form.

If you are interested in participating, please click on the link below to review the informed consent form and complete the pre-survey. This will indicate your willingness to join the study.

**[Doctoral Study Participant Response](#)**

I greatly appreciate your time and consideration in participating in this study. Your input is invaluable to understanding how mindfulness can positively impact the lives of educators. If you have any questions or need further information, please do not hesitate to contact me at [jenniferareed@stu.bakeru.edu](mailto:jenniferareed@stu.bakeru.edu).

Thank you for your support!

Jennifer Reed

Doctoral Candidate, Baker University

316-285-2557

## Appendix D: IRB Approval



### *Baker University Institutional Review Board*

October 26, 2024

Dear Jennifer Reed and Anna Catterson,

The Baker University IRB has reviewed your project application and approved this project under Expedited Status Review. As described, the project complies with all the requirements and policies established by the University for protection of human subjects in research. Unless renewed, approval lapses one year after approval date.

Please be aware of the following:

1. Any significant change in the research protocol as described should be reviewed by this Committee prior to altering the project.
2. Notify the IRB about any new investigators not named in original application.
3. When signed consent documents are required, the primary investigator must retain the signed consent documents of the research activity.
4. If this is a funded project, keep a copy of this approval letter with your proposal/grant file.
5. If the results of the research are used to prepare papers for publication or oral presentation at professional conferences, manuscripts or abstracts are requested for IRB as part of the project record.
6. If this project is not completed within a year, you must renew IRB approval.

If you have any questions, please contact me at [skimball@bakeru.edu](mailto:skimball@bakeru.edu) or 785.594.4563.

Sincerely,

Scott Kimball, PhD  
Chair, Baker University IRB

Baker University IRB Committee  
Tim Buzzell, PhD  
Steve Massey, EdD  
Jiji Osiobe, PhD  
Susan Rogers, PhD