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A Phenomenological Study on Teacher Perception of Change in School Culture
as a Result of the Implementation of Mindfulness

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

Justin J. Penley

May 2018

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Key Words: Mindfulness in Schools, Change in Schools, Student Outcomes, Student Behavior,
Teacher Stress, School Culture

ABSTRACT

A Phenomenological Study on Teacher Perception of Change in School Culture as a result of the Implementation of Mindfulness

by

Justin J. Penley

A qualitative investigation was conducted to explore the phenomenon of teacher perception of change in school culture as a result of the implementation of mindfulness. This study used a phenomenological methodology, enabling the researcher to gather information by focusing on and describing the impact of mindfulness on school culture in a deep comprehensive manner.

The investigator was able to extract meaning and code data, leading to the emergence of themes that supported and aligned with the study's research questions and thus led into a holistic understanding of the phenomenon. This was accomplished through data analysis of rich, in-depth interviews, onsite visits, and document analysis, which consisted of aggregate student disciplinary information, aggregate achievement results, the state report card, attendance records, teacher retention records, and faculty survey results. The quality of data sources led to saturation, and variety of sources allowed for triangulation of the results.

The principal researcher in this study found that mindfulness results in a large, positive impact on school culture, including improved relationships among stakeholders, improved academic performance, and a decrease in disciplinary incidents. This was evidenced and supported by a thorough literature review, the results of participant interviews, and document analysis. The researcher also specified factors teachers perceived as essential to the implementation of mindfulness in schools and provided practical suggestions for putting mindfulness in place as

well as suggestions for future research. The results from this study provide a framework for understanding and exploring the phenomenon.

DEDICATION

First and foremost, thanks be to God, who provided the means and opened the doors to allow me to reach the destination. This dissertation is proof that

“I can do all things through Christ who strengthens me.”

Thank you to my beautiful wife Erin, whose encouragement and support often provided the spark I needed to keep going. Thank you to my son Brayden, who if he learns anything from his father, may it be the importance of determination and perseverance. Though the road may not be smooth, Abraham Lincoln perhaps said it best: *“Always bear in mind that your own resolution to succeed is more important than any other thing.”*

Thank you to my parents, who instilled in me the value of work ethic, and to my sister, Lana, who provided invaluable help along the journey.

ACKNOWLEDGMENTS

Thank you to my research committee, Dr. Virginia Foley (chair), Dr. Bill Flora (methodologist), Dr. John Boyd, and Dr. Troy Knechtel, for your guidance, support, and assistance in getting me across the finish line.

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CHAPTER 1

INTRODUCTION

Negative cultures can inhibit, slow, or even stop improvement in schools (Peterson, 1998). These schools often consist of teachers and students alike that are stressed and anxious, caustic, have negative attitudes, and are critical of change. These issues can permeate throughout the entirety of school stakeholders, from principals to teachers to staff to students and can manifest in a variety of negative results. School culture affects how everyone connected to a school interacts with one another, how learning takes place, and how the educational environment is constructed (Tableman & Herron, 2014).

There is no universally-accepted definition of culture as it relates to schools (Koch, 2009). However, researchers have developed operational definitions, many of which share common descriptors. For example, Schein (1985) offered that culture is a pattern of basic assumptions – invented, discovered, or developed by a given group as it learns to cope with problems – that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. Additionally, Hall and Hord (2015) described culture as the individually and socially constructed values, norms, and beliefs about an organization and how it should behave that can be measured only by observation of the setting using qualitative methods. It can be beneficial to think about culture as the personality of the organization; it is grounded in shared values and beliefs (Gruenert, 2008). In a deeper sense school culture usually refers to the long-term physical and social environment, as well as the values or beliefs of the school, shared by stakeholders about the school (“FAQ’s About School Climate,” n.d.).

The importance of school culture cannot be overstated. Sergiovanni (2007) stated that the leader makes meaning, infusing with value, beyond technical requirements of the job, with values at the center, and technical issues on the periphery. Additionally, Sergiovanni (2001) explained that if one can get those who are most affected to become invested in the outcomes in a moral sense – the leader compelling teachers to believe in and strive toward a sense of purpose – the end result is a shift in culture in which the students are the winners. This type of culture, where teachers are working for something greater than just themselves and are invested in the servant culture, establishes a covenantal relationship between administration and faculty. The covenant is interwoven with a shared commitment to values and goals, creating a school culture where administrators, teachers, staff, students, and parents are all striving to reach the school’s potential. Sergiovanni (2007) stated that in order to be successful at building culture school leaders should give attention to the informal, subtle, and symbolic aspects of school life. Further, it is worth noting that Sergiovanni also explained that culture is impacted by values, beliefs, and the expression of needs and desires of stakeholders that constitute meaning and significance; these aspects of the school community help to provide the foundation of the educational environment’s culture. Research has clearly supported that there is a need to create such a culture, one that supports teachers across several fronts, including supporting professional endeavors and encouraging collaborative efforts. The influence of workplace culture is wide-ranging, spanning the gamut of teachers’ practices and approaches, and, therefore, student outcomes (Hall & Hord, 2015).

Further evidence that environment matters is discussed by Brown, Roediger, and McDaniel (2014). The authors pointed out that environmental influences have positive effects on such endeavors as increasing one’s IQ, memory, learning, and even athletic ability. In the

same study Brown et al. also noted that environmental factors can directly impact success and failure because of the effect these factors have on attitude. Along those same lines, Dweck (2007) reported that a positive environment, one that features encouragement and praise, has the power to shape how people respond to challenges. Thus, creating an environment of encouraging and empowering teachers can foster the willingness to strive for improvement.

Ultimately, school culture has the potential to directly impact everyone invested in a school at every fiber of its composition (Habegger, 2008). However, Davis and Hayes stated (2011) the practice of being present in the moment – being intentionally aware of the current moment – and focusing on one’s thoughts and emotions can have positive results on outcomes. This includes academic performance, stress and anxiety reduction, boosting positive reactions to potentially negative situations through decreasing negative reactivity, improving mood, and leading to a more positive outlook in general. Such is the goal of mindfulness: a state of moment-by-moment awareness of one’s thoughts, emotions, and surroundings, without judgement.

Though not a new phenomenon, the practice of mindfulness has increased in schools over the past few years, becoming increasingly popular as schools search for ways to implement Social-Emotional Learning curriculums and programs in an attempt to improve the educational environment, both for students and their adult counterparts (Zenner, Herrleben-Kurz, & Walach, 2014). Improving the school environment for all leads to positive results for all: an environment where students enjoy attending school and improve both academically and socially, and faculty members feel respected and empowered to be their best. This type of school improvement can result in a supportive environment where both children and adults feel safe, encouraged, and valued while being held to high expectations (Fullan, 2001). Mindfulness-Based Interventions (MBIs) can be a vehicle that leads to this type of educational atmosphere, as

this type of intervention has been shown to be effective in a wide range of stress- and anxiety-related illnesses (Piet & Hougaard, 2011). Of note is also the impact mindfulness demonstrates in the preventive and health promoting capacities in regular (nonclinical) populations including stress reduction, increasing overall well-being, and strengthening immune functions (Chiesa & Serretti, 2009). This impact shows potential for both students and adults, promoting personal development such as self-compassion, empathy, and perspective taking, increasing attentional capacity, and the temporal window of attention (Zenner et al., 2014).

Statement of the Problem

The problem addressed in this study is the need schools have for an intervention that can address faculty and student stress and anxiety as well as negative school culture, while improving academic results and student behavior. Data for this study were collected using open-ended interviews of faculty members for first-hand viewpoints and experiences as well as through document analysis. Interviews were conducted in-person. Document analysis consisted of relevant data including aggregate student disciplinary information, aggregate achievement results, attendance records, teacher retention records, and faculty survey results.

Renowned educational reformer and author Phillip Schlechty (2009) encouraged the thought of schools being approached as *learning areas* as opposed to *teaching areas*. That is, teachers, instead of being mere disseminators of facts, should be designers, leaders, and guides to instruction and therefore keeping students engaged and actively participating in their own learning. In order to cultivate this type of environment, the school must strive to be a learning organization in the sense that students are engaged and invested, and teachers are excited and invigorated. Stress and anxiety can be a barrier for both teacher- and student-investment to striving toward becoming a Schlechty style learning area, as stakeholders face an array of

stressors yet are often provided with few resources with which to alleviate them. There is an evident need for innovative, cost-effective ways for school systems to train and better support the resilience of their teachers while equipping students to be better prepared to meet the demands of school as well (Meiklejohn et al., 2012).

One such resource could be mindfulness, a neuroscience-backed blending of self-care, focused-attention training, practice in prosocial skills, practical stress-mitigation techniques, and being aware in the moment. Mindfulness has the potential to provide educators and students alike practical skills for self-care; effective mindfulness practices can be integrated into the school day and adapted for diverse environments (“About Mindful Schools,” n.d.).

When teachers implement mindfulness, not only can they reap personal benefits such as reduced stress, anxiety, and burnout, but their students do as well. Teachers who practiced mindfulness have reported greater efficacy in doing their jobs, more emotionally-supportive classrooms, and better classroom organization (Flook, Goldberg, Pinger, Bonus, & Davidson, 2013). Jones, Greenberg, and Crowley (2015) suggested that through mindfulness student-benefits can include improved cognitive outcomes, social-emotional skills, and well-being; such benefits may lead to long-term improvements in life. Jones et al. also reported that skills in kindergarten predict improved education, employment, crime, substance abuse, and mental health outcomes in adulthood.

The purpose of this qualitative phenomenological case study was to describe the transformation of culture for faculty and students at Marysville K-8 School (Portland Public Schools, Portland, OR) through the implementation of mindfulness. Deal and Peterson (2016) wrote that culture affects all aspects of school including communication, instruction, forms, and function.

Mindfulness, like culture, has many definitions and can mean different things to different practicing people and groups. However, also like culture, there are typically some common threads. This study will use the definition put forth by mindfulness pioneer, Kabat-Zinn, along with some elements of other practitioners. Kabat-Zinn (2017) offered a streamlined view of mindfulness, describing it as paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally. Though there are many aspects to mindfulness, the goal is to, through training and practice, learn a healthier way of responding to life's inevitable challenges.

Research Questions

The following research questions guided the study:

1. How do teachers perceive the impact of mindfulness on school culture?
2. How do teachers perceive the impact of mindfulness on student learning?
3. How do teachers perceive the impact of mindfulness on relationships within the school?
4. What factors do teachers perceive as essential to the implementation of mindfulness in a school?

Significance of the Study

The study will be significant on several fronts: to enhance and strengthen the current body of research on school implementation of mindfulness; to provide authentic, real-world examples and instances of mindfulness making a positive impact in school culture; and to develop further recommendations based on study outcomes.

There are seemingly many benefits associated with mindfulness implementation in schools, with manageable associated costs. Students spend a significant amount of time in

school; school-interventions are readily accessible by students in areas of need. Mindfulness-based interventions (MBIs) are secular programs featuring the goal of promoting holistic development and well-being (Cullen, 2011; Maloney, Lawlor, Schonert-Reichl, & Whitehead, 2016; Roeser, 2014). MBIs implemented as part of a foundation for creating a positive educational environment, can improve students' ability to focus, regulate attention and emotion, better handle frustration, and improve intrinsic motivation (Zenner et al., 2014). Even though there are some studies currently available outlining the benefits of MBIs, this study will add additional strength and depth to the current research.

Not only will this study add to the current body of research theory into mindfulness in schools, it will look to identify authentic implementation experiences as well. While there is no definite, clear-cut model for mindfulness implementation, schools are beginning to dedicate time and resources to mindfulness, recognizing its potential benefits to academic performance, behavior, and the culture of a school. As Deegan (2015) pointed out regarding MBIs, there are some clear lessons being learned and best practices developing as schools begin to implement these programs. As authentic, real-world experiences and best practices are further developed, administrators and educators on the front lines of education can continue to learn important lessons from others as they look to add new and innovative programs to their own curriculums.

Further recommendations based on study outcomes are a significant part of the research as well. The researcher studied the impact of mindfulness practice and its enhancement to the educational environment. This includes not only the aforementioned positive results of MBIs, but in addition the attentional and emotional self-regulation, improvement in prosocial dispositions such as empathy and compassion, sensitivity toward others, creativity, and problem-solving skills. MBIs also have been suggested to enable children to deal with future challenges of the

rapidly changing world, ideally becoming smart, caring, and committed citizens (Davidson et al., 2007). Through completion of the study, it is a goal to be able to suggest further focused research opportunities as well as add to the current implementation practices in schools.

Definitions of Terms

The following terms are defined for the purpose of this study.

- Codes – in qualitative research, codes are labels that assign symbolic meaning to the descriptive or inferential information compiled during a study; codes usually are attached to data “chunks” of varying size and can take the form of a straightforward, descriptive label or a more evocative and complex one (Miles, Huberman, & Saldana, 2014).
- Confirmability – refers to the degree to which the results could be confirmed or corroborated by others (Trochim, 2006) and how the research findings are supported by the data collected.
- Credibility – establishes that the results of qualitative research are credible or believable from the perspective of the participant in the research (Trochim, 2006).
- Culture – consists of the stable, underlying social meanings that shape beliefs and behavior over time, developing as teachers, students, parents, and administrators work together to deal with crises and accomplishments. Cultural patterns are highly enduring, have a powerful impact on performance, influence approaches to school improvement, and shape the ways people think, act, and feel (Peterson & Deal, 2016).

- Data Dashboard Analytics- a one-page summary report produced by the school system that outlines several aspects of teacher and student satisfaction, discipline data, and student academic performance.
- Dependability – a traditional quantitative view of reliability is based on the assumption of replicability or repeatability (Trochim, 2006). Trochim also stated that dependability in the qualitative paradigm is concerned with whether a study would obtain the same results if a researcher could observe the same thing twice. Dependability ensures that the research findings are consistent and could be repeated; this is measured by the standard of which the research is conducted, analyzed and presented (“Ensuring Credibility,” 2011).
- Epoche – a phase in which the researcher eliminates or clarifies preconception. Of note is the researchers need to be aware of prejudices, viewpoints, or assumptions regarding the phenomenon under investigation (Patton, 1990).
- Essence – A relational term referring to the intentionalities of our world (Ary, Jacobs, Irvine, & Walker, 2014).
- Interview Guide – a prepared list of questions or issues that are to be explored in an interview to ensure the same basic lines of enquiry are pursued person interviewed (Patton, 2002).
- Mindfulness – neuroscience-backed blending of self-care, focused-attention training, practice in prosocial skills, practical stress-mitigation techniques, and being aware in the moment; paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally (“What is Mindfulness? Explained,” 2017).

- Mindfulness-Based Interventions (MBIs) – secular programs featuring the goal of promoting holistic development and well-being (Cullen, 2011; Maloney et al., 2016; Roeser, 2014).
- Natural setting – a setting in which there is no staging of dialogue, minimal interviewer interference, and freedom to engage in semistructured interviews with open-ended dialogue.
- Neuroscience – the study of the brain including its impact on behavior and cognitive (thinking) functions.
- Purposive sampling – a type of sampling is characterized by the incorporation of specific, preselective criteria met by the participants at the moment of selection (Padilla-Díaz, 2015).
- Stakeholder – someone who has a vested interest in the success and welfare of a school including but not necessarily limited to students, administrators, teachers, staff members, parents, families, community members, and elected officials such as school board members. It can also include other community members such as advocacy groups, business people, or other community organization members. In summary, anyone who has a “stake” in the success of a school and its students, via a personal, professional, civic, and/or financial interest or concern. (“Stakeholder,” 2014).
- Transferability – a qualitative term to describe external validity (Anfara, Brown, & Mangione, 2002; Creswell, 2012; Suter, 2012; Trochin, 2006). Transferability is evidence supporting the generalization of findings to other contexts in which

detailed descriptions enable judgments about transferability with other contexts (Suter, 2012).

- Triangulation – the combination of methodologies in the study of the same phenomenon (Denzin, 1970). The qualitative researcher is expected to draw upon multiple (at least two) sources of evidence in an effort to seek convergence and corroboration through the use of different data sources and methods (Bowden, 2009). This lends credibility to the study.

Limitations

Due to the nature of its construct, there are limitations to qualitative research in general, and phenomenological research in particular. Limitations include, in most cases, the small number of participants who participate in phenomenology, as researchers make sampling choices that enable them to deepen understanding of whatever phenomenon is being studied.

Another limitation is because the nature of phenomenological study includes participants few in number, findings from qualitative research cannot be generalized to the whole population. It is important to remember, however, that such research serves as a spring board for larger studies and deeper understanding that can inform theory, practice, and specific situations (Ben-Eliyahu, 2017).

Delimitations

The delimitations that add focus to the study are location (where the study takes place), the sample participants of the study, and its purpose. The phenomenological nature of the chosen research design is narrow in focus and only reveals information on a specific implementation experience of teachers and students in a specific school. In an attempt to

examine, analyze, and describe teacher perception of change in school culture through the implementation of mindfulness, the researcher has chosen to conduct the study of the phenomenon at Marysville Elementary School of the Portland Public Schools district. Included in this study will be open-ended interviews of 12 faculty members as well as data collection through document analysis from which the researcher hopes to glean valuable first-hand viewpoints and experiences. Interviews will be conducted in a face-to-face format, lasting approximately 30 minutes. Document analysis will consist of relevant data including but not limited to aggregate student disciplinary information, aggregate achievement results, attendance records, teacher retention records, historical school board minutes, and/or other pertinent data. These delimitations of the study, put into place by the researcher, narrowed the focus and scope of the study.

Overview of the Study

The study was completed through the use of open-ended interviews of faculty members as well as data collection through document analysis, from which the researcher gleaned valuable first-hand viewpoints and experiences. Interviews were conducted in a face-to-face format. Document analysis consisted of relevant data including but not limited to aggregate student disciplinary information, aggregate achievement results, attendance records, teacher retention records, historical school board minutes, and/or other pertinent data.

This study includes five chapters. Chapter 1 establishes the need and basis for this research study by including an introduction to the study, a statement of the purpose of the study, the research questions, definitions of relevant terms, and the limitations and delimitations of the study. Chapter 2 is a review of the literature that details the emergent themes of the supporting

scholarly research and current academic practices relating to mindfulness in schools and its impact on teacher perception of change in school culture and students learning. Chapter 3 is a presentation of the research methodology and design. Chapter 4 is a presentation of the interpretation of the data, the coding of the descriptive data, and the findings of the study. Chapter 5 is a summary of the findings, conclusions, implications for practice, and recommendations for further research.

Chapter Summary

In summary this research will address how teachers perceived a change in school culture that occurred through the implementation of mindfulness. Chapter 1 presented the purpose of the study, research questions, the significance of the study, limitations and delimitations, the definitions related to the study, and an overview of the study.

Mindfulness-based interventions can be an effective weapon with which educational professionals can arm themselves to combat a toxic environment and improve school culture. Deal and Peterson (2016) wrote of the importance of school culture, pointing out that culture impacts all facets of school operation. A potential help in this area, mindfulness has been found to improve school culture (Cullen, 2011; Flook et al., 2013; Maloney et al., 2016; Roeser, 2014; Zenner et al., 2014;).

Through a phenomenological methodology, this study enhances the current body of knowledge in the area of mindfulness in schools as part of an effective Social-Emotional Learning curriculum as well as providing suggestions for both for possible future implementation as well as recommendations for both practice and further research, leading to an improved educational atmosphere for both faculty and students.

CHAPTER 2

LITERATURE REVIEW

Introduction

Classroom teachers play a critical role in shaping the lives of students; not only do teachers facilitate learning, but they also influence a child's social and emotional development (Flook et al., 2013). In fact, a student's experience in the classroom is among the most important predictors for well-being and success in school (Eccles & Roeser, 2011; Jennings & Greenberg, 2009). Stress among teachers continues to rise, and some research has shown that burnout among teachers is high relative to other occupations (Aloe, Amo, & Shanahan, 2013). High levels of stress are affecting teacher health and well-being, causing teacher burnout, lack of engagement, job dissatisfaction, poor performance, and some of the highest turnover rates in the history of the profession (Greenberg, Brown, & Abenavoli, 2017). Stress not only has negative consequences for teachers, it also results in lower achievement for students and higher costs for schools (Blase, 1986; Jennings & Greenberg, 2009).

A school's culture has a large impact on teacher stress and teachers' ability to mitigate that stress as well as having an impact on student outcomes. The actions of administrators, the management style of the principal, as well as the school's organizational culture and climate can affect a teacher's sense of well-being and, therefore, have an effect on student behavior and achievement (Prilleltensky, Neff, & Bessell, 2016). Fortunately, one resource that has been shown to help in mitigating these negative effects is mindfulness practice, which can not only help improve executive functioning but also reduce stress, anxiety, and aggression (Levasseur, 2012). When schools implement and practice mindfulness, faculty members reap personal

benefits such as reduced stress and burnout; additionally, school culture has been shown to improve, and, as a result, student outcomes are positively impacted as well (Flook et al., 2013).

Educational Leadership

As one researches common characteristics of successful schools, it becomes clear that a quality administrative team plays a large role in reaching educational goals (Blase, Blase, & Phillips, 2010; Lynch, 2015; Tutt & Williams, 2012). Leadership has significant effects on student learning, second only to the effects of the quality of curriculum and teachers' instruction (Leithwood & Riehl, 2003). Key attributes of exemplary administrators include creating and working toward a shared school vision, providing leadership and establishing expectations for faculty, staff, and students and therefore facilitating effective curriculum and instruction (including using data to manage processes), serving as a liaison for a diverse community, including all stakeholders, and shaping the culture of the school (Fullan, 2001; Harris, 1987). Undoubtedly, there are many other aspects of being a principal, including the day-to-day operation of a school, such as managing budgets, the building, and grounds, and planning and implementing continuing faculty professional development. However, the key characteristics mentioned above provide the foundation for successful schools; without these characteristics providing the infrastructure, the school would be unable to withstand the proverbial storms that all schools must inevitably navigate (Davis, Darling-Hammond, LaPointe, & Meyerson, 2005; LaPointe & Davis, 2006).

Effective educational leaders help schools develop a vision that embodies the best thinking about teaching and learning (Leithwood & Riehl, 2003). It is commonly understood that the mission and vision of a school are connected (Lezotte, 1993; Stemler, Bebell, & Sonnabend, 2010). At its core the point of school is the mission, helping educational leaders

design and implement academic curriculums, determining how and what they want their students to learn, and what goals for which they are striving (Wiggins & McTighe, 2007). Implementing a clear mission statement promotes student achievement and provides the foundation for positive school culture (Fiore, 2000). As Wiggins and McTighe stated, “Schools exist to cause learning that is intellectually vital, generative of future self-directed learning, personally meaningful and productive, and socially valuable” (p. 12).

Guided with such a mission, educational professionals can use this approach as a springboard for developing and striving for the school vision. Simply put, a vision provides detail and inspiration for what the mission, the learning principals, and curriculum framework really mean. A vital leadership challenge for educational leaders is to ensure that even the most habit-bound members of the school community come to understand that there is always more to be done to add value to learning and schooling (Wiggins & McTighe, 2007).

A school’s vision and mission impacts and are connected to a school’s climate and culture. The principal’s approach to leadership, both words and actions, set the tone for the school. As Sergiovanni (2001) noted, all schools have cultures, but successful schools seem to have strong and functioning cultures aligned with a vision of quality schooling. Culture serves as a compass setting to steer people in a common direction; it provides a set of norms defining what people should accomplish and how, and it is a source of meaning and significance for teachers, students, administrators, and others (Sergiovanni, 2001). Educational leadership is a moral craft and plays a large role in high-achieving schools (Sergiovanni, 2007), as does all of the managerial responsibilities a principal must oversee on a daily basis.

Often, the results of an approach of a successful administrator are not about the management of things but rather the leadership shown through relationships and the culture that

is cultivated in the school. Effective leaders constantly work on developing relationships at all levels of the organization; attempting to improve the quality of relationships and how people interact with one another is a moral purpose of the highest order. Education is about both ends and means. In education Fullan (2001) posited, making a difference in the lives of students is an important end, but how educational leaders arrive at that end is also critical.

Those means, Fullan (2011) stated, include treating others (stakeholders) well and fairly, which positively reflects on the culture and climate of the school. Fullan wrote that his Six Secrets of Change (Love Your Employees, Connect Peers with Purpose, Capacity Building Prevails, Learning is the Work, Transparency Rules, Systems Learn) are based on “cultivating the welfare of others” (2011, p. 135). Researchers have found that this approach to school leadership can be greatly enhanced through the application of mindfulness, through cultivating an environment that stresses both self-care and welfare of others (Flook et al., 2013; Jennings, Frank, Snowberg, Coccia, & Greenberg, 2012; Jennings et al., 2017; Roeser et al., 2013).

School Culture and Climate

Though interconnected, the terms climate and culture as they relate to school are not the same thing, and mindfulness’s potential in both areas looks to be impactful. In an effort to differentiate between the terms climate and culture, the culture of a school is represented by its shared beliefs, traditions, and the things that make the school unique; school culture takes years to develop. School climate is represented by current conditions that exist in the school, the feeling of what is going on in the school environment right now (Jakes, 2013).

In a deeper sense school climate refers to the individual experiences and feelings that students, teachers, and staff have about the school, while school culture usually refers to the

long-term physical and social environment as well as the values or beliefs of the school shared across individuals and time (“FAQ’s About School Climate,” n.d.). Another way to differentiate the two terms is by categorizing climate as the “attitude or mood” of the school and the culture as the “personality or values” of the school. Climate is perception-based, while culture is grounded in shared values and beliefs (Gruenert, 2008). In this sense climate is how people feel in the school, and culture is a deeper sense of how people act in the school (Kane et al., 2016). A toxic environment can sabotage both. Such an environment could be characterized as lacking a clear sense of purpose, having norms that reinforce inertia, school personnel that blame students for lack of progress, discouragement of collaboration, and often having actively-hostile relations among staff (Deal & Peterson, 2016). Researchers have found that mindfulness-based practices can positively influence the culture and climate of a school through reducing stress and anxiety, improving emotional regulation, and enlarging capacity for compassion and empathy (Greenberg, 2012; Lutz, Brefczynski-Lewis, Johnstone, & Davidson, 2008; Tang, 2014).

History of Mindfulness

Mindfulness has recently become a huge phenomenon and multi-billion-dollar industry in the United States (Wilson, 2014). Mindfulness’s origin is diverse, including being generally traced to eastern religions practice of nonjudgmentally allowing thoughts and feelings to come and go, in the moment, without attaching to any one, as part of a spiritual journey (Aitken, 2013). Along with integrating elements of yoga with the religious mediation, mindfulness aspects have been applied in human endeavors for thousands of years; mindfulness practice, though having its beginnings in eastern religions, has roots in and has been found beneficial by other religions. This includes not just Hindus and Buddhist, but others such as Muslims and Christians (Morales-Knight, 2011; Trousselard, Steiler, Claverie, & Canini, 2014).

Historically the arrival of mindfulness and its introduction to Western culture is most-often attributed to Jon Kabat-Zinn (Shea, 2016). Kabat-Zinn, Professor of Medicine Emeritus and creator of the Stress Reduction Clinic and the Center for Mindfulness in Medicine, Health Care, and Society at the University of Massachusetts Medical School, was first introduced to the philosophy of Buddhism while he was a student at MIT (Shea, 2016). Kabat-Zinn in the 1970s, influenced by the writings of a Buddhist monk, began using mindfulness meditations in his work with chronic pain sufferers. Having received his Ph.D. in molecular biology from MIT in 1971 in the laboratory of Nobel Laureate Salvador Luria, Kabat-Zinn founded the Mindfulness-Based Stress Reduction Clinic in 1979, and the Center for Mindfulness in Medicine, Health Care, and Society in 1995 (“History of MBSR,” 2016). Kabat-Zinn adapted Buddhist teachings on mindfulness when he developed the Stress Reduction and Relaxation Program (Shea, 2016; Zenner et al., 2014). He later renamed the program “Mindfulness-Based Stress Reduction” (MBSR), removing the Buddhist framework and eventually downplayed any connection between mindfulness and Buddhism, instead putting MBSR in a secular context as it is used today in the United States (Shea, 2016).

Mindfulness in the Mainstream

It has now been over 30 years since Kabat-Zinn introduced mindfulness as a resource into clinical research and practice through the Mindfulness-Based Stress Reduction Program (Zenner et al., 2014). Kabat-Zinn’s program includes psycho-education and advances the ideas of being nonjudgmental, accepting, letting go, and patience toward others (Kabat-Zinn, 2003). In addition to teaching concepts like remaining calm, demonstrating patience, and being nonjudgmental, mindfulness can have a positive effect on treatment of health issues as well. Studies have proven, through research and meta-analyses, that mindfulness can be effective in

relieving symptoms of an assortment of stress-related and clinical health issues such as reducing stress, increasing well-being, strengthening immune functions, and promoting personal development such as self-compassion, empathy, and perspective taking (Zenner et al., 2014).

Mindfulness-based practices (MBPs) continue to emerge out of the confluence of different epistemologies including Western culture, business, and educational environments (Crane, 2017). The empirical evidence is becoming increasingly strong that mindfulness practice is beneficial in a multitude of ways (Dimidjian & Segal 2015; Khoury et al., 2013). The work of Kabat-Zinn and others who have brought mindfulness from a Buddhist context into the Western culture has made mindfulness practice more accessible in the secular setting. Many recent mindfulness curriculums, programs, and practices are secular insofar as their central aim is not to instill a particular set of beliefs but to support introspective practices that help to improve relationships, reduce stress, and enhance well-being (Brensilver, 2016). Those who integrate mindfulness into their lives are not necessarily declaring metaphysical truths but rather are attempting to cultivate attention in such a way that they improve daily living through struggling less and having more joy (Garland, Farb, Goldin, & Fredrickson, 2015; Khoury et al., 2013).

Mindfulness in Schools

Mindfulness can be an effective response to improving school climate and culture as well as teacher stress. Sofer (2017) stated:

Working in the educational system can be as challenging and exhausting as it can be meaningful and rewarding. For those engaged in teaching children and youth, finding ways to nourish ourselves is essential...to do any kind of work – and especially the demanding work of education and service – requires both external and internal resources. We need resilience and strength to persevere through challenges. And there's nothing quite like joy to bring resilience and strength to the heart (para. 1).

Mindfulness incorporates development of being receptive to the moment, being aware of thoughts, emotions, sensations, empathy, and being aware in the moment, each of which can open one up to joy. When educators rediscover joy, doors are opened to improved climate and culture. When teachers learn and practice mindfulness, they not only reap personal benefits such as reduced stress and burnout but their schools do as well (Flook et al., 2013). In randomized controlled trials teachers who learned mindfulness reported greater efficacy in doing their jobs (Jennings et al., 2013).

Recent research suggests that teaching is one of the most stressful occupations in the United States; high levels of stress are affecting teacher health and well-being, causing teacher burnout, lack of engagement, job dissatisfaction, poor performance, and high numbers of professionals leaving the field (Greenberg et al., 2017). Further, the researchers state there are four main sources of teacher stress: school organizations that lack strong principal leadership, a healthy school climate and a collegial, supportive environment; job demands that are escalating with high-stakes testing, student behavioral problems, and difficult parents; work resources that limit a teacher's sense of autonomy and decision-making power; and teacher social and emotional competence to manage stress and nurture a healthy classroom (Greenberg et al., 2017). When high job demands and stress are combined with low social-emotional competence (SEC) and classroom management skills, poor teacher performance and attrition increase (Montgomery & Rupp, 2005).

Further, mindfulness holds promise in the search for ways to help promote positive student academic performance and behavior. Mindfulness can enhance emotional regulation and cognitive performance; a mindful approach may be especially beneficial in high-stakes academic testing environments in which anxious thoughts may disrupt cognitive control (Bellinger,

Decaro, & Ralston, 2015). Due in large part to its positive impact on emotion regulation and cognitive control, mindfulness-based practices have been attributed as beneficial to educational practice and readiness to learn (Bakosh, Snow, Tobias, Houlihan, & Barbosa-Leiker, 2015; Zenner et al., 2014). Researchers and educators have become increasingly interested in examining the impact of mindfulness on schools. Some studies have found a positive relationship between mindfulness and educationally-relevant outcome measures (Bakosh et al., 2015; Ramsburg & Youmans, 2014). In fact, Zenner et al. (2014) found that school-based mindfulness interventions lead to improvements on a range of attention, creativity, and social-emotional learning measures.

Mindfulness's Impact on Academic Performance

Bellinger et al. (2015) posited that there are several reasons behind mindful practice being helpful in educational settings, including the areas of attention control, emotional regulation, and test anxiety. Additional benefits include cognitive outcomes such as attention and focus and academic performance (Schonert-Reichl et al., 2015).

Negatively-biased cognition and rumination has been shown to decrease with mindfulness practice as well (Frewen, Evans, Maraj, Dozois, & Partridge, 2008; Kiken & Shook, 2012). Bellinger et al. (2015) stated one proposed explanation for this relationship is that individuals practicing mindfulness are better at decentering—letting anxious and negative thoughts pass without further elaboration or rumination. Further, Keng, Gruber, and Gray (2013) found that there is empirical research to support that mindfulness can facilitate the discontinuation of such automatic mental operations. It is reasonable then to assimilate that if mindfulness practice enables individuals to regulate anxious thoughts, then an individual's working memory may be less likely to be distracted, improving classroom performance

(Bellinger et al., 2015). Miyake and Shah (1999) define working memory as the mental workspace used to attend to thoughts relevant to the task at hand while inhibiting irrelevant or intrusive thoughts. Mindfulness-based interventions in school-aged children show potential in providing positive results, particularly as it relates to improving cognitive performance and resilience to stress (Zenner et al., 2014). Mindfulness has been found to reduce ruminative tendencies (Ramel, Goldin, Carmona, & McQuaid, 2004) and the negative effects of cognitive reactivity (Kuyken et al., 2010).

In addition to potentially reducing rumination and negatively-biased cognition in completing routine classroom expectations, mindfulness shows promise in reducing test anxiety as well, and, therefore, improving overall academic results. Studies such as Decaro, Rotar, Kendra, and Beiock (2010) have supported the notion of increased worries and negative rumination in high-stakes testing situations. Additional studies (Beilock & Carr, 2005; Bellinger et al., 2015; Chapell et al., 2005; Cunha & Paiva, 2012) found that test anxiety can be viewed as a form of emotion dysregulation that contributes to increased worries and negative self-criticism, as well as being associated with lower academic performance at every educational level. Such anxiety is thought to disrupt cognitive processing by compromising ongoing activity in working memory (Ashcraft, 2002). Working memory capacity is used in managing cognitive demands and regulating emotions; persistent and intensive demands, such as those experienced during high-stress intervals, may deplete working memory capacity and lead to cognitive failures and emotional disturbances (Jha, Stanley, Kiyonaga, Wong, & Gelfand, 2010).

The idea of working memory has replaced short-term memory as a construct, yet the idea remains that one only holds on to memories for as long as he or she needs them for the current thought process (Berman, 2016). Further, Berman stated, research suggests that working memory

plays a role in a person's outlook; those with a greater ability to process information are better equipped to block out negative influences while others are more likely to become depressed. Alloway and Horton (2016) found that there was a positive correlation between those with a stronger working memory and a sense of optimism; their study's conclusion was that a solid working memory helps people focus on achieving a positive outcome, ignoring negative thoughts. Mindfulness, Bellinger et al. (2015) wrote, may benefit performance in high-stakes academic situations by allowing students to devote greater attention to the test rather than to negative anxieties that consume valuable working memory resources. Further studies that support the notion of mindfulness decreasing test anxiety and thus increasing test performance include Cunha and Paiva (2012) and Napol, Krech, and Holley (2005), each of which found that mindfulness-based practice is associated with less test anxiety.

Bellinger et al. (2005) conducted a pair of studies that reinforced the thought that mindfulness practice has a positive impact on high-pressure testing situations in students. The first of these studies suggested that dispositional mindfulness reduced anxiety in a high-pressure testing situation and thus indirectly improved math accuracy. The researchers found in Study 1 that the effect of mindfulness was selective to problems that place a high demand on working memory. It should also be noted that their Study 1 results were consistent with previous research that demonstrated that high-pressure situations can disrupt the working memory needed to solve high-demand problems (Beilock & Carr, 2005; Decaro et al., 2010). Additionally, the researchers in these studies suggested that dispositional mindfulness can reduce the anxiety experienced in a high-stakes testing situation, freeing the working memory resources needed for optimal performance. Dispositional mindfulness is defined as people's awareness and attention to what they are thinking and feeling in the moment (Loucks, 2014). In their second study

Bellinger et al. (2005) reinforced the findings of their first study while extending findings related to mindfulness and academic performance. Study 2 included performance measures in both low-stakes assignments such as homework and high-stakes assignments such as quizzes and exams. The researchers examined the selective impact of mindfulness on these two types of assignments and found that in high-stakes testing the impact of dispositional mindfulness was measurable in reducing the anxiety toward high-stakes testing and quizzes and therefore indirectly benefited academic performance by reducing test anxiety. Bellinger et al. found that the impact of dispositional mindfulness on low-stakes assignments were negligible, which reflects the thought that in high-anxiety situations mindfulness provides value to those who implement it.

Researchers in previous studies demonstrated that performance on working memory-demanding problems is decreased by the increase of worries and negative thoughts (that high-pressure testing situations increase worries and negative thoughts, selectively impairing performance on working memory-demanding problems (Beilock & Carr, 2005; Bellinger et al., 2005). Research is consistent with the idea that mindfulness has the potential to buffer individuals against the negative impact of worries and intrusive thoughts, protecting working memory resources, and that, as a result of mindfulness practice, individuals can devote working memory resources to solving test questions. (Beilock & Carr, 2005; Bellinger et al., 2005; Cunha & Paiva, 2012; Jha et al., 2010; Napol et al., 2005).

Mindfulness's Impact on Student Behavior

Most educational professionals, policy makers, and other stakeholders agree that at the end of a student's educational journey, he or she should be proficient in core academic subjects, able to work well with others from diverse backgrounds in socially and emotionally skilled ways, practice healthy behaviors, and behave responsibly and respectfully (Association for Supervision

and Curriculum Development, 2007; Greenberg et al., 2003). Schools have an important role to play in rearing healthy children by fostering not only their cognitive development but also their social and emotional development (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

To this end researchers in prior studies have suggested that school-based initiatives that promote students' social and emotional learning (SEL) can enhance children's success in school and life (Elias et al., 1997; Zins & Elias, 2006). Today's schools are increasingly multicultural and multilingual with students from diverse social and economic backgrounds; educators and other stakeholders serve students with different motivation for engaging in learning, behaving positively, and performing academically (Weissberg, 2016). Social and emotional learning provides a foundation for safe and positive learning, and enhances students' ability to succeed in school, careers, and life (Durlak, Domitrovich, Weissberg, Gullotta, & Comer, 2017).

Social and emotional learning's role in education continues to grow, aiming to foster core social and emotional competencies such as self-awareness, self-regulation, initiating and maintaining healthy relationships, and treating others with respect and care (Maloney et al. 2016). Durlak et al. (2011) stated that over time mastering SEL competencies resulted in a developmental progression that led to a shift from being predominantly controlled by external factors to acting increasingly in accord with internalized beliefs and values, caring and concern for others, making good decisions, and taking responsibility for one's choices and behaviors.

Effective mastery of social-emotional competencies is associated with greater well-being and better school performance; lack of competence in these areas can lead to a variety of personal, social, and academic difficulties (Eisenberg, 2006; Guerra & Bradshaw, 2008; Masten & Coatsworth, 1998; Weissberg & Greenberg, 1998). Not only can social and emotional learning curriculums promote students' academic achievement, it can also help students learn

how to interact in socially-skilled and respectful ways; practice positive, safe, and healthy behaviors; contribute ethically and responsibly to their peer group, family, school, and community; and possess basic competencies, work habits, and values as a foundation for meaningful employment and engaged citizenship (Elias et al., 1997; Jackson & Davis, 2000; Jennings & Greenberg, 2009; Osher, Dwyer, & Jackson, 2002). By integrating mindfulness as an aspect of the social learning curriculum, it can lead to great impact, including increased academic achievement and well-being, less risky behavior, and better relationships with peers and teachers (Lantieri & Zakrzewski, 2015).

Mindfulness in education seems to complement social emotional learning programs. The two approaches have similar goals: both aim to teach students how to build self-awareness, effectively handle their emotions, and empathetically manage their relationships (Davis, 2015). Thus, effective social emotional learning programs often incorporate mindfulness as an important aspect.

Mindfulness-based interventions (MBIs) are secular programs featuring the goal of promoting holistic development and well-being (Cullen, 2011; Maloney et al., 2016; Roeser, 2014). Mindfulness offers a specific type of mental training with the aim of cultivating mindful awareness; a key aspect of MBIs is the mindful awareness: an unbiased present-centered awareness that is accompanied by states of clarity, compassion, and equanimity (Kabat-Zinn, 2003; Roeser, 2013). As Grossman (2015) pointed out, mindful awareness is developed through practicing specific training techniques with an attitude of open-heartedness, curiosity, kindness, patience, perseverance, and acceptance of what unfolds during practice. Additionally, mindful awareness can be cultivated by practicing moment-to-moment awareness of objects, sensations, and emotions, accepting them as they arise without attempting to evaluate, change, or control the

experience (Maloney et al., 2016). Keng, Smoski, and Robins (2011) noted, following review of many years of empirical studies, there has been a convergence of evidence over the past few decades demonstrating that participation in MBIs increases psychological well-being and leads to greater satisfaction with life in both clinical and nonclinical populations. In addition, studies have resulted in evidence that mindfulness training may also improve cognitive abilities such as attention, working memory, and inhibitory control (Chiesa, Calati, & Serretti, 2011; Jha et al., 2010) as well as encouraging prosocial action (Condon, Desbordes, Miller, & DeSteno, 2013), all of which can play large roles in and be beneficial to educational SEL curriculums and corresponding educational learning environments.

Quality social-emotional learning helps create more engaging schools and prepares students for the challenges of the world through competencies such as self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (Weissberg, & Cascarino, 2013). Productive core components of mindfulness practice that seamlessly integrate into this type of SEL program include attention awareness practices that have been identified to promote children's executive functions through the cognitive control abilities, along with practices that strengthen the prefrontal cortex (PFC) that organize, sequence, and regulate behavior as well as improving the regulation of stress, well-being, and prosociality (Maloney et al., 2016). Additionally, the MBIs are backed by research and theory in positive psychology that suggests that practicing gratitude and performing acts of kindness bolster one's sense of well-being and happiness (Emmons & McCullough, 2003; Layous & Lyubomirsky, 2014; Lyubomirsky & Layous, 2013) as well as increasing compassion for one's self and others (Birnie, Speca, & Carlson, 2010; Condon et al., 2013).

Focused Training Improves Concentration and Attention

One of the core benefits of the meditation aspects of mindfulness as it relates to school is that the focused-attention training improves one's ability to concentrate (Walton, 2015). Mrazek, Franklin, Phillips, Baird, and Schooler (2013) found that cultivating an environment of mindfulness practice for as little as 2-weeks decreased mind-wandering and improved cognitive performance. Mindfulness training is an effective and efficient technique for improving cognitive function, with wide-reaching consequences; given that the ability to attend to a task without distraction underlies performance in a wide variety of contexts, training one's ability to stay on task should result in a similarly broad enhancement of performance.

Further, in a study comparing the performance of concentrative- and mindfulness-meditators on a test of sustained attention (Wilkins' counting test) versus those of control groups, both groups of meditators demonstrated superior performance on the test of sustained attention in comparison of those controls (Valentine & Sweet, 1999). Jensen, Vangkilde, Frokjaer, and Hasselbalch (2012) also found that mindfulness-based stress reduction interventions significantly improved selective attention, supported by a blinded-design study including control groups. This study also found that MBSR intervention improved the threshold for conscious perception and visual working memory capacity, along with mindfulness' stress-reducing effects being supported as those in the study's MBSR group showed significantly less perceived and physiological stress.

Foundation in Neuroscience

Mindfulness has the potential to provide educators and students alike practical skills for self-care; effective mindfulness practices can be integrated into the school day and adapted for

diverse environments through the neuroscience-backed blending of self-care, focused-attention training, practice in prosocial skills, practical stress-mitigation techniques, and being aware in the moment (“About Mindful Schools,” n.d.). Research supported by neuroscience is an important aspect of why mindfulness practice ties in so well with school SEL programs, as studies support the belief that those who practice mindfulness regularly actually experience positive changes in the structure of the brain (Walton, 2015). Both Hozel (2011) and in a follow-up study by Singleton (2014) reinforced this statement, reporting that mindfulness-based stress-reduction practice increased cortical thickness in the hippocampus, which governs learning and memory, and in certain areas of the brain that play roles in emotion regulation and self-referential processing.

Hozel (2011) also found that there were also decreases in brain cell volume in the amygdala, which is responsible for fear, anxiety, and stress; these changes matched the participants’ self-reports of their stress levels, indicating that meditation not only changes the brain, but it changes our subjective perception and feelings as well. Further, Singleton (2014) later found that after meditation training, changes in brain areas linked to mood and arousal were also linked to improvements in how participants said they felt; mindfulness changed their psychological well-being in a positive way.

In addition to changes in the hippocampus, researchers found physical improvements in the both the amygdala and prefrontal cortex areas of the brain. The studies of Lutz, Slagter, Dunne, and Davidson (2008) and Desbordes et al. (2012) found that the amygdala is aroused when detecting and reacting to emotions, especially difficult or strong emotions such as fear; however, the amygdala is less activated and has less gray matter density following mindfulness training. Amygdala gray matter volume (GMV) or density is correlated with magnitude of

stress and anxiety in the normal population as well as a neural signature of a variety of emotion-related disorders such as major depressive disorder, bipolar disorder, borderline personality disorder, and posttraumatic stress disorder (Li et al., 2011). Along with changes in the brain areas of the hippocampus and amygdala, mindfulness practice has also resulted in a more activated prefrontal cortex (Chiesa & Serretti, 2010). The prefrontal cortex portion of the brain has been implicated in planning complex cognitive behavior, personality expression, decision making, and moderating social behavior (Dahlitz, 2017).

Overall Salutary Effects for Students, Teachers, and School Administrators

Brown, Ryan, and Creswell (2007) found that studies examining the relationship between mindfulness practice and degree of change in affective, behavioral, and neurophysiological outcomes have reported positive findings, further supported by Carson et al. (2004) as well as Shapiro, Bootzin, Figueredo, Lopez, and Schwartz (2003). Additionally, researchers have shown that significant changes in dispositional mindfulness can occur over the course of and following participation in the MBSR program (Cohen-Katz et al., 2005; Shapiro, Brown, & Biegel, 2006), and that such changes are related to positive mental health outcomes (Shapiro, Carlson, & Astin, 2006). Further, Brown et al. (2007) reported that research suggests mindfulness has positive psychological, somatic, behavioral, and interpersonal effects. Other researchers have found mindfulness practice directly beneficial as well, including social-emotional skills such as emotion regulation (Metz et al., 2013) and social-skills (Barnes, Bauza, & Treiber, 2003).

As mindfulness-based practices relate to students, researcher Schonert-Reichl et al. (2015) published a study that found children who received a social and emotional learning (SEL) program involving mindfulness and caring for others improved cognitive control, reduced stress, promoted well-being and being prosocial, and produced positive school outcomes. They

concluded that students who went through the SEL curriculum that included mindfulness improved more in their cognitive control and stress physiology. Additionally, the researchers found that students reported greater empathy, perspective-taking, emotional control, optimism, school self-concept, and mindfulness. Students also showed greater decreases in self-reported symptoms of depression and peer-rated aggression, were rated by peers as more prosocial, and increased in peer acceptance (or sociometrical popularity). Researchers reported that results of this investigation supported the implementation of mindfulness-based interventions to cultivate students' overall well-being.

There have been several studies relating mindfulness-based practices to teachers as well that supported the use of MBSR interventions (Flook et al., 2013; Richardson & Rothstein, 2008; Roeser et al., 2013). Roeser et al. conducted a study including a sample of 113 elementary and secondary school teachers from Canada and the United States, with measures being collected at baseline, postprogram, and 3-month follow-up. Participants in this study were randomly assigned to condition after baseline assessment. Researchers found that, compared to those in the control condition, teachers in the intervention condition reported large declines in occupational stress and symptoms of burnout, anxiety, and depression. The size of these program effects were large and on par with those reported in a meta-analysis of occupational stress management interventions that rely on cognitive-behavioral techniques (Richardson & Rothstein, 2008). An additional study that supports the notion of improved health effects through mindfulness was conducted by Flook et al. (2013). Researchers also found that MBSR shows promise as an intervention, as participants demonstrated significant reductions in psychological symptoms and burnout, improvements in observer-rated classroom organization and performance on a computer task of affective attentional bias, and increases in self-compassion. In contrast, control group

participants showed declines in cortisol functioning over time and marginally significant increases in burnout. Furthermore, changes in mindfulness were correlated in the expected direction with changes across several outcomes (psychological symptoms, burnout, sustained attention) in the intervention group.

Lastly, as mindfulness-based practices relate to school administrators, there is research supporting benefits as well. Ultimately responsible for their school's culture and climate, school administrators, Fullan (2011) wrote, can improve the school environment by cultivating the welfare of others. Researchers have found that MBSR practices can have a large impact on how stakeholders experience the school environment through promoting both self-care and being concerned for the welfare of others (Flook et al., 2013; Jennings et al., 2012; Jennings et al., 2017; Roeser et al., 2013). Further studies have resulted in the notion that mindfulness-based practices can positively influence the culture and climate of a school through reducing stress and anxiety, improving emotional regulation, and enlarging capacity for compassion and empathy (Greenberg, 2012; Lutz et al., 2008; Tang, 2014). Mindfulness can be a key resource for educational leaders by using MBSRs learn to breathe through disequilibrium as well as pause in the volatility and complexity of their jobs (Brown & Olson, 2015). Additionally, Brown and Olson (2015) posited that when individuals learn to be more present and caring of themselves, they are better equipped to be able to accept uncertainty, ambiguity, and challenges with less inner turmoil, and by practicing mindfulness administrators can develop a calmer school environment for all stakeholders.

Chapter Summary

The review of literature as it relates to mindfulness and its potential impact on schools and stakeholders has found clear, research-based evidence that supports the notion that

mindfulness practices can have a positive impact on students, faculty, and administrators. A quality administration team plays a large role in reaching educational goals (Blasé et al., 2010; Lynch, 2015; Tutt & Williams, 2012). Leadership has significant effects on student learning, second only to the effects of the quality of curriculum and teachers' instruction (Leithwood & Riehl, 2003). Flook et al. (2013) noted that educators, in addition to facilitating learning, also play a large role in a child's social and emotional development. This social and emotional development is accomplished through daily interactions and the cultivating of a school culture and climate that is conducive to positively impacting stakeholders. Researchers have found that mindfulness-based practices can positively influence the culture and climate of a school through reducing stress and anxiety, improving emotional regulation, and enlarging capacity for compassion and empathy (Greenberg, 2012; Lutz et al., 2008; Tang, 2014).

Further, the researchers found, when schools implement and practice mindfulness, student outcomes are enhanced both emotionally and academically, faculty members reap personal and professional benefits such as reduced stress and burnout, and school culture has been shown to improve as well (Flook et al., 2013). This is important for both the current academic environment as well as future impacts, as a student's experience in the classroom is among the most important predictors for well-being and success in school (Eccles & Roeser, 2011; Jennings & Greenberg, 2009).

MBSR incorporated into school curriculums shows promise not only as a way of reducing teacher stress (Harris, Jennings, Katz, Abenavoli, & Greenberg, 2015; Jennings et al., 2013; Roeser et al. 2013; Schussler, Jennings, Sharp, & Frank, 2015; Taylor et al. ,2015) and improving performance (Jennings et al., 2015) but also help to prepare educators with the skills required to present mindfulness practice to students effectively as well, thus positively impacting

the students social and emotional development (Jennings et al., 2015; Schonert-Reichl et al. 2015).

Review of current literature resulted in the researcher determining that educational leaders, teachers, and students all receive benefits when a school includes mindfulness in its day-to-day operations. Studies performed that support mindfulness' impacts on students include, among others, Schonert-Reichl et al. (2015), who found that students who received a social and emotional learning (SEL) program involving mindfulness improved cognitive control, experienced a reduction in stress, an increase in general well-being and being prosocial, and improved positive school outcomes. Several studies have supported teacher benefits as well. Flook et al. (2013) showed that mindfulness resulted in significant reductions in teacher psychological symptoms and burnout, improvements in observer-rated classroom organization and performance, and increases in self-compassion. Jennings et al. (2013) found that teachers who learned mindfulness reported greater efficacy in doing their jobs. Furthermore, as mindfulness relates to educational leaders, research has shown potential for a large positive impact as well through not only personal experience that reduce stress and anxiety (Harris et. al., 2015; Jennings et al., 2013; Levasseur, 2012; Roeser et al., 2013; Schussler et al., 2015; Taylor et al. 2015) but also cultivate a school environment that reduces stress and anxiety for others, improving emotional regulation, and enlarging capacity for compassion and empathy (Greenberg, 2012; Lutz et al., 2008; Tang, 2014). The actions of administrators, the management style of the principal, as well as the school's organizational culture and climate, can affect a teacher's sense of well-being and, therefore, have an effect on student behavior and achievement (Fullan, 2011; Prilleltensky et al., 2016).

As a result of this literature review, the researcher supports mindfulness as a way to affect positive change in not only students but faculty and other stakeholders as well. Studies indicate that mindfulness practice can play an important role in helping all involved in school develop and implement the tools to live a happier, more productive life. Through a blending of neuroscience, practical application activities, the latest research-based scientific studies, mindfulness can provide specific benefits for both educators and students.

CHAPTER 3

RESEARCH METHODOLOGY

Introduction

The purpose of this qualitative phenomenological case study was to describe the transformation of culture for faculty and students at Marysville K-8 School (Portland Public Schools, Portland, OR) through the implementation of mindfulness. Research methodology is the overall strategy that a researcher chooses to complete a study, composed of different aspects of the study and arranged in a coherent and logical way, therefore ensuring that the study will properly address the research problem. It constitutes the blueprint for the collection, measurement, and analysis of data; of note is the point that the research problem determines the type of design that should be used, as opposed to first deciding on a design strategy and then attempting to fit the research problem into that design (de Vaus, 2001). Therefore, the type of methodology should be determined by the research problem. To further clarify, Creswell (2014) stated that research approaches are plans and procedures for research that span the steps from broad assumptions to detailed methods of data collection, analysis, and interpretation.

A type of qualitative research methodology phenomenology attempts to gather information by focusing on and describing a phenomenon in a deep comprehensive manner, generally accomplished through interviews, open-ended questions, or focus groups. Phenomenological interviews can vary from being highly structured and guided by open-ended questions to being less structured and take the form of a conversational interview (Ben-Eliyahu, 2017).

Research Questions

1. How do teachers perceive the impact of mindfulness on school culture?
2. How do teachers perceive the impact of mindfulness on student learning?
3. How do teachers perceive the impact of mindfulness on relationships within the school?
4. What factors do teachers perceive as essential to the implementation of mindfulness in a school?

Qualitative Design

Qualitative methods are, first and foremost, research methods; the qualitative approach to research is a way to determine what people do, know, think, and feel by observing, interviewing, and analyzing documents. Qualitative methods are used in both research and evaluation (Patton, 2002). Qualitative research is a form of inquiry that analyzes information conveyed through language and behavior in natural settings; it is used to capture expressive information not conveyed in quantitative data about beliefs, values, feelings, and motivations that underlie behaviors (Berkwits & Inui, 1998). The purpose statement of a qualitative study provides the purpose, major objective, or phenomenon to be researched. Research questions serve to focus in or narrow the purpose. Maxwell (2005) stated that research questions should explain specifically what a study will attempt to learn or understand.

Included in types of qualitative research methods is the phenomenological approach. Phenomenology was described by Patton (2002) as focusing on exploring how human beings make sense of experience and transform experience into consciousness, both individually and as shared meaning. “This requires methodologically, carefully, and thoroughly capturing and

describing how people experience some phenomenon – how they perceive it, describe it, feel about it, judge it, remember it, make sense out of it, and talk about it with others” (Patton, 2002, p. 104).

The phenomenological approach was chosen for this study in order to gain a deeper understanding of the change in culture on a variety of levels brought on through the implementation of mindfulness. Qualitative research allowed for a deeper review of the topic as well as researching insights and contributing factors that led to a more in-depth understanding of the culture change.

Creswell (1998) wrote that the best criterion to determine the use of phenomenology is when the research problem requires a profound understanding of human experiences common to a group of people. As the 1990s progressed the term *culture* was beginning to gain popularity, especially in the use of qualitative research methods. Studies featuring the qualitative approach emphasize in-depth observations in the environment being studied, developing rich narrative descriptions, and then searching for patterns and themes (Hall & Hord, 2015).

It is with this definition in mind that the researcher for this study chose this approach. The goal is to study the phenomenon of change in school culture as a result of the implementation of mindfulness. To conduct the research faculty members at Marysville K-8 were interviewed. The participants that made up the study sample were selected due to being part of the school faculty, and they have real-world, practical experience in implementing mindfulness practice both before the implementation of mindfulness as well as after. This is purposive sampling. Purposive sampling is characterized by the incorporation of specific, preselective criteria met by the participants at the moment of selection (Padilla-Díaz, 2015). The goal of qualitative research is to provide in-depth understanding and, therefore, targets a specific

group, type of individual, event, or process. To accomplish this goal qualitative research focuses on criterion-based sampling techniques to reach their target group (Luborsky & Rubinstein, 1995).

Data analysis were completed through coding of the interviews following their transcription, as well as analysis of other documents such as aggregate disciplinary records, teacher satisfaction surveys, and teacher retention reports.

Role of the Researcher

The researcher determined that the research problem was best examined using the phenomenological approach of qualitative research. The phenomenon of teacher perception of change through the implementation of mindfulness was identified.

In qualitative research Patton (2002) wrote that the researcher is the instrument. Further, Patton (2002) also stated that the credibility of the qualitative phenomenological study relies to a great extent on the skill of the researcher. The competence of the researcher administering the instrument greatly impacts the study. Additionally, Guba and Lincoln (1981) wrote concerning this process that the differences in skill of the researcher can impact the data collected; thus, the researcher's role in collecting information relies on the skill, competence, and experience of the human instrument.

Qualitative research, and phenomenology specifically, focuses on understanding how human beings experience their world; it gives researchers the opportunity to understand the subjective experiences of participants (Smith, Jarman, & Osborn, 1999). Phenomenology is best applied when the research problem requires a profound understanding of human experiences common to a group of people (Creswell, 2002). The most common source of data collection in

qualitative studies is the interview (Merriam, 2001), with the person-to-person format being most prevalent, though occasionally group interviews and focus groups are conducted. These qualitative interviews range from a highly-structured style, featuring questions that are determined before the interview, to an open-ended, conversational format, though the typical format for the interview uses the more open, and less structured, approach (Merriam, 2001). Frequently, the interviewer asks the same questions of all the participants, but the order of the questions, the exact wording, and the type of follow-up questions may vary considerably (Thomas, Nelson, & Silvermann, 2001).

A gatekeeper controls access to the research. Saunders (2006) explained that an example of a gatekeeper might be a senior executive in an organization, or the person within a group or community who makes the final decision as to whether to allow a researcher access to undertake the research. Gaining access to undertake social research can be problematic. Friends, contacts, colleagues, and others may be willing to vouch for a researcher and the value of the research and act as research sponsors. However, unless permission has been granted by a gatekeeper from within the group, community, or organization in which it is planned to undertake the research, it is unlikely that access will be allowed in practice (Saunders, 2006). Therefore, gatekeeping is a necessary component within qualitative studies and consequently can affect the research endeavor in a number of ways by limiting conditions of entry, by defining the problem area of study, by limiting access to data and respondents, by restricting the scope of analysis, and by retraining prerogatives with respect to publication (Broadhead & Rist, 1976).

Gatekeepers and participants interpret what they are asked to do in their own social context (Feldman, Bell, & Berger, 2003). Also, Berg (2004) noted that researchers must learn the social structure of a research site to successfully negotiate entry. Gaining access is based on

building relationships with gatekeepers, which has the potential to be an unpredictable, uncontrollable process (Feldman et al., 2003).

Typically researchers will negotiate access with influential gatekeepers at multiple entry points to the research site (Marshall & Rossman, 2006; Patton, 2002). The gatekeepers for this study site ranged from the Portland Public School System's Research, Evaluation, & Assessment Department committee members to the principal of the school. Informal gatekeepers within the organization also often protect research settings and participants, particularly vulnerable individuals such as the students and the classroom setting. The informal gatekeepers for this study were teachers, educational assistants, and office personnel. Formal gatekeepers in positions of power included the Institutional Review Board (IRB) for research at East Tennessee University, the Research, Evaluation, and Assessment Department of the school system, and the principal of the school. These gatekeepers have the authority to grant official permission and sponsor research for specific entry points (Berg, 2004).

The researcher conveyed to gatekeepers or individuals in authority both at the central office and school level how the research provided the least disruption to the activities at the site (Creswell, 2012). The researcher also obtained formal permission for this study through approval of the written research proposal to conduct document analysis such as aggregate student disciplinary information, aggregate achievement results, attendance records, and teacher retention records.

Interviews were conducted in an office setting in the school where the phenomena took place. The school's principal and chief building administrator assisted in arranging the logistics of the interviews. Each interview was voice-recorded and transcribed. The investigator communicated that participation in the study was voluntary and subjects could withdraw from

the study at any time. No benefits, to which the subjects were otherwise entitled, were lost upon withdrawal.

Ethical Considerations

Qualitative researchers face ethical challenges in all stages of the study, including anonymity, confidentiality, informed consent, and researchers' potential impact on the participant (Sanjari, Bahramnezhad, Fomani, Shoghi, & Cheraghi, 2014). Ethics should be considered both for the data collection process and procedures while equally ensuring ethical practices in the writing and reporting phases of the research (Creswell, 2012). When considering the nature of qualitative studies, the interaction between researchers and participants should be recognized as ethically challenging for the researchers, as they are personally involved in different stages of the study (Sanjari et al., 2014). It is of vital importance that researchers be well-informed of all the different aspects of their roles, as well as the roles of participants, when conducting research and anticipate any ethical issues that may arise and prepare accordingly (Creswell, 2014). Researchers who carry out phenomenological research have an immense responsibility as there is no statistical analysis in qualitative studies. The researcher has to both evaluate what is observed and to interpret it (Sanjari et al., 2014). These considerations were applied to this study, and the researcher adhered to ethical procedural protocol.

The researcher in this study obtained approval from both the Portland Public School's System Planning and Performance Department and the Human Research Protection Program at East Tennessee State University (ETSU) prior to beginning the research. The research study received both approvals before beginning the investigation into the phenomenon of teacher perception of change through the implementation of mindfulness; the approval letters are provided in Appendices A (PPS System and Performance Department) and B (ETSU IRB).

Additionally, the researcher completed Conduct of Human Subject research training, an ETSU/Veterans Affairs-approved course in the ethical conduct of research involving human subjects. ETSU uses Collaborative Institutional Training Initiative (CITI) courses, a web-based program designed to provide research ethics education. This is demonstrated by the final report, found in Appendix C of this dissertation.

In addition to the approval granted by ETSU's IRB and the school system's research committee, both accomplished through written proposals, approval was also sought and granted through the school's top administrator, the principal. The study's purpose, methodology, and scope were communicated by the researcher, as well as implied consent forms and interview questions. Next, through the use of purposive sampling, potential participants were identified.

The school principal aided in the scheduling and logistics of potential interview participants. The purpose of the study and participants' role as interviewees were communicated by the researcher in each interview. As was written into the informed consent that was signed by each participant, found in Appendix D, the researcher verbally reminded each participant before commencing the interview. Additionally, participants were reminded that the interview would be recorded and transcripts provided should they wish to clarify or correct any information contained in the interview. Also included in the implied consent form signed by all participants was the statement by the researcher that efforts will be made to protect individual identifiers, but, though unlikely, the potential for loss of confidentiality did exist. Both verbal permission and the signed informed consent served as ethical safeguards. Furthermore, individual participant interviewees were free to allow or disallow the use of the interview as a whole or any comments, quotations, observations, and any other information. As per IRB requirements, the researcher and informed consent document emphasized the participant's right to refuse participation, to

modify their participation following receipt of the interview transcripts, to decline to answer any questions, or to withdraw from the study at any time.

The goal of qualitative phenomenological research is to describe a "lived experience" of a phenomenon (Waters, 2017). Because this type of research is a qualitative analysis of narrative data, methods to analyze its data vary significantly from more traditional methods of research. Educational research often involves large sample sizes, but the phenomenological approach to research uses vastly fewer participants and is typically more intimate and lesser scaled (Patton, 2002). Essentially, phenomenological studies are focused on meaning, the meaning of the experience, behavior, or narrative (Waters, 2017). This study followed specific guidelines, namely, do no harm, respect participants, do not lie, treat people fairly, gain informed consent, and allow the right to withdraw (Simons, 2009).

The researcher developed, wrote, and communicated a formal written research proposal for the participating school district, the IRB application document, and informed consent documents. Each of the three documents clearly detailed the exact purpose of the research, the qualitative research methods employed, and the data collection protocols.

Setting

From elements of phenomenological study and its interrelationships, the researcher can begin to understand the nature and meaning of an experience for a particular group of people in a particular setting (Glaser & Strauss, 1967). Phenomenological research plays a role in the general objective of qualitative research in that it features development of concepts necessary to understand abstract cognition phenomena in natural settings (Creswell, 2012). Phenomenology attempts to study and understand an experience in a particular setting or context from the

participants' point of view (Leedy & Ormrod, 2001). Further, Creswell (2003) wrote that qualitative research can also be described as an effective model that occurs in a natural setting that enables the researcher to develop a level of detail from being highly involved in the actual experiences.

This study defined a natural setting to be a setting in which there is no staging of dialogue, minimal interviewer interference, and freedom to engage in semi-structured interviews with open-ended dialogue. The physical setting was Marysville K-8 School of the Portland Public School system, Portland, OR. The recorded interviews occurred during administratively-designated times at the convenience of the school and interviewee schedules during the month of September 2017.

Population

For phenomenological qualitative studies relatively few participants are needed (Morse, 1994; Sandelowski, 1995). For these studies the intent is to describe the participants' experience rather than to generalize from their experience to that of the whole population. The research goal is to describe the common features of an experience. It is important that participants share certain demographic characteristics that represent inclusion criteria for the sample (Porter, 1999).

The identified population in this study was that of 12 faculty members at Marysville K-8 school. The researcher did not attempt to generalize findings to all people or all groups but rather sought to inquire, assess, examine, and describe teachers' perception of change as a result of the implementation of mindfulness at this particular school setting. The researcher also sought to enhance and further the current body of research on school implementation of mindfulness; to

provide authentic, real-world examples and instances of mindfulness making a positive impact in school culture; and to develop further recommendations based on study outcomes.

Sampling Strategy

The participants in the phenomenological qualitative approach are usually chosen by purposive sampling; this type of sampling is characterized by the incorporation of specific, preselective criteria met by the participants at the moment of selection (Padilla-Díaz, 2015). This method of sampling helps to create a homogenous sample of participants who have all experienced the phenomenon (Creswell, 2013). The researcher in this study used purposive sampling.

Sample

An appropriate and adequate sample size for phenomenological research can be as little as 6-10 participants as the results are not meant to be generalized to the larger population. The goal generally of the interviews is to cease when extensive detail has been collected to saturation (Creswell, 2013; Haase, 1987; Morse, 1994). In this study 12 faculty members participated, with no additional participants identified and recruited once data saturation had been reached. The make-up of the sample was six classroom general education teachers, one special education teacher, one school-support staff person, two academic coaches, one community-school coordinator, and one behavior/school climate coach. Through purposive sampling techniques, participants were identified and chosen according to their academic backgrounds and experiences, with the thought that these faculty members would provide the richest information by having had the thickest exposure to the phenomenon of the culture shift via mindfulness

implementation and thus provide a wider variety of views and experiences of the targeted phenomenon (Creswell, 2012; Patton, 1990).

Data Collection Procedures

Any way the researcher can entice a research study participant to describe a lived phenomenal experience can be used to gather data in a phenomenological study (Waters, 2017). Qualitative researchers rely quite extensively on in-depth interviewing (Marshall & Rossman, 2006). Creswell (2007) wrote that there are various forms of interview design that can be developed to obtain thick, rich data using a qualitative investigational approach. Further, Patton (2002) explained that the purpose of interviewing is to allow for the researcher to enter into the participant's perspective and that qualitative interviewing begins with the assumption that the perspective of others is meaningful, knowable, and able to be made explicit.

Patton (2002) stated that there are three basic approaches to collecting qualitative data through open-ended interviews: the informal conversational interview, the general interview guide approach, and the standard open-ended interview. Additionally, Patton (2002) noted that there are strengths and weaknesses among each of the three approaches, and each serves a somewhat different purpose. For the purpose of this study the general interview guide approach was used. Characteristics of this approach are that an interview guide is prepared that lists the questions or issues that are to be explored to ensure the same basic lines of enquiry are pursued with each person interviewed (Patton, 2002). Further, the interview guide provides topics or subject areas within which the interviewer is free to explore, probe, and ask questions that will elucidate and illuminate a particular subject; thus, the interviewer is free to build a conversation within a particular subject area, to word questions spontaneously, and to establish a

conversational style but with the focus on a particular subject that has been predetermined (Patton, 2002).

The researcher in this study used the interview guide approach. A list of interview questions was developed prior to the interviews (Appendix E) to make sure to best use limited time available for each interview. Further, preparing a list of questions before hand allowed for interviewing the different participants more systematically and comprehensively by delimiting in advance the issues to be explored (Patton, 2002).

Phenomenological interviewing has been described as a conversation with a purpose (Kahn & Cannell, 1957). One of the most important aspects of the interviewer's approach is to convey the attitude that the participant's views are valuable and useful, as the interview allows the researcher to understand the meanings that everyday activities hold for people (Marshall & Rossman, 2006). Additionally, Marshall and Rossman (2006) stated interviewers should have superb listening skills and be skillful in personal interaction, question framing, and gentle probing for elaboration. The interviews in this study, conducted on-site at the school, were the first step of data collection activities. The interview protocol was structured with a predetermined set of questions that the interviewer asked every participant and, when necessary, probing or follow-up questions were asked and varied by participant. This approach allowed the interviewer to manage the interviews, keeping them within a planned framework, sequence questions, and make decisions about which informational answers to pursue in greater depth.

A second type of data collection for this study consisted of document analysis. Organizational and institutional documents have been a staple in qualitative research for many years (Bowden, 2009). Document analysis is a systematic procedure for reviewing or evaluating documents, both printed and electronic material. Like other analytical methods in qualitative

research, document analysis requires that data be examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge (Corbin & Strauss, 2008). The analytic procedure entails finding, selecting, appraising (making sense of), and synthesizing data contained in documents (Bowden, 2009). Document analysis yields data – excerpts, quotations, or entire passages – that are then organized in to major themes, categories, and case examples specifically through content analysis (Labuschagne, 2003).

Document analysis is often used in combination with other qualitative research methods as a means of triangulation; that is, the combination of methodologies in the study of the same phenomenon (Denzin, 1970). The qualitative researcher is expected to draw upon multiple (at least two) sources of evidence in an effort to seek convergence and corroboration through the use of different data sources and methods (Bowden, 2009). Yin (1994) pointed out that in addition to documents such sources could include interviews, participant or nonparticipant observation, and physical artifacts. By triangulating data Eisner (1991) stated the researcher attempts to provide the necessary evidence that lends credibility. Through the examination of information collected through different methods the researcher can corroborate findings across data sets and thus reduce the impact of potential biases that can exist in a single study (Bowden, 2009). Triangulation helps the researcher guard against the accusation that a study's findings are simply an artifact of a single method, a single source, or a single investigator's bias (Patton, 1990).

Documents can be direct written versions of transcribed interviews and observations (Owen, 2013). Additionally, Owen stated documents support description as the foundation of qualitative inquiry where both written and recorded documentation are rich in descriptive language and further facilitate the researcher's task to extract meaning from the data (Owen,

2013). The use of documents often entails a specialized analytic approach called content analysis, and as the document analysis has evolved through the years, it is viewed as a method for describing and interpreting the artifacts of a society or social group. (Marshall & Rossman, 2006).

In this study document analysis was conducted on school aggregate disciplinary records, aggregate student academic results, teacher retention data, and teacher satisfaction survey results. Descriptive coding was used as a preliminary data analysis tool. Thematic analysis is a form of pattern recognition within the data, with emerging themes becoming the categories for analysis (Fereday & Muir-Cochrane, 2006). The process involves a careful, more focused rereading and review of the data (Bowen, 2009). For this study the data sources of observation, textual interview transcription, and analysis of related documents resulted in data saturation. An appropriate amount of time was allocated for this study so as to collect meaningful data that resulted in a vivid understanding of the phenomenon of teacher perception of change of school culture as a result of the implementation of mindfulness.

Data Management

Every attempt was made to see that the study results were kept confidential, including removing potential identifiers such as participant names in interview transcripts and any names contained on any analyzed documents. The impact of mindfulness was not controversial at the study site; its implementation was not rejected to the researcher's knowledge. Because of using the name of the school where the data was collected and through some wording by participants in interview transcripts, one could potentially speculate to the attribution of the quotes. The principal investigator did not guarantee absolute anonymity. However, the principal investigator does not believe any information revealed to be controversial.

Additionally, the results of this study may be published or presented at meetings without naming participants. Pseudonyms will be used instead of names in both the demographic data and when using direct quotes from interviews; however, there is a remote possibility that someone may be able to identify participants from the demographic data. Although participant rights and privacy were maintained, ETSU IRB, the principal investigator, and the research team did have access to the study records. Records will continue to be kept completely confidential as much as possible, with records being stored on a password-protected laptop.

Measures of Rigor

Regarding results of research studies, consideration must be given to the rigor of the research, referring to the extent to which the authors of a study worked to ensure the quality of the study. Perhaps in the more well-known quantitative research this is achieved through measurement of the validity and reliability (Heale & Twycross, 2015). Validity is a term used in quantitative studies, defined as the extent to which a concept is accurately measured. A second well-known term in quantitative research, reliability, is the accuracy of an instrument; in other words, the extent to which a research instrument consistently has the same results if it is used in the same situation on repeated occasions (Heale & Twycross, 2015). Heale and Twycross provided a simple and easy to understand example of the terms in the following vignette: an alarm clock rings at 7:00 each morning, though is set for 6:30. It is very reliable (it consistently rings the same time each day), but is not valid (it is not ringing at the desired time).

Conversely, in regards to qualitative research, these issues have traditionally been more difficult; qualitative researchers argue for different standards than those used in quantitative for judging the quality of research (Trochim, 2006). Anfara et al. (2002) addressed some of the strategies that researchers have used and offered suggestions for assessing and publicly

disclosing the methodological rigor and analytical defensibility of qualitative research. Further, Anfara et al. stated that credibility, transferability, dependability, and confirmability improve the quality of research through documenting the relationship between data sources and a study's research questions, the development of themes and categories, and the triangulation of findings. The terms credibility, transferability, dependability, and confirmability in qualitative research correspond to quantitative research terms internal validity, external validity, reliability, and objectivity (Anfara et al., 2002; Trochin, 2006). These proposed qualitative terms and the analogous quantitative criteria (Anfara et al., 2002) are listed in Figure 1 below:

Figure 1

<i>Quantitative and Qualitative Criteria for Assessing Research Quality and Rigor</i>		
Quantitative Term	Qualitative Term	Strategy Employed
Internal Validity	Credibility	Prolonged Engagement in the Field Use of Peer Debriefing Triangulation Member Checks Time Sampling
External Validity	Transferability	Provide Thick Description Purposive Sampling
Reliability	Dependability	Create an Audit Trail Code-Recode Strategy Triangulation Peer Examination
Objectivity	Confirmability	Triangulation Practice Reflexivity

Figure 1. Quantitative and Qualitative Criteria for Assessing Research Quality and Rigor (adapted from Anfara et al., 2002).

Trustworthiness of a research study is important to evaluating its worth (Lincoln & Guba, 1985). Zhang and Wildemuth (2005) also discussed that the aforementioned four criteria are necessary for qualitative research: trustworthiness, credibility, transferability, dependability, and confirmability.

These four aspects were followed by the researcher in this study through the use of triangulation, thick description, purposive sampling, code-recode procedure, expert review, and reflexivity.

Credibility

The credibility criteria establish that the results of qualitative research are credible or believable from the perspective of the participant in the research (Trochim, 2006). The purpose of qualitative research from this perspective is to describe or understand the phenomena of interest from the participant's eyes because the participants are the only ones who can legitimately judge the credibility of the results ("Ensuring Credibility," 2011). Credibility is involved in establishing that the results of the research are believable. This is a classic example of quality not quantity; it depends more on the richness of the information gathered instead of the amount of data gathered ("Ensuring Credibility," 2011). There are many techniques to gauge the accuracy of the findings, such as prolonged engagement, persistent observation, both data and analyst's triangulation, peer debriefing, negative case analysis, referential adequacy, and member checking. This study used triangulation of data, triangulation through multiple analysis, and member checks to establish credibility.

Transferability

Transferability is a qualitative term to describe external validity (Anfara et al., 2012; Creswell, 2012; Suter, 2012; Trochin, 2006). Transferability is evidence supporting the generalization of findings to other contexts in which detailed descriptions enable judgments about transferability with other contexts (Suter, 2012). From a qualitative perspective transferability is primarily the responsibility of the one doing the generalizing; the researcher can enhance transferability by doing a thorough job of describing the research context and the assumptions that were central to the research (Trochim, 2006). This research study used thick description – a detailed account of experiences through data collection – and purposive sampling to enhance transferability.

Dependability

A traditional quantitative view of reliability is based on the assumption of replicability or repeatability (Trochim, 2006). Essentially, Trochim stated dependability in the qualitative paradigm is concerned with whether a study would obtain the same results if a researcher could observe the same thing twice. Dependability ensures that the research findings are consistent and could be repeated; this is measured by the standard of which the research is conducted, analyzed, and presented (“Ensuring Credibility,” 2011). Each process in the study should be reported in detail to enable an external researcher to repeat the inquiry and achieve similar results. This also enables researchers to understand the methods and their effectiveness (“Ensuring Credibility,” 2011).

Zhang and Wildemuth (2005) described qualitative research dependability as an internal coherent process of accounting for changing condition in the phenomena. The major technique

for establishing dependability and confirmability is through audits of the research processes and findings; dependability is determined by checking the consistency of the study processes. Other techniques in establishing dependability are inquiry audit, using the code-recode strategy, expert review, reflexivity, and triangulation. To establish dependability this study used code-recode strategy, expert review, inquiry audit, reflexivity, and triangulation.

Confirmability

Qualitative research assumes that each researcher brings a unique perspective to the study; confirmability refers to the degree to which the results could be confirmed or corroborated by others (Trochim, 2006). Additionally, confirmability questions how the research findings are supported by the data collected. This is a process to establish whether the researcher has bias during the study and is due to the assumption that qualitative research allows the researcher to bring a unique perspective to the study (“Ensuring Credibility,” 2011). Zhang and Wildemuth (2005) found that confirmability is determined by checking the internal coherence of the research product, such as data, findings, interpretations, and the recommendations. An external researcher can study the data collected during the original inquiry, enhance the confirmability of the initial conclusion, and an audit trail can be completed throughout the study to demonstrate how each decision was made (Trochim, 2006). There are a number of strategies for enhancing confirmability in addition to an audit trial, such as actively searching for and describing negative instances that contradict prior observations, and then, following the study, the researcher then examines the data collection and analysis procedures and makes judgements about the potential for bias or distortion (Trochim, 2006). Other techniques include reflexivity and triangulation, both of which were used in this study.

Data Analysis

Creswell (1998) stated that phenomenological data analysis proceeds through the methodology of reduction, the analysis of specific statements and themes, and a search for all possible meanings. The focus on text – the qualitative data rather than on numbers – is the most important feature of qualitative analysis; the text that qualitative researchers analyze is most often transcripts of interviews or notes from participant observation sessions (Schutt, 2017).

Also important, Moustakas (1995) explained, is establishing the truth of things, and that such truth begins with the perception of the researcher. Further, the researcher must first reflect on the meaning of the experience from the researcher's own perspective, then turn outward to those being interviewed to establish intersubjective validity, the testing of understanding with interviewees through a back-and-forth social interaction (Moustakas, 1995).

The focus of a phenomenological study lies in the descriptions of a phenomenon people experience and how they experienced it (Patton, 1990). Additionally, Patton explained that the goal is to identify the essence of the shared experience that underlies all the variations in a particular learning experience; the essence is viewed through analysis as commonalities in the human experiences. The steps of identification of the essence through data analysis include:

1. *Epoche*: a phase in which the researcher eliminates or clarifies preconception. Of note is that the researchers need to be aware of prejudices, viewpoints, or assumptions regarding the phenomenon under investigation.
2. Phenomenological reduction: the researcher brackets out the world and presuppositions to identify the data in pure form, uncontaminated by extraneous intrusions.
3. Bracketing involves the following steps (Denzin, 1989):

- Locate within the personal experience key phrases and statements that speak directly to the phenomenon in question.
 - Interpret the meanings of these phrases as an informed reader
 - Obtain the subject's interpretations of these phrases if possible
 - Inspect these meanings for what they reveal about the essential recurring features of the phenomenon being studied
 - Offer a tentative statement, or definition, of the phenomenon in terms of the essential recurring features identified
4. Textural portrayal of each theme: a description of an experience.
 5. Development of structural synthesis: containing the bones of the experience; the true meanings of the experience of deeper meanings for the individual.

By using this approach the researcher is categorizing, known as qualitatively coding, and making sense of the essential meanings of the research phenomenon. As the researcher works with and through the rich, descriptive data, the common themes or essences begin to emerge. This qualitative coding is concerned with data retention where the goal is to learn from the data and to revisit the data until patterns and explanations begin to emerge (Creswell, 2012; Patton, 2002; Richards, 2005). Patton (2002) further explained that without developing manageable classification or coding schemes, chaos and confusion in analysis results. Creswell (2007) noted that codes can emerge in response to not only expected patterning but also what the researcher finds to be striking, surprising, unusual, or conceptually captivating.

Patton (2002) also added that such coding includes making sense out of what people have said, looking for patterns, putting together what is said in one place with what is said in another place, and integrating what different people have said. Codes are labels that assign symbolic meaning to the descriptive or inferential information compiled during a study; codes usually are attached to data “chunks” of varying size and can take the form of a straightforward, descriptive label or a more evocative and complex one (Miles et al., 2014). Additionally, Miles et al. (2014) observed that codes are primarily, but not exclusively, used to retrieve and categorize similar data chunks so the researcher can quickly find, pull out, and cluster the segments relating to a particular research question, hypothesis, construct, or theme; clustering and the display of condensed chunks then set the stage for further analysis and drawing conclusions.

This researcher developed a coding protocol that evolved throughout the research process. The protocol developed as one of constant and continual comparison, that was then used as a method to extract conceptual categories, themes, and units. Coding allowed for the identification of shared themes among the following data collection protocols: on-site visits, observation, participant interviews, and document analysis. After identifying the emergent themes, the researcher continued the iterative process by grouping commonalities and recurrent thematic units. Code mapping involved three iterations of analysis and is detailed by the principal investigator in Table 3.

Data Presentation

Findings were presented, using thick and rich description, following the analyzation of data. The data were depicted in the form of quotations, transcripts, and other documents to support the findings, which corresponded with a description of emergent themes and relationships. In this study data analysis led to the development of a master code table that

indicates how codes fit into categories. Saldana (2013) defined a code as, typically, a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data. Saldana continued, the data can consist of interview transcripts, participant observation field notes, journals, documents, drawings, artifacts, photographs, video, internet sites, e-mail correspondence, or literature, among others. Charmaz (2001) described coding as the “critical link” between data collection and their explanation of meaning.

Identifying and developing thematic units from the data analysis required first-round and second-round coding. The researcher achieved first-round coding by using line-by-line coding of the interview transcriptions and other relevant documents. Codes are primarily, though not exclusively, used to retrieve and categorize similar data chunks so the researcher can quickly find, pull out, and cluster the segments relating to a particular research question, hypothesis, construct, or theme. Clustering and the display of condensed chunks then set the stage for further analysis and drawing conclusions (Miles et al., 2014).

Following the first-cycle coding, the researcher conducted second-round coding of all data using the constant-comparative method before developing a master code list. First cycle coding is a way to initially summarize segments of data; Second cycle coding is a way of grouping those summaries into a smaller number of categories, themes, or constructs (Miles et al., 2014). The researcher examined the relationship between themes.

Additionally, an interpretative commentary was provided regarding specifics as well as general findings from the thick and rich description. The presentation included thematic analysis on some of the key themes that emerged. After the open-coding cycle was completed, the

researcher interpreted and reflected on the codes and grouped the codes based on similar meanings. After the grouping the researcher moved inductively to construct categories or themes.

Specific findings for each of the four research questions are presented in written form within the body of this text. Both the data and summary of the research findings associated with the qualitative analyses of the interviews, observations, and simulations, are presented in Chapter 4. In addition to narrative text, tables relating to research findings are presented in this study's appendices, such as the master code list that was developed and representative of how codes are categorized into themes.

Chapter Summary

Qualitative research is a way to determine what people do, know, think, and feel. It is designed to reveal a target audience's range of behavior and the perceptions that drive it with reference to specific topics or issues and is descriptive as opposed to predictive ("What is Qualitative Research?" 2017). Phenomenology, a qualitative research method, is used to describe a "lived experience" of a phenomenon. In this study the phenomenological approach was chosen in order to gain a deeper understanding of the change in culture on a variety of levels bought on through the implementation of mindfulness. Qualitative research allowed for a deeper review of the topic as well as researching insights and contributing factors that lead to a more in-depth understanding of the culture change.

The methodology used and the paradigm of inquiry rationale for using the phylogenetically-qualitative research design are outlined and discussed in this chapter. Because the study focused on a human experience, the phenomenological approach provided the most detailed and rich data. The research methods and questions were outlined, as well as information

pertaining to the methodology used, the researcher's role, participant selection, and the semistructured interview guide and interview protocol are discussed. The chapter concludes by detailing the data-collection process, trustworthiness of the study, and ethical considerations as well as the data analysis, presentation, and management.

CHAPTER 4

FINDINGS

Introduction

The purpose of this phenomenological study was to describe the transformation of culture for faculty and students at Marysville K-8 School through the implementation of mindfulness. Phenomenological methodology was used. A phenomenological study focuses on understanding how human beings experience their world; it is designed to describe and interpret the experience by determining the meaning as perceived by the people who lived it, focused on a subjective experience as perceived by an individual (Ary et al., 2014).

This chapter presents the findings attained from 12 in-depth interviews of school faculty members along with guided discussion, both formal and informal, during on-site visits in September 2016 as well as relevant document analysis. The interviews, guided discussion, and document analysis produced the data used in interpreting and analyzing the phenomenon of teacher perception of change due to mindfulness.

Participant Profiles

Each of the 12 participants of this research study was employed in the same elementary school and was involved in the study during the 2017-18 academic year. The participants were assigned pseudonyms to protect anonymity. Each participant was assigned a school faculty number (SFMN) from 1 to 12. The participants included a wide array of backgrounds, teaching assignments, school roles, and educational experience.

School Faculty Member 1 (SFMN1) began in education as a teaching assistant at the elementary school where the study was conducted. SFMN1 did have a student-teaching

experience at a different school before being hired as a teaching assistant. Eventually SFMN1 was offered a kindergarten position and has spent the last 5 years in that role. In addition to implementing mindfulness practices as part of the school-wide initiative, SFMN1 has since attended Mindfulness Based Stress Reduction trainings on personal time and practices mindfulness in both professional work and personal life.

School Faculty Member 2 (SFMN2) has a background in both providing social services to underprivileged families as well as in education. SFMN2 served as a teacher for 2 years in a different school before coming to the school being studied in this research. SFMN2 has over 20 years of experience working with youth and families in direct-service community organizations, serving in a variety of positions. The professional experiences of SFNM2 include leading direct services for school families, serving as a liaison between the community and the school, and playing an important role in planning and implementing extracurricular activities. Serving in a variety of professional capacities gives SFMN2 a valuable perspective of both the school's importance to the community and the community-members' importance to the school, including organizing and promoting parental involvement. SFMN2 has worked in the study school for over 3 years in addition to serving in multiple professional roles in other community and educational environments.

School Faculty Member 3 (SFMN3) has served as a special education teacher for 12 years. Prior to teaching at this school, SFMN3 taught for 6 years at a different school in the same district. SFMN3 has been teaching for 18 years. SFMN3 taught at this school prior to the implementation of mindfulness. Therefore, SFMN3 is able to articulate how mindfulness has impacted the school over time.

School Faculty Member 4 (SFMN4), currently assigned as educational assistant and other school-support services, has worked at the study school for 8 years, which includes employment time prior to the implementation of mindfulness. Included in the many roles SFMN4 has worked were assisting in the classroom, providing pull-out services for individuals and groups of students, and working in the school office. This allowed SFMN4 many different perspectives on the services the school provides as well as the culture of the school as viewed from different roles. SFMN4 has been employed with the school system for 20 years.

School Faculty Member 5 (SFMN5) has an extensive background in education spanning the past 30 years. SFMN5 is currently serving the study school as an academic coach, striving to help classroom teachers improve their practice. Additional duties include making sure the curriculum is available and ready for teachers, negotiating changes in district policy or guidelines, planning and working out logistics of when deadlines must be met, and being a liaison for teachers., SFMN5 has been at the study school for 13 years.

School Faculty Member 6 (SFMN6) has been a teacher for the past 22 years, including the last 17 at the study school. Each year of teaching has taken place in the current school system. Having had extensive experience, SFMN6 has a valuable perspective on the implementation of mindfulness and the importance it has played in the shift of culture that has occurred.

School Faculty Member 7 (SFMN7) is currently assigned as a classroom teacher in the middle grades. SFMN7 has been employed at the school as a classroom teacher for 5 years following student-teaching in another district. SFMN7 has served as a middle school teacher in both a small, neighborhood-school and at a larger, middle-grades-only school.

School Faculty Member 8 (SFMN8) is currently assigned as a classroom teacher. Experience includes 5 years as a teacher at the study site, which was preceded by a position as an interim for 6 months in a different school. SFMN8 holds a master's degree in education and worked as an educational assistant before being hired as a classroom teacher. Both placements have been at similar schools: Title-1 schools with high-academic and high-behavior needs.

School Faculty Member 9 (SFMN9) is working at the school as a school climate coach. Originally hired as the student management specialist, over the years the title of the position has evolved to more accurately reflect SFMN9's contribution to the school environment. Though discipline is part of the responsibilities for this position, SFMN9 also works diligently to provide students the tools to have positive interactions with one another and their teachers as well as developing positive relationships. SFMN9 works with each grade at the school, K-8. SFMN9 has been in education, including many years as a classroom teacher, for 17 years. The last 14 of those years have been at the study site.

School Faculty Member 10 (SFMN10) worked as a classroom teacher for over 30 years. Currently, SFMN10 is working as an academic coach for the study school, a position SFMN10 has served in for the last 9 years. SFMN10 served as a reading coach for one year in a different school district. SFMN10 provides valuable perspective on the shift in culture and the impact mindfulness has had on faculty and students. As an academic coach SFMN10 is expected to lead teachers in the following: implementing curriculum, developing productive learning environments, and improving teacher practice as it relates to student learning.

School Faculty Member 11 (SFMN11) has been a classroom teacher for 5 years. Prior to becoming a full-time teacher, SFMN11 worked for 2 years in the community as part of a civil organization. SFMN11 also has experience in a variety of school in the district, having served as

a roving substitute for a year prior to being hired as a teacher at this school. These experiences give SFMN11 a valuable perspective through being exposed to many school, cultures, and learning environments. SFMN11 is currently assigned as a middle grades teacher.

School Faculty Member 12 (SFMN12) has been a classroom teacher for 20 years, currently teaching in the elementary grades. SFMN12 student-taught at this study site as well. SFMN12 brings an interesting perspective regarding the impact of mindfulness, having spent many years in the building as a lead teacher who worked under several principals. Having seen many different leadership styles at the study site over the course of employment lends credence to the thoughts and outlooks shared in SFMN12’s comments contained in this study.

Interview participants varied in amount of experience, although each had multiple years serving in education. Eleven of the 12 participants held advanced degrees. Table 1 is a representation of the participants’ educational attainment based on the highest earned degree, number of years of employment at the study site, and total number of years in education.

Table 1

<i>Interview Participants</i>			
Participant Pseudonym	Educational Attainment	Years at Study School	Years in Education
SFMN1	masters	5	5
SFMN2	bachelors	3	2
SFMN3	masters	12	18
SFMN4	masters	8	20
SFMN5	masters	13	30
SFMN6	masters	17	22
SFMN7	masters	5	6
SFMN8	masters	6	7
SFMN9	masters	14	17
SFMN10	masters	9	43
SFMN11	masters	5	7
SFMN12	masters	20	20

Interview Results

Through the analysis of interview data, coding, and categorization, contextual themes emerged. Thematic analysis is frequently used in qualitative psychology research and is a foundational qualitative analytic research method (Braun & Clarke, 2006). Themes in this study were identified at the semantic level throughout data analysis in context and support of the research questions. Those themes in support of Research Question 1 are as follows: improved emotional and psychological outlook, increase in positive personal relationships, faculty and student mindful engagement, decrease in negative student behavior, increase in student academic performance, and systems and protocols for mindful practice. Themes in support of Research Question 2 are as follows: increase in positive personal relationships, faculty and student mindful engagement, decrease in negative student behavior, and increase in student academic performance. Themes in support of Research Question 3 are as follows: increase in positive personal relationships, faculty and student mindful engagement, and decrease in negative student behavior. Themes in support of Research Question 4 are as follows: supported by faculty and students' mindful engagement, and decrease in negative student behavior. The themes and related research questions are presented in Table 2.

Table 2

Emergent Themes in Support of Research Questions

Research Questions	Supporting Themes
RQ 1 -- How do teachers perceive the impact of mindfulness on school culture?	Theme 1 -- Improved emotional and physiological outlook Theme 2 -- Increase in positive personal relationships Theme 3 -- Faculty and students' mindful engagement Theme 4 -- Decrease in negative student behavior Theme 5 -- Increase in student academic performance Theme 6 -- Systems and protocols for mindful practice
RQ 2 -- How do teachers perceive the impact of mindfulness on student learning?	Theme 2 -- Increase in positive personal relationships Theme 3 -- Faculty and students' mindful engagement Theme 4 -- Decrease in negative student behavior Theme 5 -- Increase in student academic performance
RQ 3 -- How do teachers perceive the impact of mindfulness on relationships within the school?	Theme 2 -- Increase in positive personal relationships Theme 3 -- Faculty and students' mindful engagement Theme 4 -- Decrease in negative student behavior
RQ 4 -- What factors do teachers perceive as essential to the implementation of mindfulness in a school?	Theme 3 -- Faculty and students' mindful engagement Theme 6 -- Systems and protocols for mindful practice

Coding resulted in the identification of shared themes among the observation and interview protocols. After identifying the emergent themes, the researcher continued the iterative process by grouping commonalities and recurrent thematic units. Code mapping involved three iterations of analysis and is detailed by the principal investigator in Table 3.

Table 3

Three Iterations of Analysis (to be read from the bottom up)

CODE MAPPING FOR PERCEPTION OF SCHOOL CHANGE DUE TO MINDFULNESS

<u>Research Question 1</u> -- How do teachers perceive the impact of mindfulness on school culture?	<u>Research Question 2</u> -- How do teachers perceive the impact of mindfulness on student learning?	<u>Research Question 3</u> -- How do teachers perceive the impact of mindfulness on relationships within the school?	<u>Research Question 4</u> -- What factors do teachers perceive as essential to the implementation of mindfulness?
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THIRD ITERATION: APPLICATION TO DATA SET
Perception of Change in School Culture due to Mindfulness

SECOND ITERATION: PATTERN VARIABLES

<i>Improved emotional and physiological outlook Increase in positive personal relationships</i>	<i>Faculty and students' mindful engagement Decrease in negative student behavior</i>	<i>Increase in student academic performance Systems and protocols for mindful practice</i>
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FIRST ITERATION: INITIAL CODES/SURFACE CONTENT ANALYSIS

<i>Current Position/Role Educator Experience Student History School Services Educator Interests Belief</i>	<i>Commitment Implementation Procedures Self-Awareness Calming Joy</i>	<i>Respect/Kindness Improved Learning Self-Care/Wellness School Environment Lack of Focus Obligations</i>
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Identified themes and representative quotes relevant to each research question are provided below:

Research Question 1

How do teachers perceive the impact of mindfulness on school culture?

This research question was designed to examine how teachers and other educational professionals perceived the impact that the implementation of mindfulness has on school culture. Overwhelmingly, the study participants discussed that mindfulness did indeed have a large positive impact on the learning environment from both an educator perspective as well as student learning and behavior. Results of the data analysis allowed the researcher an opportunity to develop the six themes emerging from analysis.

Improved emotional and physiological outlook. The first of the emergent themes, improved emotional and physiological outlook, was supported by each of the study participants. School Faculty Member 2 (SFMN2) said:

I mean, it's just, I feel like, for the most part, people are very happy here. And you can see that by the lack of turnover from year to year. Very minimal, if any. [We] didn't have to hire anyone. People like being here, and I think it's because we have a really good support team. We come in and we hug each other. We check in. I mean our support team of, you know, the principal, counselor, academic coaches, behavior coaches, we text each other funny little messages over the weekend, we really like each other. Mindfulness has definitely helped cultivate that.

SFMN6 said:

But when I heard about this (mindfulness) it was like a light just came on, it was like, yes this is what we need. And I went home and wrote all over my Facebook, guys: these are the tenets for happiness. And I really was totally excited about the thought that we would start something like this in our school... We're healed. We are unity again. I don't hear the negative talk I heard for a little while. I think we're a family again. It was a long time coming but we're a family again. I think what mindfulness, and mindfulness has done a bunch of different things, one of the most important is it has changed our culture to where everyone is in important. Everyone is valued. It's transformed my life. It's transforming as a teacher and it's transformed my students' lives as well. As a teacher, I am more effective. I think our school is a better place to work, a better place to learn than it was before.

SFMN11 supported the perspective that mindfulness improved the physiological outlook of the school:

It's (school environment) completely different. I mean, Marysville didn't even have to interview this year because there are no openings. A Title-1 school to not have any openings? That's really, really unusual. People like to work here. There's a reason it... for why our retention is so high for teachers. There's a lot of things, but I feel like (mindfulness') culture of self-care for teachers and for students is really an original concept. Within the school, I, you know, I see how important it is to practice mindfulness.

Mindfulness makes a difference physiologically as well; it helps teachers deal with physical symptoms of a demanding job, such as reducing anxiety and stress. SFMN11 supported this by saying:

If teachers are unhappy, their teaching is not going to be as effective as it could be. So, stressed out teachers, teachers that feel like they don't have a purpose, or feel like they aren't appreciated...all those things mindfulness kind of instills... I think it makes teachers feel more valuable, more settled, less stressed, more fulfilled.

Additionally, SFMN8 supported the perspective that mindfulness improved the emotional outlook of the school:

It's been huge. Taking in the self-care piece, focusing, as a teacher, when burn-out is an issue with the profession, we are taking care of ourselves, and that's supported. We do things like having secret valentines, leaving little notes in our boxes, saying things like "I appreciate you" and sticking it in there. It's just always being grateful that we get to come here, we get to teach here, that we get each other. And knowing that, if we have student that become unregulated, it's not because I am a bad teacher, but it's just that together, as a community, we need to practice more. And those feelings, of being supported in some really tough situations, I think those things bring us together.

Increase in positive personal relationships. SFMN2 reported that personal relationships have improved in quality and grown deeper as a result of mindfulness.

Then, often times Lana (principal) will bring something in for us to read together. Whether it's a poem or whether it's an article and then we reflect on how mindfulness plays in our roles as leaders within the school. So we're constantly reflecting on that. And I think internalizing it and it feels good, it feels right. It's like it's very hard to say that mindfulness is not helping me because it just, it's human. It's so based on human nature. That kindness piece, the gratitude. Research that has been done has been done that backs

this. It's like, why wouldn't you want to feel better about your relationships, with people and yourself. It's kind of a no brainer.

SFMN1 said:

As a faculty I think that we treat each other more kindly. I think that I've been to schools where there maybe wasn't an expectation that you had to treat people home with a lot of respect. And here we are we treat each other with a lot of kindness and compassion and where you know a person might be struggling out their home life or a difficult situation with students that we all come together and support each other. I feel like that that the support that is offered here can only be achieved by, you know, the people who are able to provide the support, the administrators, they're working on mindfulness practices too. So, they understand the perspectives of others, they understand the importance of kindness and compassion when they're working with others.

Additionally, SFMN4 shared that mindfulness has helped faculty members create caring professional relationships.

Mindfulness has created an environment of love and care and relationships. Just the tone that we've set here. They (faculty/staff) are cared for. I don't think they always feel that in every building.

Student and faculty mindful engagement. The third thematic unit that emerged following coding of interviews was the idea of student and faculty mindful engagement. This was support though several statements throughout analyzing the interview transcripts, such as SFMN2:

That's why life skills and mindfulness, being aware of yourself and others, is so critical before you could even start that learning process. I mean that's the way we look at our

school. Everything is seen through that mindful lens. And that just makes everything so clear. It doesn't feel muddy; it doesn't feel confusing. It doesn't feel overwhelming.

Because you know where you are on the path. I think having the common languaging from grade to grade makes it really clear to students what the expectations are. Also, the role that mindfulness can play in their lives, I think that, you know, as they go from kindergarten to first grade, they're still going to be practicing their breathing and their brains are still going to be going back to all these different themes we're always building on. There's comfort in being calm and being able to understand your brain and how it works. So, I think students, when they are realizing that they're becoming dysregulated, they are noticing it sometimes before the teachers even do, or they are noticing it when the teachers are noticing. And so they're able to, they're able to put attention on it and help bring themselves down, rather than get all worked up and then have to be out of class for an hour, hour-and-a-half, or do something that's going to get them in bigger trouble.

Additionally, SFMN1 said:

The first thing – and this is even after teaching mindfulness for 4 years, this is still something I'm working on – is that idea that emotions come and go and that feelings come, but they don't last. And if you can learn to just notice them and not push them down, not only does it help you kind of solve feelings of unease, it also helps you kind of move through emotions more quickly. So as a teacher, I get that I have times every day where I'm stressed out, or angry, or sad, or irritated... and what I can do now is, let's pause and recognize that and even use some of the tools that I give the kids, like taking deep breaths and noticing your feelings and grounding. So, what I notice is that while all

the teacher issues are still there, I still have all the teaching problems that I ever had, it's just that I can react to those in a different way and have a little bit more equanimity when I do react. Now (with mindfulness), I also understand the brain science behind why that's a good thing and why you can regulate yourself, and then help regulate students.

Also, SFMN2 had the following to say when asked how much of the current learning environment was attributable to mindfulness:

A lot. I think it's made us focus, caused us to focus more, why we're really here and what's really, really important. And that's our relationships as a staff and with our administration. But then with our families and the students.

Further, SFMN12 offered the following referencing being aware in the moment:

It's just like I teach the kids, now, with mindfulness, it's to just stop... pause... breathe... soften your voice...take a breath. And that's been absolutely amazing. Just stopping for a moment, being mindful. I'm a very passionate person, so in the past if I was upset, my voice would get really loud, I'd talk really fast, and you could tell I was in a stressful state. But now, with mindfulness, I've worked very hard on voice level. And it really has changed and feels so much better. We do this 3-4-5 thing, where we stop, breathe in, hold it, let it out...it's fast, it's mobile, you can do it anywhere. It's great, because instead of raising your voice, if the kids are totally going nuts, you just stop and do 3-4-5. I just tell them, "I'm going to do a 3-4-5, let's do it together." And it's amazing...it calms them down, it calms me down, it's just been amazing.

Decrease in amount of negative student behavior. The theme of decrease in amount of negative student behavior also supported Research Question 1. In this regard one faculty member offered:

Mindfulness gives them skills...my students already just in the last couple weeks my new group they have developed skills to respond instead of reacting. So, what I see in that is that students fight a lot less because they know how to talk to each other. They know how to request things from each other.

Another said, when answering if mindfulness can affect student interactions:

Yeah, I think so, definitely. Student behavior...mindfulness helps in calming issues, they are listening to their bodies. They're becoming aware of their triggers, aware their feelings and their heart racing or whatever. And they'll step back and take a break, instead of continuing to climb the ladder of being upset and getting more and more upset. They just step back for a second. They get refocused, calm down, and then they jump back into learning.

SFMN8 shared, when asked about how mindfulness helps students:

For sure student behavior. That's been such a gift, that we've had mindfulness. Before it, we had the positive behavior reinforcements, but we've had more tools through mindfulness. Tools to teach self-regulation. That's so powerful for kids, especially kids like ours who live a stressful life, for them to know they can step back, take a breath, to calm themselves in a stressful situation. I love hearing those stories of how they've used mindfulness to stay in control.

Increase in students' academic behavior. Also supporting Research Question 1 was the theme of increase in students' academic performance. This was evidenced by many comments from faculty members. For example, one faculty member pointed out:

I was just sharing with Lana (principal) the other day, looking at scores, we are at the top of all the Title-1 schools. In both reading and math.

Additionally, SFMN8 had the following to say when asked about mindfulness's impact on academic performance:

The data shows – and I wasn't really aware of this until I started utilizing mindfulness – but you can't learn when your amygdala is firing, when you're upset, when you are not in what we call the green zone, the zone ready to learn. So, to be able to recognize that, to have students at age 8 be able to recognize they can't learn, and then giving them the tools, such as breathing, maybe taking a walk, a break, whatever they need, just whatever they need to be able to self-regulate, is able to raise our test scores. Our reading scores have gone up, and in the classroom, they are able to access the material better. And it's really great...kids actually remind me sometimes to take a breath or a break. I mean, we are all human, we all make mistakes. Now kids can begin to implement it, even at home.

SFMN7 discussed that mindfulness has helped students learn how to regulate themselves, getting themselves ready to learn.

I have had students who have definitely been helped with anxiety issues, and its helped their learning, too. Just being able to be calm, and just taking breaks, and I think it allows them to focus more.

This belief was echoed by SFMN5:

The scores have gone up. I think because as we reduce their anxiety and, more than anything, I think is that teachers are less stressed and reactive. The kids feel more comfortable and that they're able to get into the education and I think there's just a quicker start to the day and less disruptions throughout the day. Or, are handled in quieter and calmer way. So, it's very unusual to have a class de-railed anymore. We're learning just because students aren't as off task, we don't have as many blow-outs.

Systems and protocols for mindful practice. The sixth and final theme, systems and protocols for mindful practice, addressed Research Question 1 as well. Consistently throughout the interviews, participants noted the importance of having systems in place for the implementation and consistency of integrating mindfulness into the curriculum and over all approach to the school environment. SFMN2 pointed out the importance of focusing in on what the administrative team feels is important to the learning environment.

I think in the school environment, and I think Lana does a very good job with this at Marysville, and that is having focus. On overall administrative focus rather than having a zillion different great ideas but no focus on any of them. My husband works at another PPS school, he is a fifth-grade teacher. And his principal is constantly finding new things for his staff. Oh, we could do this and then we can learn that... we can do this and it's just like, you can't focus on any of them because you have no idea where you should be putting your attention because you just, each time you're being thrown like three or four ideas of things that have to be implemented now. And that's incredibly stressful for teachers. Either that or they just kind of block it out. I don't know...they might even be like, I'm just not going to do any of this stuff because we have no focus. I think what

really works well at (our school) is that we have a focus and Lana's (principal) philosophy has always been do less and do it well.

SFMN10 believes that having systems in place, including having consistent expectations, structure, and policies, has been a tremendous help in providing a safe and nurturing environment, one in which students and faculty alike know what to expect, which in turn helps to improve school culture.

I have seen a real transition to where most of the staff has a similar mind now. And we have our common language and the way that we work with kids. All the way through, K-8 is very similar. I think previous to mindfulness, everybody handled their issues individually, differently. There was not a lot of consistency through the building. (Without the year-to-year consistency) as they move through they learn the way to handle things one year, then have to re-learn a different style the next year. It might then be different again the year after that. I think the biggest thing with mindfulness is that when the kids come into kindergarten and they're here through the eighth grade, and now we're into our fifth year, they're having consistency among the staff about how things are going to be handled. We have similar terminology. We're not going to change ...you know we're all using the same phrases. So, the kids have an understanding what it means to go to that mindful space. They know what that means. They know what it means to take a deep breath. Whereas, before...before mindfulness I think, every teacher was an individual and it teachers can still be individual, but we have a consistent language. So, I think that's a big plus for the kids.

SFMN3 added, when discussing the need for having protocols and policies in place to ensure mindfulness is implemented throughout the school:

For students, well, they, they, I mean, I think the (mindfulness) curriculum, that's really important to follow. And again, they need to have that developed self-awareness (that mindfulness brings). They need to have really practical and usable strategies...they need to have regular practice. Here, the teachers are more regulated, which helps kids be more regulated. And kids have learned lots of different strategies.

SFMN9 discussed in detail the importance of planning, having systems in place, being prepared with a plan in place, and the difference mindfulness has made both professionally and personally for students, staff, and faculty:

I think that the powerful lessons to take away the way we did it at Marysville was that the teachers were learning alongside the students. So, we were all, we were all practicing, we were fully immersed in it and that it wasn't some boxed curriculum that I was giving to my students. But I was also practicing it alongside of my students. And so I think that that is crucial. You know our principal, Lana, is huge on systems.

So, I think that that foundational piece on systems has to be in place that that helped create this lack of unknowing...the knowing piece is important. People know what's expected of them, like you know, the parameters that you live in. That is huge. I think that that lowers the stresses of teachers like the systems being in place and then being able to say we've got that down to the foundation. Now we're able to roll out this mindfulness practice where we are all participating in it at the same time and it takes a lot of energy in the front-end, and again a lot of intentionality.

You know it's hard to use really academic language when you talk about the culture before, but it's was uncomfortable. It was hard. It was hard to be a mom, and a wife, and

a coach, and an educator. It was hard...it was hard. It was demanding, and it was hard.

And the climate not only with the kiddos but the climate with the staff was uncomfortable because everybody was so exhausted that they were very, like, self-absorbed in a lot of ways.

It was a very, it was dog-eat-dog. I mean it was. And that created this climate between peers, which you know, caused it to be not very team-focused. It wasn't, and it was uncomfortable.

I mean, I think, you know, part of it is, you know, the self-care component, which is not just at work, but also a practice at home. And it has like, these reverberations where it trickles out into how I am with my children, and how I am with my husband, you know all of my responsibilities. That, then, lends itself right back to my job, my profession, which when I'm more balanced holistically, with my whole being, my whole person, personal and professional, it allows me to be better in both.

So practicing mindfulness, being intentional, being aware of where I am, practicing self-care, that has allowed me to just be more balanced and less up and down, and more like I've got this. OK, I got this, all right I've got this. Also, the swings from, like, this constant craziness, is less.

Research Question 2

How do teachers perceive the impact of mindfulness on student learning?

Bellinger et al. (2015) reported that there are several reasons behind mindful practice being beneficial for students, including specifically the areas of attention control, emotional regulation, and test anxiety. Additionally, Schonert-Reichl et al. (2015) found that cognitive

outcomes such as attention and focus and academic performance can be improved by mindful practice. In order to explore this phenomenon further, the principal investigator included this research question in the study.

Increase in personal positive relationships. While analyzing responses, several important themes emerged, the first of which was increase in personal positive relationships. Regarding student academic outcomes as they relate to student learning, SFMN11 said:

There is some hard data (that supports mindful practice in the school)...our test scores are increasing, going up, students work harder and longer, you know, in the middle of the year than at the beginning and mindfulness impacts that perseverance. You know, the growth mindset of being self-aware enough to the point where you recognize the environment to learn best in. Maybe sitting on a desk isn't where you do your best work; maybe getting on a beanbag chair with a clipboard and just kind of really exploring your learning style, that self-reflective piece that mindfulness brings out in people. A lot of the middle school mindfulness lessons are getting students to look at themselves. So, I think, like, students getting more in tune with how they learn best.

SFMN9 added:

It's exciting to see that kids will say a lot of times I need a break. Or do you have a fidget? I need a fidget for math class because it's really stressful. And that impacts a classroom in a positive way.

Faculty and students' mindful engagement. Another thematic unit supporting Research Question 2 was faculty and students' mindful engagement, being aware in the moment and learning how to

better regulate oneself, which in turn leads to a more efficient learning environment.

SFMN2 referenced this in the interview:

That's why life skills and mindfulness, being aware of yourself and others, is so critical before you could even start that learning process... I think for other schools there's so much more emphasis, and not that we don't have an emphasis on academics because I feel like we're really strong in our academics, but (how we are different is) we start from the core of the child and how they feel and how they respond to the stimuli that they're exposed to on a daily basis. And if they're coming in with a heavy heart, and if they're coming with anger, they're coming with sadness, they're not going to be able to acquire the curriculum that they're being taught. They're going to be focusing on the fact that someone yelled at them that morning or that they just don't feel good or they can't relate with other kids in their class.

Further, SFMN6 added:

I think maybe as we talk about perseverance, helping them understand letting things go from home when they are at school. That's an obstacle for learning if I'm still thinking about Mom and Dad's fight. And so helping them bring into awareness of what their brain is even doing, I think helps a lot. Because as we understand that, we can then be open to other experiences.

Another faculty member added:

(Through mindfulness) I have the power in the moment to remind myself that when you're stressed about something. The hope is that you're stressed about it because it's meaningful and you're stressed about it because it you know if I'm stressed out about how

this kid is behaving that's because I care about this kid and I care about the temperature and the weather in my room... so reframing things. I definitely try to reframe issues that I have. So, it's kind of in that moment-to-moment thing. But I also believe that just practicing mindfulness just gives me generally more at ease and calmness. The general feeling of being able to handle things a little bit better. And then the moment to moment feeling that if I am under stress, acute stress, in the moment then what I can do is practice mindfulness and remind myself that all I have to do is be here right now.

Improved student academic performance. A third theme that emerged relating to Research Question 2 upon transcript analyzation was improved student academic performance.

SFMN4 had this to say regarding mindfulness' influence on student learning:

They just step back for a second. They get refocused, calm down, and then they jump back into learning. I mean if I'm all in a tizzy I'm not going to be able to hear a thing. Then I start to impact others and take away from their learning. So, I think that's part of it. And then when we get to things like state testing, which is very stressful for students especially those who are interested, like for those who really want to be challenged and those who are not successful academically, they both seem to be the most energized in the testing room. I also help with state testing and have for years. We do a lot of mindfulness, will do a chime and all of that and have a really calm environment and give the students a chance to do their best.

SFMN3 said:

If their behavior is calmer and more regulated, then they will be more engaged in learning versus engaged in all this other stuff.

Additionally, SFMN2 offered:

They're noticing that their breathing is getting faster, that they can't keep their bodies still, that they're about ready to do something that they really shouldn't do or they're going to, you know, hurt somebody else or get into somebody else's space or disrupt the learning environment and they're not accessing what's being taught. If they're in that state, the transitions that we use during the school day are meant to get everyone to that place where they can be able to access whatever is coming next. And so, you know, teachers are not like, oh it's, you know, 2:00, it's time for a brain break. It's like I can see that the classroom is getting a little bit wound up, we need to bring back focus. So it's used as a tool not as a requirement.

Decrease in negative student behavior. A fourth theme also emerged. This theme, decrease in negative student behavior, supported Research Question 2 as well. SFMN12 said:

I can say that it's a very mindful place here, and that's why I stay. Before, it was very loud and children would sometimes even run in the hallway. The teachers aren't here anymore, so I can tell you this: teachers like me and some of the other teachers would try to correct the students who weren't ours and were screaming and running, but the other teachers who aren't here now would tell us not to do that. Now, we're all on the same page, and now we think of all the kids as all our kids. So, we are more united now, and we are very calm. We can correct behavior in a loving and gentle way, and the other teachers are like, "thank you." So, that's been a nice difference for me.

SFMN4, talked about how mindfulness helps calm behavior situations down before small issues become large ones, as well as having expectations for students:

As student behavior, mindfulness helps in calming issues, often keeping from making it worse. But now as our kids are maturing through it and have had it for several years, it's part of what we do. It's just natural, ingrained as part of our day, and routine. And since we are doing the same lessons, you know, school-wide we are doing the same language, we are doing the same routines, rituals, whatever you want to call it. It's just what we do (here). When new students come in, they come in, you know, it's like "Oh well everybody else is doing it, all right I'll do it." We knew there was a learning curve on that. But, so clearly, those kids who are now kind of in the middle grades, not middle-school grades, but our middle, they don't know any other way. Which I think will really help them because the tools will still be in there. They don't have to have a chime, they don't have to have a teacher reading a script to them or whatever. They know to listen, to feel their heart rate, and why whatever is going on is happening.

Another faculty member described mindful practice's influence on student behavior:

I think it's helping kids to recognize what's happening in their bodies, then we can stop it before it gets out of control. And if I just know I'm reacting and I don't know why...how can I modulate that as an adult or as a child. But if I understand it, academically and intellectually, then with time I can change.

Research Question 3

How do teachers perceive the impact of mindfulness on relationships within the school?

One of the many positives continually discussed throughout the faculty interviews was the concept of mindfulness improving the culture of the school through improved relationships. Relationships between students, relationships between faculty members, and relationships

between teachers and students. The outlook and approach has shifted to focusing on kindness and respect for one another. Fullan (2001) addressed this issues by stating that effective school leadership constantly worked to develop and strengthen relationships. Research supports the notion that mindfulness can play an important role in the quality of relationships in the learning environment. Lantieri and Zakrzewski (2015), Davis (2015), Brensilver (2016), and Maloney et al. (2016), among many others, all wrote that mindfulness can develop, manage, and improve professional relationships among stakeholders in a school regardless of assigned roles within that school.

This research question was supported by themes such as improved relationships, mindful engagement, and a decrease in negative student behavior. These themes emerged through analyzation of transcripts when interviewing study participants regarding developing and maintaining positive relationships.

Increase in positive personal relationships. Research Question 3 is supported through the comments shared by faculty members who routinely cited improvement and quality of relationships as an important benefit of mindfulness in the school. For example, one faculty member pointed to the high quality of peer-to-peer relationships as a main reason faculty members and staff are so happy at the school. This has been evidenced by the low turnover rate, especially so for a Title-1 school in this system that serves a very needy population. In fact, as previously mentioned, there were no openings coming into the school year, which is virtually unheard of for a school with these or similar characteristics.

One faculty member articulated:

I think, and though I have never taught anywhere else to you know, compare much, but I did student teach for a year, I do attribute a lot of our positive culture to mindfulness. Because, I think part of it is just, you know, the stuff that we teach our kids and that we try to practice ourselves, like empathy and kindness, that all plays into it, you know, to how we treat each other. So, yeah, I do think that we can contribute that to mindfulness. It makes a difference in the staff and relationships, and the atmosphere that we all experience.

Another faculty member mentioned, as it pertains to relationships:

I think that's how mindfulness has affected me the most. Being present in the moment, knowing it's OK to slow down, and knowing that's where I should be, thinking about what's right now, not necessarily focusing on what's next. So, for me, that's really been an eye-opener, being more present in relationships, more present in school.

A third faculty member summed relationships being positively impacted by mindfulness, describing it as implementing steps to better those relationships with those around us:

When we come together on Mondays for our support team, specifically, and that's the group I just mentioned (principal, counselor, academic coaches, behavior coaches), we meditate together, we take a moment to just pause sometimes. Even on Monday morning, maybe like an hour, hour-and-a-half into the day, a lot has already happened. And so just to stop and to pause together is really nice. As opposed to being alone, sometimes it's nice to do that as a team. Then often times, Lana (principal) will bring something in for us to read together. Whether it's a poem or whether it's an article, and then we reflect on how mindfulness plays into our roles as leaders within the school. So, we're constantly

reflecting on that. And I think internalizing it and it feels good, it feels right. It's like it's very hard to say that mindfulness is not helping me because it just, it's human. It's so based on human nature. That kindness piece, the gratitude. Research that has been done that backs this. It's like, why wouldn't you want to feel better about your relationships, with people and yourself. It's kind of a no brainer.

Decrease in negative student behavior. Regarding decreases in negative student behavior due to improving relationships between teachers and students, faculty members attributed the betterment of culture through mindfulness as well. One faculty member said:

As an individual, I think that non-judgment is there. I feel like its incredibly important to feel supported. I feel like that that the support that is offered here can only be achieved by, you know, the people who are able to provide the support, the administrators, they're working on mindfulness practices too. So they understand the perspectives of others they understand the importance of kindness and compassion when they're working with others. Because of mindfulness, (we have) the understanding that what's important is getting to know people and building relationships. And, mindfulness gives students skills...my students already just in the last couple weeks my new group they have developed skills to respond instead of reacting. So, what I see in that is that students fight a lot less because they know how to talk to each other. They know how to request things from each other. Students can just solve small problems and then move on. And so, I think that's mostly what we've been working on this year is learning about the parts of our brain and how that impacts our behavior and then also learning about how to respond to people rather than instantly reacting. I think mindfulness just gives people a chance to feel their feelings, you know, just gives you a chance to accept your feelings and feel

them. There is a lot of talk about how it connects to your body and how your body works and how your mind works.

Faculty and students' mindful engagement. When referencing mindful engagement, and how much of the culture shift and improved relationships between students and faculty and staff could be attributed to mindful engagement, one faculty member reported:

Well, all of it, because it's a conscious decision. Mindfulness is being aware of yourself, and how your actions affect other people. So that's what mindfulness is. We are all trying to be more careful of, if we are being negative, that's going to make other people more negative. Just like I tell our kids, "keep your positive!"

Another relevant comment was:

(Mindful engagement) has made a huge impact. For example, maybe a kid was stressed out in math. They couldn't do the math. So, before mindfulness, you might see ripping up the paper, throwing the pencil. Screaming "I'm stupid!" or "I hate this!" But now, with all these different breathing techniques that we teach the kids, they know to stop, take a minute, take a breath. We train them how to talk to themselves. We call it "treasure talk instead of trash talk." So, I spend probably the first six weeks of school teaching the kids how to talk to themselves respectfully, giving themselves permission to make a mistake, and that's ok if you don't know how to do it. So now, if a student doesn't get the math, then you can see them stop, and take a breath, and they'll remember to say to themselves, "I can do this. Maybe I can't do this yet, but I can do it." Or, maybe if I see them beginning to get upset, I can hand them a fidget. Or ask them if they want me to breath with them. So, it feels really good, when before I might have students ripping

paper or throwing pencil when they were upset or calling themselves names. Now, we can better handle it, and kids can get back to learning.

Research Question 4

What factors do teachers perceive as essential to the implementation of mindfulness in a school?

Though the possibility exists for barriers in putting mindfulness practice in place, the principal researcher in this study sought to discuss with participants their perception of essential aspects for successful implementation. Two themes that aligned this research question were mindful engagement and having systems and protocols in place.

Faculty and students' mindful engagement. In reference to mindful engagement from the faculty and students, one school faculty member discussed the importance of having a committed and focused administration with a plan:

Continuous leadership, a leader with a vision (is essential). The fact that Lana (principal) has been here for 10 years is unheard of in the PPS school district. Principals are changed constantly, and it seems you get used to your new principal, then another new principal is put in place. But we've been really fortunate because you have to have a backbone to the program. You have to have someone who truly believes in it and has vision and is able to see that vision through. And it requires a lot of planning. It requires a lot of communication and having systems in place. Having systems in place is huge, having protocols. How we interact with each other, how we meet...following through on expectations. Having grace, you know it's just it's all those different things. It doesn't just happen. Like we started with a counselor teaching it, which is not a bad way to start. I mean that way all the kids receive the same information. But if the teachers are not

getting the information, if the parents are not getting the information, then it lays a little flat. But if the teachers are the one giving the information if it's constantly being enveloped in everything that you do. I mean that's the way we look at our school. Everything is seen through that mindful lens. And that just makes everything so clear. It doesn't feel muddy it doesn't feel confusing. It doesn't feel overwhelming. Because you know where you are on the path.

Systems and protocols for mindful practice. The theme of having systems in place also was supported by SFMN1, who discussed the importance of explaining the neuroscience behind mindful practice as a means lending in credibility to its use in schools:

I think that I always have had the understanding that being calm around children was a good idea. And so, I think that I always tried to practice calm and equanimity around children. But now, with mindfulness, I also understand the brain science behind why it's a good thing, and how you can regulate yourself to then regulate students. For the first couple of years we were doing mindfulness, we definitely talked about the parts of the brain. But I think that we're really deepened it to understand that that the brain science is the why. And so, I describe a lot of those things to my students and I think that it does provide a lot of credibility. We have opportunities at the school; we're going to go in and listen to a brain scientist talk at the end of the month and I think that will improve my practice, so I think at the beginning where we might have talked about it kind of abstractly and how is it feels good, and it feels right, and it is good, now we know why. It's because of the brain and how our brain works.

Other thoughts on successful implementation included having a core team of mindful leaders who are mindfully engaged, committed to both the practice and developing ways to handle barriers when they arise:

I think the most important thing is practice. Had I been able to change anything about how we implemented our Mind Up (a mindfulness-based) program, it would be maybe having teachers spend a year practicing it before we even bring it to students. I think that that could have been beneficial. Also, what I think we have done well is providing time for self-care, which I think is important. Things like, I guess it was last week, we had a late opening and what we did was, we focused on well-being for the teachers. 40 minutes of sitting meditation or 40 minutes of mindful art. And so I think that if you tell teachers we're going to do this and you have to do it too, but here is some time to do it while you're here. You know, we're going to send up a roving sub for a break where you can go and do a single meditation, enjoying a cup of tea or something like that, I think that if you give time within the school day, so it's not an extra thing, I think that teachers can start to enjoy that.

I think really the most vital thing for us is that we have a mindfulness team. So, we have a mindfulness team of people, and I'm on that team and I'm very passionate about mindfulness. Maybe not everyone at the school is as passionate as the people on the Mind Up team but we're able to make connections with those who aren't. And often I get to hear, you know, this is my issue. And then I can bring it back to the mindfulness or well-being team and we can talk about that and then figure out how to address the issue. So I think that core people, a core group of people who are really invested and interested in it, I think that's also very important.

Yet another faculty member touched on proper planning and training as well:

We have built into our staff meeting times where our group (mindfulness team) can meet and plan professional development. Sometimes we do that on our own time and when it is on our own time, maybe the administrators buy us lunch, they take us somewhere nice (if we are working on our own time and not being paid). But they make sure it's an experience that provides some well-being practices for us so we meet and then we develop things like calendars, we develop things like a really nice PD that we can bring to teachers, so I think that having those opportunities built into the school day are important. And occasionally we volunteer to do things like that to bring things to the staff because I don't think if one person was working on this alone, I don't think it could be what we have here. I think we've had as many as eight people or nine people on the mindfulness team at one time. And so, it's lots of voices, lots of perspectives that are adding to where we need to go next.

SFMN10 added about faculty being prepared by having systems in place as well as teachers being engaged in mindfulness:

I think there's been a lot of resources provided. The lessons have been provided, the curriculum has been provided. If you need something for a lesson, those things are provided. So I think just having the support; things are there for you be supported for you be successful in doing that because, if you're told you have to do something, and then you go to do it but you don't have the right materials and it's like, I can't do this, it's more work it's something else I have to do... if I have to go out and find these things, that makes it difficult. But here, those things were all provided.

So, I think the fact that it is well-planned. There's a year plan this is what we're going to be doing. We know exactly what days we're going to be teaching it. There's a lot of PD at staff meetings before you teach the lesson. Here's the lesson, now let's go through it.

What questions do you have? So professional development plays a large role and that's a big piece that we've implemented.

A lot of teachers do their own meditation. Or they're taking yoga. They are in an exercise class. I think they practice the breathing. Perseverance. You have to keep it up. You have to keep trying. And self-care is a part of the Marysville culture. From where we were nine years ago, when I first started...

Yes, (mindfulness has made a very positive impact on the school environment). I think you probably have heard from a lot of teachers that we have a lot more teachers that are involved in taking yoga classes. You know, training. A lot of us took a fundamentals of mindfulness class this summer. And continued on with Essentials of Mindfulness. Just stuff like that. You know that's people choosing to do that. So, we weren't being told we had to do it, but it's opened up more choices for teachers.

Table 4 is a representation of how research questions for this study were addressed through the use of interview questions (see Appendix E). Table 4 also includes background and rapport questions designed to gain understanding of the participants' experience in education and to establish a degree of acceptance and cooperation on the part of the interviewee. The column labelled Interview Questions is a representation of the interview question(s) associated with the research question.

Table 4

Research Questions in Relation to Interview Questions

Research Questions	Interview Questions
<u>Research Question 1</u> -- How do teachers perceive the impact of mindfulness on school culture?	IQ3, IQ4, IQ5, IQ6, IQ7, IQ8, IQ9
Research Question 2 -- How do teachers perceive the impact of mindfulness on student learning?	IQ4, IQ7, IQ8
<u>Research Question 3</u> -- How do teachers perceive the impact of mindfulness on relationships within the school?	IQ3, IQ4, IQ5, IQ8
<u>Research Question 4</u> -- What factors do teachers perceive as essential to the implementation of mindfulness?	IQ6, IQ9
Background/Rapport Questions	IQ1, IQ2

Document Analysis

Document analysis, a systematic procedure for reviewing or evaluating documents, both printed and electronic, has had an important role in qualitative research for many years (Bowen, 2009). Like other analytical methods in qualitative research, document analysis requires that data be examined and interpreted to elicit meaning, gain understanding, and develop empirical knowledge (Corbin & Strauss, 2008). Bowen indicated that document analysis is an important research tool, an invaluable part of most schemes of triangulation, the combination of methodologies in the study of the same phenomenon.

For purpose of this study the principal investigator, in support of on-site observations and analyzing interview transcripts, analyzed relevant documents including aggregate academic data, faculty surveys, and Data Dashboard analytics.

According to the system's Data Dashboard document analytics, 100% of Marysville faculty returned this school year. As mentioned in several of the study's participant interviews, this is particularly impressive for a Title-1 school that serves a high-need population, including a student body that is economically disadvantaged, but also a student body that is often transient and has representative students from homes that speak 16 different first languages. Additionally, the dashboard reports that an overwhelming number of faculty members "feel supported or very supported" at the school, and zero feel unsupported. These data again support, along with all eligible faculty members choosing to return to the school, that the culture of the school is healthy, warm, and supportive.

Specifically, regarding the impact of mindfulness, the Data Dashboard document reports that an impressive 97% of faculty at the study-site "agree or strongly agree" that mindfulness has shifted the culture of the school. Additionally, 87% of faculty members integrate mindful practices into their daily classroom activities, and 83% integrate mindfulness into their life outside of work, an indication of the belief in and commitment to mindfulness and its potential for positive impact. This portion of the Data Dashboard report supports both Research Questions 1 and 3 of this study.

Data Dashboard document reports on student discipline, indicating that since the implementation of mindfulness at the school, office referrals have dropped by 46%. Additionally, the document indicated the total number of school suspensions since implementing mindfulness has dropped 70%. These statistics support this study's Research Questions 2 and 3.

Lastly, information from the Data Dashboard provides pertinent information that can be used to impact relationships within the school. To contribute to this safe and supportive environment, the Dashboard indicated that 80% of teachers examine their own racial and ethnic awareness through professional development; for comparison, the system score was 71%. Additionally, 93% of responders reported that the school promotes culturally-responsive classroom management practices, with the district score at 72%. Further support for this approach was evidenced by 100% of teachers intentionally implementing culturally-responsive classroom management plans (district score 81%). Notably the report revealed that via a student survey, 100% of students feel safe at the school and feel the school teaches them to care and treat each other with respect. These statistics support Research Questions 1, 2, and 3 of this study.

Another document pertinent to this study was the state report card (<http://www.ode.state.or.us/data/reportcard/reports.aspx>). This annual report issued by the Oregon Department of Education includes several aspects that provide a description of the school. Included is information on the diversity of student body and other demographics, enrollment trends, average class size, and how students are performing academically. It also includes data indicating how students are performing relative to students in other schools, and whether the school is making sufficient progress over time. The assessments used to gather the academic performance information are the Smarter Balanced Assessments, administered for the first time last school year, replacing prior state tests. These assessments are based on Common Core standards that have been adopted in Oregon. Academic performance data were provided in three subject areas: Science, Math, and English-Language Arts.

Of note to the researcher were School Results Percentage as compared to the state as a whole, and “Like Schools” when assessing school accountability. For the 2016-17 school year

the state report card reports that Marysville scored 54.7% as meeting district and school accountability, higher than both the Oregon performance percentage (52.3) and Like-School Average (40.9%) in English Language Arts. In Mathematics Marysville's school performance percentage (42.6) is barely (two hundredths of a percent) below the state percentage of 42.8, but well above the Like-School average of 33.4. Finally, in Science, Marysville students performed at a higher rate (61.7) than the Like-School average (57.7). The Science assessment, as the state is in a transition period for assessments, was based on the Oregon Assessment of Knowledge and Skills (OAKS) test.

The school for this study is comprised of approximately 400 students. Though school leaders are proud of student assessment scores, the principal points out, properly preparing students goes beyond numbers. "We believe in the well-being of the whole child, including both strong academics balanced with intentional teaching of social and emotional skills through a mindful lens," the principal wrote on the schools public-record state report card. "We are a MindUP school that practices intentional teaching of concepts such as mindful awareness, kindness, gratitude, empathy, joy, and compassion. We educate both the head and the heart." This outlook, along with the data presented on the report card, support Research Questions 1, 2, 3, and 4 of this study.

Summary of Findings

The central focus of this research study was to develop an understanding of teacher perceptions of change in school culture as a result of the implementation of mindfulness. Seeking to answer this question, the researcher collected and analyzed data through interviews and pertinent document analysis. The findings of the study are presented in this chapter.

In the process of analyzing data from conducting this study, the techniques of participant interviews and document analysis were used. To complete the interview portion of the study, an interview guide was developed, composed of open-ended and semistructured questions. Next, the texts of the interviews were accurately transcribed, followed by the researcher searching for chunks of texts sharing similar characteristics. The researcher then began searching for common themes or essences, a process known as open coding. Data were reexamined to make connections between the open codes, referred to as axial coding. Following coding and categorization, themes emerged from the data collected; themes in this study were identified at the semantic level throughout data analysis in context and support of the research questions.

Two pieces of data that help to summarize the overall impact of mindfulness in schools were shared during participant interviews. The first was during SFMN10's discussion of mindfulness' impact on the school as a whole:

I just think it's changed our culture. We have seen our test scores going up, looking at our scores, we are at the top of all the Title-1 schools in both reading and math. And, we have seen the discipline (referrals) going down. We have seen teacher enjoyment of their jobs go up. We have a hundred percent of the teachers that want to return. We have hostings here for other schools that want to visit and see how we do things, we have people that come and want to do research. I just think it's been a very positive thing for our school.

Additionally, SFMN12 summarized the mindful approach in the educational environment as follows:

I just wish that every school everywhere had mindfulness as a whole-school goal. That would be my dream for all kids because (with mindfulness) it's easier to learn, it's more fun to work there, and it just feels better to be surrounded by people who have the same goal. Students will learn more. Test scores will go up. Behavior issues will go down, the extremeness of what behavior issues you do have will go down. Teachers will be happier, calmer, and have better lesson plans. They are going to do a better job of teaching kids, loving kids, because they are taking the time to be mindful.

CHAPTER 5

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The study findings, conclusions, and implications of this qualitative phenomenological research study, and the recommendations for practice and future research are discussed and detailed in Chapter 5. Chapter 1 provided the principal researcher's introduction to the topic, teachers' perception of change in school culture as a result of the implementation of mindfulness. Chapter 2 presented a review of literature on the subjects of school culture, mindfulness, and mindfulness's use in education. Chapter 3 detailed the chosen research methodology. Chapter 4 presented the findings of this research.

The researcher used phenomenological research methodology to actively explore how teachers perceived the impact of mindfulness on school culture, including improved relationships among stakeholders, improved academic performance, and a decrease in disciplinary incidents. The specific factors teachers perceived as essential to the implementation of mindfulness in schools were also examined. This study produced data in support of using mindfulness, having found that it has several potential benefits including improved relationships among stakeholders, overall school culture, academic performance, and reduced negative student behavior incidents. Further, the data analysis suggests that specific protocols can streamline and improve the success rate in implementation of mindfulness.

Statement of the Problem

The purpose of this qualitative phenomenological case study was to describe the transformation of culture for faculty and students at Marysville K-8 School (Portland Public Schools, Portland, OR) through the implementation of mindfulness. Data were collected using

open-ended interviews of faculty members for first-hand viewpoints and reported experiences as well as through document analysis. Interviews were conducted in person. Document analysis consisted of relevant data including aggregate student disciplinary information, aggregate achievement results, the state report card, attendance records, teacher retention records, and faculty survey results.

Discussion

Prior studies found that when mindfulness is implemented in the classroom both teachers and students reap benefits such as reduced stress, reduced anxiety, increased general well-being, and promoting personal development such as self-compassion and empathy (Dimidjian & Segal 2015; Garland et al., 2015; Khoury et al. 2013; Zenner et al., 2014).

Teachers who practiced mindfulness have reported having greater efficacy in doing their jobs, more emotionally-supportive classrooms, and better classroom organization (Flook et al., 2013). Other research suggested mindfulness initiatives develop skills that can increase teachers' sense of well-being as well as their ability to manage classroom behavior and establish and maintain supportive relationships with students (Meiklejohn et al., 2012). Jennings et al. (2013) found that teachers who learned mindfulness reported greater efficacy in doing their jobs. Further, due in large part to its positive impact on emotion regulation and cognitive control, mindfulness-based practices have been attributed as beneficial to educational practice and readiness to learn (Bakosh et al., 2015; Zenner et al., 2014). Some studies have found a positive relationship between mindfulness and educationally-relevant outcome measures (Bakosh et al., 2015; Ramsburg & Youmans, 2014). In fact, Zenner et al. (2014) found that school-based mindfulness interventions lead to improvements on a range of attention, creativity, and social-emotional learning measures.

The prior research aligns with the data produced in this research study. Throughout the faculty interview phase participants discussed in detail how mindfulness's implementation in the school setting has resulted in not only an improved culture for the school but also in improved academic performance and a decrease in negative student behaviors. Additionally, this study resulted in data that support the approach that mindfulness does indeed hold promise as an intervention in the school setting. This was evidenced through study participants' disposition during interviews and discussions, the researcher's transcripts of the interviews, and document analysis. Comments repeatedly voiced by interviewees, and triangulated through document analysis, provided data that support the notion that students have benefited from mindfulness implementation, specifically increased test scores, a reduction in office referrals for poor behavior, and improvement in the areas of self-regulation and stress management. Similar results were gleaned from data analysis for faculty members as well. Interviews and data analysis revealed improvement in overall teacher satisfaction, teacher perception of school culture, teacher reduction in stress, and overall development of positive relationships.

Conclusions

Analysis of the data from this study led the researcher to conclude that mindfulness can indeed have a large, positive impact on school culture, stakeholder relationships, academic performance, and student behavior. The results from this study provide a framework for understanding and exploring the phenomenon of teachers' perception of change as a result of the implementation of mindfulness. The theoretical implications and conclusions associated with this scholarly investigation are included below.

Four research questions guided this study throughout the qualitative investigation. From the review and subsequent analysis of transcripts of interviews, observations, and document

analysis, the researcher was able to extract meaning such to understand this phenomenon.

Although this phenomenological study does not seek to apply the results to the entire population of the educational community, the results do warrant consideration of its implementation in schools not currently utilizing mindfulness practice. The conclusions and findings may be used to direct future research, develop professional development experiences, and educational policy regarding mindful-based practices in schools. The conclusions for each of the four research questions are provided below.

Research Question 1: How do teachers perceive the impact of mindfulness on school culture?

Individually, the results of this study align with the supporting research and scholarly material found within the review of the literature. From the interview responses, researcher observations, and document analyses, each participant described own unique experience that collectively culminated into a valid and thorough understanding of the positive changes to school culture brought by mindfulness.

One result of this research study was that relationships, which have a large effect on the culture of the school, benefit from mindfulness practices. This finding aligns with Lantieri and Zakrzewski (2015), who found that integrating mindfulness can lead to increased academic achievement and well-being, less risky behavior, and better relationships with peers and teachers. Jennings et al. (2013) revealed that culture is improved through greater teacher efficacy. This finding corresponds with Albrecht, Albrecht, and Cohen (2012), whose research explained that mindfulness is productive in reducing teacher stress levels, helping with behavior management of students, and improving self-esteem. Further evidence of this was provided by a participant in this study, who replied when asked how much of the positive environment of the study site could be attributed to mindfulness:

A lot. I think it's made us focus, caused us to focus more, on why we're really here and what's really, really important, and that's our relationships as a staff and with our administration. It's really important because we have hard jobs and supporting and helping each other is important. Somebody is tired today, somebody's got a cold, somebody is whatever...you're just trying to boost them. And not just because they'll boost you later, but it's just ingrained and we all help each other. We're all a team.

The investigator found through document analysis that mindfulness improved school culture as well. One of the documents reviewed as part of this study, the Data Dashboard report compiled and released by the school system, reported that, regarding the impact of mindfulness, an impressive 97% of faculty at the study-site “agree or strongly agree” that mindfulness has shifted the culture of the school.

Research Question 2: How do teachers perceive the impact of mindfulness on student learning?

Student learning benefitted greatly from the implementation of mindfulness. Prior research identified in this study’s literature review supported the notion that mindfulness has the potential to play a large role in improving academic results. For example, a systematic review of literature completed by Maynard, Solis, Miller, and Brendel (2017) reported that mindfulness interventions have resulted in outcomes of increased academic performance. This includes improvements on standardized achievement tests, measures of content mastery, reading, and reported grades. Mindfulness shows promise among those students with learning disabilities as well. A study conducted by Beauchemin, Hutchins, and Patterson (2008) resulted in outcomes that showed significantly decreased state and trait anxiety, enhanced social skills, and improved academic performance.

Another finding that supported Research Question 2 was reflected in the following faculty member quote from the research interviews, when asked about academic outcomes due to mindfulness:

Scores have gone up. I think because as we reduce their (students) anxiety and I think also that teachers are less stressed and reactive. The kids feel more comfortable and that they're able to get into the education. And I think there's just a quicker start to the day, and less disruptions throughout the day or the disruptions (that do arise) are handled in quieter and calmer way.

Another faculty member pointed out:

Academically, our test scores are up. The two pieces go together...if a student is more well-behaved then they are more likely to do better academically. And just that perseverance...I feel like the students today are so, like, rapid-fire with everything that building up that endurance and that perseverance, like sitting and working out a task for 30-to-45 minutes, is a skill in and of itself.

Additionally, one faculty member, when asked if the classroom teacher was more effective due to practicing mindfulness, said:

I think I am. Three times more effective. I think that I was a good teacher before. I think I'm a much more effective teacher (now, after practicing mindfulness). I think I'm a more effective person. A better friend, a better spouse. I'm just more aware of my world, and where I am in it and where I am right then. So I can help myself get where I need to be.

Document analysis also was an important factor in supporting Research Question 2. The State Report Card for the study school provided a School Results Percentage, which compared

academic performance on state tests to schools similar in demographics when assessing school accountability. The State Report Card reported that Marysville scored higher on the “Like-School Average” in English Language Arts, Mathematics, and Science, the subject-areas where data were reported.

Research Question 3: How do teachers perceive the impact of mindfulness on relationships within the school?

The researcher concluded that mindfulness practice improves and establishes supportive personal relationships in the school, contributing to a positive overall school environment. This includes culture, improved academic performance, and improved student behavior. Healthy relationships and treating others with respect and care plays an important role in the productive educational environment by promoting outcomes such as perspective-taking, empathy, and prosocial behavior (Maloney et al., 2016). In addition, recent research has found that teachers play an important role in helping students feel connected to their school and in developing trusting adult relationships (Frank, Reibel, Broderick, Cantrell, & Metz, 2013); further, research has shown that the quality of teachers' relationships with children is a key predictor of children's later social emotional competence and academic achievement (Becker, Gallagher, & Whitaker, 2017).

The principal investigator in this study found support for mindfulness practice resulting in improved relationships through document analysis as well. According to the Data Dashboard document analytics 100% of Marysville faculty returned this school year. As mentioned in several of the study' participant interviews, this is particularly impressive for a school that serves a high-need population. Additionally, the dashboard indicated that an overwhelming number of faculty members “feel supported or very supported” at the school, and zero feel unsupported.

Based on these data, the researcher supports the notion that the study site features a culture that is healthy, warm, and supportive.

Further findings include remarks from study participants during the interview process. For example, when asked if the school's positive atmosphere and stakeholder relationships could be attributable to mindfulness practice, one faculty member remarked stated:

I do (attribute the atmosphere to mindfulness). I do attribute a lot of our positive culture to mindfulness because, I think, part of it is just, you know, the stuff that we teach our kids and that we try to practice ourselves, like empathy and kindness, like that all plays into it, you know, to how we treat each other. So, yeah, I do think that we can attribute that to mindfulness. It makes a difference in the staff and relationships, and the atmosphere that we all experience

Research Question 4: What factors do teachers perceive as essential to the implementation of mindfulness in a school?

Through analyzing the study results, the principal investigator found through having systems in place and along with proper implementation, educational leaders can help with the transition of implementing mindfulness in schools. Joyce, ETTY-Leal, Zazryn, Hamilton, and Hassed (2010) reported that teachers enjoyed teaching mindful practice together with other colleagues, valued the support provided by the wider school community, and being able to apply mindfulness to their personal lives helped with program be success. Teachers in that study also suggested that more training in the practice beforehand would have been beneficial. To that end, it has been suggested that before teaching mindfulness in the classroom, teachers should practice

mindfulness on a personal level for several months in addition to several days of instructional training (Bristow, 2017).

Other findings from the research study also indicated that prior planning is a must. For example, while there is not one model of implementing that ensures success, educators are learning and developing effective practices as they implement mindfulness programs in schools (Deegan, 2015). These lessons being learned include the importance of much prior planning and training as well as having systems in place to handle situations as they arise. In order to maximize and streamline implementation, administrators should strongly believe in mindful practice and be committed to it (Bristow, 2017; Deegan, 2015). Along these lines were comments from a participant of this study when asked about what is necessary from an administrative perspective to demonstrate commitment to mindfulness:

Continuous leadership and a leader with a vision. We've been really fortunate because you have to have a backbone to the program. You have to have someone who truly believes in it and has a vision and is able to see that vision through. And you have to have a focus. I think (our principal) does a very good job with this at Marysville, and that is having focus. On overall administrative focus, rather than having a zillion different great idea but no focus on any of them. (Our principal's) philosophy, and it works really well, is when we are all focused through the same mindful lens, and then it's something that you can see the difference that it's making in yourself and the students.

This study found that a proper introduction to and communicating the neuroscience behind mindfulness is also helpful, as explaining the physiology lends credence to the approach. Brown et al. (2007) found that studies examining the relationship between mindfulness practice

and degree of change in affective, behavioral, and neurophysiological outcomes have reported positive findings, as has the research of Carson et al. (2004) and Shapiro et al. (2003).

Researchers suggested that those who regularly practice mindfulness experience positive changes in the structure of the brain (Hozel, 2011; Singleton, 2014; Walton, 2015). These researchers found that mindfulness-based stress-reduction practice increased cortical thickness in the hippocampus, which governs learning and memory, and in certain areas of the brain that play roles in emotion regulation and self-referential processing. Hozel's research (2011) found that there were also decreases in brain cell volume in the amygdala, which is responsible for fear, anxiety, and stress. In addition to changes in the hippocampus, Chiesa and Serretti (2010) found physical improvements in the both the amygdala and prefrontal cortex areas of the brain.

The importance of introducing the science behind mindfulness was also pointed out by a study participant, who, when asked if communicating the neuroscience was beneficial, commented:

Definitely. And for the first couple of years we were doing mindfulness, we definitely talked about the parts of the brain. But I think that we really deepened it to understand that the brain science is the why (it works). I describe a lot of those things to my students and I think that it does provide a lot of credibility. We have opportunities at the school... we're going to go in and listen to a brain scientist talk at the end of the month and I think that will improve my practice so I think at the beginning where we might have talked about it kind of abstractly and how is it feels good and it feels right and it is good. Now we know why it's because of the brain and how our brain works

Another important factor found by the study, and mentioned frequently by study participants, was the need for having systems – policies and procedures – in place.

One participant said:

It requires a lot of planning. It requires a lot of communication and having systems in place. Protocols. How we interact with each other. How we meet. Following through on expectations. Having grace, you know it's just it's all those different things. It (mindfulness) doesn't just happen. Having systems in place is huge.

Another faculty member remarked concerning policies and procedures:

Having systems in place...having a mindfulness or well-being team...I think that core people, a core group of people who are really invested and interested in it, I think that's also very important. We have a built into our staff meeting times where our group can meet and plan professional development. We develop things like calendars, we develop things like a really-nice PD that we can bring to teachers. I think that having those opportunities built into the school day (is important). And occasionally we volunteer to do things like that to bring things to the staff because I don't think if one person was working on this alone I don't think it could be what we have here. I think we've had as many as eight people or nine people on the mindfulness team at one time. It's lots of voices, lots of perspectives, that are adding to where we need to go next.

Yet another faculty member said referencing systems:

Professional development, training...all of that and having it be the entire team. So, it's not a you versus us situation. Its not just for some of the people and not others. Over the years, there have been a lot of behavior trainings or things in schools around where only

some of the staff are really trained on it. And if we're not full time and we're not at staff meetings, we don't really know what it is. You can pick up on it, you definitely see the classroom teacher doing it or whatever, but you really don't know the background and the whys. Mindfulness is something that has been generously supported and at a financial cost to make sure all of those people are involved and on the same page.

Emergent Themes

There were six themes that emerged from the research questions. These themes were identified from coding following the observation and interview protocols. After identifying the emergent themes, the researcher continued the iterative process by grouping commonalities and recurrent thematic units. Creswell (2013) stated that codes can emerge in response to not only expected patterning, but also what the researcher finds to be striking, surprising, unusual, or conceptually captivating. Thus, codes relating to the data allowed for the identification of shared themes to emerge among the observation and interview protocols.

Each of the six themes supported how teachers perceive the impact of mindfulness of school culture, Research Question 1. The first of the emergent themes, improved emotional and physiological outlook, was related to the researcher by virtually all of the interview participants. A second theme, increase in positive personal relationships, was also frequently discussed by interview participants, as well as evidence through document analysis in the form of faculty surveys. The third thematic unit that emerged supporting the first research question is the idea of student and faculty mindful engagement. Participants frequently commented on the importance of practicing awareness in the moment and engaged in putting mindfulness into practice. The fourth theme that emerged to support Research Question 1 was a decrease in amount of negative student behavior. In this regard faculty members mentioned how mindfulness gave students

skills to respond instead of reacting, how to better communicate to one another, how to better interact with one another, and how mindfulness helps to instill a calmer environment. Also supporting Research Question 1 was the theme of increase in students' academic performance. This was evidenced by many comments from faculty members, who referenced an increase in summative assessment, as well as through document analyses of the state's reports card for schools. The sixth and final theme, systems and protocols for mindful practice, addressed Research Question 1 as well. Consistently throughout the interviews, participants noted the importance of having systems in place for the implementation and consistency of integrating mindfulness into the curriculum and over all approach to the school environment.

Research Question 2, how teachers perceive the impact of mindfulness on student learning, was supported by four emergent themes. The first was increase in personal positive relationships, followed by faculty and students' mindful engagement, improved student academic performance, and decrease in amount of negative student behavior. Each of these themes relate to an increase in student outcomes, as evidenced by both participant comments and document analysis in the form increased performance on state tests. Additionally, not only have the school's scores improved, but so have students' ability to remain focused on day-to-day assignments, engage in the curriculum, and a reduce the amount of off-task behavior, thus reducing classroom distractions.

Three themes emerged supporting Research Question 3, how teachers perceive the impact of mindfulness on relationships within the school. Those themes were an increase in positive personal relationships, decrease in negative student behavior, and faculty and students' mindful engagement. Faculty members overwhelmingly cited the improvement and quality of relationships as an important benefit of mindfulness in the school. Not only do the positive

relationships improve the learning environment but also impact decreasing student negative behavior. This leads to an increase in mindful engagement at the school. All of these things lead to shifting the culture of the school in a positive way.

The last research question, the factors that teachers perceive as essential to the implementation of mindfulness in a school, had two themes develop during the study. Those two themes were faculty and students' mindful engagement and systems and protocols for mindful practice. Mindful engagement of seeing the operation of the school through a mindful lens develops a faculty and administrative approach of commitment to a mindful environment. Further, many participants freely discussed the importance of have systems in place, thus having policies and procedures on how implementation and day-to-day running of the school is to take place. This is evidenced through the large amount of resources, training, and professional development that is made available to faculty and staff, along with systems in place to handle any issues that may develop. Both interviews with faculty and data analysis suggest that this approach is effective at the study site and holds much promise as an approach to educational intervention in other schools as well.

All of the study participants spoke to the impact that mindfulness has made to improve the education environment at the study site. This improvement is supported not only by participant interviews but also by document analysis and prior research review. The researcher concludes that mindfulness-based interventions and practices have contributed to measurable improvement in academic performance data, improvement in stakeholder relationships, a decrease in student behavior issues, and general improvement of school culture overall.

Recommendations for Practice

There is support for the use of mindfulness practice in schools. As previously noted by Lutz et al. (2008), Greenberg (2012), and Tang (2014), mindfulness-based practices can positively influence the culture and climate of a school through reducing stress and anxiety, improving emotional regulation, and enlarging capacity for compassion and empathy. Other research, such as Flook et al. (2013), found that when schools implement and practice mindfulness, student outcomes are enhanced both emotionally and academically. Faculty members reap personal and professional benefits such as reduced stress and burnout and school culture improves. More researchers that support mindfulness' promise include Jennings et al. (2013), Roeser et al. (2013), Harris et al. (2015), and Schussler et al. (2015), each of whom reported mindfulness as a way to reduce teacher stress. Jennings et al. (2015) and Schonert-Reichl et al. (2015) found that mindfulness-based practices can help improve teacher and student performances as well as impacting students' social and emotional development.

Following the analyzation of data collected from the researcher's on-site visit, participant interviews, document analysis, and literature review, the principal researcher offers the following suggestions for educational leaders looking to make practical and authentic changes to improve culture, stakeholder relationships, student discipline, and academic performance through the implementation of mindfulness:

- *Have a plan, including clearly defined goals.* Included in the plan should be forming a "Mindfulness Team" in advance to discuss specific strategies of implementation that may include methods unique to different schools. A Mindfulness Team should be composed of administrators and teacher-leaders who are committed to mindfulness and can plan the announcement and preroll out

training for classroom teachers, as well making sure any curriculums and supplemental materials are prepared and ready. This team is also tasked with coaching teachers on specific strategies and addressing any issues that arise. Having clearly defined goals will help faculty members focus on and measure results.

- *Have systems in place.* This was discussed by the majority of interview participants; it helps take the guess-work out of implementing a new program. Examples of specifics would be protocols for meetings, handling student discipline, and dealing with parents. Mapping the announcement and implementation, as well as clearly communicating the program to faculty, parents, and students should be communicated.
- *Explain the science behind mindfulness.* The reason for this is twofold: first, by presenting the neuroscience and research behind mindfulness, it lends credibility to the approach. Second, those stakeholders who may resist for religious reasons may be more accepting if mindfulness in schools is implemented on a strictly secular path. Communicating this initially – that mindfulness is part of a total-school educational and lifestyle approach in an effort to address teachers’ and students’ needs from a social, emotional, and physical standpoint – can help to alleviate potential stakeholder concerns that their beliefs will be threatened.
- *Thoroughly prepare teachers.* This includes pre-implementation study on mindfulness in schools (to aid in understanding) as well as on-going professional development. This is a must; if teachers do not feel comfortable with mindfulness and how to implement it in their classrooms, they will not be onboard with

mindfulness as an approach. This may limit its effectiveness. Adequate support is vital. It may be a good idea to encourage personal practice as well.

- *Have the Mindfulness Team meet regularly to assess what is – and what is not – working and adjust as necessary.* The team should also continue to research new ways of using mindfulness in the school to avoid the program growing stale.
- *Consider school-wide implementation as opposed to allowing faculty to “pick-and-choose” whether to participate.* The consistency in approach and using a common language will benefit all stakeholders in the long run.
- *Purchase a prepared curriculum such as MindUp.* This type of program features prepared lessons for teachers and schools, which may streamline the implantation process.
- *Be flexible.* Research has found that there is not one single best practice for mindfulness in schools, so some adjusting on the fly will most likely be needed to meet individual school differences. Expect some bumps; keep in mind that the overall overarching theme is culture-building, and continue to strive for improvements, tweaking as necessary along the way.

Recommendations for Future Research

The researcher, recognizing the limitations of the data analysis and literature review of this study, presents the recommendations below as suggestions for research based upon the study findings and the supporting literature. Phenomenological research, by the nature of the approach, has limitations. Limitations include, in most cases, the small number of participants, as researchers make sampling choices that enable them to deepen understanding of whatever phenomenon is being studied. The purpose of this investigative study was to assess and analyze

the phenomenon of teacher perception of change in school culture due to the implementation of mindfulness. Since a phenomenological study includes the relatively few number of participants, the findings cannot be generalized to the whole population. With this in mind, it is the recommendation of the principal investigator to:

- Conduct studies of differing grade levels. This is especially important as students matriculate through elementary to middle grades and into high school. Do mindfulness practices continue to have a positive impact on students and faculty in higher grades?
- As this study focused on a school serving many low socioeconomic, high need students and families, future studies could research if mindfulness holds promise as an intervention across schools serving different types of student bodies, including private schools and those schools with a higher number of students from affluent households.
- As the researcher in this study found that mindfulness practices had a measurable positive effect on both students and faculty, future researchers could design a case study involving parents and guardians that practice mindfulness as well. The impact of stakeholder relationships, student behavior, academic performance, and school culture as a whole could be examined.
- Replicate this study with maximum variation sampling.

Chapter Summary

This phenomenological research study was designed to add to the body of research regarding mindfulness implementation in schools as well as offering practical recommendations

for its implementation. Investigation to answer the study's research questions was completed. Research combined a review of prior literature on the subject in addition to completing a study focusing on a school that has measurable, demonstrated results through putting mindfulness practices in place. Both a document analysis and participant interviews were completed in addition to the review of literature. A discussion of the findings, conclusions, and recommendations for practice are included in this chapter. The experiences of Maryville School community would support considering this approach in other schools with benefits of improved relationships among stakeholders. Further, the data revealed that specific protocols improve the implementation of mindfulness and increase the chances of achieving measurable goals. The principal investigator outlines those protocols above, offering authentic suggestions for implementing mindfulness-based practices as well as suggestions for future research.

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APPENDIX A

School System Approval Letter



SYSTEM PLANNING AND PERFORMANCE
PORTLAND PUBLIC SCHOOLS
501 N DIXON STREET • PORTLAND, OR 97232
503-916-3341 • WWW.PPS.NET

September 12, 2017

Justin Penley
Department of Educational Leadership & Policy Analysis
East Tennessee State University
Re: 2017-18-001

Dear Justin Penley:

The Portland Public Schools (PPS) System Planning and Performance department has reviewed and approved your request to conduct your research entitled, *Teacher Perception of Change in School Culture as a Result of Implementation of Mindfulness*. The study is consistent with Board policy and professional research practices. This project is approved for the 2017-18 school year.

This approval provides you with clearance to seek participation from appropriate sites within the school district. Please use this approval letter in your introduction to schools so that district staffs know your research has been approved. Participation in the study by the schools is voluntary. District staff and students are not obligated to participate in outside research, regardless of approval by the System Planning and Performance Department.

Should you need to make changes to your research after this approval is granted, you must submit changes in writing (e-mail is fine) to this department and receive additional approval for requested changes. PPS reserves the right to retract permission to continue your research at any time.

Please note that paid researchers must have worker compensation coverage while on school property. Researchers working directly with students must also complete a PPS volunteer background check. Background checks take about five working days. Researchers meeting with students when a PPS employee is not present must also be fingerprinted by our Security Services Department. For additional information about completing these steps, please visit the PPS Security Services Department web page at: <http://www.pps.k12.or.us/departments/security-services/index.htm>. Please keep appropriate administrative staff at study sites updated on the progress of your research. The District is interested in receiving information on the results of this study when they become available. Please submit a copy of the final report to this office. We wish you every success in this study.

Sincerely,
System Planning and Performance
Portland Public Schools

APPENDIX B

IRB Approval Letter



EAST TENNESSEE STATE
UNIVERSITY

Office for the Protection of Human Research Subjects Box 70565 Johnson City, Tennessee 37614-1707
Phone: (423) 439-6053

IRB APPROVAL – Initial Expedited Review

September 26, 2017

Mr. Justin Penley
116 South Pointe Court
Kingsport, TN 37663

Re: Teacher Perception of Change in School Culture as a Result of Implementation of Mindfulness **IRB#** :c0917.1s **ORSPA #**:

The following items were reviewed and approved by an expedited process:

New Protocol Submission xForm; CV; Education Certificate; References;
Informed Consent Document; Invitation Email; Portland Schools Letter;
Interview Questions

On **September 20, 2017**, a final approval was granted for a period not to exceed 12 months and will expire on **September 19, 2018**. The expedited approval of the study will be reported to the convened board on the next agenda.

The following **enclosed stamped, approved Informed Consent Documents** have been stamped with the approval and expiration date and these documents must be copied and provided to each participant prior to participant enrollment:

PENLEY -- Informed Consent Form ver 8-31-17 (SA 9-20-17)

Federal regulations require that the original copy of the participant's consent be maintained in the principal investigator's files and that a copy is given to the subject at the time of consent.

Projects involving Mountain States Health Alliance must also be approved by MSHA following IRB approval prior to initiating the study.

Unanticipated Problems Involving Risks to Subjects or Others must be reported to the IRB (and VA R&D if applicable) within 10 working days.

Proposed changes in approved research cannot be initiated without IRB review and approval. The only exception to this rule is that a change can be made prior to IRB approval when necessary to eliminate apparent immediate hazards to the research subjects [21 CFR 56.108 (a)(4)]. In such a case, the IRB must be promptly informed of the change following its implementation (within 10 working days) on Form 109 (www.etsu.edu/irb). The IRB will review the change to determine that it is consistent with ensuring the subject's continued welfare.

Sincerely,
Stacey
Williams, Chair
ETSU Campus
IRB

cc:



Accredited Since December 2005

APPENDIX C
CITI Training Report

**COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 1 OF 2
COURSEWORK REQUIREMENTS***

* NOTE: Scores on this Requirements Report reflect quiz completions at the time all requirements for the course were met. See list below for details. See separate Transcript Report for more recent quiz scores, including those on optional (supplemental) course elements.

- **Name:** Justin Penley (ID: 6376554)
- **Institution Affiliation:** East Tennessee State University (ID: 663)
- **Institution Email:** penleyj@etsu.edu
- **Phone:** 4239671191
- **Curriculum Group:** Human Research
- Course Learner Group:** Group 2. Social and Behavioral Research Investigators and Key Personnel (non-VA)
- **Stage:** Stage 1 - Basic Course
- **Description:** Social and Behavioral Research Investigators and Key Personnel who are **NOT** affiliated with or working at the VA. If you are an Member of the ETSU IRB you should join this Learner Group. IRB Members must also complete the IRB member module.
- **Record ID:** 23381978
- **Completion Date:** 03-Jun-2017
- **Expiration Date:** 02-Jun-2020
- **Minimum Passing:** 80
- **Reported Score*:** 91

REQUIRED AND ELECTIVE MODULES ONLY

	DATE COMPLETED	SCORE
Avoiding Group Harms - U.S. Research Perspectives (ID: 14080)	02-Jun-2017	3/3 (100%)
Belmont Report and CITI Course Introduction (ID: 1127)	02-Jun-2017	3/3 (100%)
History and Ethical Principles - SBE (ID: 490)	02-Jun-2017	5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491)	02-Jun-2017	4/5 (80%)
The Federal Regulations - SBE (ID: 502)	02-Jun-2017	5/5 (100%)
Assessing Risk - SBE (ID: 503)	02-Jun-2017	4/5 (80%)
Informed Consent - SBE (ID: 504)	02-Jun-2017	4/5 (80%)
Privacy and Confidentiality - SBE (ID: 505)	03-Jun-2017	5/5 (100%)
Research with Prisoners - SBE (ID: 506)	03-Jun-2017	5/5 (100%)
Internet-Based Research - SBE (ID: 510)	03-Jun-2017	5/5 (100%)
Research and HIPAA Privacy Protections (ID: 14)	03-Jun-2017	4/5 (80%)
Conflicts of Interest in Research Involving Human Subjects (ID: 488)	03-Jun-2017	4/5 (80%)
East Tennessee State University (ID: 1002)	03-Jun-2017	No Quiz

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k59a88b76-eb73-46d1-ac8d-83ff3a54598b-23381978

Collaborative Institutional Training Initiative (CITI Program)

Email: support@citiprogram.org
Phone: 888-529-5929
Web: <https://www.citiprogram.org>

COLLABORATIVE INSTITUTIONAL TRAINING INITIATIVE (CITI PROGRAM)
COMPLETION REPORT - PART 2 OF 2
COURSEWORK TRANSCRIPT**

** NOTE: Scores on this [Transcript Report](#) reflect the most current quiz completions, including quizzes on optional (supplemental) elements of the course. See list below for details. See separate Requirements Report for the reported scores at the time all requirements for the course were met.

- **Name:** Justin Penley (ID: 6376554)
- **Institution Affiliation:** East Tennessee State University (ID: 663)
- **Institution Email:** penleyj@etsu.edu
- **Phone:** 4239671191

- **Curriculum Group:** Human Research
- **Course Learner Group:** Group 2. Social and Behavioral Research Investigators and Key Personnel (non-VA)

- **Description:** Social and Behavioral Research Investigators and Key Personnel who are **NOT** affiliated with or working at the VA. If you are an Member of the ETSU IRB you should join this Learner Group. IRB Members must also complete the IRB member module.

- **Record ID:** 23381978
- **Report Date:** 03-Jun-2017
- **Current Score**:** 91

REQUIRED, ELECTIVE, AND SUPPLEMENTAL MODULES

	MOST RECENT	SCORE
History and Ethical Principles - SBE (ID: 490)	02-Jun-2017	5/5 (100%)
Defining Research with Human Subjects - SBE (ID: 491)	02-Jun-2017	4/5 (80%)
Belmont Report and CITI Course Introduction (ID: 1127)	02-Jun-2017	3/3 (100%)
The Federal Regulations - SBE (ID: 502)	02-Jun-2017	5/5 (100%)
Assessing Risk - SBE (ID: 503)	02-Jun-2017	4/5 (80%)
Informed Consent - SBE (ID: 504)	02-Jun-2017	4/5 (80%)
Privacy and Confidentiality - SBE (ID: 505)	03-Jun-2017	5/5 (100%)
Research with Prisoners - SBE (ID: 506)	03-Jun-2017	5/5 (100%)
East Tennessee State University (ID: 1002)	03-Jun-2017	No Quiz
Internet-Based Research - SBE (ID: 510)	03-Jun-2017	5/5 (100%)
Research and HIPAA Privacy Protections (ID: 14)	03-Jun-2017	4/5 (80%)
Conflicts of Interest in Research Involving Human Subjects (ID: 488)	03-Jun-2017	4/5 (80%)
Avoiding Group Harms - U.S. Research Perspectives (ID: 14080)	02-Jun-2017	3/3 (100%)

For this Report to be valid, the learner identified above must have had a valid affiliation with the CITI Program subscribing institution identified above or have been a paid Independent Learner.

Verify at: www.citiprogram.org/verify/?k59a88b76-eb73-46d1-ac8d-83ff3a54598b-23381978

Collaborative Institutional Training Initiative (CITI Program)

Email: support@citiprogram.org
 Phone: 888-529-5929
 Web: <https://www.citiprogram.org>

APPENDIX D

Informed Consent Form

Title of Research Study: Teacher Perception of Change in School Culture as a Result of Implementation of Mindfulness

Principal
Investigator:
Justin Penley

Principal Investigator's Contact Information: Justin Penley (423) 967-1191
Organization of Principal Investigator: East Tennessee State University

INFORMED CONSENT

This Informed Consent will explain about being a participant in a research study involving the implementation of mindfulness. It is important that you read this material carefully and then decide if you wish to voluntarily participate.

- A. Purpose:** The purpose of this qualitative phenomenological case study will be to describe the transformation of culture for faculty and students at Marysville K-8 School (Portland, OR) through the implementation of mindfulness. I hope that this will tell the story of one school's experience with using mindfulness and be helpful for other schools considering mindfulness.
- B. Duration:** The study will consist of 12 participants who will be interviewed for approximately 30 minutes. You will be interviewed one time, with potential for a brief follow-up conversation at your request following your review of the transcript should you feel it necessary to clear up any statements or sentiments.
- C. Procedures:** The study will be phenomenological in its approach.
- The interview will last for approximately 30 minutes to collect information. Some interviews will be conducted in-person, some will be conducted via telephone and/or Skype. Interviews will be audio recorded for transcription purposes.
 - Transcriptions will be sent by email to you for your review and approval.
 - Opportunity for a follow up interview will be provided to you should you want the opportunity to clarify or correct information provided.

- Document analysis will be conducted (some of the documents are publicly available, others will be provided by administration); any data pertaining to students will be aggregate data, such as number of discipline referrals, attendance rates, etc. without any personal identifiers.

D. Alternative Procedures/Treatments: There are no alternative procedures/treatments available.

E. Possible Risks/Discomforts: Possible risks and/or discomforts associated with participation in this study consists of loss of confidentiality (identifiers will be removed) and, though unlikely, some questions could cause you to be uncomfortable regarding offering thoughts and opinions (you may decline to answer any questions).

F. Possible Benefits: Potential benefits include increasing the current body of knowledge relating to the use of mindfulness in schools, including potential future implementation in other schools; potential to contribute first-hand viewpoints and experiences; potential for you to share thoughts and opinions formed through first-hand accounts; through aiding in the possible implementation of mindfulness in schools, you can potentially have a positive influence in improving the educational

Ver. 08/31/17 (3rd update)

Page 1 of 2

Participant Initials _____

Title of Research Study: Teacher Perception of Change in School Culture as a Result of Implementation of Mindfulness

Principal Investigator: Justin Penley experiences of a multitude of students, not only their own students but those several states away as well.

G. Voluntary Participation: Participation is voluntary and you may withdraw from the study at any time. No benefits, to which you are otherwise entitled, will be lost upon withdrawal. You may withdraw by calling the Principal Investigator, Justin Penley, at (423) 967-1191.

H. Contact for Questions: If you have any questions, problems, or research-related medical problems at any time, you may call Justin Penley at (423) 967-1191. You may also call the Chairperson of the ETSU Institutional Review Board at 423.439.6054 for any questions you may have about your rights as a research participant. If you

have any questions or concerns about the research and want to talk to someone independent of the research team or you can't reach the study staff, you may call an IRB Coordinator at 423.439.6055 or 423.439.6002.

- I. Confidentiality:** Every attempt will be made to see that the study results are kept confidential. A copy of the records from this study will be stored in Johnson City/Kingsport, Tennessee for at least 6 years after the end of this research. The results of this study may be published and/or presented at meetings without naming you as a participant. Pseudonyms will be used instead of names in both the demographic data and when using direct quotes from your interview. However, there is a remote possibility that someone may be able to identify you from the demographic data. Although your rights and privacy will be maintained, ETSU IRB, and Justin Penley and his research team have access to the study records. Records will be kept completely confidential according to current legal requirements. Records will be stored on a password-protected laptop at the researcher's home address at 116 South Pointe Court, Kingsport, TN 37663 and ETSU 1276 Gilbreath Drive Johnson City, TN 37614. They will not be revealed unless required by law, or as described in this form.

By signing below, I confirm that I have read and understand this Informed Consent Document and that I had the opportunity to have them explained to me verbally. You will be given a signed copy of this informed consent document. I confirm that I have had the opportunity to ask questions and that all my questions have been answered. By signing below, I confirm that I freely and voluntarily choose to take part in this research study.

Signature of Participant

Date

Printed Name of Participant
Ver. 08/31/17 (3rd update) Page 2 of 2

Date
Participant Initials _____

APPENDIX E

Interview Guide

Interview Questions

1. How long have you been a teacher?
2. How long have you taught at Marysville K-8 School?
3. Describe the school culture at Marysville K-8 prior to the implementation of mindfulness.
4. Describe the school culture of Marysville K-8 after the implementation of mindfulness.
5. Discuss any factors that cause you stress and or anxiety during the school year. How has mindfulness impacted these factors and your reaction to them?
6. As it pertains to mindfulness specifically, what factors would you say are essential for successful implementation?
7. Without referring to individual students, please discuss how mindfulness has impacted student learning.
8. Without referring to individual students, please discuss the impact of mindfulness on student behavior.
9. Is there anything else in regard to mindfulness at Marysville K-8 School that you believe is important for a research study on mindfulness and schooling?

VITA

JUSTIN J. PENLEY

Education: Ed. D. Educational Leadership, East Tennessee State University, Johnson City, TN 2018
M. Ed. Education, Milligan College, Milligan College, TN 2004
B.S. Mass Communication, East Tennessee State University, Johnson City, TN 1997

Professional Experience: Teacher, ETSU University School, Johnson City, TN 2007-Present
Teacher, Robinson Middle School, Kingsport, TN 2004-2007

Related Experience: Head Coach, High School Boys Basketball, ETSU University School, Johnson City, TN, 2007-Present
Head Coach, High School Boys & Girls Golf, ETSU University School, Johnson City, TN 2009-Present
Leadership Team, ETSU University School, Johnson City, TN 2016-Present
Administrative Internship Hours (over 700 hours total in various local schools & organizations), East Tennessee State University, Johnson City, TN 2014-2017
Assistant Coach, Boys Basketball, Dobyms-Bennett High School, Kingsport, TN, 2004-2007

Current Tennessee Licensure: 442 Administration
420 Physical Education K-12
400 Middle Grades 5-8