5-2020

A Study of Select Minnesota Public School Teachers' Mindfulness as it Relates to Their Stress-Management, Resilience, and Job Satisfaction for Motivation

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A Study of Select Minnesota Public School Teachers' Mindfulness as it Relates to Their Stress-Management, Resilience, and Job Satisfaction for Motivation

by

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A Dissertation

Submitted to the Graduate Faculty of

St. Cloud State University

in Partial Fulfillment of the Requirements

for the Degree of

Doctor of Education

in Educational Administration and Leadership

May, 2020

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Abstract

Mindfulness is not a new concept or practice, and many organizations are beginning to train their staff in such practices for various purposes such as well-being and productivity. The focus of this research study is to identify mindfulness training programs specific to teachers, the mindfulness techniques teachers are trained on, attributes that can affect motivation and well-being, and the impact mindfulness and practicing mindfulness techniques can have on teachers' reported levels of mindfulness, stress, resilience, job satisfaction, motivation, and their work environment. While there is an abundance of research on mindfulness, teacher well-being, and human motivation, there is little research analyzing mindfulness programs specific to teachers, how trained mindfulness techniques can impact teacher perception, nor whether mindful teachers have different reported perceptions regarding their levels of stress, resilience, job satisfaction, or motivation.

Research findings from this study suggests that teachers who report as having higher levels of mindfulness report having lower levels of stress and higher levels of resilience, job satisfaction, and motivation. Furthermore, it was also found that teachers who reported as having lower levels of stress, an intended outcome of mindfulness, also reported having higher levels of resilience, job satisfaction, and motivation. Teachers who practiced mindfulness techniques frequently within one category (Positive Mantras, Reminders, and Restructuring; Converting Stress to Learning Experiences; Problem-Solving; Seeking Information and Support) also practiced the other mindfulness techniques more frequently. Of the teachers who practiced mindfulness techniques more frequently, it was found that they reported as having higher levels of resilience, job satisfaction, and motivation. For teacher perceptions of their work environment and implications it may have on teacher reported outcomes, it was found that teachers who reported working in a more mindful and resilient work environment also reported themselves as having higher resilience, job satisfaction, and motivation.

The study provides school districts and school leaders with positive correlations that may assist them in providing opportunities to their staff regarding mindfulness training. Moreover, the study can provide a better understanding of how mindfulness techniques and being mindful may impact teacher stress, resilience, job satisfaction, and motivation. Finally, the study may suggest teacher well-being and motivational considerations for school leaders to determine what their teachers may need.

Keywords: mindfulness, mindfulness techniques, teachers, teacher well-being, teacher perceptions, stress, resilience, job satisfaction, motivation

Acknowledgement

Being an educator has been one of the most rewarding experiences of my life. Having the opportunity to earn my Doctorate has not only been a meaningful achievement, but one that has shown me the responsibilities that lay ahead. I am forever changed. Thank you to my Cohort 9 peers, whose belief in one another has never wavered and rich perspectives have continually inspired.

Thank you to my dissertation committee members who bestowed upon me continual wisdom, motivation, and guidance throughout this journey. Dr. Nate Rudolph, Dr. David Lund, Dr. Plamen Miltenoff, and my dissertation committee chair, Dr. John Eller, thank you for your persistence on what is the beginning of my life's work. You all have shown me what great leadership truly is through your enduring, resolute dedication. I am eternally grateful.

Finally, I would like to thank my family. The amount of confidence you have all had in me throughout this journey has meant the world to me. Thank you for believing in me, engaging in discussions surrounding my research, and understanding the amount of sacrifice this meaningful work takes. Most notably to my mom, Gigi, who taught me the power of curiosity, commitment, and optimism when striving to make a difference in the world.

Dedication

I dedicate this dissertation to all the educators throughout the world, who time and time again persevere with tenacity in and outside the classroom for a higher purpose. To those who serve all learners with high expectations, empathy, and compassion no matter what. To those who instill an enduring belief within every person with courage and authenticity. To those who endlessly provide the opportunity for all to succeed. This is for you.

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Chapter 1

Introduction of the Study

Introduction

"The frequency of teachers who reported experiencing great stress at least several days per week increased from 35% in 1985 to 51% in 2012; greater stress correlated with lower teacher job satisfaction, budget decreases, and teaching in underperforming schools" (Eva & Thayer, 2017, p. 18). The career field of teaching is a stressful one, as it demands constant, multitudinous needs on a wide spectrum regarding the human condition. The "high levels of emotional work" (Skinner & Beers, 2016, p. 99) teaching solicits is the nature of the profession. However, teachers are not provided the tools to sustain quality instruction in their classrooms. This is the product of a decrease in teacher perceived satisfaction in their job, motivation to refine their practices, and the ability to manage stress (Skinner & Beers, 2016; Marinak et al., 2014; Flook et al., 2013; Frank et al., 2015b) Professional development opportunities to train teachers in the practices of mindfulness and coping for stress-management and self-efficacy will help teachers gain resilience and motivation in their teaching practices, which in turn will have a positive effect on learners, colleagues, and school culture (Beshai et al., 2016; Wildman, 2015; Rickert et al., 2016; Jennings et al., 2016; Lutz et al., 2015; Avci et al., 2016; Bandura, 1977). Currently, little information exists on the impact of training teachers specifically in mindfulness. Furthermore, there is little information on the impact training teachers specifically in mindfulness as it relates to their professional motivation, or the implications mindfulness training for teachers has on stress-management, resilience, or job satisfaction.

Statement of the Problem

Teaching is a career path chosen and maintained predominantly by intrinsic motivations, yet teachers confront a multitude of issues, many of which are "detrimental factors that systematically undermine and erode the intrinsic character of teacher motivation" (Dörnyei & Ushioda, 2013, p. 168). Furthermore, teachers must be able to make scores of decisions consistently throughout each day, coupled with pedagogical and content-related planning, collegial collaboration, parent meetings, and more, which can diminish an individual's mental, emotional, and physical well-being (Skinner et al., 2016; Flook et al., 2013).Consequently, teacher stress and attrition rates have continued to rise (Skaalvik & Skaalvik, 2008; Skaalvik & Skaalvik, 2013) as "burnout results from continuously experiencing distress" (Vandenberghe et al., 1999, p. 192). Practicing mindfulness and acquiring skills which contribute to stress management, resilience, and job satisfaction is the antecedent to this issue, and furthers the culture of building and maintaining motivated, quality teachers (Skaalvik & Skaalvik, 2016; Didonna, 2008; Carson et al., 2006; Flook et al., 2013; Bandura, 1986; Bandura et al., 2003; Shapiro, 2009; Kong et al., 2014; Wildman, 2015). On account of the fact that "low teacher and student motivation have been identified as critical factors for school failure" (Wildman, 2015, pp. 8-9), teacher motivation and retention is directly related to stressors in the classroom and how teachers cope with those stressors (Wildman, 2015, pp. 8-9), making it more important to consider "...most educators do not have the resources to deal with daily problems in ways that convert stressors to learning experiences" (Skinner & Beers, 2016, p. 101). While mindfulness has been studied and implemented into various organizations for decades, few studies have identified mindfulness as a contribution to stress-management, resilience, and job satisfaction for

motivation in the teaching profession.

Purpose of the Study

The purpose of the study was to identify the relationship of mindfulness and practicing mindfulness to stress management, resilience, and job satisfaction for motivation among select Minnesota public school teachers who have had mindfulness training.

Significance of the Study

The career of teaching requires a great amount of emotional labor (Skinner & Beers, 2016, p. 99) which can undermine a once thought of meaningful and purpose-driven career energized by challenge, and replace it with exhaustion (Skinner & Beers, 2016, p. 100). Where stress is involved, resilience, job satisfaction, and motivation can falter due to a lack of coping skills and tools necessary to alleviate symptoms of teacher attrition (Skinner & Beers, 2016, p. 101). Mindfulness has the ability to raise teacher welfare, efficacy, and attributes of being mindful such as positive processing in stressful situations, which can lead to less teacher fatigue (Eva & Thayer, 2017, p. 21). Mindfulness-based interventions may help in maintaining teacher wellbeing and allow for a proactive approach to stressful encounters with the provision of stress coping skills and tools, resulting in elevated classroom effectiveness (Flook et al., 2013, p. 2). Mindfulness allows teachers to have a present outlook on any situation (Carson & Langer, 2006, p. 30). Furthermore, the provision of self-care tools via mindfulness practices illuminates the importance of an engaged teacher and the success of learners (Wildman, 2015, pp. 12-13). Individuals who are consciously able to manage their thoughts, emotions, and behaviors can guide any outside encounter toward meaningful work (Bandura, 1991, p 248), making mindfulness the cognizant guide of self-regulation teachers can use when approaching stressful

situations. Due to education requiring great emotional stamina, reflection, and adaptability, being mindful can result in effectively staying present and noticing new understandings in situations, (Carson & Langer, 2006, p. 30) thus supporting necessary self-regulation.

Research Questions

In reviewing the literature, the following research questions were created to guide this study in identifying correlations among teacher reports on the attributes of mindfulness, stress, resilience, job satisfaction, and motivation.

1.) What do teachers report relating to their own situations regarding self- mindfulness attributes (self-awareness, regulation, and situational acceptance), in relation to their reported outcomes regarding stress, resilience, job satisfaction, and motivation?
2.) What do teachers report in relation to stress management skills of coping for emotional regulation and keeping their personal priorities unaffected, and how does it relate to their reported motivation attributes of interest and/or enjoyment of work tasks, job satisfaction attributes of being stimulated by work tasks and feeling respected and recognized, and resilience?
3.) How do the reported demographics of teachers' gender, age, years of teaching, types of mindfulness practices they practice, and amount of time practicing those mindfulness practices affect their reported outcomes regarding mindfulness, stress, resilience, job satisfaction, and motivation?
4.) What do teachers report regarding their school's environmental attributes of mindfulness and resilience, and how does it relate to their reported outcomes regarding mindfulness, stress, resilience, job satisfaction, and motivation?

Assumptions of the Study

Assumptions within a study are expectations, or "what you take for granted relative to your study" (Roberts, 2010, p. 139). Assumptions are "presumed to be true, often only temporarily or for a specific purpose…" (Vogt & Johnson, 2011 p. 16). The study identified the following assumptions:

- Mindfulness is correlated with well-being and understanding of self and situations (Higgins, 1987).
- Well-being and understanding of self-cultivated through mindfulness is correlated with positive self-regard (Judge, 2005) and belief in one's own abilities (Bandura, 1986).
- Belief in one's own abilities is correlated with job satisfaction (Bandura, 1986).
- Well-being and understanding of self-cultivated through mindfulness is correlated with stress-management (reperceiving) (Shapiro, 2009), resilience (Smith, 2008), and job satisfaction (Herzberg et al., 1959; Herzberg, 1974), which contributes to motivation.
- Mindfulness practices allow for the threshold of stress to be managed more efficiently, which affects the psychological and physiological impact stress can have on a person (Flook et al., 2013).
- Due to psychological and physiological stress being managed, a person will gain motivation, resilience, and/or job satisfaction in their work.

Delimitations: Boundaries of the Study

Delimitations "indicate to the reader how you narrowed your study's scope. You control the delimitations- what will be included and what will be left out" (Roberts, 2010, p. 138).

Delimitations can include time, location, samples, and specific criteria (Roberts, 2010). The delimitations for this study were:

1. The school is located in Minnesota.
2. The school is a public school.
3. The school staff has had mindfulness-based training school-wide.
4. The participants are classroom teachers.

Definition of Terms

Competent: A complex combination of knowledge, skills, understanding, values, attitudes and desire which lead to effective, embodied human action in the world, in a particular domain (Crick, 2008, p. 313).

Emotional Regulation: "the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (Gross 1998, p. 275).

Mindfulness: "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (Kabat-Zinn, 2003, p. 145).

Mindfulness Based Stress Reduction (MBSR): "MBSR is based on training attention through straight- forward, secular, meditation techniques. It seeks to change our relationship with stressful thoughts and events, by decreasing emotional reactivity and enhancing cognitive appraisal" (Gold et al., 2009, p. 185).

Mindfulness Based Stress Reduction (MBSR) Practices: "The formal practices in MBSR are: mindful movement (gentle hatha yoga with an emphasis on mindful awareness of the body);

the body scan (designed to systematically, region by region, cultivate awareness of the body—the first foundation of mindfulness—without the tensing and relaxing of muscle groups associated with progressive relaxation); and sitting meditation (awareness of the breath and systematic widening the field of awareness to include all four foundations of mindfulness: awareness of the body, feeling tone, mental states and mental contents)" (Cullen, 2011, p. 3).

Motivation: "Motivation is what causes behavior" (Fejes, 2008).

- "Motivation concerns energy, direction, persistence and equifinality--all aspects of activation and intention" (Ryan & Deci, 2000, p. 69).

Positive Reappraisal: "a form of meaning-based coping, is the adaptive process by which stressful events are re-construed as benign, valuable, or beneficial" (Garland, 2009, p. 2).

Self-Awareness: "meta-awareness of self" (Vago & Silbersweig, 2012, p. 2).

Self-Regulation: "an ability to effectively manage or alter one's responses and impulses" (Vago & Silbersweig, 2012, p. 2).

Reperceive: "shifting our relationship to experience, becoming less identified with it, and better able to see it with clarity and objectivity" (Shapiro, 2009, p. 558).

Resilience: "a quality that enables teachers to maintain their commitment to teaching and their teaching practices despite challenging conditions and recurring setbacks" (Brunetti, 2006, p. 813).

Self-Efficacy: "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1977, p. 3).

Stress: "Stress is essentially the rate of wear and tear on the body" (Selye, 1976, p. 1)

Stress-Management: "by removing stressors from our lives, by not allowing certain neutral events to become stressors, by developing a proficiency in dealing with conditions we do not want to avoid, and by seeking relaxation or diversion from the demand" (Tache & Selye, 1985, p. 20).

Teacher Stress: "Teacher stress is often defined as the experience by a teacher of unpleasant emotions resulting from aspects of the work as a teacher" (Skaalvik & Skaalvik, 2016, p. 1786).

Summary

The study is presented in five chapters: (1) Introduction of the Study, (2) Review of the Literature, (3) Methodology, (4) Findings, and (5) Summary, Conclusions and Recommendations. The Review of Literature provides information on the meaning of mindfulness, intentional mindfulness practices, and teacher-specific mindfulness-based trainings. This information provides the basic factors of stress affecting teachers and their ability to manage stressful situations in the profession. Furthermore, the study analyzed factors that affect teacher resilience and job satisfaction, identifying mindfulness attributes and practices that overlap with similar theories and studies. Finally, motivational theories were analyzed in order to find correlations between the overlapping mindfulness attributes, practices, and its outcomes.

The Methodology of this study detailed the quantitative survey delivered to select Minnesota public school teachers. The survey identified the demographics of the participants, consisting of gender, age, years of teaching, the mindfulness techniques they practiced, and the frequency of practicing those mindfulness techniques weekly. These demographics allowed for the survey outcomes reported to be narrowly synthesized. The survey items consisted of

identifying participant levels of mindfulness, environmental mindfulness, attributes of stress, resilience, job satisfaction, and motivation. These reported factors, along with the participant demographics, provided data to identify correlations and answer this study's research questions. The Findings section of this study gathered the data and determined whether positive and/or negative correlations were found among teacher demographics and the survey items.

Chapter 2

Review of the Literature

Introduction

The review of literature focused on defining mindfulness, identifying mindfulness practices and trainings specific to the teaching profession, how stress affects teachers, and how mindfulness influences stress-management, job satisfaction, resilience, and motivation in teachers. The following themes identified within this chapter included:

- Being Mindful and Mindfulness Trainings for Teachers;
- The Effect of Stress on a Teacher;
- The Factors and Effects of Mindfulness on Teacher Stress-Management, Job Satisfaction, Resilience, and Motivation

Being Mindful and Mindfulness Trainings for Teachers

Mindful awareness. One of the more well-known definitions of mindfulness belongs to Kabat-Zinn. His definition of mindfulness is "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (Kabat-Zinn, 2003, p. 143). However, among other numerous definitions of the term mindfulness, it is "both an outcome (mindful awareness) and a process (mindful practice)" (Shapiro, 2009, p. 556). The way an individual interacts with and understands situations and themselves have implications when being mindful (Didonna, 2008; Vago et al., 2012; Higgins, 1987; Kabat-Zinn, 2003). A vague, broken-down definition of mindfulness that specifies the overlapping elements over the multitude of definitions is having "(1) awareness, (2) of present experience, (3) with acceptance" (Germer et al., 2005). Shapiro and Carlson identified

mindfulness more specifically as being "the awareness that arises through intentionally attending in an open, accepting, and discerning way to whatever is arising in the present moment" (2009, p. 556) and is "... composed of three core elements: intention (I), attention (A), and attitude (A)" (2009, p. 557). Being intentional, gaining specific attention, and providing a willing attitude assists in acquiring the ability to 'reperceive', a term coined by Shapiro that shifts an individual's relationship with stressful situations from personal to objective (Shapiro, 2009). The term 'reperceive' in regard to mindfulness is understood as the ultimate shift in experience and overall wellbeing upon facing adverse situations (Shapiro, 2009, p. 558). The acquisition of reperception evolves a person's approach to all experiences and allows for self-regulation, exploration, and liberation (Hollis-Walker & Colosimo, 2011, p. 223). From reperception comes having the ability to maintain and control attention in any situation while acquiring an attitude of self-compassion and nonjudgement of one's shortcomings (Hollis-Walker & Colosimo, 2011, p. 223), which indicates that the interaction with situations and oneself are altered when mindful. Mindfulness is not limited to the treatment of experiences only, but also makes one cognizant of their behavior toward and effect on others (Frank et al., 2015b). Furthermore, while encompassing situational-awareness and self-awareness,

> "mindfulness is guided and directed by seven other factors. They are: 1) the *view* one has of what is real, important valuable, and useful; 2) how *intention* is used to initiate and sustain action in skillful ways; 3) the nature of *speech* that can be either harmful or beneficial; 4) the quality of *action* as it relates to ethical principles; 5) one's means of sustaining oneself in the world as *livelihood*; 6) the degree and quality of *effort* employed

> to bring about change; 7) and *concentration* as a focusing and supporting factor to mindfulness" (Didonna, 2008, p. 28).

Didonna (2008) provides insight on how intricate mindfulness practices and acquisitions are. Acquiring a present-focused mindset through mindfulness practices is only one facet of this complex process. The process of an individual intentionally understanding themselves and their approach to any number of situations in a mindful manner is the shift mindfulness practices create (Didonna, 2008; Shapiro, 2006; Vago et al., 2012; Higgins, 1987), improving opportunities to successfully navigating new situations and continuously gathering understandings of oneself (Hoy, Gage, & Tarter, 2006, p. 238).

Self-awareness. Across a multitude of mindfulness studies and in identifying the mechanisms of mindfulness, the following four themes were identified when utilizing a "self-awareness, -regulation, and -transcendence (S-ART)" (Vago & Silbersweig, 2012, p. 2) approach to mindfulness: "(1) a present-centered orientation of awareness; (2) An attitude that consists of a constellation of positive state- like qualities (open-hearted, non-judgmental; accepting) toward thoughts and feelings; (3) a positive intention or motivational component for clinical change or spiritual incentive; (4) development of a form of decentering or psychological distancing from one's thoughts and emotions" (Vago & Silbersweig, 2012, p. 5). Along with having an optimistic outlook, Vago and Silbersweig (2012) consider that there is a certain level of self-understanding necessary in positive-quality approaches. Being mindful can provide the understanding that experiences can become negatively manipulated and influenced, causing harsh emotions and skewed realities (Vago & Silbersweig, 2012, p. 2), further enlightening an individual to becoming non-judgmental.

Higgins' Self-Discrepancy Theory (1987) provides the importance self-understanding and self-identity have on an individual's beliefs and affect, which ultimately influences well-being, decision-making, and motivation; outcomes mindfulness affect. Higgins's theory identifies three domains of the self: the actual self, the ideal self, and the ought self. The actual self represents the qualities one, or someone, believes one has. The ideal self represents qualities one, or someone, wants one to have. The ought self represents qualities one, or someone, believes one should have (Higgins, 1987, pp. 320-321).

The discrepancies between the qualities you (or others) believe you do possess, the qualities you (or others) want you to possess, and the qualities you (or others) feel you should possess can impact motivation due to the ambition of reaching a place where those areas of qualities match (Higgins, 1987, p. 321). In other words, who we believe we are should be closely aligned to who we want to and should become in order to obtain and maintain motivation. The antecedent, however, rests on self-awareness, which mindfulness impacts (Vago et al., 2012), and may be manipulated by positive self-belief "...as individual teachers' beliefs in their own ability to plan, organize, and carry out activities that are required to attain given educational goals" (Skaalvik & Skaalvik, 2008, p. 1058) can further motivate and create a bridge between who we are and who we want to, or should, become (Higgins, 1987). Therefore, mindfulness cultivating and nurturing positive self-awareness, leading to a closer relation between teacher's beliefs and others' desire to believe of in order to provide well-being and motivation, is the antecedent.

Emotional and self-regulation. Developing emotional regulation as a symptom of mindfulness allows individuals to have influence over their experiences with these emotions

(Gross, 1998, p. 275). Much like Vago and Silbersweig's use of the term *self-regulation* as "an ability to effectively manage or alter one's responses and impulses" (2012, p. 2), mindfulness studies have utilized both emotional regulation and self-regulation to define the ability to determine the effect of one's emotions from their experiences and actions. According to Shapiro, through intentional mindfulness practice, individuals who wanted to obtain self-regulation did so (Shapiro et al., 2006). Furthermore, Shapiro stated that providing focused attention to self-regulation is the center of mindfulness and is even a practice in cognitive-behavior therapy (Shapiro et al., 2006). When an individual is able to intentionally focus attention to their experiences and emotions and determine the effect it will have on themselves, attitude toward the experiences and emotions becomes vital to self-regulation (Shapiro et al., 2006). Practicing mindfulness is an "intentional training, one becomes increasingly able to take interest in each experience as it arises… bringing the attitudes of patience, compassion and non-striving to the attentional practice" (Shapiro et al., 2006, p. 377), reflecting Kabat-Zinn's definition of mindfulness regarding awareness, paying attention to current experiences, and non-judgmentally reflecting upon experiences (Kabat-Zinn, 2003).

Positive reappraisal. Mindfulness reframes stressful situations, allowing for individuals to approach and interact with such situations in a more productive way due to a shift in thinking. Positive reappraisal is a coping mechanism that shifts stressful situations into learning experiences, inevitably made to be seen as beneficial, based on metacognitive practices of the individual (Garland, 2009). Having the self-awareness that mindfulness cultivates allows individuals to practice positive reappraisal and step back from adverse situations, be aware of their thoughts and emotions, and adapt in a positive, objective way. Therefore, mindfulness

training and practices assist individuals in achieving positive reappraisal when experiencing difficult circumstances, creating a more objective reality to which they may be cognitive of in order to lessen negative impact and moderate accordingly (Garland, 2009).

Leadership mindfulness. Mindfulness utilized by leadership in a school setting in order to promote a culture of effectiveness and resilience is another realm in which stress management and well-being for teachers could be nurtured. A 2012 study focused on the ability of elementary school principals to create such an atmosphere (Fitzgerald, S., 2012). The study was conducted in Oregon across six urban school districts. The participants were ten elementary school principals. The purpose of this study was to identify the leader's ability to utilize mindfulness practices to transform a school toward a more effective, collaborative culture.

The participants in this study took the Multifactor Leadership Questionnaire (MLQ) (Avolio & Bass, 2004) and the Mindful Attention Awareness Scale (MAAS) (Brown & Ryan, 2003) in the form of an interview at their school-sites. After gathering the results of the data from both tests, three principals were identified as 'transformational', having scored the highest in leadership qualities and mindfulness when establishing academic rigor and teacher effectiveness in their schools. Further analysis of the data revealed consistency with three responses from the interview regarding transformative leadership: integrity, risk-taking, and transparency/honesty.

The interviewers chose integrity as a quality in which a transformative leader must have. Their responses ranged from discussing the importance of communication to the power of relationships with coworkers. Along with integrity, another quality counted was teachers having the confidence to take risks. A part of risk-taking, as shown throughout the interview process, was trusting peers at work. In order to overcome challenges, a transformative leader must be

willing to trust those around them and help those people become leaders as well. With this comes transparent, honest communication. School leaders having meaningful conversations with those they recognize as someone who needs it or deserves it can create opportunities for them and their school, further urging a present state of awareness mindfulness cultivates and is necessary from the leader (Didonna, 2008; Shapiro, 2006; Vago et al., 2012; Higgins, 1987; Hoy et al., 2006). These transparent conversations can also provide leaders with feedback and perspectives they may not have been aware of had they not been intentional and present. Allowing for others' voices to be heard and following through with testimonies or actions is an important quality of a transformative leader. Throughout, the study brought to light the importance of school environments being mindful and having a moral compass, modeling expectations, and bettering others.

Hoy, Gage, and Tarter (2006) further explore the impact of mindful leaders on mindful environments for teachers. The researchers identify the reliant culture of educational routines and standard practices, pointing out that the robustness of routines may stand unevolved even when confronted with issue. "Once habits are formed, it is difficult to break set and respond in novel ways, especially if the routines have been successful. Mindful behavior of individuals and organizations is more than simply being alert; it is a habit of mind that scans for subtle changes that cause trouble (Hoy et al., 2006, p. 237). In order for educational environments to cultivate a mindful approach to all situations, rigid standards and practices within the environment must be considered to be retired (Hoy et al., 2006). "When teachers and administrators simply follow rules or comply with senseless orders, they are mindless…" (Hot et al., 2006, p. 238), further exemplifying that "…the causes of mindlessness that influence daily behavior are repetition,

narrow mindsets, preoccupation with ends rather than means, and context confusion" (Hoy et al., 2006, p. 238). Due to mindfulness requiring individuals to be flexible, non-judgmental, and to have the ability to break their normalcies, routines are counterproductive of cultivating a mindful environment. Furthermore, Hoy differentiates the importance of mindful organizations over the number of collective mindful individuals in an organization (2003). Ray, Baker, and Plowman (2011) offer five processes to help organizational mindfulness: preoccupation with failure, Reluctance to Simplify, Sensitivity to Operations, Commitment to Resilience, and Deference to Expertise (Ray et al., 2011). Preoccupation with Failure implicates organizations to confront failures as commonplace, sharing mistakes and openly reporting problems (Ray et al., 2011). This creates a culture that fails fast and often and is comfortable with openly failing for continual improvement. Reluctance to Simplify involves organizations refusing old ways of identifying new solutions, rather "seeking divergent views" (Ray et al., 2011, p. 190). Sensitivity to Operations focuses on organization's awareness of present, relevant details to current situations with continuous adjustments (Ray et. Al, 2011). Commitment to Resilience involves quick, accurate corrections to situational errors before anything can become worse (Ray et al., 2011). Finally, Deference to Expertise focuses organizations toward strategically utilizing individuals who have specific sets of knowledge regardless of their level or rank within the organization, "…recognizing that authority does not equate expertise" (Ray et al., 2011, p. 190).

How school leadership administers themselves as mindful leaders matters not simply for within themselves, but their approach to their teachers and the opportunities those approaches can create within teachers.

Mindfulness trainings specifically for teachers. Actively engaging in mindfulness "...range of formal practices that are undertaken for varying periods of time on a regular basis, to informal practices that are aimed at cultivating a continuity of awareness in all activities of daily living" (Kabat-Zinn, 2003, p. 147). Across a multitude of studies, teachers trained in mindfulness via a MBI were found to experience less stress and take a leave of absence due to illness than those who did not receive the MBI. Stressful encounters were shifted to encounters of opportunity and learning as teachers utilized coping mechanisms to overcome adversities and stay actively engaged (Skinner & Beers, 2016, p. 104. "Developmental conceptualizations by definition link the processes of dealing with stress to the potential for growth…" (Skinner & Beers, 2016, p. 106), necessitating coping mechanisms mindfulness practices teach.

Providing mindfulness professional development opportunities is not sufficient enough to create change and growth in schools. Through research, Langer suggests *what* is taught regarding mindfulness may be less important than *how* it is taught (Langer, 2000, p. 220). Professional development offered to teachers must see leadership subscribe to mindfulness practices themselves and have a mindful approach. Schools with personal growth opportunities and incentives for their staff have been viewed as engaging and motivating for teachers, as well as furthering the schools' development as a whole (Wildman, 2015, pp. 16-17). Schools that support teacher well-being positively impacts not only the teachers themselves, but the school as well.

Trends in professional development often are contextual to a point in education; not all educators are in need of that specific development. "Facts, whether derived from science or not, are not context-free; their meaning and usefulness depend on the situation" (Langer, 2000, p.

221). The differentiated approach to teacher support must be taken, as contexts to everyone's experiences and needs differ greatly due to a number of factors. "Mindfulness has been proposed as a form of professional development to manage the demands of teaching" (Flook et al., 2013, p. 3), which can help create the antecedent to approaching any contextual situation. It is applicable to any situation in order to allow teachers to manage stress and shift their perceptions to possibility. Any professional development information and skill learned must be mindfully approached by teachers in order to allow their stressors to be turned into opportunities (Flook et al., 2013).

The Happiness Advantage Orange Frog Workshop. In a pilot study assessing the impact of The Happiness Advantage Orange Frog Workshop principles (Achor, 2011) on school culture, teacher engagement, and student achievement. According to the study, "when positive psychology principles are implemented across a school district, teacher satisfaction and engagement in their work improves" (Sagan, 2019, p. i). The study consisted of over 2,000 teachers across 28 schools in the Chicagoland area. Overall, it was reported that 86% of staff were highly satisfied and engaged at work, having ranges from 56% to 97% as staff being highly satisfied and engaged. All schools in the district had different traditions during the school year, which impacted the replies of their staff. Schools with frequent all-staff activities saw higher reported satisfaction and engagement. Even though all schools allocated time for their staff to engage in professional development and activities, how the schools had staff members interact made a distinct difference. Upon being trained in on The Happiness Advantage Orange Frog Workshop (Achor, 2011), schools provided intentional time twice a month for staff to implement

the Orange Frog principles (Achor, 2011) and provide staff development with culture building activities. Overall staff satisfaction and engagement increased by 12%.

Modified mindfulness-based stress reduction (mMBSR). In a pilot study focused on assessing the impact on teacher stress burnout and efficacy (Flook et al., 2013), a modified Mindfulness-Based Stress Reduction (mMBSR) program, adjusted specifically for teachers from Kabat-Zinn's Mindfulness-Based Stress Reduction (MBSR) (1990), the study indicated "that mMBSR may be one intervention modality that has potential for systematic implementation as a part of teachers' professional development" (Flook et al., 2013, p. 10). The study consisted of 18 public elementary school classroom teachers across four different elementary schools in Madison, Wisconsin. 16 of the participants were female, two were male. The average age of the participant pool was 43 years of age, while the average of years taught among the participants was approximately 13 years. All schools were low income and had a significantly diverse population of learners' (racial and ethnic backgrounds).

Individuals were placed into an intervention group or wait-list control group. Pre-test and post-test data collections were performed throughout the study. Teachers were assessed on their levels of "psychological distress" (Derogatic, 1994) through the use of the Symptom Checklist 90-R (Derogatic, 1994), the Five Facet Mindfulness Questionnaire (FFMQ) (Baer et al., 2006), the Neff Self-Compassion Scale (SCS) (Neff, 2003), the Maslach Burnout Inventory-Educators Survey (MBI-ES) (Maslach et al., 1996), the Classroom Assessment Scoring System (CLASS) (LaParo et al., 2004), cortisol measurements from saliva, the Cambridge Neuropsychological Test Automated Battery (CANTAB) (University of Cambridge, 1988), the Rapid Visual Information Processing task (RVP) (Bakan, 1953), the Affective Go/No-Go task (AGN) (Kaplan

et al., 2006), and the logging of minutes per day each participant would engage in formal and informal mindfulness practice.

Both groups reported changes in accordance to the CLASS instructional support (LaParo et al., 2004) assessment. However, both groups did see an improvement in their mindfulness skills (FFMQ) (Baer et al., 2006) and their lowered cortisol levels. The intervention group alone reported an increase in psychological awareness, an increase in self-compassion (SCS) (Neff, 2003), a decrease in emotional exhaustion, an increase in personal accomplishment, an improved rated classroom behavior and organization (CLASS) (LaParo, Pianta, & Stuhlman, 2004), and fewer errors on the AGN (Kaplan et al., 2006) assessment, showing improved emotional processing.

The purpose of this study was to modify the Mindfulness-Based Stress Reduction (MBSR) (Kabat-Zinn, 1990) training for teachers specifically, focusing on teachers and the integration of mindfulness into their professions. Studies from the implementation of the mMBSR program showed positive effects on the participants' brains and overall well-being, indicating that "policy decisions that take into consideration and support programs designed to enhance teacher personal and professional well-being have the potential to significantly improve educational practices" (Flook et al., 2013, p. 10).

SMART program. In a study piloting the SMART program (Cullen & Wallace, 2007), 14 elementary teachers averaging 24 years of age participated. The Five Factor Mindfulness Questionnaire (FFMQ) (Baer et al., 2006) was utilized to measure the mindfulness of the participants, as well as a qualitative interview in order to identify themes regarding mindfulness among participants. Of the 14 participants, 12 reported having an increase in mindfulness after

receiving the SMART program (Cullen & Wallace, 2007) courses, according to the FFMQ (Baer et al., 2013). An improvement in teaching practices, the ability to be proactive, and growth in well-being were themes found when interviewing participants. Both the quantitative and qualitative findings were positively correlated, showing the SMART program (Cullen & Wallace, 2007) to help teachers increase their mindfulness.

CARE program. In a pilot study utilizing the CARE program (Garrison Institute, 2007), 53 teachers participated. The teachers were recruited from suburban and urban schools throughout two school districts. Of the 53 participants, 47 were female and 6 were male. Averaging 36 years old and having taught for an average of 11.7 years, 72% of the participants had graduate degrees. Two cohorts of teachers were delivered the CARE program training (Garrison Institute, 2007) at two different times of the school year. Cohort one received the training from October 2010 to January 2011, while Cohort two received the training from January to April 2011. "Participants completed an online battery of self-report measures at pre and post to assess general well-being, efficacy, burnout/time pressure, and mindfulness" (Jennings et al., 2013, p. 381). To assess general well-being, participants were rated via Positive and Negative Affect Schedule (PANAS) (Watson et al., 1988), Emotion Regulation Questionnaire (Gross & John, 2003), The Center for Epidemiologic Studies Depression Scale (CES-D-20) (Radloff, 1977), and The Daily Physical Symptoms (DPS) (Larsen & Kasimatis, 1997). To assess teacher efficacy, participants were rated via Teachers' Sense of Efficacy Questionnaire (TSES) (Tschannen-Moran & Hoy, 2001). To assess teacher burnout and time pressure, participants were rated via Maslach Burnout Inventory Educators' Survey (MBI) (Maslach et al., 1997) and The Time Urgency Scale (TUS) (Landy et al., 1991). To assess

teacher mindfulness, participants were rated via The Five Facet Mindfulness Questionnaire (FFMQ) (Baeret al., 2006). Throughout the multitude of areas participants were rated, significant and positive CARE (Garrison Institute, 2007) intervention effects were found within specific aspects in all areas. The overall "results reported here suggest that CARE had significant positive effects on teachers' general well-being, efficacy, burnout/time pressure, and mindfulness" (Jennings et al., 2013, p. 384).

.b foundations course. Another study was conducted to specifically assess how efficient MBI's for teachers would be in accordance to their stress levels and overall well-being (Beshai et al., 2016). The MBI utilized the teacher-specific Mindfulness in Schools Project (MiSP) program known as the .b Foundations Course (2014). This program included nine, 75 minute sessions with the participants. Along with these sessions, participants were expected to spend 10-40 minutes at home, six days a week, practicing the mindfulness techniques learned throughout their sessions.

The assessments of this study relied on teachers evaluating their perceptions of their own stress and well-being, in juxtaposition to whether the MBI would provide a more positive school culture as the result. This study was narrowed down to the individual teacher. Participants recruited for the study came from diverse school-settings, including public and private schools. All participants were secondary teachers who worked with learners in an educational role. Throughout seven schools, 108 participants were initially identified to take place in the study. 89 of those recruited were to be the 'intervention' group, while the remaining would be the 'comparison' group. 19 total participants dropped out of the study, leaving 82 participants in the intervention group and the rest in the comparison group. 62 participants in the study were

female, 27 participants in the study were male. Teachers within the schools that had the recruited individuals would be administering the MBI over the span of eight weeks. The first task for the participants was for them to answer a questionnaire and self-select whether they would in the comparison or intervention condition group. At the end of their eight-week MBI, a personalized questionnaire was sent to each participant.

Four tests were used on the participants. The Perceived Stress Scale (PSS) (Cohen et al., 1983), the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) (Stewart-Brown et al., 2011), the Five Facet Mindfulness Questionnaire (FFMQ) (Baer et al., 2006), and the Neff Self-Compassion Scale (SCS) (Neff, 2003). The baseline results for the PSS (Cohen et al., 1983) showed a significant difference between the intervention group and the comparison group. The intervention group reported higher than the comparison group, highlighting a higher perception of stress. Of the baseline results for the WEMWBS (Stewart-Brown et al., 2011), the intervention group scored significantly lower than the comparison group, providing an insight of a lack of well-being amongst that group. The FFMQ (Baer et al., 2006) baseline tests also showed a significant difference, as the intervention group scored lower than the comparison group, proving that the intervention group does not have strong mindfulness skills. The SCS (Neff, 2003) test did not show any significant differences between the groups.

The intervention group test scores all shifted after the eight-week MBI was administered. The PSS scores went down, showing an improvement on the levels of stress they were perceiving to have. In addition, the intervention group scored higher on their well-being reports (WEMWBS) (Stewart-Brown et al., 2011), they were reportedly stronger in their mindfulness skills (FFMQ) (Baer et al., 2006), and they reported to have more self-compassion (SCS) (Neff,

2003). The comparison groups reported scores had the opposite effect, showing an increase in perceived stress and lower scores in well-being, mindfulness skills, and self-compassion.

The groups were formed by participant-choice. This may have had a direct effect on the outcomes of the tests. Due to how well these participants may have known themselves, many of them who have been dealing with stress may have chosen the intervention group as a way to receive help. The correlations between their higher levels of perceived stress and their lower self-esteem were evident.

Mindfulness techniques. The Happiness Advantage Orange Frog Workshop (Achor, 2011), Modified Mindfulness-Based Stress Reduction (mMBSR) (Flook et al., 2013), Cultivating Awareness and Resilience in Education (CARE) (Garrison Institute, 2007) and Stress Management, Relaxation Techniques in Education (SMART) (Cullen & Wallace, 2010), and the .b Foundation Course (MiSP, 2014) are teacher-specific interventions providing educators with the tools to manage daily stressors that may be inhibiting stress-management, resiliency, job satisfaction, and/or motivation. Across these teacher-specific mindfulness trainings, four categories of mindfulness techniques emerged, comprised of various applied practices and regarding similar outcomes.

Throughout each teacher-specific mindfulness training, multiple mindfulness techniques and intended outcomes were found to be similar, and were situated into four categories: positive mantras, reminders, and restructuring, converting stress to learning experiences, problem-solving, and seeking information and support. These four categories have identified mindfulness techniques taught within each mindfulness training specific to the category, shared categorical

techniques with other mindfulness trainings, intended outcomes for each category, and supported motivation and job satisfaction theories they fulfill.

Positive mantras, reminders, and restructuring techniques share the intended outcomes of achieving self-regulation and applying positive appraisal. Having positive self-perception, positive self-perception, and efficacy, according to Albert Bandura's Social Cognitive Theory (1977) and Timothy Judge's Core Self-Evaluation (2005) respectively, is relative to this mindfulness category, techniques, and intended outcomes.

The mindfulness technique category of converting stress to learning experiences provides outcomes of acceptance, self-regulation of having a non-judging attitude, and job satisfaction through respect and recognition. This supports Frederick Herzberg's Motivation-Hygiene Theory (Herzberg et al., 1959; Herzberg, 1974) in having intrinsic personal growth, and Abraham Maslow's Hierarchy of Needs' (1967) meta-motivation from having self-actualization as outcomes of practicing these types of mindfulness techniques.

Actively problem-solving, another mindfulness technique category, provides the ability to self-regulate attention and achieve job satisfaction based on job responsibilities. These intended outcomes support Abraham Maslow's Hierarchy of Needs' (1967) meta-motivation from self-actualization through individuals realizing and understanding their attentional abilities, Frederick Herzberg's Motivation-Hygiene Theory (Herzberg et al., 1959; Herzberg, 1974) of intrinsic personal growth, and Timothy Judge's Core-Self Evaluations (2005) and its positive self-reflection and efficacy.

Seeking information and support as a mindfulness technique category contributes to self-regulating attention on various tasks, as well as gaining motivation through being interested in

and enjoying work by having information and support. An individual having the skill and opportunity to seek out information and support at work supports Abraham Maslow's Hierarchy of Needs' (1967) meta-motivation from self-actualization through gained efficacy, Frederick Herzberg's Motivation-Hygiene Theory (Herzberg et al., 1959; Herzberg, 1974) of intrinsic personal growth by having needs of information and supports met, and Timothy Judge's Core-Self Evaluations (2005) and its positive self-reflection through gained efficacy.

Figure 1 provides associations across the four mindfulness technique categories (Positive Mantras, Reminders, and Restructuring; Converting Stress to Learning Experiences; Problem-Solving; Seeking Information and Support), intended attributes each mindfulness technique focuses on as an outcome, The Orange Frog Program (Achor, 2011), mMBSR practices (Flook et al., 2013), CARE practices (Jennings et al., 2013), and SMART practices (Cullen & Wallace, 2010) that associate with a mindfulness technique category, and motivational theories that apply to each mindfulness technique, intended attribute, and practice(s) of each mindfulness program.

Figure 1

Associations Between Mindfulness Techniques, Intended Mindfulness Attributes, Mindfulness Program Practices, and Motivational Theories

The Happiness Advantage Orange Frog Workshop. Shawn Achor's The Happiness Advantage Orange Frog Workshop (2011) focuses on teaching seven principles based on the science of happiness and positive psychology, which is paired with a parable called "The Orange Frog". The mission for the workshop is to have teachers learn strategies and develop habits to help overcome adverse situations. The seven principles are titled The Happiness Advantage, The Zorro Circle, The 20-Second Rule, The Social Investment Solution, Mindset Matters, The Tetris Effect, and Falling Up (Achor, 2011).

The Happiness Advantage is a principle for teachers to develop a more positive approach to situations, with the goal of improving productivity and performance (Achor, 2011). The Zorro Circle helps teachers remain rationale and objective when facing adverse situations. By keeping control of emotions, teachers are then able to focus on identifying short term goals to work toward a larger success, acknowledging the small accomplishments along the way (Achor, 2011). The 20-Second Rule provides a way for teachers to create better habits by shifting their actions toward proactivity for goal attainment by asking them to make small adjustments that will have long-term benefits (Achor, 2011). The Social Investment Solution makes teachers cognizant of their interaction with people (friends, peers, family) who can support them in order to create a sustaining network of support for success (Achor, 2011). Mindset Matters helps teachers focus on situational mindsets, asking for them to adjust their mindset in one situation to see and feel fulfillment and achievement from it (Achor, 2011). The Tetris Effect causes teachers to begin to see positive patterns in their world. When teachers look for positive happenings, they will begin to see patterns and opportunities to contemplate positive solutions (Achor, 2011). Finally, Falling Up is a reflective principle for teachers begin to see triumphant opportunities

regardless of the adverse situations they may be experiencing. They are able to see a positive outcome because of the adverse situation (Achor, 2011).

These seven principles Achor (2011) describes and trains teachers on are able to be categorized into four mindfulness techniques based on the mindfulness attributes they help teachers achieve: Positive Mantras, Reminders, and Restructuring, Converting Stress to Learning Experiences, Problem-Solving, and Seeking Information and Support.

The Happiness Advantage Orange Frog Workshop mindfulness technique categories. When determining what category of mindfulness techniques Achor's "Happiness Advantage Orange Frog Workshop" (2011) seven principles attribute to, the objective of each were considered. The Happiness Advantage, The Tetris Effect, and Falling Up (Achor, 2011) falls under "Positive Mantras, Reminders, and Restructuring" (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011) mindfulness technique category, as those practices support the achievement of the mindfulness attributes of self-regulation through intentional actions and a positive attitude, and positive appraisal (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). Mindset Matters (Achor, 2011) falls under the "Converting Stress to Learning Experiences" (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011) mindfulness technique category, supporting teachers in achieving situational acceptance, self-regulation through a positive attitude and situational non-judgement, and job satisfaction through respect and recognition (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). The Zorro Circle and The 20-Second Rule (Achor, 2011) falls under the "Problem-Solving" (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990;

Achor, 2011) mindfulness technique category, which focuses on helping teachers gain self-regulation through attention and recognize job satisfaction through responsibility (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). The Social Investment Solution (Achor, 2011) falls under the "Seeking Information and Support" (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011) mindfulness technique category, as it supports teachers in acquiring self-regulation through attention and motivation by interest and enjoyment (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016).

Modified mindfulness-based stress reduction (mMBSR). The goal for the Modified Mindfulness-Based Stress Reduction (mMBSR) was to directly adapt Kabat-Zinn's MBSR (1979) specifically for teachers and their implementation of mindfulness practices into their classrooms (Flook et al., 2013, p. 5). Both the MBSR (Kabat-Zinn, 1979) and the mMBSR (Flook et al., 2013) share the following practices:

- "Length of time: weekly 2.5 hour sessions spanning an eight week period
- A 7-hour day of mindfulness (following the 6th session)
- Practices learned: body scan, sitting meditation, walking meditation, loving- kindness meditation, choiceless awareness, and yoga
- Themes presented such as the fact that challenges and difficulties are workable, how seeing and not see things will determine to some extent how you will respond to them, and mindfulness as a means of working with stress

- Foundational attitudes brought to cultivating mindfulness which impact both the learning and the practice: beginner's mind, non-judgment, non-striving, patience, acceptance, letting go, and trust
- Each session includes: selective and sustained attention practices, introduction of new concepts, dyad/triad/whole group reflection/sharing about practice experiences in and out of class, reflecting on poetry or readings, mindful listening practice, and opportunity for questions" (Flook et al., 2013, p. 11).

However, what makes mMBSR (Flook et al., 2013) adapted for teachers are the at-home guided practice options consisting of guided meditation, body scanning, sitting, and yoga, as well as specific 'informal practices' to be completed in the teachers' school environment in order to support the application of mindfulness practices in their workplace setting (Flook et al., 2013). These 'informal practices' are to be written on small index cards and accompany the teachers all day. Practices ranging from written reminders for self-care, written body scan reminders and guides, positive mantras to read regarding thoughts, emotions, and pain, and situational awareness are found on these index cards with the intention that teachers will read and practice mindfulness activities throughout their workday.

Loving-Kindness Meditation is a Caring Practice of mMBSR in which teachers utilize phrases three or more times a day wishing themselves and others to be safe, be happy, be healthy, and to live with ease (Flook et al., 2013). This provides teachers an opportunity to acknowledge their emotions and respond to them in a loving and kind way toward themselves and others. Informal Practices such as having a teacher repeat positive phrases to themselves regarding their thoughts, emotions, and pain, and noticing their physical body to be in the present

moment and ease any tightness happening allows teachers to regulate their thoughts and emotions objectively (Flook et al., 2013). Foundational Attitudes teach teachers how to cultivate mindfulness through learning the meaning of mindfulness and ways to actively practice being non-judgmental, non-striving, patient, accepting, letting go, and trusting negative thoughts, emotions, and situations they may be in (Flook et al., 2013). Stressors and Stress Cycle supports teachers in learning how to react and respond to stressful situations by breaking them down for analysis. Teachers are asked to write their stressors on post-it notes, as well as ways to cope with stressors on separate post-it notes. While reading through stressors and coping practices, teachers are able to identify coping practices that work for them, what may be unhealthy, and any patterns of stressors and reactions to stressors (Flook et al., 2013). In the Experience practice of mMBSR (Flook et al., 2013), teachers share with each other their emotions regarding their classrooms, what difficulties arise, and what makes their classrooms come alive. This reflective discussion allows teachers to support one another in shared experiences.

These practices from the mMBSR teacher training (Flook et al., 2013) can be categorized into four mindfulness techniques based on the mindfulness attributes they help teachers achieve: Positive Mantras, Reminders, and Restructuring, Converting Stress to Learning Experiences, Problem-Solving, and Seeking Information and Support.

mMBSR mindfulness technique categories. Outcomes and objectives of each mMBSR (Flook et al. 2013) practice that teachers are trained on were considered when identifying the category of mindfulness technique they are applicable to. Loving-Kindness Meditation, Informal Practices, and Foundational Attitudes (Flook et al., 2013) contributes to the mindfulness technique category “Positive Mantras, Reminders, and Restructuring” (Skinner & Beers, 2016;

Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011), supporting teachers in achieving self-regulation intentionally, through attitude, as well as positive appraisal (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). The Stressors and Stress Cycle (Flook et al., 2013) practice was applicable to the mindfulness category of "Converting Stress to Learning Experiences" (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011) based on teaching teachers to accept their current situations, achieving self-regulation through a non-judging attitude, and acknowledging respect and recognition for job satisfaction (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). Informal Practices (Flook et al., 2013) allow teachers to practice the mindfulness technique of "Problem-Solving" (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011) based on acquired attributes of self-regulation through paying attention to the present moment and recognizing responsibility as a job satisfaction (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). Experience (Flook et al., 2013) falls beneath the mindfulness technique category "Seeking Information and Support" (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011) allowing teachers to pay attention to experiences they are sharing, with can help achieve self-regulation and motivation based on identifying interests or enjoyment at work (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016).

CARE program. The CARE program was established in 2007 by the Garrison Institute with an approach that "...blends didactic instruction in the neuroscience of emotion with related experiential activities including time for group discussion and individual reflection" (Jennings,

2016, p. 138). With the CARE intervention (Garrison Institute, 2007) focusing on mindfulness practices, emotional skills instruction, and caring and listening practices for teachers, their intended outcomes for teachers would be mindfulness, efficacy, and well-being (Jennings, 2016). Over the course of four to five weeks, with options for follow-up, the CARE program (Garrison Institute, 2007) has teachers learn to regulate their emotions through reflective practices and role-playing in order to achieve resiliency and positive reappraisal in adverse situations for themselves, as well as colleagues, parents, and students (Jennings, 2016, p. 139). "The researchers found that participation in CARE was associated with substantial increases in teacher well- being, effectiveness in teaching, and mindfulness, as well as decreases in burnout and time-related stress" (Eva & Thayer, 2017, p. 21).

Various practices are a part of the CARE intervention training (Garrison Institute, 2007). In order to help teachers grow in empathy and compassion, they have teachers practice Caring Practices, which involves teachers reflecting positively on themselves and others well-being to help instill positive emotions. Mindfulness/Stress Reduction Practices (Garrison Institute, 2007) has teachers become aware of their physical body, their breathing, and staying present and mindful throughout every moment as much as possible. This level of intention also is role played in the CARE intervention training (Garrison Institute, 2007). Emotion Skills Instruction (Garrison Institute, 2007) allows teachers to explore their emotions across different situations through role-playing and reflection in order to support their growth in self-awareness to promote less reactivity during classroom adverse situations. Mindful Listening Partner Practices (Garrison Institute, 2007) helps teachers understand the means to be present and mindful when listening.

Not allowing their minds to wander off is an attribute of being a mindful teacher, and through role-playing practice, teachers can fully engage with someone non-judgmentally.

The CARE intervention training for teachers (Garrison Institute, 2007) can be categorized into four mindfulness techniques based on the mindfulness attributes they help teachers achieve: Positive Mantras, Reminders, and Restructuring, Converting Stress to Learning Experiences, Problem-Solving, and Seeking Information and Support.

CARE program mindfulness technique categories. Based on the objectives the CARE intervention training practices for teachers (Garrison Institute, 2007) focus on, each practice was categorized by those objectives with mindfulness technique categories. Caring Practice and Mindfulness/Stress Reduction Practices (Garrison Institute, 2007) could be placed in the "Positive Mantras, Reminders, and Restructuring" mindfulness technique category (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011) with self-regulation through intention and attitude, and positive appraisal attributes being achieved (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). CARE's Emotional Skills Instruction (Garrison Institute, 2007) contributes to the "Converting Stress to Learning Experiences" category (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011), as the attributes acquired through these practices are acceptance of a situation, self-regulation through a non-judgmental attitude, and acknowledging respect and recognition as job satisfaction (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). Mindfulness/Stress Reduction Practices (Garrison Institute, 2007) also contribute to the mindfulness technique category "Problem-Solving" (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990;

Achor, 2011) due to teachers achieving self-regulation through added attention and seeing responsibility as job satisfaction (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). Mindful Listening Partner Practices (Garrison Institute, 2007) fall beneath "Seeking Information and Support" mindfulness techniques (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011), as it allows teachers to gain self-regulation through their added attention to a situation and gained motivation through the identification of interests and enjoyment at work (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016).

SMART program. The Stress Management and Resiliency Techniques in Education (SMART) (Cullen & Wallace, 2010) program focuses on mindfulness, empathy, and understanding emotions. The program includes "experiential activities in mindfulness including: meditation, emotional awareness and movement" (PassageWorks, n.d., para. 4). While a large portion of the SMART program (Cullen & Wallace, 2010) implements MBSR (Kabat-Zinn, 1979) practices (meditation, yoga, body scans), it also focuses on self-awareness for emotional regulation and the impact on interpersonal relationships. The SMART program (Cullen & Wallace, 2010) makes intentional the interconnectedness of both, citing themselves as "devoted to emotion theory and the application of mindfulness to awareness and regulation of specific challenging emotions (fear, anger, unforgiveness) and... forgiveness and loving-kindness practices aimed at mindfulness in the context of interpersonal relationships" (Jennings et al., 2012, pp. 382-383). Teachers participate in eight weeks of 2.5 hour sessions with a MBSR and

SMART-trained instructor (Jennings et al., 2012, p. 383). Teachers were to also practice mindfulness independently for 15 minutes per day throughout the entirety of the program.

The SMART (Cullen & Wallace, 2010) program has specific practices teachers are trained in throughout the course. The SMART (Cullen & Wallace, 2010) program begins with introducing teachers to mindfulness and moves into Perceptions practice. Teachers are brought through a guided visualization, focus of the physical body, mindful stretching, and breath awareness. Responding versus reacting (Cullen & Wallace, 2010) trains teachers on the stress reaction cycle, coping, and discussions. Working with conflict (Cullen & Wallace, 2010) trains teachers in aikido of communication through role playing. Compassion and kindness (Cullen & Wallace, 2010) trains teachers in kindness meditation. Working with anger (Cullen & Wallace, 2010) trains teachers in choiceless awareness meditation. Working with fear (Cullen & Wallace, 2010) brings teachers through a relived fear exercise.

The SMART (Cullen & Wallace, 2010) program can be categorized into four mindfulness techniques based on the mindfulness attributes they help teachers achieve: Positive Mantras, Reminders, and Restructuring, Converting Stress to Learning Experiences, Problem-Solving, and Seeking Information and Support.

SMART Principles mindfulness technique categories. Throughout the SMART (Cullen & Wallace, 2010) program, various practices were taught to teachers with different objectives. Each objective was considered when identifying and connecting those practices to a mindfulness technique category. Perceptions and Compassion and kindness (Cullen & Wallace, 2010) were identified as belonging in the “Positive Mantras, Reminders, and Restructuring” mindfulness technique category (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011)

based on the attributes of self-regulation and positive appraisal being an intended outcome (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). The SMART (Cullen & Wallace, 2010) practices of Responding versus reacting, Working with anger, and Working with fear connect with the "Converting Stress to Learning Experiences" mindfulness technique category (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011), as achieving acceptance, self-regulation, and job satisfaction are the objectives (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). Working with anger and Working with fear SMART (Cullen & Wallace, 2010) practices fell beneath the "Problem-Solving" mindfulness technique category (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011) due to self-regulation and job satisfaction being the attributed outcome (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016). Finally, the SMART (Cullen & Wallace, 2010) practice Working with conflict falls beneath the "Seeking Information and Support" mindfulness technique category (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011), with self-regulation and motivation being the attributed outcomes (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Germer et al.; Skaalvik & Skaalvik, 2008; Jennings, 2016).

Stress on a Teacher

"Stress arises when individuals perceive that they cannot adequately cope with the demands being made on them or with threats to their well-being" (Lazarus, 1966). Hans Selye, the pioneer in stress studies and the author of "The Stress of Life" (1956) first coined the term

and defined stress as “the rate of wear and tear on the body” (Selye, 1956, p. 1). As the term stress can be applied to different contexts, when specifically relating to teaching, “teacher stress is often defined as the experience by a teacher of unpleasant emotions resulting from aspects of the work as a teacher” (Skaalvik & Skaalvik, 2016, p. 1786), which “causes individual to exert farther effort beyond his/her physical and psychological limits due to disturbing conditions from the physical and social environment” (Avci et al., 2016, p. 155). Therefore, we understand stress in education to be the wear and tear on an educator due to unpleasant emotions from teaching. Furthermore, the effects of stress may impede one’s ability to be mindful, gain resilience, have job satisfaction, or find motivation in one’s work (Avci et al., 2016; Dunham, 2002; Skaalvik & Skaalvik, 2016).

The perception of stress on a teacher. Throughout this theme, research regarding the stressors teachers experience within their job will be analyzed in order to identify areas and levels of needs for mindfulness practices. “Twenty-five to thirty percent of teachers rate their jobs as either very or extremely stressful” (Skinner & Beers, 2016, p. 99), and the effects of those high levels of stressors can take many forms.

The perceptions of teachers experiencing stress in the teaching profession was indicative in a study by Avci, Bozgeyikli , & Kesici (2017). The authors looked at whether psychological needs predicted teachers’ perceptions of stress (Avci et al., 2017). 498 participants were included. 317 were female, 181 were male. Two groups were looked at for comparison: public school to private school teachers, and male to female teachers.

The instruments used for this study were a personal information form, the New Psychological Needs Scale (Heckert et al., 2000), the Perceived Stress Level Scale (PSS) (Cohen

et al., 1983), the Beck Depression Inventory (Beck, 1961), and the State-Trait Anxiety Inventory (Spielberger et al., 1983). Different levels of education, public schools and private schools, as well as genders of teachers were looked at throughout this study.

In the areas of Perceived Stress, Relationships, and Autonomy in their school, public school teachers reported higher levels than those in private schools, but not significantly. There was no significant difference in terms of Perceived Stress or Needs for Success. Female teachers averaged higher scores than male teachers in the psychological needs areas of Needs for Success and Perceived Stress categories per the instrument. However, males scored higher than females in the psychological needs areas of Relationships, Autonomy, and Dominance. This is significant in understanding whose, specifically female teachers and male teachers, perceptions within areas of psychological needs were notable when understanding the supports needed to alleviate demotivating factors for those in the profession.

The study also broke down data among teachers in elementary schools, secondary schools, and high schools. Overall, secondary school teachers scored the highest in perception of stress and the psychological needs area of Autonomy, while teachers who work in high schools have the lowest perception of stress, but highest in the psychological needs areas of Success, Relationships, and Dominance. This reveals a distinction between elementary teachers, secondary teachers, and high school teachers, which discloses a deviation in areas of psychological needs and supports necessary for motivation at the various levels. Therefore, psychological needs supports must be organized based on the level of education teachers work in.

This study found a correlation between the psychological needs and the perceived stress levels of teachers. The level of perceived stress rises as the psychological needs rise. For that reason, the perceptions of teachers, regardless of gender or level of education, must be considered in order to offer relevant support that can aid in perceived job satisfaction and motivation, as well as have lasting effects physiologically in regard to stress on the teacher.

The brain and physiological effects of stress. Stress effects on one's brain not only has effects on mental health, but physical health as well. The impact of stress shows up physiologically in saliva sample that "were collected to measure cortisol (nmol/L) over a span of three consecutive working days…. It is again noteworthy that these effects were seen both on self-report measures as well as more on objective measures (behavioral tasks, cortisol, observer-rated behavior), which are considered less susceptible to influences such as social desirability" (Flook et al., 2013, pp. 6-9). This more objective approach furthers determined physiological effects of stress on the human body. More specifically, "findings from this pilot study also suggest that teachers who do not receive any intervention during the school year may be prone to increased physiological stress as reflected in lower morning cortisol levels and decreased sense of personal accomplishment" (Flook et al., 2013, p. 10). Teachers not managing their stress further exacerbates daily stressors that affect the function of human abilities, and run the risk of prolonged stress, which "...appears to increase bottom-up psychobiological stress reactivity and, at the same time, to disrupt functions in the brain regions that underlie top-down self-regulation" (Skinner & Beers, 2016, p. 103).

Stress-management on a human brain found positive results, which scientifically shows what can happen when stress is not dealt with in a proactive, effective way. "MRI brain scans

taken before and after an 8-week Mindfulness-Based Stress Reduction (MBSR) program found increased gray matter in the hippocampus, an area important for learning and memory and a reduction of gray matter in the amygdala, a region associated with anxiety and stress" (Jennings, 2016, p. 137). This provides insight into just how much impact stress can have on the human body and mind. Therefore, teachers who have not been trained in practices that enable effective stress management risk succumbing to not only negative psychological effects, but negative physiological effects as well.

Teachers who practice mindfulness for stress-management and self-efficacy "...may increase the ability to sustain engagement of self-regulatory neural circuits in the prefrontal cortex resulting in improved sustained attention and emotion regulation (Lutz, Slatger, Dunne, & Davidson, 2008) as well as alterations in functional connectivity of brain networks" (Flook et al., 2013, p. 2). The scientific approach behind neurocognitive understandings and intentional practices will allow teachers to become more insightful and see a physical sustainability behind mindfulness and coping practices. Practical purpose for mindfulness practices can also be understood due to research showing "an increase in competence; a decrease in accidents; an increase in memory, creativity, and positive affect; a decrease in stress; and an increase in health and longevity, to name a few of the benefits" (Langer, 2000, p. 220). The cognitive benefits from practicing mindfulness may not only be enticing, but necessary.

The Factors and Effects of Mindfulness on Teacher Stress-Management, Resilience, Job Satisfaction, and Motivation

Correlations among mindfulness, stress-management, resilience, job satisfaction, and motivation were identified. All have the ability to affect each concept's outcomes. However,

not all are necessary to achieve motivation. The constant among each concept that was linked to motivation was mindfulness.

Mindfulness effects on teacher stress-management. "People who are arbitrarily led to believe that they can control aversive events display lower autonomic arousal and less performance impairment than do those who believe that they lack personal control, although they are subjected equally to the painful events" (Bandura & Locke, 2003, p. 91). The culture of a school is essential to cultivating and nurturing teachers approach to stressful situations and acquire the ability "to manipulate the events that affect their lives" (Bandura, 1977, p. 177), showing the impact stress management practices, such as mindfulness, have on teachers well-being.

Teacher motivation. "Teacher motivation refers to reasons that emanating from individuals' intrinsic values to choose to teach and sustaining teaching, and the intensity of teacher motivation which is indicated by effort expended on teaching as influenced by a number of contextual factors" (Han & Yin, 2016, p. 3). In a 2008 teacher motivation literature review, Sinclair identified eight factors that "can be discerned that enhance or reduce commitment in terms of retention in the profession" (p. 83) of teaching: personal factors, student factors, professional factors, working conditions and school factors, work-life balance, influence of others, and the nature of teaching work. An intrinsically motivated teacher with "intrinsic work incentives" (Sinclair, 2008, p. 83) showed strong predictions of teacher commitment to the profession. Factors in which further supported teacher motivation were identified as autonomy and control over their classroom, recognition and responsibility, and work environment (Han & Yin, 2016). However, through further review, it must be noted that "teacher motivation, though

primarily derived from intrinsic values of teaching, may be undermined by a number of factors" (Han & Yin, 2016, p. 7), namely stress.

Motivations not only have implications on teacher retention, but also on teacher quality, seeing that "...if a teacher is motivated to teach, there is a good chance that his or her students will be motivated to learn" (Dörnyei & Ushioda, 2013, p. 158). Dörnyei and Ushioda identified "four motivational aspects are particularly featured with respect to teacher motivation: 1. It involves a prominent *intrinsic component* as a main constituent" (2013, p. 160) such as interest in the subject taught, autonomy of the classroom, and self-efficacy. "2. It is very closely linked with *contextual factors*, associated with the institutional demands and constraints of the workplace, and the salient social profile of the profession" (Dörnyei & Ushioda, 2013, p. 160), ranging from how leadership of the school functions to the treatment and image of the profession by society. "3. Along with all the other types of career motivation, it concerns an extended, often lifelong, process with a featured *temporal axis*" (Dörnyei & Ushioda, 2013, p. 160), regarding both intrinsic fulfillments and extrinsic rewards. The final aspect identified in teacher motivation is "4. It appears to be particularly *fragile*, that is, exposed to several powerful negative influences (some being inherent in the profession)" (Dörnyei & Ushioda, 2013, p. 160) coming from the stressful nature of the profession, a lack of self-efficacy, and possible loss of interest in subject matter.

Motivation and job satisfaction theories. "Motivation concerns energy, direction, persistence and equifinality—all aspects of activation and intention" (Ryan & Deci, 2000, p. 69). Whether success in schools create motivation of teachers, or motivation of teachers creates success in schools, the antecedent to obtain motivation and success must be identified in order to

develop resilience in teachers. “The motivation to teach and remain in the profession relates significantly to the challenges encountered in the classroom and the ability to successfully navigate those” (Wildman, 2015, pp. 8-9). In this way, it is understood that how well the teacher is able to handle challenges encountered in the classroom is indicative of the level of motivation to teach there is. This in turn contributes to job satisfaction, an ingredient in motivation, and ultimately resilience.

In order to begin to identify areas of motivation and the outcomes they offer in juxtaposition to mindfulness practices and the outcomes they offer, an examination of motivation and job satisfaction theories provides some answers. “Several studies indicate that job satisfaction is one of the most important factors influencing teachers’ relations to students, teachers’ enthusiasm as well as teacher retention. Moreover... studies in different cultures show that measures of teacher burnout predict teachers’ motivation and job satisfaction” (Skaalvik & Skaalvik, 2008, p. 1061). This further supports that “...people are moved to act by very different types of factors, with highly varied experiences and consequences” (Ryan & Deci, 2000, p. 69). Albert Bandura’s Social Cognitive Theory (1977), Abraham Maslow’s Hierarchy of Needs, Frederick Herzberg’s Motivation-Hygiene Theory (Herzberg et al., 1959), and Timothy Judge’s Self-Concordance Model will be reviewed in identifying motivation and job satisfaction components and outcomes.

Albert Bandura’s Social Cognitive Theory. The belief in one’s own abilities has a direct impact in regard to “teachers goals and aspirations, teachers’ attitudes towards innovation and change, teachers’ tendency to refer difficult students to special education, teachers’ use of teaching strategies, and the likelihood that teachers stay in the teaching profession” (Skaalvik &

Skaalvik, 2008, p. 1060). Albert Bandura illuminates the importance of believing in one's own abilities, a necessary antecedent to turning those beliefs into expectations, when identifying that "people regulate their level and distribution of effort in accordance with the effects they expect their actions to have. As a result, their behavior is better predicted from their beliefs than from the actual consequences of their actions" (Bandura, 1986, p. 129). This shows how teachers have the power "to manipulate the events that affect their lives" (Bandura, 1977, p. 177) by "the way an individual generates perceptions of themselves" (Wildman, 2015, p. 19). Positive self-perception as a component of confidence and motivation supports Bandura's social cognitive theory, which "...suggests that people are prompted to perform and complete tasks they are confident in undertaking" (Wildman, 2015, p. 17).

Frederick Herzberg's Motivation-Hygiene Theory. Frederick Herzberg's motivation-hygiene theory (Herzberg et al., 1959) identifies components of satisfaction at work (motivation factors), and dissatisfaction at work (hygiene factors). John B. Miner simplified Herzberg's two hypotheses regarding the motivation-hygiene theory (Herzberg et al., 1959) in his 2005 book *Organizational Behavior 1: Essential Theories of Motivation and Leadership* by stating them as "1. The factors causing positive job attitudes and those causing negative attitudes are different. 2. The factors and the performance or personal effects associated with sequences of job events extending over long time periods differ from those associated with sequences of events of short duration" (Miner, 2005, p. 63). While job motivation creates the enrichment and fulfillment necessary for intrinsic motivation, job hygiene focuses on the avoidance of stress, which does not contribute to motivation.

Teacher motivation is contextualized into the essential elements of self-efficacy, job

satisfaction, and retention. The social cognitive theory focuses on the cognitive processes used by people to make occupational choices while framing self-efficacy beliefs (Bandura, 1982). Maslow's hierarchy of needs explains how a person's motivation is drawn up and drives them towards behaviors that demonstrate this motivation (Shunk, 2011). Herzberg's motivation-hygiene theory elucidates job satisfaction elements, and presents work factors that impact motivation through the determination of satisfaction and dissatisfaction with work" (Wildman, 2015, p. 1).

"Hygiene	Motivators
Job dissatisfaction	Job satisfaction
1. Company policy and administration	1. Achievement
2. Supervision	2. Recognition for achievement
3. Interpersonal relations	3. Work itself
4. Working conditions	4. Responsibility
5. Salary	5. Advancement
6. Status	6. Growth"
7. Security	(Herzberg, 1974, p. 21)

Herzberg explains that pain is found in a multitude of areas of life and are unavoidable, making job satisfaction meaningful and impactful. Motivation, according to Herzberg, is intrinsic to personal growth and can have a long-lasting results on an employee (Herzberg et al., 1959; Herzberg, 1974). Recognition and growth from the work the employee does helps them attain achievement, which can be meaningful. Unlike motivation, hygiene improvements last for a short time and are recurrent. Financial gains are in place in order to avoid stress, which is merely

the hygiene that does not make up job satisfaction. The avoidance of stress does not impact the inclination of motivation or satisfaction, as "satisfying the needs for hygiene is the prevention of dissatisfaction and poor job performance (Herzberg et al., 1959, p. 115).

Abraham Maslow's Hierarchy of Needs. When considering the perceptions of stress levels among teachers, Maslow's Hierarchy of Needs must also be considered. Psychological needs of human beings can determine how well the individual can manage stressors and be motivated. Maslow's Hierarchy of Needs consists of the following needs required to assist in human growth: physiological, safety, love/belonging, esteem, and self-actualization. Though a person may be having their needs met at the physiological level, psychological impacts are being made in regard to their environment and their own perceptions.

In order for anyone in the workforce to achieve a sense of job motivation (satisfaction), they must first have their physiological and safety needs met, which can be affected by the culture and value placed in that field of work. The societal value of teaching in America, though necessary, is not highly regarded. Whether this is due to the low pay, assumption that it is an easy profession to get into, or outsiders assuming that teachers get three months off, the high amount of expectations put upon teachers is not level with the low value it has in American culture.

In 1967, Maslow coined the term "Metamotivation" in his *A Theory of Metamotivation: The Biological Rooting of the Value-Life* at Brandeis University. Metamotivation would help construct a theory behind why a person is motivated to go beyond what is expected of them and further refine their skills in their professional and personal lives. However, it is important to note that according to Maslow, metamotivation is found in self-actualized individuals. This requires the individual to have their other basic needs met (physiological, safety, love/belonging, and

esteem). “Self-actualizing individuals (more matured, more fully-human), by definition, already suitably gratified in their basic needs, are now motivated in other higher ways, to be called ‘metamotivations’” (Maslow, 1967, p. 93). Therefore, when applying the term to teachers’ abilities to be motivated, their basic needs must also be met. What schools must then understand, is that “supporting teachers’ well-being and their social and emotional competence (SEC) to manage stress and emotion reactivity in the context of the classroom may be key to optimizing their teaching effectiveness.” There is an overlap between what motivates teachers and what outcomes mindfulness practices create. These overlaps could give insight to the mindset that cultivates and nurtures motivation, greater self-evaluation, and resilience.

Timothy Judge’s Core-Self Evaluations. Reminiscent of Bandura’s research that believing in one’s own abilities assists in motivation (1986), *Core-Self Evaluations*, which are “self-esteem, generalized self-efficacy, locus of control, and neuroticism” (Judge et al., 2005, p. 259), proved that those who reflect upon themselves in a positive way find their jobs more interesting and meaningful than those who think of themselves in a negative way (Judge et al., 2005). Furthermore, those who see themselves in a positive way, such as being efficacious and able in their work tasks, are unaffected by adverse encounters and pressures (Judge et al., 2005). This highlights the importance that greater self-evaluation has on an individual’s perception of their job, in what manner they are impacted by their job, and how they interact with their job. Furthermore, positive self-regard affects goal-setting, which has implications on individuals’ job satisfaction (Judge et al., 2005). Positive self-regard was found to lead to independent goals set and achieved, and overall job and life satisfaction (Judge et al., 2005, p. 265). Positive self-regard requires a level of introspection, as there is a correlation found between “people who see

themselves as worthy, efficacious, and in control of their lives (positive core self-evaluations) and those who were most likely to set goals for autonomous or self-chosen reasons" (Judge et al., 2005, p. 266). Autonomous goal-setting urge individuals to identify what they want, need, and find most meaningful (Judge et al., 2005, p. 266). Therefore, personal "clear awareness is critical for satisfying our basic psychological needs and… deepening one's self-awareness and self-understanding is vital to the process of realizing one's highest potential" (Hollis-Walker & Colosimo, 2011, p. 226), further supporting Maslow's hierarchy of needs (1943) and metamotivations model (1967).

Teacher resilience. Resilience is defined as the "human capacity to face, overcome, and even be strengthened by experiences of adversity" (Grotberg, 1997, p. 13). Learning methods to manage stress and obtain mindfulness results may allow teachers to become resilient. In order to acquire stress-management skills and mindful influence, teachers acquire resilience through building support networks of people who can empathize with the stressors of teaching, understand the value and purpose in the teaching profession, and provide advice for one another (Bobek, 2002, p. 203). Cultivating and nurturing positive, empathetic relationships requires the school environment to enable it. "Respect for and understanding of one another's roles and a willingness to listen to and learn from one another can make the working environment more positive and productive for both administrators and teachers" (Bobek, 2002, p. 203), furthering the notion that an increase of resilience in teachers can be supported by an environment that allows positive relationships to occur. However, it must be noted that the antecedent to such an environment of positive relationships may only be found if individuals in those relationships

have characteristics which allow them to be resilient such as having self-confidence and practicing coping mechanisms when confronted with stressful situations (Beltman et al., 2011).

The Brief Resilience Scale (BRS) (Smith et al., 2008) "was created to assess the ability to bounce back or recover from stress" (Smith et al., 2008, p. 194), originally utilized to "provide unique and important information about people coping with health-related stressors" (Smith et al., 2008, p. 194). The BRS (Smith et al., 2008) is comprised of six items, each being self-assessments of the participant on a one through five likert scale. "Items 1, 3, and 5 are positively worded, and items 2, 4, and 6 are negatively worded" (Smith et al., 2008, p. 195). In the original validation article, "The Brief Resilience Scale: Assessing the Ability to Bounce Back" (Smith et al., 2008), a total of 354 participants were surveyed, "recruited from a medium- sized metropolitan area in the southwestern U.S. (Albuquerque, New Mexico)" (Smith et al., 2008, p. 195). The participants were divided into four sample groups; Sample one consisted of 128 individuals with the average age of 20.4, 76 percent being female, reporting an average BRS (Smith et al., 2008) score of 3.53. Sample two consisted of 64 individuals with the average age of 19.8, 67 percent being female, reporting an average BRS (Smith et al., 2008) score of 3.57. Sample three consisted of 112 individuals with the average age of 62.8, 24 percent being female, reporting an average BRS (Smith et al., 2008) score of 3.98. Sample four consisted of 50 individuals with the average age of 47.3, 100 percent being female, reporting an average BRS (Smith et al., 2008) score of 3.61. Among the 354 participants in this survey, the average age was 37.5 years. Out of the 354 participants, 217 were female. The average overall BRS (Smith et al., 2008) score was 3.67. "The BRS was positively correlated with the resilience measures, optimism, and purpose in life… social support… active coping and positive reframing… and

negatively correlated with pessimism and alexithymia…. Negative interactions… behavioral disengagement, denial, and self-blame… perceived stress, anxiety, depression, negative affect, and physical symptoms" (Smith et al., 2008, p. 197). These correlations found in the BRS (Smith et al., 2008) can be organized as facets and outcomes of teacher mindfulness practices, outcomes of mindful school environments, and outcomes of teacher perceived stress.

Conceptual Framework

Mindfulness practices cultivate effects necessary to the teaching profession by allowing teachers to approach any issue, regardless of context, equipped with an open mind and an understanding of types of inquiries that should be made. When mindfulness practices are taught and applied into everyday routines, the possible outcomes that can occur are the management of stress, resilience, and job satisfaction. From these possible outcomes lead the teacher to be motivated within their teaching responsibilities across any multitude of circumstances, leading to a more efficient and effective teacher (Rickert et al., 2016; Wildman, 2015; Beshai et al., 2016; Eva et al., 2017; Jennings, 2016; Flook et al., 2013; Bandura, 1977).

Mindfulness-based interventions (MBI) and studies have indicated that mindfulness promotes a position of awareness, acceptance, self-compassion, and openness (Didonna, 2008; Kabat-Zinn, 2003; Hoy, 2003; Langer, 1989; Flook et al., 2013), which further supports the understanding that "...teachers who participated in an MBI reported significantly less stress and were less likely to take sick leave than teachers who did not participate in the intervention" (Beshai et al., 2015, p. 199) due to mindfulness practices having an outcome that "reduces psychological symptoms and burnout, increases effective teaching behavior, and reduces attentional biases" (Flook et al., 2013, p. 9). From this, mindfulness changes teachers' approach

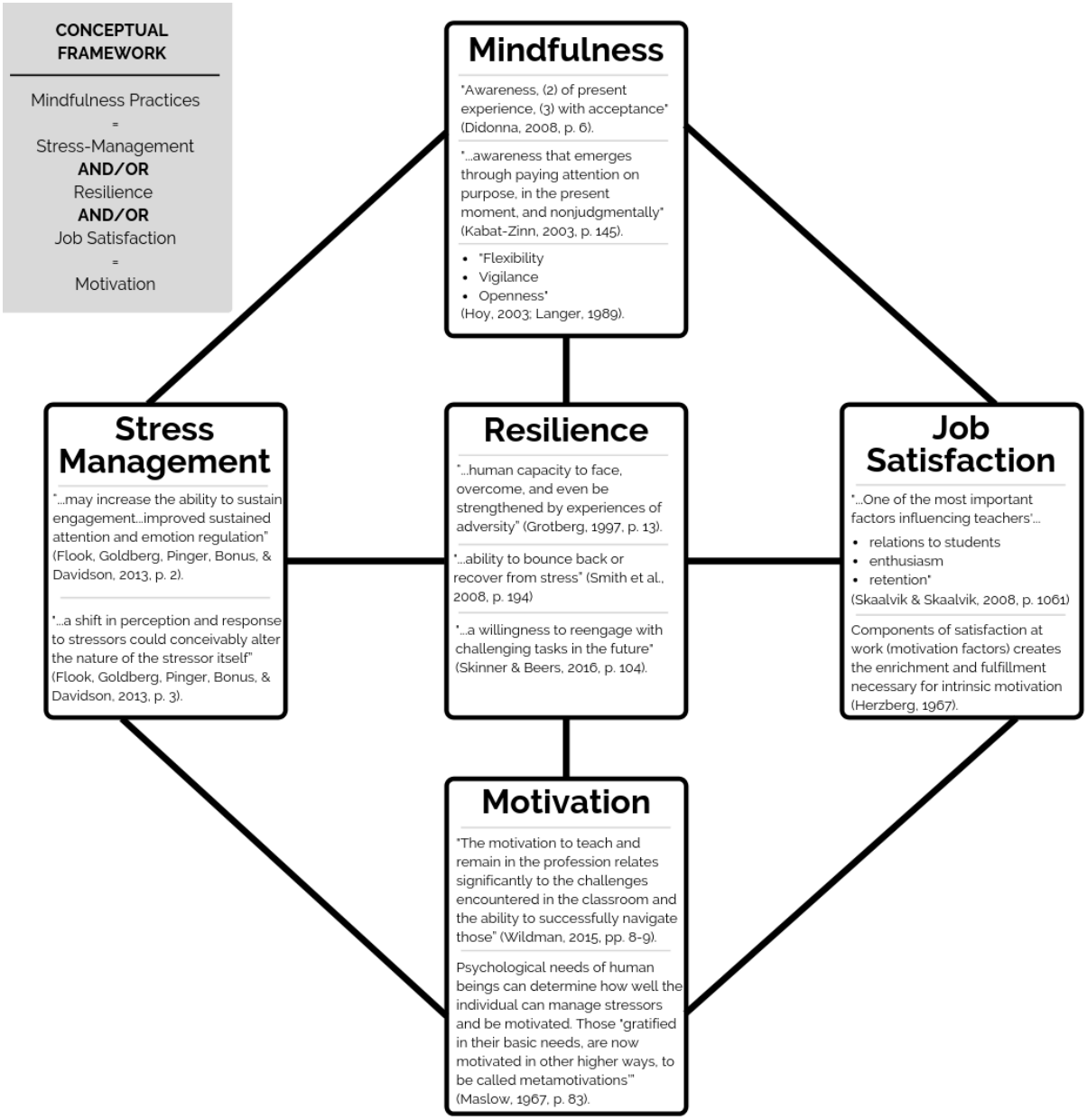
to stressful situations, allowing for effective stress-management to occur. Mindfulness supporting stress-management "is not to eliminate stressful experiences but to convert them to occasions for growth" (Skinner & Beers, 2016, p. 105). With "adaptive responses to stress, such as problem-solving, seeking information or support, self-reliance, accommodation" (Skinner & Beers, 2016, p. 104), teachers may very well obtain "resilience and a willingness to reengage with challenging tasks in the future" (Skinner & Beers, 2016, p. 104). Being that teaching involves interacting with numerous individuals or various needs, it is important for teachers to understand that "...care and transformation of self is set as a precondition for governing others" (Baker & Saari, 2018, p. 177), giving permission for mindfulness to act as a necessary antecedent to effective teaching and handling challenges. Mindfulness then allows the teachers to "'let go' of her darting thoughts and plans, as well as her profound fears or doubts" (Baker & Saari, 2018, p. 178) in order to achieve "positive effects on one's attunement to the world and of building resilience " (Baker & Saari, 2018, p. 178). This personal attunement helps teachers gain confidence in self- control and abilities, correlating directly to job satisfaction. Bandura and Locke (2003) indicate that "people who are arbitrarily led to believe that they can control aversive events display lower autonomic arousal and less performance impairment than do those who believe that they lack personal control" (p. 91), further supporting Judge et al.'s (2005) self-evaluation correlations with job satisfaction, stating "...individuals with a positive self- regard were more likely to perceive their jobs as interesting, significant, and autonomous..." (Judge et al., 2005, p. 258). Furthermore, "mindfulness was positively related to core self-evaluations and life satisfaction" (Kong et al., 2014, p. 165), contributing to the connection between mindfulness, positive self-regard, and job satisfaction. In juxtaposition to motivation, "people who see

themselves as worthy, efficacious, and in control of their lives (positive core self-evaluations) were most likely to set goals for autonomous or self-chosen reasons" (Judge et al., 2005, p. 266).

Figure 2 provides a conceptual framework regarding ways mindfulness connects to and supports stress-management, resilience, and job satisfaction. Continually, the conceptual framework displays stress-management, resilience, and job satisfaction connecting and supporting to motivation. The attributes of mindfulness, stress-management, resilience, job satisfaction, and motivation may be connected and support one or more of the attributes.

Figure 2

Conceptual Framework of Mindfulness, Stress, Resilience, Job Satisfaction, and Motivation



Chapter 3

Methodology

Introduction

The purpose of the study was to identify ways in which mindfulness relates to stress management, resilience, and job satisfaction for motivation among select Minnesota public school teachers, as there have been very few studies that show how mindfulness relates to teacher professional motivational factors. The study examined levels of teacher-reported mindfulness in public school teachers and within their school environments, levels and areas of teacher-reported stress in public school teachers, levels of teacher-reported resilience in public school teachers and within their school environments, and levels of teacher-reported motivation in public school teachers.

The quantitative study conducted consisted of surveying teachers trained in mindfulness practices in regard to their reported mindfulness, stress, resilience, job satisfaction, and motivation levels in direct correlation with mindfulness practices.

Research Questions

1.) What do teachers report relating to their own situations regarding self- mindfulness attributes (self-awareness, regulation, and situational acceptance), in relation to their reported outcomes regarding stress, resilience, job satisfaction, and motivation?

2.) What do teachers report in relation to stress management skills of coping for emotional regulation and keeping their personal priorities unaffected, and how does it relate to their reported motivation attributes of interest and/or enjoyment of work tasks, job satisfaction

attributes of being stimulated by work tasks and feeling respected and recognized, and resilience?

3.) How do the reported demographics of teachers' gender, age, years of teaching, types of mindfulness practices they practice, and amount of time practicing those mindfulness practices affect their reported outcomes regarding mindfulness, stress, resilience, job satisfaction, and motivation?

4.) What do teachers report regarding their school's environmental attributes of mindfulness and resilience, and how does it relate to their reported outcomes regarding mindfulness, stress, resilience, job satisfaction, and motivation?

Research Methodology

This study was a quantitative study with the goal of identifying teachers' mindfulness, stress, resilience, job satisfaction, and motivation in direct correlation with mindfulness practices. Study data were gathered via implementations and modifications of the Orange Frog Climate Survey (Achor & ILTN, 2011), School Mindfulness Scale (M-SCALE) (Hoy et al., 2004), Brief Resilience Scale (BRS) (Smith et al., 2008), Cognitive and Affective Mindfulness Scale- Revised (CAMS-R) (Feldman et al., 2007), Teacher Stress Inventory (TSI) (Fimian & Fastenau, 1990), and the Work Tasks Motivation Scale for Teachers (WTMST) (Fernet et al., 2008).

The M-Scale, developed by Hoy, Gage, and Tarter in 2004 in effort to identify correlations between school mindfulness, structures, and efficacy, was refined and piloted with teachers across 103 schools in Ohio, Oklahoma, North Carolina, Michigan, New York, Texas, and Virginia. The pilot study revealed a positive correlation "between mindful schools and

school structures that enable teaching and learning" (Hoy et al., 2004, p. 319). Furthermore, "collective efficacy was positively correlated with teacher mindfulness" (Hoy et al., 2004, p. 320), showing a relationship between teachers confident in their abilities and their level of mindfulness. Overall school mindfulness was also linked to principal and faculty mindfulness, both being affected by one another.

The Brief Resilience Scale (BRS) (Smith et al., 2008) was developed by Smith, Dalen, Wiggins, Tooley, Christopher, and Bernard and was tested on 354 individuals in Albuquerque, New Mexico, USA, ranging from undergraduate students, cardiac rehabilitation patients, and women who suffered from fibromyalgia. The BRS (Smith et al., 2008) was developed to identify "resilience as bouncing back from stress, whether it is related to resilience resources, and whether it is related to important health outcomes" (Smith et al., 2008, p. 195). The results from the study found positive correlations among resilience and "optimism... purpose in life... social support... active coping... and positive reframing" (Smith et al., 2008, p. 197), capturing the importance of coping mechanisms and positive approaches to stressful situations.

The Cognitive and Affective Mindfulness Scale- Revised (CAMS-R) (Feldman et al., 2007), tested and revised by Feldman, Hayes, Kumar, Greeson, and Laurenceau, sought out to identify the ability to develop mindfulness through four factors: "attention, present-focus, awareness, and acceptance" (Feldman et al., 2007, p. 179). In order to capture these four factors of mindfulness, "items were written to convey attitudes and approaches towards internal experiences of emotions and thoughts" (Feldman et al., 2007, p. 179) while remaining "comprehensible to individuals with no prior experience with mindfulness practice" (Feldman et al., 2007, p. 180). 548 university students were utilized for this study, offering positive

correlations between high mindfulness scores and low levels of distress and "maladaptive emotional regulation" (Feldman et al., 2007, p. 185). This provides outcomes connecting mindfulness to emotional clarity and introspection.

Teacher Stress Inventory (TSI) (Fimian & Fastenau, 1990) was developed and distributed to 3,401 teachers across eight states. Among the findings, results indicated that stress sources for teachers such as time management, work-related stressors, professional distress, discipline and motivation, and professional investment, were rated as higher stress factor than stress manifestations, such as emotional, fatigue, cardiovascular, gastronomic, and behavioral manifestations. This illustrates the reason of stress to be teaching-specific versus a manifestation-based antecedent.

Work Tasks Motivation Scale for Teachers (WTMST) (Fernet et al., 2008), developed by Fernet, Senécal, Guay, Marsh, and Dowson, looked to "measure of teachers' motivation toward specific work tasks" (Fernet et al., 2008, p. 256) due to implications that "teachers who are highly motivated are more engaged in their work and more satisfied" (Fernet et al., 2008, pp. 256-257). 609 teachers participated in taking the WTMST (Fernet et al., 2008), which measured teacher motivation and regulation levels toward work tasks (class preparation, teaching, evaluation of students, class management, administrative tasks, and complementary tasks). Gender differences and teaching-level differences were specifically observed. When analyzing gender differences based on outcomes, females had higher motivation and regulation with class preparation and administrative tasks than males. When analyzing teaching-level differences, elementary teachers had less motivation with class preparation, whereas high school teachers had

higher regulation of complementary tasks, but higher levels of external regulations toward class management (Fernet et al., 2008, p. 271).

Pilot Testing

The Mindfulness, Stress, Resilience, Job Satisfaction, and Motivation (MSRJM) survey was piloted at a Minnesota public middle school.

Population

The Mindfulness, Stress, Resilience, Job Satisfaction, and Motivation (MSRJM) hybrid survey was sent to Central Minnesota public teachers in a school district that had mindfulness practice training for their staff. Participants of this study were kept anonymous. The Institutional Review Board (IRB) granted permission to conduct this study and issue the MSRJM hybrid survey to teachers.

The Central Minnesota public school district consisted of 14 schools, gathering over 400 teacher responses of completed surveys.

The study identified whether mindfulness practices impacted levels of mindfulness, stress, resilience, job satisfaction, and motivation among classroom teachers in order to better serve learners in public schools, to keep quality teachers in classrooms, and identify how school districts can implement mindfulness practices and trainings for their classroom teachers to indicate whether school districts would benefit from providing classroom teachers with resources and training on mindfulness practices. The Minnesota public school district being studied was currently utilizing a mindfulness program and practices specific for teachers with their staff, which was directly related to the study regarding mindfulness practices and how it impacts levels of mindfulness, stress, resilience, job satisfaction, and motivation. The study helped determine in

what manner mindfulness training and practices benefitted the Minnesota public school district's teachers and provided additional information about teachers for further recommendations for future implementations.

Data Collection

Information from Central Minnesota public school district teachers was gathered from Survey Monkey. It was understood that the electronic survey given via Survey Monkey were to be anonymous, and no IP addresses collected by Survey Monkey were to be used in the research study. The electronic survey information was gathered in order to identify whether there are correlations between teacher-reported demographics, mindfulness techniques (and frequency) practiced, and reported levels of mindfulness, stress, resilience, job satisfaction, and/or motivation. Existing data previously gathered by the Minnesota public school district regarding data relevant to the research study on teachers' mindfulness as it related to their stress-management, resilience, and job satisfaction for motivation was made available to compare results with the research study.

Data Analysis

The study had a quantitative research design. The participants were K-12 public school classroom teachers. Study activities included electronically surveying classroom teachers and gathering information regarding teacher-reported gender, number of years within the Minnesota public school district, number of years of teaching experience, grade level(s) taught, mindfulness techniques practiced and frequency of mindfulness techniques practiced weekly, and levels of mindfulness, stress, resilience, job satisfaction, and motivation.

For the items within the survey, a six-point Likert scale comprised of six following choices: *strongly agree, agree, somewhat agree, somewhat disagree, disagree, strongly disagree*, while categorizing specific items within the survey under themes in order to identify areas for different purposes in regard to mindfulness and motivation, was given to identify teacher reported levels of mindfulness, stress, resilience, job satisfaction, and motivation. Furthermore, the following were analysis groupings for positive and/or negative correlations:

- Demographics + Outcome Reports
- Demographics + Mindfulness Practices
- Demographics + Mindfulness Practices + Time Spent Practicing Mindfulness
- Mindfulness Practices + Time Spent Practicing Mindfulness
- Mindfulness Practices + Outcome Reports
- Mindfulness Practices + Time Spent Practicing Mindfulness + Outcome Reports

Figure 3 shows the Teacher Survey given to participants in the study. The Teacher Survey gathers information regarding participant gender, number of years of teaching experience, number of years in the school district, level of teaching assignment, frequency of mindfulness techniques practiced weekly, and survey items measuring mindfulness, stress, resilience, job satisfaction, motivation, mindful environment, and resilient environment.

Figure 3

Teacher Survey

Gender	Number of Years of Teaching Experience	Number of Years with District	Grade Level(s) Taught (*Check all that apply*)
☐ Female ☐ Male	☐ 0-5 years ☐ 6-10 years ☐ 11-15 years ☐ 16-20 years ☐ 21-25+ years	☐ 0-5 years ☐ 6-10 years ☐ 11-15 years ☐ 16-20 years ☐ 21-25 years ☐ 26-30 years ☐ 31+ years	☐ Early Childhood ☐ Elementary ☐ Middle School ☐ High School ☐ Transition Programs

Please indicate how often you practiced the following activities:	Times Per Week Practicing Activities				
Positive Mantras, Reminders, and Restructuring *Daily Gratitudes, Exercise, Conscious Acts of Kindness, Positive Journaling, Meditating, consciously looking for the positive, seeing setbacks as Growth, writing positive reminders on cards.*	☐ 0	☐ 1-2	☐ 3-4	☐ 5-6	☐ 7+
Converting Stress to Learning Experiences *Consciously adjusting our mindset to be more positive, writing stressors down, and identifying coping strategies.*	☐ 0	☐ 1-2	☐ 3-4	☐ 5-6	☐ 7+
Problem-Solving *Breaking down goals into smaller steps, making small adjustments to help achieve your goals easier.*	☐ 0	☐ 1-2	☐ 3-4	☐ 5-6	☐ 7+
Seeking Information and Support *Finding and having a network of support to actively seek out, especially during times of challenges and setbacks.*	☐ 0	☐ 1-2	☐ 3-4	☐ 5-6	☐ 7+

Please respond to the following statements based on your experience working at work IN GENERAL:	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. I feel supported and respected at work.	♊	♋	♌	♍	♎	♏
2. I feel connected to others at work.	♊	♋	♌	♍	♎	♏
3. When things go badly, employees bounce back quickly and do not give up.	♊	♋	♌	♍	♎	♏
4. It does not take me long to recover from a stressful event.	♊	♋	♌	♍	♎	♏
5. I can tolerate emotional pain.	♊	♋	♌	♍	♎	♏
6. I can accept things I cannot change.	♊	♋	♌	♍	♎	♏
7. I am able to accept the thoughts and feelings I have.	♊	♋	♌	♍	♎	♏
8. I am able to focus on the present moment.	♊	♋	♌	♍	♎	♏
9. I am able to pay close attention to one thing for a long period of time.	♊	♋	♌	♍	♎	♏
10. There is not too much work to do.	♊	♋	♌	♍	♎	♏
11. I respond to stress by feeling vulnerable, anxious, and/or unable to cope.	♊	♋	♌	♍	♎	♏
12. I get recognition for the extra work and/or good work I do.	♊	♋	♌	♍	♎	♏
13. I enjoy being at work.	♊	♋	♌	♍	♎	♏

Chapter 4

Results and Findings

Introduction

The career of teaching requires a great amount of emotional labor (Skinner & Beers, 2016, p. 99). It can undermine a once thought of meaningful and purpose-driven career energized by challenge, and replace it with exhaustion (Skinner & Beers, 2016, p. 100). Where stress is involved, resilience, job satisfaction, and motivation can falter due to a lack of coping skills and tools necessary to alleviate symptoms of teacher attrition (Skinner & Beers, 2016, p. 101). Mindfulness has the ability to raise teacher welfare, efficacy, and attributes of being mindful such as positive processing in stressful situations. It can lead to less teacher fatigue (Eva & Thayer, 2017, p. 21). Mindfulness-based interventions may help in maintaining teacher wellbeing and allow for a proactive approach to stressful encounters with the provision of stress coping skills and tools, resulting in elevated classroom effectiveness (Flook et al., 2013). Mindfulness allows teachers to have a present outlook on any situation (Carson & Langer , 2006). Furthermore, the provision of self-care tools via mindfulness practices illuminates the importance of an engaged teacher and the success of learners (Wildman, 2015). Individuals consciously able to manage their thoughts, emotions, and behaviors can guide any outside encounter toward meaningful work (Bandura, 1991), making mindfulness the cognizant guide of self-regulation teachers can use when approaching stressful situations. Due to education requiring great emotional stamina, reflection, and adaptability, being mindful can result in effectively staying present and noticing new understandings in situations, (Carson & Langer, 2006) thus supporting necessary self-regulation.

Study Purpose

The purpose of the study was to identify ways in which practicing mindfulness techniques and achieving mindfulness related to stress management, resilience, and job satisfaction for motivation among select Minnesota public school teachers, as there have been very few studies that show how mindfulness relates to these teacher attributes. The study examined the self-reported levels of mindfulness and frequency of mindfulness techniques practiced in female and male public school teachers. The study also examined female and male public school teachers' levels of mindfulness within their public school environments, levels and areas of stress in female and male public school teachers, levels of resilience in female and male public school teachers and within their public school environments, and levels of motivation in female and male public school teachers.

Research Methodology

This study was a quantitative study with the goal of identifying teachers' stress, resilience, job satisfaction, and motivation in direct correlation with mindfulness practices. Study data were gathered via implementations and modifications of the School Mindfulness Scale (M-SCALE) (Hoy et al., 2004), Brief Resilience Scale (BRS) (Smith et al., 2008), Cognitive and Affective Mindfulness Scale- Revised (CAMS-R) (Feldman et al., 2007), Teacher Stress Inventory (TSI) (Fimian & Fastenau, 1990), and the Work Tasks Motivation Scale for Teachers (WTMST) (Fernet et al., 2008).

The conducted quantitative study conducted consisted of administering a survey to teachers trained in mindfulness and mindfulness techniques in regard to their levels of the attributes mindfulness, stress, resilience, job satisfaction, and motivation to determine potential

correlations with mindfulness techniques, frequency of practicing mindfulness techniques, teacher demographics, and reported levels of attributes. Survey items specific to teacher demographics inquired the following:

- Gender
- Number of Years of Teaching Experience
- Number of Years with District
- Grade Level(s) Taught

Participants were administered survey items specific to the frequency of mindfulness techniques practiced weekly by teachers, indicated by the choices of *0, 1-2, 3-4, 5-6,* and *7+* (times per week), were in regard to mindfulness techniques found in the research. Four mindfulness techniques and how often teachers practiced them weekly were listed in the survey as identified through the research.

The first mindfulness technique within the survey asked participants to indicate the frequency of practiced Positive Mantras, Reminder, and Restructuring weekly. This technique exemplified practices for teachers such as Daily Gratitude, Exercise, Conscious acts of Kindness, Positive Journaling, Meditating, consciously looking for the positive, seeing setbacks as growth, and writing positive reminders on cards (Achor, 2011; Flook et al., 2013; Jennings et al., 2016; Benn et al., 2012; Bashai et al., 2015).

The second mindfulness technique participants were asked to answer regarding the frequency they practiced the technique Converting Stress to Learning Experiences weekly. The examples given for this mindfulness technique were teachers consciously adjusting their mindset to be

more positive, writing stressors down, and identifying coping strategies (Achor, 2011; Flook et al., 2013; Jennings et al., 2016; Benn et al., 2012; Bashai et al., 2015).

The third mindfulness technique on the survey given to participants was Problem-Solving. Within this mindfulness technique, examples given were teachers breaking down goals into smaller steps and making small adjustments to help achieve goals easier (Achor, 2011; Flook et al., 2013; Jennings et al., 2016; Benn et al., 2012; Bashai et al., 2015).

The fourth and final mindfulness technique given on the survey was Seeking Information and Support. The example given for this technique was teachers finding and having a network of support to actively seek out, especially during times of challenges and setbacks (Achor, 2011; Flook et al., 2013; Jennings et al., 2016; Benn et al., 2012; Bashai et al., 2015).

Beyond the survey demographic questions and mindfulness techniques, survey items specific to measuring participant levels of the attributes Mindfulness (M), Mindful Environment (ME), Stress (S), Job Satisfaction (JS), Resilience (R), Resilient Environment (RE), and Motivation (Mot.) based on how they report on a Likert scale with the choices *Strongly Agree, Agree, Somewhat Agree, Somewhat Disagree, Disagree,* and *Strongly Disagree* in order to indicate higher or lower levels of that attribute were given. Each survey item measured one or more attributes, as indicated in Figure 4 below:

Figure 4

Survey Item Alignments of Measured Attributes

Item	Statement	Measured Attribute						
		M	ME	S	JS	R	RE	Mot
1	I feel supported and respected at work.		X		X			
2	I feel connected to others at work.		X		X			
3	When things go badly, employees bounce back quickly and do not give up.		X				X	
4	It does not take me long to recover from a stressful event.	X				X		
5	I can tolerate emotional pain.	X						
6	I can accept things I cannot change.	X						
7	I am able to accept the thoughts and feelings I have.	X						
8	I am able to focus on the present moment.	X						
9	I am able to pay close attention to one thing for a long period of time.	X						
10	There is not too much work to do.	X		X				
11	I respond to stress by feeling vulnerable, anxious, and/or unable to cope.	X		X				
12	I get recognition for the extra work and/or good work I do.			X	X			
13	I enjoy being at work.	X			X			X

The thirteen survey items above were given to teachers to report their level on based on the Likert scale choices of *Strongly Agree, Agree, Somewhat Agree, Somewhat Disagree, Disagree,* and *Strongly Disagree.* Each survey item measured a specific attribute(s): Mindfulness (M),

Mindful Environment (ME), Stress (S), Job Satisfaction (JS), Resilience (R), Resilient Environment (RE), and Motivation (Mot.), based on researched valid instrument survey items taken and/or modified throughout the research process from the Orange Frog Climate Survey (Achor & ILTN, 2011), School Mindfulness Scale (M-SCALE) (Hoy et al., 2004), Brief Resilience Scale (BRS) (Smith et al., 2008), Cognitive and Affective Mindfulness Scale-Revised (CAMS-R) (Feldman et al., 2007), Teacher Stress Inventory (TSI) (Fimian & Fastenau, 1990), and the Work Tasks Motivation Scale for Teachers (WTMST) (Fernet et al., 2008). Items measuring the same attribute were categorized by the attribute measured.

Mindfulness survey items. Survey items that measured participant levels of mindfulness were items four through eleven and thirteen. Items four ("It does not take me long to recover from a stressful event"), five ("I can tolerate emotional pain"), six ("I can accept things I cannot change"), seven ("I am able to accept the thoughts and feelings I have"), eight ("I am able to focus on the present moment"), nine ("I am able to pay close attention to one thing for a long period of time"), ten ("There is not too much work to do"), eleven ("I respond to stress by feeling vulnerable, anxious, and/or unable to cope"), and thirteen ("I enjoy being at work") measured teacher Mindfulness by asking teachers to report on various elements pertaining to being mindful such as situational acceptance, focus, and response to adverse situations. Survey items identifying mindfulness per teacher reports were based on the definition of mindfulness as being "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (Kabat-Zinn, 2003, p. 143) and understanding that being

mindful is “both an outcome (mindful awareness) and a process (mindful practice)” (Shapiro, 2009, p. 556).

Mindful environment survey items. Survey items that measured how mindful participant work environments were reported on items one through three. Items one, (“I feel supported and respected at work”), two (“I feel connected to others at work”), and three (“When things go badly, employees bounce back quickly and do not give up”) measured teacher Mindful Environment by asking teachers to report their perception of their work environment based on mindfulness attributes that furthered teacher perception of support and respect. Mindful environments, cultivated by school leaders, can allow teachers to evolve their focus of failures, solutions, and rigidity (Hoy et al., 2006; Ray et al., 2011), resulting in a feeling of trust, support, and respect in their work.

Stress survey items. Survey items that measured participant stress levels were items ten through twelve. Items ten, (“There is not too much work to do”), eleven (“I respond to stress by feeling vulnerable, anxious, and/or unable to cope”), and twelve (“I get recognition for the extra work and/or good work I do”) measured teacher stress, understanding that teacher perceived stress has been reported at higher levels throughout research and can take many forms (Skinner & Beers, 2016, p. 99). Teachers not managing their stress further exacerbates daily stressors that affect the function of human abilities and run the risk of prolonged stress (Skinner & Beers, 2016, p. 99). This is something mindfulness shifts through reperceiving (Shapiro, 2009) and changing ways they approach adverse situations.

Job Satisfaction items. Survey items that measured participant levels of job satisfaction were items one and two. Items one, (“I feel supported and respected at work”)

and two (“I feel connected to others at work”) measured teacher job satisfaction, looking at the elements of support, respect, and collegial connection. Building and maintaining teacher self-efficacy (Bandura, 1982) unaffected by adverse encounters and pressures (Judge et al., 2005) allow teachers to grow in self-actualization (Maslow, 1967) for positive acknowledgement of recognition, responsibility and growth in the work itself (Herzberg et al., 1959).

Resilience survey items. Survey item four measured participant levels of resilience. Item four (“It does not take me long to recover from a stressful event”) measured teacher resilience based upon the definition as being “a quality that enables teachers to maintain their commitment to teaching and their teaching practices despite challenging conditions and recurring setbacks” (Brunetti, 2006, p. 813). Resilience in teaching could be cultivated through job satisfaction (Herzberg et al., 1959), self-efficacy (Bandura, 1982), and mindfulness in order to achieve “positive effects on one’s attunement to the world and of building resilience” (Baker & Saari, 2018, p. 178).

Resilient environment survey items. The survey item that measured the resilience of the participant’s work environment were reported on item three. Item three (“When things go badly, employees bounce back quickly and do not give up”) measured teacher Resilient Environment by asking teachers to report their perceptions of resiliency in their work environment based on their colleague’s ability to overcome bad situations quickly. A mindful environment is also committed to resilience and the ability to overcome mistakes with anticipation (Hoy et al., 2006).

Motivation survey items. Survey item thirteen measured participant levels of motivation. Item thirteen (“I enjoy being at work”) measured teacher motivation based on

motivation concerning “energy, direction, persistence and equifinality—all aspects of activation and intention” (Ryan & Deci, 2000, p. 69). In wanting continual, intentional action from teachers, coupled with knowing that “low teacher and student motivation have been identified as critical factors for school failure” (Wildman, 2015, pp. 8-9), motivation was measured in junction with Herzberg’s motivation-hygiene theory (Herzberg et al., 1959). Herzberg identified components of satisfaction at work (motivation factors), one of them being found in the work itself (Herzberg et al., 1959; Herzberg, 1974).

Research Questions

The research questions of this study sought to explore the frequency of teachers practicing mindfulness techniques, how teachers reported their own levels of mindfulness, and whether mindfulness practices and being mindful could impact teacher reported levels of stress, resilience, job satisfaction, and motivation. The research questions also investigated whether teacher work environment impacted various reported attributes.

1.) What do teachers report relating to their own situations regarding self- mindfulness attributes (self-awareness, regulation, and situational acceptance), in relation to their reported outcomes regarding stress, resilience, job satisfaction, and motivation?
2.) What do teachers report in relation to stress management skills of coping for emotional regulation and keeping their personal priorities unaffected, and how does it relate to their reported motivation attributes of interest and/or enjoyment of work tasks, job satisfaction attributes of being stimulated by work tasks and feeling respected and recognized, and resilience?

3.) How do the reported demographics of teachers' gender, age, years of teaching, types of mindfulness practices they practice, and amount of time practicing those mindfulness practices affect their reported outcomes regarding mindfulness, stress, resilience, job satisfaction, and motivation?

4.) What do teachers report regarding their school's environmental attributes of mindfulness and resilience, and how does it relate to their reported outcomes regarding mindfulness, stress, resilience, job satisfaction, and motivation?

This chapter is separated into the following sections for each research question:

- Descriptive Results
- Factor Analysis Results
- Correlation Results
- Reliability Results

Description of the Sample

The Mindfulness, Stress, Resilience, Job Satisfaction, and Motivation (MSRJM) hybrid survey was electronically sent to Minnesota public school teachers in a school district with an implemented professional development program on mindfulness for their staff. The electronic survey was sent to teachers through district leadership emails. Of the surveys that were sent to teachers, 418 surveys were completed (n= 418). Of these completed surveys, 100% were considered valid responses. Surveys with all items answered were determined as valid.

Survey items regarding teacher respondent's (n=418) demographics are found on the following tables. Table 1 synopsizes a frequency count for teacher-reported grade level(s) taught during the current school year. Some teachers teach multiple grade levels.

Table 1

Reported Participant Grade Level Assignments

(n= 418)

Grade Level(s) Taught	Frequency	Percent
Early Childhood	8	1.91%
Elementary	201	48.09%
Middle School	65	15.55%
High School	188	44.98%
Transition Programs	3	0.72%

Of the 418 responding teachers, two hundred and one or 48.09% teach at the elementary level. One hundred and eighty-eight or 44.98% teach at the high school level. Sixty-five or 15.55% teach at the middle school level. Eight or 1.91% teach at the early childhood level. Three or 0.72% teach at the transition programs level.

Of the teachers reporting (n=418), teachers indicated the number of years of teaching experience they have. Table 2 summarizes the frequency count for reported years of teaching experience for participants.

Table 2

Reported Participant Total Years of Teaching Experience

(n= 418)

Years of Teaching Experience	Frequency	Percent
0-5	133	31.82%
6-10	65	15.55%
11-15	51	12.20%
16-20	42	10.05%
21-25	53	12.68%
26-30	46	11.00%
31+	28	6.70%
Total	418	100%

Of the 418 responding teachers, one hundred and thirty-three or 31.82% have less than five years of teaching experience. Sixty-five or 15.55% have six to ten years of teaching experience. Fifty-three or 12.68% have twenty-one to twenty-five years of teaching experience. Fifty-one or 12.20% have eleven to fifteen years of teaching experience. Forty-six or 11.00% have twenty-six to thirty years of teaching experience. Forty-two or 10.05% have sixteen to twenty years of teaching experience. Twenty-eight or 6.7% have thirty-one or more years of teaching experience.

Teachers were asked to report how many years they have been working in the current school district. These outcomes are found in Table 3.

Table 3

Reported Participant Total Years of Employment in Current District

(n= 418)

Years with District	Frequency	Percent
0-5	182	43.54%
6-10	66	15.79%
11-15	48	11.48%
16-20	30	7.18%
21-25	44	10.53%
26-30	32	7.66%
31+	16	3.83%
Total	418	100%

Of the 418 responding teachers, one hundred and eighty-two or 43.54% have been with the current school district for zero to five years. Sixty-six or 15.79% have been with the current school district for six to ten years. Forty-eight or 11.48% have been with the current school district for eleven to fifteen years. Forty-four or 10.53% have been with the current school district for twenty-one to twenty-five years. Thirty-two or 7.66% have been with the current school district for twenty-six to thirty years. Thirty or 7.18% have been with the current school district for sixteen to twenty years. Sixteen or 3.83% have been with the current school district for thirty-one or more years.

An analysis of survey items in correspondence to this study's research questions was conducted. Teacher-reported demographics, mindfulness techniques practiced, and reported levels of the attributes mindfulness, stress, resilience, job satisfaction, and motivation were explored to answer the study's research questions.

Research Question One

Mindfulness reframes stressful situations, allowing for individuals to approach and interact with such situations in a more productive way due to a shift in thinking called positive reappraisal, a coping mechanism that shifts stressful situations into learning experiences, inevitably made to be seen as beneficial (Garland, 2009). Therefore, identifying whether reported levels of mindfulness impacted key attributes that motivate and retain teachers in the profession was a focus of research question one. Research question one asks:

What do teachers report relating to their own situations regarding self-mindfulness attributes (self-awareness, regulation, and situational acceptance), in relation to their reported outcomes regarding stress, resilience, job satisfaction, and motivation?

Upon addressing the research question, the analyzed survey items four through eleven and thirteen were identified as measuring teacher mindfulness levels to consider how those levels of mindfulness correlated to their stress, resilience, job satisfaction, and motivation levels. The survey items four through eleven and thirteen, modified from the Orange Frog Climate Survey (Achor & ILTN, 2011), School Mindfulness Scale (M-SCALE) (Hoy et al., 2004), Brief Resilience Scale (BRS) (Smith et al., 2008), Cognitive and Affective Mindfulness Scale-Revised (CAMS-R) (Feldman et al., 2007), and the Teacher Stress Inventory (TSI) (Fimian & Fastenau, 1990), were categorized as measuring teacher self-mindfulness levels. The survey items measuring all attributes can be found in Table 4 below, showing the mean score of each survey item to investigate participant reported averages (n=418).

Table 4

Mean Score Ranking and Standard Deviation of Survey Item Participant Responses (n=418)

Item	Statement	Min	Max	*M*	*SD*
7	I am able to accept the thoughts and feelings I have.	1	6	4.763	0.864
8	I am able to focus on the present moment	1	6	4.669	0.908
2	I feel connected to others at work.	1	6	4.638	0.992
13	I enjoy being at work.	1	6	4.614	1.051
9	I am able to pay close attention to one thing for a long period of time	1	6	4.586	1
1	I feel supported and respected at work	1	6	4.547	1.072
6	I can accept things I cannot change.	1	6	4.5	0.95
5	I can tolerate emotional pain.	1	6	4.377	1.055
4	It does not take me long to recover from a stressful event.	1	6	4.332	1.048
3	When things go badly, teachers bounce back quickly and do not give up.	1	6	4.255	1.063
12	I get recognition for the extra work and/or good work I do.	1	6	3.401	1.305
11	I respond to stress by feeling vulnerable, anxious, and/or unable to cope	1	6	2.882	1.336
10	There is not too much work to do.	1	6	2.6	1.395

Strongly Agree= 6; Agree= 5; Somewhat Agree= 4; Somewhat Disagree= 3; Disagree= 2; Strongly Disagree= 1

Each of these survey items measured participant attributes based on intended outcomes of mindfulness they reflected, being “the awareness that arises through intentionally attending in an

open, accepting, and discerning way to whatever is arising in the present moment" (Shapiro, 2009, p. 556) and is "... composed of three core elements: intention (I), attention (A), and attitude (A)" (2009, p. 557). The survey items were collectively gathered and analyzed to determine how teachers reported their general level of mindfulness. Furthermore, teachers also indicated their level of stress, resilience, job satisfaction, and motivation across various other survey items, allowing an analyzation of how their general self-mindfulness reports related to these other attributes. Teachers reported their levels mindfulness, stress, resilience, job satisfaction, and motivation utilizing a Likert scale comprised of six following choices: *strongly agree, agree, somewhat agree, somewhat disagree, disagree, strongly disagree.* Items reported as *strongly agree, agree,* and *somewhat agree* were considered as high levels within the attribute the survey item measured. Items reported as *strongly disagree, disagree,* and *somewhat disagree* were considered as low levels within the attribute the survey item measured.

Mindfulness survey items. Survey items four through eleven and thirteen measured teacher mindfulness regarding elements such as situational acceptance, focus, and response to adverse situations. Survey item four ("It does not take me long to recover from a stressful event") had a mean of 4.3, five ("I can tolerate emotional pain") had a mean of 4.37, six ("I can accept things I cannot change") had a mean of 4.5, seven ("I am able to accept the thoughts and feelings I have") had a mean of 4.76, eight ("I am able to focus on the present moment") had a mean of 4.66, nine ("I am able to pay close attention to one thing for a long period of time") had a mean of 4.58, ten ("There is not too much work to do") had a mean of 2.6, eleven ("I respond to stress by feeling vulnerable, anxious, and/or unable to cope"; score was reversed) had a mean of 2.88, and thirteen ("I enjoy being at work") had a mean of 4.6.

Mindful environment survey items. Survey items one through three measured how teachers reported their work environment as being mindful based on mindfulness attributes that furthered teacher perception of support and respect in their environment. Survey item one, ("I feel supported and respected at work") had a mean of 4.5, two ("I feel connected to others at work") had a mean of 4.6, and three ("When things go badly, employees bounce back quickly and do not give up") had a mean of 4.25.

Stress survey items. Survey items ten through twelve measured teacher stress, understanding that teacher perceived stress has been reported at higher levels throughout research and can take many forms (Skinner & Beers, 2016, p. 99). Survey item ten ("There is not too much work to do"; score was reversed due to the negative form of the item statement) had a mean of 2.6, eleven ("I respond to stress by feeling vulnerable, anxious, and/or unable to cope") had a mean of 2.88, and twelve ("I get recognition for the extra work and/or good work I do"; score was reversed due to the negative form of the item statement) had a mean of 3.4.

Job Satisfaction items. Survey items one and two measured teacher job satisfaction, looking at the elements of support, respect, and collegial connection. Survey item one ("I feel supported and respected at work") had a mean of 4.5 and two ("I feel connected to others at work") had a mean of 4.6.

Resilience survey items. Survey item four measured teacher resilience based upon the definition as being "a quality that enables teachers to maintain their commitment to teaching and their teaching practices despite challenging conditions and recurring setbacks" (Brunetti, 2006, p. 813). Survey item four ("It does not take me long to recover from a stressful event") had a mean of 4.3.

Resilient environment survey items. Survey item three measured teacher Resilient Environment by asking teachers to report their perceptions of how resilient their work environment is based on their colleague's ability to overcome bad situations quickly. Survey item three ("When things go badly, employees bounce back quickly and do not give up") had a mean of 4.25.

Motivation survey items. Survey item thirteen measured teacher motivation based on motivation concerning "energy, direction, persistence and equifinality—all aspects of activation and intention" (Ryan & Deci, 2000, p. 69). Survey item thirteen ("I enjoy being at work") had a mean of 4.6.

Table 5 presents outcomes regarding teacher reported self-mindfulness levels from survey items four through eleven and thirteen. Each item measured how mindful a teacher reported themselves to be. Items answered as *strongly agree (SA), agree (A), and somewhat agree (SWA)* indicated a teacher having a higher level of reported mindfulness, and considered High Mindfulness. Items answered as *strongly disagree (SD), disagree (D),* and *somewhat disagree (SWD)* indicated a teacher having a lower level of reported mindfulness, and considered Low Mindfulness. The total number of responses were analyzed to determine what level of mindfulness was exhibited by the participants.

Table 5

Aggregated Results of Participant Reported General Levels of Self-Mindfulness

(n= 418)

Response	Frequency	Percent
High Mindfulness	2,942	78.19%
Low Mindfulness	820	21.78%
Total	3,762	100%

SA, A, & SWA= High level of mindfulness
SD, D, & SWD= Low level of mindfulness

When analyzing items related to teacher reported self-mindfulness, answers closest to *strongly agree* indicated a teacher reporting their level of mindfulness as being high. Answers closest to *strongly disagree* indicated a teacher reporting their level of mindfulness as being low. Of the 418 teachers surveyed and across three thousand seven hundred and sixty-two responses from survey items four through eleven and thirteen, two thousand nine hundred and forty-two (78.19%) teacher responses suggested high levels of mindfulness. A frequency total of eight hundred and twenty (21.78%) teacher responses suggested low levels of mindfulness.

Overall, a majority of responses indicated high levels of mindfulness (78.19%), as indicated by *strongly agree*, *agree,* and *somewhat agree* survey item responses. Table 5 shows the descriptive statistics of how teachers reported on self-mindfulness items, job satisfactions items, stress items, self-resilience items, and motivation items overall. The survey utilized specific items to measure each categorized attribute in order to identify potential correlations. Table 6 is a preliminary data table showing the mean of participant responses for each survey

item category. These teacher attributes as categories were identified to be measured with research indicating what may retain and develop an effective, motivated teacher is teachers having the ability to successfully navigate challenging situations in the classroom (Wildman, 2015), which contributes directly to teacher motivation and job satisfaction (Skaalvik & Skaalvik, 2008).

Survey items were categorized by the attribute the survey item measured. The mean score ranking found within Table 6 were scored based on how teachers reported on the items measuring the attributes mindfulness, job satisfaction, stress, resilience, and motivation. *Strongly agree* was given a score of six, *agree* was given a score of five, *somewhat agree* was given a score of four, *somewhat disagree* was given a score of three, *disagree* was given a score of two, and *strongly disagree* was given a score of one.

Table 6

Participant Reported Mean Levels of the Survey Categories Mindfulness, Stress, Resilience, Job Satisfaction, and Motivation

(n=418)

Measured Attribute	Min	Max	*M*	*SD*
Motivation	1.00	6.00	4.6148	1.05142
Mindfulness	2.33	6.00	4.5255	.67512
Resilience	1.00	6.00	4.3325	1.04890
Job Satisfaction	1.00	6.00	4.1962	.92386
Stress	1.00	6.00	3.6411	.98511

Strongly Agree= 6; Agree= 5; Somewhat Agree= 4; Somewhat Disagree= 3; Disagree= 2; Strongly Disagree= 1

Survey items reported by teachers that were closest to *strongly agree* indicated a higher level of that attribute, while survey items reported by teachers that were closest to *strongly*

disagree indicated a lower level of that attribute. The categorized survey items of teacher responses (n=418) showed the measured attribute of "motivation" as having the highest reported level mean at 4.6148, as well as the highest standard deviation at 1.05. This may indicate that there is a larger range across a number of participant responses within this attribute. The next highest reported level was teacher reported "mindfulness" at a mean of 4.5255 and the lowest standard deviation of .67. Teacher reported level of "resilience" had a mean of 4.3325 and a large standard deviation of 1.04. Items measuring teacher reported "job satisfaction" had a mean of 4.1962 and a standard deviation of .92. The lowest attribute measured was teacher reported "stress", which had a mean of 3.6411 and a standard deviation of .98, indicating teachers reporting a low level of stress overall.

All attributes measured in the survey had a mean above 4.0, except for "stress", indicating higher levels within those attributes. "Stress" was lower (3.64), indicating teacher's reporting a mean of having lower levels of stress. These survey results were further explored to identify correlations between attribute levels reported by teachers.

Significant Findings Related to Research Question One

Research question one investigated how teachers reported their general level of mindfulness, and how that related to their reported level of stress, resilience, job satisfaction, and motivation within survey items that measured those attributes. Table 7 provides data regarding correlations between teacher reported levels to each of these attributes. For each attribute measured within the survey items, a Likert scale of six choices were given as seen in previous tables: *Strongly Agree, Agree, Somewhat Agree, Somewhat Disagree, Disagree, Strongly Agree.*

Table 7

Correlations Between Participant Reported Levels of Mindfulness to Participant Reported Stress, Job Satisfaction, Resilience, and Motivation Levels and How Each Reported Outcome Relates to Each Other

(n=418)

Reported Attribute	Mindfulness	Job Satisfaction	Stress	Resilience	Motivation
Mindfulness		.446**	-.452**	.674**	.407**
Sig.		.000	.000	.000	.000
Job Satisfaction	.446**		-.282**	.368**	.613**
Sig.	.000		.000	.000	.000
Stress	-.452**	-.282**		-.435**	-.357**
Sig.	.000	.000		.000	.000
Resilience	.674**	.368**	-.435**		.408**
Sig.	.000	.000	.000		.000
Motivation	.407**	.613**	-.357**	.408**	
Sig.	.000	.000	.000	.000	

** Correlation is significant at the .01 level

How teachers reported their levels of mindfulness had significant correlations between their reported levels of stress, resilience, job satisfaction, and motivation. There was a significantly strong positive correlation of .674 between teacher reported levels of mindfulness and teacher reported levels of resilience. There were significantly moderate positive correlations of .446 between teacher reported levels of mindfulness and teacher reported levels of job satisfaction. There were also significantly moderate positive correlations of .407 between teacher reported levels of mindfulness and teacher reported levels of motivation. Furthermore, there was a significantly moderate negative correlation of -.452 between teacher reported levels of mindfulness and teacher reported levels of stress. Of the data provided in Table 6, the

significantly strong positive correlation between teacher reported levels of mindfulness and teacher reported levels of resilience may indicate that mindfulness associates itself with resilience. The level of mindfulness a teacher reports may indicate the level of resilience they report.

Between teachers who reported having high levels of mindfulness and low levels of mindfulness, it was found that there was a significant difference between both groups in how they report on their levels of stress, job satisfaction. resilience, and motivation. This can be found in Table 8.

Table 8

t-test of Participant Results Comparing Reported High Levels of Mindfulness and Reported Low Levels Mindfulness to Reported Stress, Job Satisfaction, Resilience, and Motivation Levels (n=418)

Reported Attribute	Mindfulness	*N*	*M*	*SD*
Stress	.00	201	4.07	.724
	1.00	217	3.21	.789
Job Satisfaction	.00	201	3.78	.831
	1.00	217	4.78	.605
Resilience	.00	201	3.70	.974
	1.00	217	4.91	.728
Motivation	.00	201	4.05	1.049
	1.00	217	5.13	.742

1- High, 0- Low

Teachers who reported having a high level of overall mindfulness were indicated with 1.00. Teachers who reported having a low level of overall mindfulness were indicated with .00. Items were scored based on how teachers reported. *Strongly agree* was given a score of six, *agree* was given a score of five, *somewhat agree* was given a score of four, *somewhat disagree*

was given a score of three, *disagree* was given a score of two, and *strongly disagree* was given a score of one. Reports indicating *strongly agree, agree,* and *somewhat agree* provided higher numbers in the table and indicated a higher level of that attribute. Reports indicating *strongly disagree, disagree,* and *somewhat disagree* provided lower numbers in the table and indicated a lower level of that attribute. Teachers who reported as having higher levels of mindfulness had a reported mean of 3.21 for the attribute stress, suggesting those teachers to have lower stress levels. This group also reported having a mean of 4.78 for job satisfaction, 4.91 for resilience, and 5.13 for motivation, indicating high levels for all of those attributes. This may suggest that teachers who report as being more mindful also report as having low stress and high job satisfaction, resilience, and motivation at work. The opposite was true for teachers who reported being less mindful, aside from motivation, which had a mean of 4.05. Teachers may still be motivated at work even if they do not report themselves as being mindful. Teachers who reported being less mindful also reported as having higher stress with a mean of 4.07, lower resilience with a mean of 3.70, and lower job satisfaction with a mean of 3.78. The lower the teachers' reported mindfulness, the higher the reported stress and lower resilience and job satisfaction.

There was a statistically significant difference between teachers who reported having a higher level of mindfulness and teachers who reported having a lower level of mindfulness. Of the teachers that reported having a higher level of mindfulness by selecting *strongly agree, agree*, and/or *somewhat agree* on the self-mindfulness related survey items, the following table shows significance of that high mindfulness population and their selections of the Likert scale choices *strongly agree, agree, somewhat agree, somewhat disagree, disagree,* and *strongly disagree* in response to items regarding stress levels, resilience levels, job satisfaction levels, and

motivation levels. This suggests that more mindful teachers were collectively less stressed and had higher resilience, job satisfaction, and motivation.

The correlative outcomes, as found in Table 9, indicated significant findings that teachers who reported having a higher level of mindfulness correlated with also reporting lower levels of stress and higher levels of resilience, job satisfaction, and motivation. In the same way, those who reported being less mindful also reported having higher levels of stress and lower levels of resilience, job satisfaction, and motivation.

Table 9

Correlations Between Participants Who Reported High Levels of Mindfulness and Reported Stress, Job Satisfaction, Resilience, and Motivation Levels

(n=418)

Reported Attribute	High Mindfulness	Stress	Job Satisfaction	Resilience	Motivation
High Mindfulness		-.493**	.570	.513**	.513**
Sig.		.000	.000	.000	.000
Stress	-.493**		-.652**	-.526	-.526
Sig.	.000		.000	.000	.000
Job Satisfaction	.570**	-.652**		.782**	.782**
Sig.	.000	.000		.000	.000
Resilience	.580**	-.447**	.412**		.408**
Sig.	.000	.000	.000		.000
Motivation	.513**	-.526**	.782**	.408**	
Sig.	.000	.000	.000	.000	

** Correlation is significant at the .01 level

There was a significantly moderate negative correlation of -.493 among teachers who reported higher levels of mindfulness and lower levels of stress. A negative correlation indicates that as mindfulness increases, stress decreases. A significantly moderate positive correlation of

.580 between teachers who reported high levels of mindfulness and higher resilience was found, along with having higher job satisfaction (.570) and motivation (.513). Within this group of highly mindful teachers, there was a significantly strong negative correlation between those who reported as having high job satisfaction with reporting lower levels of stress (-.652). There was also a significantly strong positive correlation between higher levels of resilience (.782) and higher levels of motivation (.782). Teachers who reported as having high levels of resilience within this high mindfulness group were found to have a significantly moderate negative correlation of reporting lower levels of stress (-.526) and a positive correlation with high levels of motivation (.408). There was a significantly strong positive correlation between teachers who reported as having high levels of resilience and high levels of job satisfaction (.782). There was a significantly strong positive correlation between this group of high mindfulness teachers and their reporting high levels of motivation with high levels of job satisfaction (.782), as well as a significantly moderate negative correlation with lower stress (-.526) and higher levels of resilience (.408). Highly mindful teachers who reported having lower levels of stress found a significantly strong correlation with reported high levels of job satisfaction (-.652), as well as significantly moderate correlations with high levels of resilience (-.447) and motivation (-.526).

In order to further investigate how mindfulness changes the way teachers approach adverse situations, their reported levels of stress and the effect of reported job satisfaction, resilience, and motivation was measured.

Research Question Two

Perceptions of stress, when confronted with adverse situations at work, can be the opportunity or burden when moving beyond it. Stress in education, when not managed or

perceived non-judgmentally, can wear on educators (Avci et al., 2016; Dunham, 2002; Skaalvik & Skaalvik, 2016). For the reason that intentional mindfulness has been found to support individuals obtain self-regulation and the ability to reframe stressful situations (Shapiro et al., 2006), identifying potential correlations between how teachers reported their levels of stress and how they reported their levels of resilience, job satisfaction, and motivation was to be investigated. Research question two asked:

What do teachers report in relation to stress management skills (coping for emotional regulation and keeping their personal priorities unaffected), and how does it relate to their reported motivation attributes (interest and/or enjoyment of work tasks), job satisfaction attributes (being stimulated by work tasks and feeling respected and recognized), and resilience?

Upon investigating research question two, items in the survey that measured teacher levels of stress were analyzed. Survey item numbers ten through twelve measured teacher reported stress levels, stated as the following:

- There is not too much work to do
- I respond to stress by feeling vulnerable, anxious, and/or unable to cope
- I get recognition for the extra work and/or good work I do

Items ten and twelve were negative form item statements, meaning the lower the score the higher the stress. When survey item numerical scores were reversed due to the negative form of the item statement, items answered as *strongly agree (SA), agree (A), and somewhat agree (SWA)* indicated a teacher having a higher level of reported stress. Items answered as *strongly disagree (SD)*, *disagree (D),* and *somewhat disagree (SWD)* indicated a teacher having a lower level of reported stress. Data regarding aggregated results from these survey items are shown in Table 10.

Table 10

Aggregated Results of Participant Reported Levels of Stress

(n= 418)

Response	Frequency	Percent
High Stress	639	50.95%
Low Stress	615	49.03%
Total	1254	100%

SA, A, & SWA= High level of stress
SD, D, & SWD= Low level of stress

When analyzing items related to teacher reported stress, answers closest to *strongly agree* indicates a high level of stress. Answers closest to *strongly disagree* indicates a low level of stress. In total, six hundred and thirty-nine (50.95%) teacher responses indicated having higher levels of stress by reporting *strongly agree, agree,* and *somewhat agree* on stress-measuring survey items. Six hundred and fifteen (49.03%) teacher responses indicated lower levels of stress by reporting *strongly disagree, disagree,* and *somewhat disagree* on stress-measuring survey items. Overall teacher responses were nearly split evenly, indicating that slightly lower than half of the teacher responses suggested a lower level of stress (49.05%) and little over half of the teacher responses suggested having a higher level of stress (50.95%).

For each individual response on stress-measuring survey items, three hundred and four or 24.24% of teachers selected *somewhat disagree* when reporting their stress. Two hundred and seventy-two or 21.69% of teachers selected *somewhat agree* when reporting their stress. Two hundred and nineteen or 17.46% of teachers selected *disagree* when reporting their stress. One

hundred and eighty-four or 14.67% of teachers selected *agree* when reporting their stress. One hundred and eighty-three or 14.59% of teachers selected *strongly agree* when reporting their stress. Ninety-two or 7.33% of teachers selected *strongly disagree* when reporting their stress.

In order to understand how perceptions may enable adequate coping in adverse situations and whether these reported levels of stress have an impact on teacher reported levels of resilience, job satisfaction, and motivation, research question two investigates whether correlations exist.

Significant Findings Related to Research Question Two

Research question two explored whether teachers reporting high or low levels of stress correlated with their reported levels of job satisfaction, resilience, and motivation. Due to the attribute of mindfulness shifting an individual's relationship with stressful situations from personal to objective (Shapiro, 2009), it was necessary to investigate how stress levels impacted the reported levels of teacher job satisfaction, resilience, and motivation.

Table 11 suggests a significant difference between teachers who reported having high levels of stress and low levels of stress and how they report on their levels of job satisfaction. resilience, and motivation. Teachers who reported having a high level of overall stress were indicated with 1.00. Teachers who reported having a low level of overall stress were indicated with .00. Items were scored based on how teachers reported. *Strongly agree* was given a score of six, *agree* was given a score of five, *somewhat agree* was given a score of four, *somewhat disagree* was given a score of three, *disagree* was given a score of two, and *strongly disagree* was given a score of one. Reports indicating *somewhat agree*, *agree*, and *strongly agree* provides higher numbers in the table and indicates a higher level of that attribute. Reports indicating

somewhat disagree, disagree, and *strongly disagree* provides lower numbers in the table and indicates a lower level of that attribute.

Table 11

t-test of Participant Results Comparing Reported High Levels of Stress and Reported Low Levels of Stress to Reported Job Satisfaction, Resilience, and Motivation Levels

Reported Attribute	HLStress	*N*	*M*	*SD*
Job Satisfaction	.00	192	4.82	.608
	1.00	226	3.85	.825
Resilience	.00	192	4.76	.950
	1.00	226	3.96	.988
Motivation	.00	192	5.13	.774
	1.00	226	4.17	1.054

1- High, 0- Low

Teachers who reported as having higher levels of stress had a reported mean of 3.85 for job satisfaction with a standard deviation of .825, suggesting that teachers who have higher stress report lower levels of job satisfaction. This group also reported a mean of 3.96 for resilience with a standard deviation of .988, indicating low levels of reported resilience for high stress teachers. High stress teachers reported a mean of 4.17 for being motivated with a standard deviation of 1.05. For teachers who reported having lower levels of stress, a mean level of reported job satisfaction being 4.82 with a standard deviation of .608, a mean level of resilience being 4.76 with a standard deviation of .950, and a mean level of motivation being 5.13 with a standard deviation of .774 all showed higher reported levels of that attribute. These outcomes imply that teachers who report lower levels of stress have higher levels of reported job satisfaction, resilience, and motivation.

The correlative outcomes, found in Table 12, indicated significant findings that teachers who reported having a lower level of stress by reporting *strongly disagree, disagree,* and *somewhat disagree* on stress-measuring survey items correlated with also reporting higher levels of job satisfaction, resilience, and motivation on survey items measuring those attributes and reporting *strongly agree, agree,* and *somewhat agree.*

Table 12

Correlations Between Participants Who Reported Low Levels of Stress and Reported Job Satisfaction, Resilience, and Motivation Levels

(n=418)

Reported Attribute	Job Satisfaction	Resilience	Motivation	Low Stress
Job Satisfaction		.368**	.613**	-.527**
Sig.		.000	.000	.000
Resilience	.368**		.408**	-.381**
Sig.	.000		.000	.000
Motivation	.613**	.408**		-.457**
Sig.	.000	.000		.000
Low Stress	.527**	.381**	.457**	
Sig.	.000	.000	.000	

** Correlation is significant at the .01 level

There was a statistically significant correlation between teacher reported stress levels and their reported levels of job satisfaction, resilience, and motivation. These significantly moderate negative correlations of -.527 were found between teachers who reported low stress levels and high job satisfaction, high resilience (-.381), and high motivation (-.457). This could show a correlation between how perceptions of stress impact perceptions of job satisfaction, resilience, and motivation. Furthermore, this may suggest how perceptions of job satisfaction, resilience, and motivation impact stress and abilities to cope when stressed.

When investigating how other attributes may have correlations within this group who reported lower levels of stress, there was a significantly moderate positive correlation of .613 between how teachers reported levels of motivation and job satisfaction. This may provide information on how having a lower level of stress could impact motivation and job satisfaction. A significantly moderate positive correlation of .527 between job satisfaction and low stress reports was found, potentially indicating that higher job satisfaction may support lower stress.

Correlations between those who reported high levels of mindfulness in Table 9 and those who reported low levels of stress in Table 12 were significant. However, stronger correlations within the data of Table 9 with those who reported high levels of mindfulness were found, suggesting that how teachers report on mindfulness may show a clearer indication of how they will report on other attributes. Research question three investigates whether teacher demographics and frequency of practicing mindfulness techniques impact teacher reported levels of mindfulness, stress, resilience, job satisfaction, and motivation.

Research Question Three

Various factors can impact how teachers reported on each survey item. Research question three explores to determine whether a teacher's gender, age, years of teaching experience, types of mindfulness techniques they practice, or frequency of practiced mindfulness techniques impact their reported levels of mindfulness, stress, resilience, job satisfaction, and/or motivation. Research question three asks:

How do the reported demographics of teachers' gender, age, years of teaching, types of mindfulness techniques they practice, and amount of time practicing those mindfulness practices

affect their reported outcomes regarding mindfulness, stress, resilience, job satisfaction, and motivation?

Teacher reported mindfulness techniques practiced on a weekly basis during the current school year are represented in the tables below with the following Likert scale choices: (0) 0 times per week, (1) 1-2 times per week, (2) 3-4 times per week, (3) 5-6 times per week, (4) 7+ times per week. There are four categories of mindfulness techniques:

- Positive Mantras, Reminders, and Restructuring: Daily Gratitudes, Exercise, Conscious Acts of Kindness, Positive Journaling, Meditating, consciously looking for the positive, seeing setbacks as Growth, writing positive reminders on cards.
- Converting Stress to Learning Experiences: Consciously adjusting our mindset to be more positive, writing stressors down, and identifying coping strategies.
- Problem-Solving: Breaking down goals into smaller steps, making small adjustments to help achieve your goals easier.
- Seeking Information and Support: Finding and having a network of support to actively seek out, especially during times of challenges and setbacks.

Teachers reported how often they practiced each mindfulness technique per week. Table 13 provides teacher reported mean score ranking and standard deviation of each mindfulness technique practiced.

Table 13

Participant Reported Frequency of Weekly Mindfulness Technique Practice

(n=418)

Mindfulness Technique	Min	Max	*M*	*SD*
Problem-Solving	0	4	2.13	1.136
Seeking Information and Support	0	4	2.03	1.128
Positive Mantras, Reminders, and Restructuring	0	4	2.03	1.255
Converting Stress to Learning Experiences	0	4	1.72	1.152

7+ Days A Week = 4; 5-6 Days A Week = 3; 3-4 Days A Week = 2; 1-2 Days A Week = 1; 0 Days A Week = 0

Of the four practices, the greatest mean was 2.13 (3-4 Days A Week) for the mindfulness technique “Problem-Solving” with a standard deviation of 1.136. Both “Positive Mantras, Reminders, and Restructuring” and “Seeking Information and Support” mindfulness techniques had a mean of 2.03. However, “Seeking Information and Support” had a slightly lower standard deviation of 1.128, whereas “Positive Mantras, Reminders, and Restructuring” had the largest standard deviation overall of 1.255. The mindfulness technique “Converting Stress to Learning Experiences” had the lowest mean of 1.72 (1-2 Days A Week) and a standard deviation of 1.152.

Overall, the average frequency of practicing mindfulness techniques per week was 1.974. When looking at the standard deviations for each mindfulness technique in Table 13, there does not seem to be consistency among teachers. This may suggest a wide variety of teachers ranging from those who could be more intentional and/or more knowledgeable on the practices themselves to those who do not take the time to practice and/or does not know enough about the practices.

A further breakdown of data is given, beginning with the mindfulness technique “Positive

Mantras, Reminders, and Restructuring" in Table 14, which shows how many times per week teachers reportedly practice the mindfulness technique "Positive Mantras, Reminders, and Restructuring". Some examples of this technique are Daily Gratitudes, Exercise, Conscious Acts of Kindness, Positive Journaling, Meditating, consciously looking for the positive, seeing setbacks as Growth, writing positive reminders on cards.

Table 14

Teacher Reported Frequency of Practicing the Mindfulness Techniques Within the "Positive Mantras, Reminders, and Restructuring" Category During the Current School Year (n= 418)

Times Per Week	Frequency	Percent
1-2	121	28.95%
3-4	109	26.08%
7+	73	17.46%
5-6	72	17.22%
0	43	10.29%
Total	418	100%

One hundred and twenty-one teachers or 28.95% reported practicing the mindfulness technique "Positive Mantras, Reminders, and Restructuring" one to two times per week. One hundred and nine or 26.08% reported practicing "Positive Mantras, Reminders, and Restructuring" three to four times per week. Seventy-three or 17.46% reported practicing "Positive Mantras, Reminders, and Restructuring" seven or more times per week. Seventy-two or 17.22% reported practicing "Positive Mantras, Reminders, and Restructuring" five to six times per week. Forty-three or 10.29% reported practicing "Positive Mantras, Reminders, and Restructuring" zero times per week.

Table 15 provides data on how many times per week teachers reportedly practiced the mindfulness technique “Converting Stress to Learning Experiences”, which are exemplified through consciously adjusting your mindset to be more positive, writing stressors down, and identifying coping strategies.

Table 15

Teacher Reported Frequency of Practicing the Mindfulness Techniques Within the “Converting Stress to Learning Experiences” Category During the Current School Year

(n= 418)

Times Per Week	Frequency	Percent
1-2	145	34.69%
3-4	119	28.47%
5-6	58	13.88%
0	56	13.40%
7+	40	9.57%
Total	418	100%

One hundred and forty-five teachers or 34.69% reported practicing the mindfulness technique “converting stress to learning experiences” one to two times per week. One hundred and nineteen or 28.47% reported practicing the mindfulness technique “converting stress to learning experiences” three to four times per week. Fifty-eight or 13.88% reported practicing the mindfulness technique “converting stress to learning experiences” five to six times per week. Fifty-six or 13.40% reported practicing the mindfulness technique “converting stress to learning experiences” zero times per week. Forty or 9.57% reported practicing the mindfulness technique “converting stress to learning experiences” seven or more times per week.

Table 16 shows how many times per week teachers reportedly practice the mindfulness technique “Problem-Solving”, which is breaking down goals into smaller steps, making small adjustments to help achieve your goals easier.

Table 16

Teacher Reported Frequency of Practicing the Mindfulness Techniques Within the “Problem-Solving” Category During the Current School Year

(n= 418)

Times Per Week	Frequency	Percent
3-4	140	33.49%
1-2	104	24.88%
5-6	85	20.33%
7+	63	15.07%
0	26	6.22%
Total	418	100%

One hundred and forty teachers or 33.49% reported practicing the mindfulness technique “problem-solving” three to four times per week. One hundred and four or 24.88% reported practicing the mindfulness technique “problem-solving” one to two times per week. Eighty-five or 20.33% reported practicing the mindfulness technique “problem-solving” five to six times per week. Sixty-three or 15.07% reported practicing the mindfulness technique “problem-solving” seven or more times per week. Twenty-six or 6.22% reported practicing the mindfulness technique “problem-solving” zero times per week.

Table 17 provides data on how many times per week teachers reportedly practiced the mindfulness technique “Seeking Information and Support”, which is finding and having a network of support to actively seek out, especially during times of challenges and setbacks.

Table 17

Teacher Reported Frequency of Practicing the Mindfulness Techniques Within the "Seeking Information and Support" Category During the Current School Year

(n= 418)

Times Per Week	Frequency	Percent
3-4	127	30.38%
1-2	124	29.67%
5-6	87	20.81%
7+	52	12.44%
0	28	6.70%
Total	418	100%

One hundred and twenty-seven teachers or 30.38% reported practicing the mindfulness technique "seeking information" three to four times per week. One hundred and twenty-four or 29.67% reported practicing the mindfulness technique "seeking information" one to two times per week. Eighty-seven or 20.81% reported practicing the mindfulness technique "seeking information" five to six times per week. Fifty-two or 12.44% reported practicing the mindfulness technique "seeking information" seven or more times per week. Twenty-eight or 6.70% reported practicing the mindfulness technique "seeking information" zero times per week.

Table 17 presents overall outcomes regarding teacher reported frequency of practicing all mindfulness techniques. Overall teacher reported mindfulness techniques practiced on a weekly basis during the current school year are represented in Table 17 following the Likert scale choices: (0) 0 times per week, () 1-2 times per week, (2) 3-4 times per week, (3) 5-6 times per week, (4) 7+ times per week.

Table 18 provides data on how many times per week teachers reportedly practiced all four of the mindfulness techniques given in the prior tables. Teacher responses for the mindfulness technique “Positive Mantras, Reminders, and Restructuring”, “Converting Stress to Learning Experiences”, “Problem-Solving”, and “Seeking Information and Support” are found aggregated in Table 18 to analyze how often teachers report practicing mindfulness techniques overall.

Table 18

Aggregated Participant Reported Frequency of Practicing Mindfulness Techniques During the Current School Year (Positive Mantras, Reminders, and Restructuring; Converting Stress to Learning Experiences; Problem-Solving; Seeking Information and Support)

(n= 418)

Times Per Week	Frequency	Percent
3-4	495	29.60%
1-2	494	29.54%
5-6	302	18.06%
7+	228	13.63%
0	153	9.15%
Total	1672	100%

Across all four mindfulness techniques (Positive Mantras, Reminders, and Restructuring; Converting Stress to Learning Experiences; Problem-Solving; Seeking Information and Support), a majority of teachers practiced them three to four times per week (four hundred and ninety-five or 29.60%) or one to two times per week (four hundred and ninety-four or 29.54%). Three hundred and two or 18.06% of teachers practiced mindfulness techniques five to six times per week. Two hundred and twenty-eight or 13.63% of teachers practiced mindfulness techniques

seven or more times per week. One hundred and fifty-three or 9.15% of teachers practiced mindfulness techniques zero times per week.

Although a large number of teachers reported practicing the four mindfulness techniques 1-2 and 3-4 days a week, there seems to be a widespread variety of those who do and do not practice frequently. Further investigating whether practicing mindfulness techniques has an impact on teacher reported mindfulness, stress, resilience, job satisfaction, and motivation will support any implications practicing more or less frequently has on teacher perceptions.

Significant Findings Related to Research Question Three

Research question three investigated whether the mindfulness technique and the frequency of practicing each mindfulness technique impacted teacher reported levels of mindfulness, stress, job satisfaction, resilience, and motivation. Teachers were asked to report their frequency of practicing the mindfulness techniques against the Likert scale choices (0) 0 times per week, (1) 1-2 times per week, (2) 3-4 times per week, (3) 5-6 times per week, (4) 7+ times per week across four different categories:

Positive Mantras, Reminders, and Restructuring (daily gratitudes, exercise, conscious acts of kindness, positive journaling, meditating, consciously looking for the positive, seeing setbacks as growth, writing positive reminders on cards); Converting Stress to Learning Experiences (consciously adjusting our mindset to be more positive, writing stressors down, and identifying coping strategies); Problem-Solving (breaking down goals into smaller steps, making small adjustments to help achieve your goals easier); Seeking Information and Support (finding and having a network of support to actively seek out, especially during times of challenges and setbacks).

In order to determine whether teachers practicing mindfulness techniques had any correlation with their reported levels of mindfulness, stress, job satisfaction, resilience, and motivation, Table 19 breaks down the significant findings by individual mindfulness techniques and attributes.

Table 19

Correlations Between Participant Reported Weekly Frequency of Practiced Mindfulness Techniques, and Reported Mindfulness, Stress, Job Satisfaction, Resilience, and Motivation (n= 418)

Technique	Mindfulness	Stress	Job Satisfaction	Resilience	Motivation
Positive Mantras, Reminders, and Restructuring	.158**	-.155**	.141**	.130**	.160**
Sig.	.001	.001	.002	.000	.026
Converting Stress to Learning Experiences	.241**	-.176**	.209**	.174**	.226**
Sig.	.000	.000	.000	.000	.000
Problem-Solving	.256**	-.136**	.149**	.185**	.109*
Sig.	.000	.005	.002	.000	.026
Seeking Information and Support	.143**	-.030	.164**	.126**	.073
Sig.	.003	.536	.001	.010	.135

** Correlation is significant at the .01 level
* Correlation is significant at the .05 level

Analysis of this data indicated some significance of correlations between mindfulness techniques and report attributes. Teachers who reported practicing Positive Mantras, Reminders, and Restructuring mindfulness techniques had a significantly low negative correlation with

reporting lower stress (-.155) and a positive correlation with reported mindfulness (.158), job satisfaction (.141), resilience (.130), and motivation (.160). Teachers who reported practicing Converting Stress to Learning Experiences mindfulness techniques had a significantly low negative correlation with reporting lower stress (-.176) and a positive correlation with reported mindfulness (.241), job satisfaction (.209), resilience (.174), and motivation (.226). Teachers who reported practicing Problem-Solving mindfulness techniques had a significantly low negative correlation with reporting lower stress (-.136) and a positive correlation with reported mindfulness (.256), job satisfaction (.149), resilience (.185), and motivation (.109). Teachers who reported practicing Seeking Information and Support mindfulness techniques had a significantly low positive correlation with reported mindfulness (.143), job satisfaction (.164), and resilience (.126). However, there was not as significant a correlation between Seeking Information and Support mindfulness techniques and lowered stress (-.030) or motivation (.073).

Another aspect of teachers who practice mindfulness techniques was to look at whether there was a correlation between teachers who practiced a technique while also practicing the other mindfulness techniques. Frequency of mindfulness techniques practiced are represented in Table 20 following the Likert scale choices: (0) 0 times per week, (1) 1-2 times per week, (2) 3-4 times per week, (3) 5-6 times per week, (4) 7+ times per week.

Table 20

Correlations Between Participant Reported Weekly Frequency of Practiced Mindfulness Techniques

(n= 418)

Technique	Positive Mantras	Converting Stress	Problem-Solving	Seeking Information
Positive Mantras, Reminders, and Restructuring		.478**	.443**	.394**
Sig.		.000	.000	.000
Converting Stress to Learning Experiences	.478**		.476**	.369**
Sig.	.000		.000	.000
Problem-Solving	.443**	.476**		.475**
Sig.	.000	.000		.000
Seeking Information and Support	.394**	.369**	.475**	
Sig.	.000	.000	.000	

** Correlation is significant at the .01 level

A significantly moderate correlation across all four mindfulness techniques were found. For each mindfulness technique practiced, a significantly moderate positive correlation was found. This shows that when mindfulness is practiced throughout the week, regardless of the technique being practiced, other mindfulness techniques being practiced have the potential to follow. Teachers who reported practicing Positive Mantras, Reminders, and Restructuring mindfulness techniques had a significantly moderate positive correlation with practicing Converting Stress to Learning Experiences (.478), Problem-Solving (.443), and Seeking

Information and Support (.394) mindfulness techniques. Teachers who reported practicing Converting Stress to Learning Experiences mindfulness techniques had a significantly moderate correlation with practicing Positive Mantras, Reminders, and Restructuring (.478), Problem-Solving (.476), and Seeking Information and Support (.369) mindfulness techniques. Teachers who reported practicing Problem-Solving mindfulness techniques had a significantly moderate correlation with practicing Positive Mantras, Reminders, and Restructuring (.443), Converting Stress to Learning Experiences (.476), and Seeking Information and Support (.475) mindfulness techniques. Teachers who reported practicing Seeking Information and Support mindfulness techniques had a significantly moderate correlation with practicing Positive Mantras, Reminders, and Restructuring (.394), Converting Stress to Learning Experiences (.369), and Problem-Solving (.475) mindfulness techniques.

Demographics regarding frequency of practiced mindfulness techniques were also analyzed and showed little difference between the teacher's gender, years in the school district, and years of teaching experience.

Table 21

Correlations Between the Reported Frequency of Practiced Mindfulness Techniques and Gender (n= 418)

Technique	Gender	*N*	*M*	*SD*
Positive Mantras, Reminders, and Restructuring	Male	96	1.83	1.303
	Female	322	2.08	1.236
Converting Stress to Learning Experiences	Male	96	1.52	1.179
	Female	322	1.77	1.139
Problem-Solving	Male	96	2.07	1.199
	Female	322	2.15	1.117
Seeking Information and Support	Male	96	1.86	1.193
	Female	322	2.07	1.105

7+ Days A Week = 4; 5-6 Days A Week = 3; 3-4 Days A Week = 2; 1-2 Days A Week = 1; 0 Days A Week = 0

There was no statistically significant difference between genders and the types of techniques they practice. Overall, females (n=322) reported to utilize each of the four mindfulness techniques more frequently than males (n=96). The highest female weekly frequency of practices was “Problem-Solving” which had a mean of 2.15 with a standard deviation of 1.11. The mean for females practicing “Positive Mantras, Reminders, and Restructuring” weekly was 2.08 with a standard deviation of 1.23. Female weekly frequency of practicing “Seeking Information and Support” had a mean of 2.07 with a standard deviation of 1.10. The lowest female weekly frequency of practicing “Converting Stress to Learning Experiences” had a mean of 1.77 with a standard deviation of 1.13.

Among male participants, the highest weekly frequency of practices was “Problem-Solving” which had a mean of 2.07 and a standard deviation of 1.19. Male weekly frequency of practicing “Seeking Information and Support” had a mean of 1.86 with a standard deviation of

1.19. Male weekly frequency of practicing “Positive Mantras, Reminders, and Restructuring” had a mean of 1.83 with a standard deviation of 1.30. The least frequently practiced technique for males was “Converting Stress to Learning Experiences” with a mean of 1.52 and a standard deviation of 1.17.

Table 22

Correlations Between the Average Participant Reported Frequency of Practiced Mindfulness Techniques and the Participant Number of Years with the District

(n= 418)

Years in District	*N*	*M*	*SD*
0-5 years	182	2.0014	.88163
6-10 years	66	1.9508	.88276
11-15 years	48	2.0573	.77226
16-20 years	30	1.8417	1.02023
21-25 years	44	1.8295	.86900
26-30 years	32	1.8750	.93326
31+ years	16	2.3750	1.02470
Total	418	1.9749	.88906

There were no significant differences with the teacher's number of years with the district with regard to the average frequency of mindfulness techniques practiced. The largest reported group are teachers who have been teaching for less than five years within the current school district, with 182 teachers reporting. Of those teachers, their mean score for frequency of practicing mindfulness techniques weekly is 2.00 with a standard deviation of .881. The smallest reported group are teachers who have been teaching in the current school district for over 31 years, with 16 teachers reporting. Their mean score for frequency of practicing mindfulness techniques weekly is 2.37 with a standard deviation of 1.02. Teachers who have been teaching in

the school district for over 31 years have the highest mean of practicing mindfulness techniques weekly, followed by teachers working in the school district for 11-15 years (*N*= 48, *M*= 2.05, *SD*= .772), less than five years (*M*= 2.00, *SD*= .881), six to ten years (*N*= 66, *M*= 2.05, *SD*= .772), 26-30 years (*N*= 32, *M*= 1.875, *SD*= .933), 16-20 years (*N*= 30, *M*= 1.841, *SD*= 1.02), and 21-25 year (*N*= 44, *M*= 1.82, *SD*= .869).

Table 23

Correlations Between the Average Participant Reported Frequency of Practiced Mindfulness Techniques and the Participant Number of Years of Teaching Experience

(n= 418)

Years in District	*N*	*M*	*SD*
0-5 years	133	2.0263	.87487
6-10 years	65	1.9000	.87701
11-15 years	51	1.8186	.81098
16-20 years	42	1.9881	.91390
21-25 years	53	2.0047	.91658
26-30 years	46	1.8533	.93627
31+ years	28	2.3125	.92702
Total	418	1.9749	.88906

There were no significant differences with the teacher's number of years of teaching experience with regard to the average frequency of mindfulness techniques practiced. Teachers who had less than five years of teaching experience were the largest reported group (n=133), while teachers who have been teaching for over 31 years was the smallest reported group (n=28). Teachers who had been teaching for over 31 years reported the greatest frequency of mindfulness techniques practiced weekly with a mean of 2.31 and a standard deviation of .927. Teachers with less than five years of teaching experience had a mean of 2.02 with a standard deviation of .874.

Teachers who had 21-25 years of teaching experience (n=53) reported a mean of 2.00 with a standard deviation of .916. Teachers who had 16-20 years of teaching experience (n=42) reported a mean of 1.98 with a standard deviation of .913. Teachers who had six to ten years of teaching experience (n=65) reported a mean of 1.90 with a standard deviation of .877. Teachers who had 26-30 years of experience (n=46) reported a mean of 1.85 with a standard deviation of .936. Teachers who had 11-15 years of teaching experience (n=51) reported a mean of 1.81 with a standard deviation of .810.

Though no significant differences were provided regarding teacher demographics and their frequency of practicing mindfulness techniques, both males and females practiced the mindfulness technique of "Problem-Solving" most frequently, and teachers who had been with the school district for over 31 years and teachers with over 31 years of experience practiced mindfulness techniques most frequently overall. Research question four investigates whether teacher work environment impacts teacher's mindfulness, stress, resilience, job satisfaction, and motivation.

Research Question Four

A teacher's work environment can have an impact on their level of trust, confidence to take risks, and willingness to communicate (Fitzgerald, S., 2012). School leaders building this environment by having meaningful conversations with those they recognize as someone who needs it or deserves it can create opportunities for them and their school, further urging a present state of awareness mindfulness cultivates and is necessary from the leader (Didonna, 2008; Shapiro, 2006; Vago et al., 2012; Higgins, 1987; Hoy et al., 2006). Research question four asks:

What do teachers report regarding their school's environmental attributes of mindfulness and resilience, and how does it relate to their reported outcomes regarding mindfulness, stress, resilience, job satisfaction, and motivation?

Teachers were asked to report on how mindful they believe their work environment to be on survey items one through three:

- I feel supported and respected at work.
- I feel connected to others at work.
- When things go badly, teachers bounce back quickly and do not give up.

Table 24 reveals an aggregated outcome of those survey items and how teachers reported. Each item measures how mindful a teacher reports their work environment to be. Items answered as *strongly agree (SA), agree (A), and somewhat agree (SWA)* indicated a teacher having reported a higher level of mindful environment. Items answered as *strongly disagree (SD), disagree (D),* and *somewhat disagree (SWD)* indicated a teacher having reported a lower level of mindful environment.

Table 24

Aggregated Participant Reported Levels of Survey Items Measuring Working in a Mindful Work Environment

(n= 418)

Response	Frequency	Percent
High Mindful Environment	1,074	85.63%
Low Mindful Environment	180	14.34%
Total	1254	100%

SA, A, & SWA= High level of a mindful environment
SD, D, & SWD= Low level of a mindful environment

When analyzing items related to teacher reported mindful environment, answers closest to *strongly agree* indicates a high level of a mindful environment. Answers closest to *strongly disagree* indicates a low level of a mindful environment. Overall, one thousand and seventy-four or 85.63% of responses (n=418) across the survey items measuring mindful environment were teachers reporting a high mindful work environment. One hundred and eighty or 14.34% of responses to survey items measuring mindful environment were teachers reporting a low mindful work environment.

Table 25 provides data regarding correlations between teacher reported levels of a mindful work environment and teacher reported levels of job satisfaction, resilience, and motivation. For each category measured within the survey items, a Likert scale of six choices were given as seen in previous tables: *Strongly Agree, Agree, Somewhat Agree, Somewhat Disagree, Disagree, Strongly Agree.*

Table 25

Correlation Between Participant Reporting a Mindful Work Environment and Resilience, Motivation, and Job Satisfaction

(n= 418)

Attribute	Mindful Environment	Resilience	Motivation	Job Satisfaction
Mindful Env.		.290**	.282**	.427**
Sig.		.000	.000	.000
Resilience	.290**		.408**	.238**
Sig.	.000		.000	.000
Motivation	.375**	.408**		.515**
Sig.	.000	.000		.000
Job Satisfaction	.427**	.238**	.515**	
Sig.	.000	.000	.000	

** Correlation is significant at the .01 level

How teachers reported their levels of a mindful work environment had significant positive correlations. As seen in Table 25, there was a significantly moderate positive correlation of .427 between Mindful Environment and Job Satisfaction. This may indicate that having a mindful work environment contributes to job satisfaction. There was a significantly moderate positive correlation of .375 between Mindful Environment and Motivation. There was a significantly low positive correlation of .290 between Mindful Environment and Resilience.

To further investigate whether a perceived resilient work environment impacted teachers, Table 26 provides data regarding the frequency of teacher reports. Each item measures how resilient a teacher reports their work environment to be. Items answered as *strongly agree (SA), agree (A), and somewhat agree (SWA)* indicated a teacher having reported a higher level of a

resilient environment. Items answered as *strongly disagree (SD), disagree (D),* and *somewhat disagree (SWD)* indicated a teacher having reported a lower level of a resilient environment.

Table 26

Aggregated Participant Reported Levels of Working in a Resilient Work Environment (n= 418)

Response	Frequency	Percent
High Resilient Environment	333	79.66%
Low Resilient Environment	85	20.34%
Total	418	100%

SA, A, & SWA= High level of a resilient environment
SD, D, & SWD= Low level of a resilient environment

When analyzing items related to teacher reported resilient environment, answers closest to *strongly agree* indicates a high level of a resilient environment. Answers closest to *strongly disagree* indicates a low level of a resilient environment. On the one survey item measuring resilient environment, three hundred and thirty-three or 79.66% of responses indicated a high resilient environment. Eighty-five or 20.34% of responses indicated a low resilient environment.

Table 27 provides data regarding correlations between teacher reported levels of a resilient work environment and teacher reported levels of job satisfaction, resilience, and motivation. For each category measured within the survey items, a Likert scale of six choices were given as seen in previous tables: *Strongly Agree, Agree, Somewhat Agree, Somewhat Disagree, Disagree, Strongly Agree.*

Table 27

Correlations Between Participant Reported Resilient Environment and Teacher Job Satisfaction, Resilience, and Motivation

(n= 418)

Attribute	Resilient Environment	Resilience	Motivation	Job Satisfaction
Resilient Environment		.323**	.356**	.351**
Sig.		.000	.000	.000
Resilience	.323**		.408**	.238**
Sig.	.000		.000	.000
Motivation	.356**	.408**		.515**
Sig.	.000	.000		.000
Job Satisfaction	.351**	.238**	.515**	
Sig.	.000	.000	.000	

** Correlation is significant at the .01 level

How teachers reported their levels of a resilient work environment had significant positive correlations. As seen in Table 27, there was a significantly moderate positive correlation of .356 between Resilient Environment and Motivation. This may indicate that having a resilient work environment contributes to teachers feeling more motivated. There was a significantly moderate positive correlation of .323 between Resilient Environment and Resilience. There was a significantly moderate positive correlation of .351 between Resilient Environment and Job Satisfaction.

Significant Findings Related to Research Question Four

Research question four investigated how teachers reported how resilient and mindful their work environment was. Exploring the work environment and how it impacts teacher job satisfaction, resilience, and motivation can show how important the perceptions of a workplace

environment can be on employees. Items measuring mindful environment answered as *strongly agree, agree, and somewhat agree* indicated a teacher having reported a higher level of a mindful environment. Items answered as *strongly disagree, disagree,* and *somewhat disagree* indicated a teacher having reported a lower level of a resilient environment.

Table 28

Correlations Between Participant Reported High Mindful Environment and Teacher Job Satisfaction, Resilience, and Motivation

(n= 418)

Attribute	Job Satisfaction	Resilience	Motivation	Mindful Environment
Job Satisfaction		.238**	.515**	.427**
Sig.		.000	.000	.000
Resilience	.238**		.408**	.290**
Sig.	.000		.000	.000
Motivation	.515**	.408**		.375**
Sig.	.000	.000		.000
Mindful Environment	.427**	.290**	.375**	
Sig.	.000	.000	.000	

** Correlation is significant at the .01 level

There was a significant correlation among teachers reporting working in a highly mindful environment and their reported levels of job satisfaction, resilience, and motivation. There was a significantly moderate positive correlation of .427 with teacher reported levels of job satisfaction and reported levels of motivation (.375). A significantly low positive correlation of .290 was found with teachers who reported levels of resilience.

Table 29 suggests that there was a significant difference between teachers who reported their work environment as being a high or low mindful environment and how they reported their own levels of job satisfaction, resilience, and motivation.

Table 29

t-test of Participant Results Comparing Reported High Levels of a Mindful Environment and Reported Low Levels of a Mindful Environment to Reported Job Satisfaction, Resilience, and Motivation Levels

Reported Attribute	HLMindful Environment	*N*	*M*	*SD*
Job Satisfaction	.00	212	2.8538	1.24388
	1.00	206	3.9660	1.11478
	Total	418	3.4019	1.30529
Resilience	.00	212	4.0330	1.08582
	1.00	206	4.6408	.91443
	Total	418	4.3325	1.04890
Motivation	.00	212	4.2264	1.06012
	1.00	206	5.0146	.88057
	Total	418	4.6148	1.05142

1- High, 0- Low

Teachers who reported their work environment to be a high mindful environment (n=206) reported their job satisfaction level as having a mean of 3.96 with a standard deviation of 1.11, their resilience level as having a mean of 4.64 with a standard deviation of .91, and their motivation level as having a mean of 5.01 with a standard deviation of .88. Although job satisfaction was suggested as being low, resilience and motivation were reported as being high among teachers who identify their work environment as being highly mindful. Teachers who reported their work environment to be a low mindful environment (n=212) reported their job

satisfaction level as having a mean of 2.85 with a standard deviation of 1.24, their resilience level as having a mean of 4.03 with a standard deviation of 1.08, and their motivation level as having a mean of 4.22 with a standard deviation of 1.06. Job satisfaction levels are indicated as being low for teachers who report working in a low mindful environment. However, teacher reported resilience and motivation levels remain high.

Table 30

Correlations Between Reported Levels of a High Resilient Work Environment and Teacher Reported Resilience, Job Satisfaction, and Motivation

(n= 418)

Attribute	Resilient Environment	Resilience	Motivation	Job Satisfaction
Resilient Env.		.259**	.282**	.244**
Sig.		.000	.000	.000
Resilience	.259**		.408**	.238**
Sig.	.000		.000	.000
Motivation	.282**	.408**		.515**
Sig.	.000	.000		.000
Job Satisfaction	.244**	.238**	.515**	
Sig.	.000	.000	.000	

** Correlation is significant at the .01 level

How teachers reported their levels of a resilient work environment had significant positive correlations. There was a significant correlation among teachers reporting working in a highly resilient environment and their reported levels of job satisfaction, resilience, and motivation. As seen in Table 30, there was a significantly low positive correlation of .282 between Resilient Environment and Motivation. This may indicate that having a resilient work environment contributes to teachers feeling more motivated. There was a significantly low

positive correlation of .259 between Resilient Environment and Resilience. There was a significantly low positive correlation of .244 between Resilient Environment and Job Satisfaction.

Table 31

t-test of Participant Results Comparing Reported High Levels of a Resilient Environment and Reported Low Levels of a Resilient Environment to Reported Job Satisfaction, Resilience, and Motivation Levels

Reported Attribute	HLResilient Environment	*N*	*M*	*SD*
Job Satisfaction	.00	227	3.1101	1.28340
	1.00	191	3.7487	1.24802
Resilience	.00	227	4.0837	1.05472
	1.00	191	4.6283	.96411
Motivation	.00	227	4.3436	1.06679
	1.00	191	4.9372	.93821

1- High, 0- Low

Teachers who reported their work environment to be a high resilient environment (n=191) reported their motivation level as having a mean of 4.93 with a standard deviation of .938, their resilience level as having a mean of 4.62 with a standard deviation of .964, and their job satisfaction level as having a mean of 3.74 with a standard deviation of 1.24. Although job satisfaction was suggested as being low, resilience and motivation were reported as being high among teachers who identify their work environment as being highly resilient. This is reminiscent with teachers who reported their work environments to be highly mindful. Teachers who reported their work environment to be a low resilient environment (n=227) reported their motivation level as having a mean of 4.34 with a standard deviation of 1.06, their resilience level

as having a mean of 4.08 with a standard deviation of 1.05, and their job satisfaction level as having a mean of 3.11 with a standard deviation of 1.28. Job satisfaction levels are indicated as being low for teachers who report working in a low mindful environment. However, teacher reported resilience and motivation levels remain high. This is also reminiscent with teachers who reported their work environments to be highly mindful. This could suggest how mindfulness and resilience, even in environmental factors, are alike.

Chapter 5

Summary, Conclusions, Discussions, Limitations, and Recommendations

Introduction

The career field of teaching is a stressful one, as it demands constant, multitudinous needs on a wide spectrum regarding the human condition. The "high levels of emotional work" (Skinner & Beers, 2016, p. 99) teaching solicits is the nature of the profession. However, a significant number of teachers are not provided the tools to sustain quality instruction or well-being in their classrooms. This is the product of a decrease in teacher perceived satisfaction in their job, motivation to refine their practices, and the ability to manage stress (Skinner & Beers, 2016; Marinak et al., 2014; Flook et al., 2013; Frank et al., 2015a). Professional development opportunities to train teachers in the practices of mindfulness and coping for stress-management and self-efficacy will help teachers gain resilience and motivation in their teaching practices, which in turn will have a positive effect on learners, colleagues, and school culture. (Beshai et al., 2016; Wildman, 2015; Rickert et al., 2016; Jennings et al., 2016; Lutz et al., 2015; Avci et al., 2016; Bandura, 1977).

Purpose of the Study

The purpose of the study was to identify ways mindfulness related to stress management, resilience, and job satisfaction for motivation among select Minnesota public school teachers, as there have been very few studies that show how mindfulness relates to these teacher attributes. The study examined the self-reported levels of mindfulness and frequency of mindfulness techniques practiced in public school teachers. The study also examined public school teachers' levels of mindfulness within their public school environments, levels and areas of stress in public

school teachers, levels of resilience in public school teachers and within their public school environments, and levels of motivation in public school teachers.

Research Methodology

This study was a quantitative study with the goal of identifying teachers' stress, resilience, job satisfaction, and motivation in direct correlation with mindfulness practices. Study data were gathered via implementations and modifications of the School Mindfulness Scale (M-SCALE) (Hoy et al., 2004), Brief Resilience Scale (BRS) (Smith et al., 2008), Cognitive and Affective Mindfulness Scale- Revised (CAMS-R) (Feldman et al., 2007), Teacher Stress Inventory (TSI) (Fimian & Fastenau, 1990), and the Work Tasks Motivation Scale for Teachers (WTMST) (Fernet et al., 2008).

The quantitative study conducted consisted of a survey with teachers trained in mindfulness and mindfulness practices in regard to their stress, resilience, job satisfaction, and motivation in direct correlation with mindfulness practices.

Description of the Sample

The Mindfulness, Stress, Resilience, Job Satisfaction, and Motivation (MSRJM) hybrid survey was electronically sent to Central Minnesota public school teachers in a school district that has had mindfulness practice training for their staff. The electronic survey was sent to teachers through district leadership emails across 14 schools within the district. Of the surveys that were sent to teachers, 418 surveys were completed (n= 418). Of these completed surveys, 100% were considered valid responses. Surveys with all items answered were determined as valid.

Research Questions

The research questions of this study explored how often teachers practiced mindfulness techniques, how teachers reported their own levels of mindfulness, and whether mindfulness practices and being mindful could impact teacher reported levels of stress, resilience, job satisfaction, and motivation. The research questions also investigated whether teacher work environment impacted various reported attributes.

1.) What do teachers report relating to their own situations regarding self- mindfulness attributes (self-awareness, regulation, and situational acceptance), in relation to their reported outcomes regarding stress, resilience, job satisfaction, and motivation?
2.) What do teachers report in relation to stress management skills of coping for emotional regulation and keeping their personal priorities unaffected, and how does it relate to their reported motivation attributes of interest and/or enjoyment of work tasks, job satisfaction attributes of being stimulated by work tasks and feeling respected and recognized, and resilience?
3.) How do the reported demographics of teachers' gender, age, years of teaching, types of mindfulness practices they practice, and amount of time practicing those mindfulness practices affect their reported outcomes regarding mindfulness, stress, resilience, job satisfaction, and motivation?
4.) What do teachers report regarding their school's environmental attributes of mindfulness and resilience, and how does it relate to their reported outcomes regarding mindfulness, stress, resilience, job satisfaction, and motivation?

Conclusions

Research question one. According to the study results, a majority of teachers reported themselves as being highly mindful. Those self-reporting as being highly mindful, they also indicated having lower stress and higher levels of resilience, job satisfaction, and motivation at work. These positive correlations support the notion of a more optimistic perception among mindful teachers when confronted with adverse situations, therefore impacting in what manner they report their stress, resilience, job satisfaction, and motivation levels. This may be due to a mindfulness term known as 'reperception' (Shapiro, 2009). Reperception shifts a person's experience and well-being upon facing adverse situations. Acquiring reperception allows an individual to gain self-regulation, liberation, self- compassion, and nonjudgement of one's shortcomings (Hollis-Walker & Colosimo, 2011).

Of the data provided in Table 7, the significantly strong positive correlation between teacher reported levels of mindfulness and teacher reported levels of resilience may indicate that mindfulness is associated with resilience. The level of mindfulness a teacher reported is an indicator of the level of resilience they reported. Resilience is defined as the "human capacity to face, overcome, and even be strengthened by experiences of adversity" (Grotberg, 1997, p. 13). Teachers who utilize mindfulness as an awareness and practice may be resilient, able to overcome, and be strengthened by adversity based on how they perceive adverse situations. This approach to adversity is the antecedent, or proactive preparation, to all situations in a teacher's daily life and inevitable success. Bandura's Social Cognitive Theory (1977) asserts that the belief one has in themselves has a direct impact on their attitudes, innovations, and even retention

(Skaalvik & Skaalvik, 2008). If mindfulness prepares the mind to overcome adversities through non-judgement and self-compassion, positive self-perception, a component of motivation, grows.

Research question two. The study results revealed a significant difference between teachers who reported as having high stress versus low stress. Teachers reporting high levels of stress also reported low levels of resilience and job satisfaction. However, teacher motivation was not impacted by levels of stress reported. Teachers who reported having low levels of stress also reported having high levels of resilience, job satisfaction, and motivation. This provides support toward the notion that stress levels may impact teacher perception, further supporting findings about being mindful shifting teacher perception of stress which impacts resilience, job satisfaction, and motivation overall. The perception of being able to manipulate and maintain control when encountering adverse, stressful situations create lower autonomic arousal and less performance impairment (Bandura & Locke, 2003; Bandura, 1977), confirming the study's findings.

Stress in education is perceived to be the wear and tear on an educator due to unpleasant emotions from teaching. The effects of stress may impede one's ability to be mindful, gain resilience, have job satisfaction, or find motivation in one's work altogether (Avci et al., 2016; Dunham, 2002; Skaalvik & Skaalvik, 2016). Therefore, finding correlations regarding levels of stress and the impact it can have on a teacher should support the research of ways in which mindfulness changes teacher approach and interaction with adverse situations. Mindfulness can help teachers interact with stress in a more productive, objective way. These correlations may show ways mindfulness shifts teacher perspectives on even bad situations.

Research question three. The study results regarding teacher demographics revealed no significant differences between teacher gender, the number of years of teaching experience a teacher had, or the number of years a teacher has been with the current school district. However, the study results indicated that the amount of time mindfulness techniques were practiced weekly had an impact on how teachers reported their levels of mindfulness, stress, resilience, job satisfaction, and motivation. Teachers who practiced mindfulness techniques more frequently saw higher levels of mindfulness, resilience, job satisfaction, and motivation, and lower levels of stress. This could mean that regardless of the gender, how many years of teaching experience a teacher has, or how many years a teacher has been with a school district, the frequency of practicing mindfulness techniques is what impacts teacher reported outcomes, as found in Table 20 of this study.

Mindfulness practices and acquisitions necessitate intentionality and time. Acquiring a present-focused mindset through mindfulness practices is only one facet of a complex process. The process of an individual intentionally understanding themselves and their approach to any number of situations in a mindful manner is the shift mindfulness practices create (Didonna, 2008; Shapiro, 2006; Vago et al., 2012; Higgins, 1987), improving opportunities to successfully navigating new situations and continuously gathering understandings of oneself (Hoy, Gage, & Tarter, 2006, p. 238). Therefore, the more intentional practice teachers partake in, the stronger the correlation of practicing other mindfulness techniques will be, as found in Table 19 of this study. Schools may need to give teachers time to intentionally practice a mindfulness technique beyond a mindfulness intervention training, as mindfulness requires "...formal practices that are

undertaken for varying periods of time on a regular basis, to informal practices that are aimed at cultivating a continuity of awareness in all activities of daily living" (Kabat-Zinn, 2003, p. 147).

Research question four. The study results revealed that the majority of teachers reported as working in a highly mindful and highly resilient environment. Of those teachers who reported their working environments to be highly mindful and highly resilient, both results found that this positively impacted their reported levels of resilience, job satisfaction, and motivation. This shows by what means a work environment may provide opportunities for teachers to see themselves as more resilient, more satisfied with their work, and more motivated, as found in Tables 28 and 30 in this study.

Leadership creating a mindful and resilient environment may promote more teacher well-being (Didonna, 2008; Shapiro, 2006; Vago et al., 2012; Higgins, 1987; Hoy et al., 2006). A teacher's work environment can have an impact on their level of trust, confidence to take risks, and willingness to communicate (Fitzgerald, S., 2012). A part of cultivating a mindful and resilient work environment may begin with actively engaging in formal mindfulness practices on a regular basis, as well as informal practices throughout the day (Kabat-Zinn, 2003) beyond mindfulness professional development opportunities. *What* is taught regarding mindfulness may be less important than *how* it is taught (Langer, 2000), offering insight into just how important leadership subscribing to mindfulness practices themselves is.

Limitations

Limitations within a study are not rare, and often out of the researcher's control. "Limitations are particular features of your study that you know may negatively affect results or your ability to generalize" (Roberts, 2010, p. 162). Regarding the limitations for this study:

- The survey was voluntary to take, meaning not everyone provided the survey link would take it. The survey results found a high number of participants who teach in the Elementary and High School level. Early Childhood, Middle School, and Transition Programs did not have many participants. Having a majority of study results from participants who teach in the Elementary and High School levels will provide a larger perspective from those schoolteachers and not equal representation from the other levels.
- The electronic survey was to be distributed to teachers through building leadership. However, it is not certain that all leadership sent the electronic survey to their teachers.
- Within the survey participation timeframe, a large altercation at a school within the district transpired, affecting the entire school and teachers. This could potentially have resulted in some teachers not taking the survey due to pressing issues occurring, as well as teacher reports being skewed based on the negative events at the school.

Recommendations for the Field

Based on the research gathered throughout this study, as well as information gathered from the study results, it is recommended that educators and school leaders consider the following:

- The study results determined a correlation between mindfulness and stress, resilience, job satisfaction, and motivation. Within the research, it was determined that each of these attributes were systemic in some way, all of which are impacted by mindfulness. Schools should consider providing their teachers time to practice intentional mindfulness every day.

- Throughout the research, multiple teacher-specific mindfulness intervention training programs were analyzed, all of which overlap in some way regarding their mindfulness techniques and outcomes. Schools should consider implementing a mindfulness program for teachers, with a plan in place that provides meaningful all-staff activities throughout an entire school year, with time for mindfulness practice every day.
- Based on the study results and the research, having a person of support at work for additional help or for information can be destressing. It can contribute to job satisfaction and efficaciousness. Schools should consider providing all-staff engaging activities that are intentional and meaningful, to ensure every teacher has an opportunity to connect with their colleagues and find people who can support them throughout the school year.
- Based on the study results and the research, leadership can play an integral role in building and maintaining a positive, mindful school culture. School leadership should consider partaking in mindfulness training and sustain an intentional practice, model, and awareness of it so others may benefit from it. How leaders speak with teachers as well as decision processes they utilize can be positively affected by mindfulness, which impacts teachers.

Recommendations for Further Research

Through this study, recommendations for further research were identified as the following:

- Conduct a qualitative case, surveying/interviewing teachers who have had mindfulness training and/or practice mindfulness techniques and measure their job satisfaction and

motivation, identifying why they have high or low job satisfaction and motivation with follow-up questions.

- Conduct a case study surveying teachers with mindfulness training and/or practice mindfulness techniques and ways in which their school environment impacts their mindfulness, stress, and motivation levels. Elements of their school environment, collegial relationships, and leadership in a survey could provide insight into social emotional well-being of teachers and how it is impacted by mindfulness, as well as the impact on teacher mindfulness, stress, and motivation.
- Case study on schools who actively train, implement, and give intentional time toward mindfulness techniques for their teachers and their teacher's reported levels of mindfulness, stress, and motivation, compared to schools who have had mindfulness training but do not actively implement or provide intentional time for teacher to practice mindfulness.

Concluding Remarks

Allowing teachers to be trained in mindfulness techniques to positively impact their perceptions and overall well-being can positively impact school culture and classrooms. Having more mindful teachers can provide a positive paradigm shift in a stressful, emotionally-taxing career. This shift in teacher approach to adverse situations can have implications on teacher refinement and retention. Mindfulness training for teacher well-being and school culture must go beyond the traditional professional development opportunity. There must be intermittent, intentional opportunities for new learnings, engagement, and validation. Cultivating and acquiring mindfulness takes time and purpose, but is well needed in the educational industry, as

it allows teacher's stressors to be turned into opportunities. Mindfulness can help create the antecedent to approaching any contextual situation, having implications on stress-management, teacher retention, and teacher effectiveness.

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Appendix A: Mindfulness Techniques, Programs, and Motivational Theories Chart

Mindfulness Technique Category (Skinner & Beers, 2016; Flook et al., 2013; Kabat-Zinn, 1990; Achor, 2011)	Intended Attributes of Mindfulness Technique (Garland, 2009; Vago & Silbersweig, 2012; Kabat-Zinn, 2003; Gerritz et al.; Skalvik & Skalvik, 2008; Jennings, 2016)	The Orange Frog Program Principles (Anchor & ITLN, 2011) "We will learn how to apply the 7 Principles for creating a more positive and productive workplace and lifestyle as drawn from 'The Happiness Advantage' by Shawn Achor" (Achor & ITLN, 2017, p. 3).	mMBSR Principles (Flook et al., 2013) "We expected mindfulness training to be associated with reduced burnout and psychological symptoms, increased mindfulness and improved performance on attention and emotion related tasks, as well as more effective classroom teaching practices. Furthermore, we expected that increases in mindfulness would be associated with the degree of improvement exhibited across these measures" (Flook et al., 2013, p. 4).	CARE Principles (Jennings et al., 2013; 2016; 2017; Garrison Institute) "The CARE for Teachers program model is a comprehensive system designed to reduce teachers' stress and to promote and support teachers' social and emotional competences over the course of one full school year" (Jennings et al., 2017, p. 6).	SMART Principles (Cullen & Wallace, 2010; Impact Foundation, 2010) "The curriculum represents approximately 70% of the same components and practices as the mindfulness-based stress reduction (MBSR) program developed by Kabat-Zinn and includes additional content focused on emotion theory and regulation, forgiveness, kindness and compassion, and the application of mindfulness to parenting and teaching" (Benn et al., 2012, p. 4).	Impacted Motivation and Job Satisfaction Theories
Positive Mantras, Reminders, and Restructuring	**Self-Regulation** (intention; attitude) **Positive Appraisal**	**"The Happiness Advantage"** "Daily Gratitudes, Exercise, Conscious Acts of Kindness, Positive Journaling, and Meditating (single tasking)" (p.54). **"Tetris Effect"** "When we consciously look for the positive it gets easier to find- and it enables our brains to work more efficiently and more effectively creating a virtuous cycle" (p. 59). **"Falling Up"** "Conditioning the brain to associate setbacks with Growth" (p. 60).	**"Loving-Kindness Meditation"** "Loving- Kindness is in part wishing "safety" for us and others" (Flook et al., 2013, p. 15). **"Informal Practices"** "Informal Practices are written on punched 2" × 3" cards and hung from the teacher's lanyard to carry as a reminder throughout the school day" (Flook et al., 2013, p. 12). **"Foundational Attitudes"** "Foundational attitudes brought to cultivating mindfulness which impact both the learning and the practice: beginner's mind, non-judgment, non-striving, patience, acceptance, letting go, and trust" (Flook et al., 2013, p. 11).	**"Caring Practices"** "A series of guided reflections focused on caring for self, loved one, colleague, challenging person" (Jennings et al., 2013, p. 379). **"Mindfulness/Stress Reduction Practices"** "Mindfulness of thoughts and emotion practice. Mindful movement practices (standing, walking, stretching, centering)" (Jennings et al., 2013, p. 379).	**"Introduction/Perceptions"** "…guided visualization; written reflection…Setting intentions, moods and thoughts exercise" (Benn et al., 2012, p. 4). **"Compassion and kindness"** "…kindness and compassion discussion; eyes on exercise; kindness meditation" (Benn et al., 2012, p. 4).	**Albert Bandura's Social Cognitive Theory (1977)** Positive self-perception **Timothy Judge's Core-Self Evaluations (2005)** Positive self-reflection and efficacy
Converting Stress to Learning Experiences	**Acceptance Self-Regulation** (attitude; non-judging) **Job Satisfaction** (respect/ recognition)	**"Mindset Matters"** "Consciously adjusting our mindset to be more positive gives us increased power to be more fulfilled and successful" (p. 58).	**"Stressors and Stress Cycle"** "Writing a school related or home stressor on each of several small post-it notes of one color and a way that one deals with stress on each of several small post-it notes of another color" (Flook et al., 2013, p. 16).	**"Emotion Skills Instruction"** "Drawn from the neuroscience of emotion involving a combination of didactic instruction and experiential activities (e.g., reflective practices and role-plays) to support teachers' recognition of emotional states and exploration of their *emotional landscapes*—their habitual emotional patterns" (Jennings, 2016, p. 139).	**"Responding versus reacting"** "…stress reaction cycle and coping didactic and discussion…events calendar charting and discussion" (Benn et al., 2010, p. 4). **"Working with anger"** "…relived anger exercise" (Benn et al., 2012, p. 4). **"Working with fear"** "…working with fear didactic and discussion; relived fear exercise" (Benn et al., 2012, p. 4).	**Frederick Herzberg's Motivation-Hygiene Theory (1976)** Intrinsic personal growth **Abraham Maslow's Hierarchy of Needs (1967)** Meta-motivation from self-actualization
Problem-Solving	**Self-Regulation** (attention) **Job Satisfaction** (responsibility)	**"Zorro Circle"** "Focusing first on manageable goals and then gradually expanding them" (p.55). **"20 Second Rule"** "Making small energy adjustments to reroute the path of least resistance in your favor" (p. 56).	**"Informal Practices"** "When aware of students "reacting" (acting out, shutting down, caught in anger or self-judgment): can you see this as a signal that the student is "in pain"? Try offering (maybe silently) Caring Practice to the student and yourself or both" (Flook et al., 2013, p. 13).	**"Mindfulness/Stress Reduction Practices"** "Practice maintaining mindful awareness in front of a group. Role plays to practice mindfulness in the context of a strong emotion related to a challenging classroom situation" (Jennings et al., 2013, p. 379).	**"Working with anger"** "…anger triggers/dyads and discussion, anger profiles" (Benn et al., 2012, p. 4). **"Working with fear"** "…fear dyads" (Benn et al., 2012, p. 4).	**Abraham Maslow's Hierarchy of Needs (1967)** Meta-motivation from self-actualization **Frederick Herzberg's Motivation-Hygiene Theory (1976)** Intrinsic personal growth **Timothy Judge's Core-Self Evaluations (2005)** Positive self-reflection and efficacy
Seeking Information and Support	**Self-Regulation** (attention) **Motivation** (interest/enjoyment)	**"Social Investment Solution"** "This principle tells us to invest more in our social support network- especially during challenges and setbacks" (p. 57).	**"Experience"** "Teachers share their experience of "What makes a classroom difficult?" and "What makes a classroom come alive?" and the emotional experience of each" (Flook et al., 2013, p. 14).	**"Mindful Listening Partner Practices"** "One person reads a poem or talks about a problem, partner listens mindfully practicing presence and acceptance" (Jennings et al., 2013, p. 379).	**"Working with conflict"** "…aikido of communication role play" (Benn et al., 2012, p. 4).	**Frederick Herzberg's Motivation-Hygiene Theory (1976)** Intrinsic personal growth **Abraham Maslow's Hierarchy of Needs (1967)** Meta-motivation from self-actualization **Timothy Judge's Core-Self Evaluations (2005)** Positive self-reflection and efficacy

Appendix B: Correspondence for Permission to Use Surveys and Program Material

MM

Mark McDonald <MarkM@ithoughtleader.com>
Wed 9/11/2019 11:30 AM
Chollett, Shelby A

Hi Shelby,
If you share your research findings with us go ahead.
The course does have a trademark and is protected from delivering without a license but I have no problem if you are building a research case using the structure,
Hope you are well and look forward to seeing you if you are attending the September 27th workshop at ISD742.
My Best,
Mark

Mark McDonald
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www.howstellasavedthefarm.com
www.orangefrogbook.com

INTERNATIONAL THOUGHT LEADER NETWORK

On Sep 10, 2019, at 3:45 PM, Chollett, Shelby A <chsh0703@go.stcloudstate.edu> wrote:

Hi Mark,

As I am continuing to further develop my study on mindfulness techniques, The Orange Frog workshop will be a program I will be researching due to the school district I am studying (St. Cloud) having gone through the workshop.

I am wondering if I have to obtain permission to outline the techniques taught in the workshop in my research?

Please let me know if I should reach out to someone else regarding this matter.

Thank you!

Shelby Chollett
Ed.D Candidate, Educational Administration & Leadership
St. Cloud State University Doctoral Studies
TechID: 00607116
chsh0703@go.stcloudstate.edu
612-702-8103

RE: Research Instrument Request- The Work Tasks Motivation Scale for Teachers

FC Fernet, Claude <Claude.Fernet@uqtr.ca>
Tue 3/19, 9:56 AM
Chollett, Shelby A.

Reply all

Inbox

You replied on 3/19/2019 11:49 AM.

WTMST- English version...
172 KB

Show all 1 attachments (172 KB) Download Save to OneDrive - St. Cloud State University

Dear Shelby,

Of course you could adapt the measure (see the attached file) to fit the research needs.
Best wishes,
Claude

--
Claude Fernet, Ph.D.
Professeur titulaire

Département de gestion des ressources humaines lÉcole de gestion
Université du Québec à Trois-Rivières
3351, boul. des Forges, C.P. 500
Trois-Rivières (Québec)
Canada, G9A 5H7

De : Chollett, Shelby A. <chsh0703@stcloudstate.edu>
Envoyé : 18 mars 2019 13:55
À : Fernet, Claude <Claude.Fernet@uqtr.ca>
Objet : Research Instrument Request- The Work Tasks Motivation Scale for Teachers

Greetings, Dr. Fernet,

My name is Shelby Chollett, a doctoral student from St. Cloud State University in Minnesota, USA. Currently, my study involves a look at teachers' motivation as it relates to mindfulness

Re: Research Instrument Request- Brief Resilience Scale

CA Chollett, Shelby A.
Today, 3:24 PM
Bruce Smith <bws0513@gmail.com>

Reply all

Sent Items

Dr. Smith,

I truly appreciate everything you have given me! This is extremely exciting.

I will be in touch regarding my findings.

Thank you so much.

Have a wonderful day,

Shelby Chollett
Ed.D Student, Educational Administration & Leadership
St. Cloud State University Doctoral Studies
TechID: 00607116
chsh0703@stcloudstate.edu
612-702-8103

From: Bruce Smith <bws0513@gmail.com>
Sent: Sunday, March 3, 2019 2:46:29 PM
To: Chollett, Shelby A.
Subject: Re: Research Instrument Request- Brief Resilience Scale

Hi Shelby,

Thanks for your interest in the Brief Resilience Scale. You are welcome to use it free of charge and for as much as you like.

I have attached (1) our original validation article, (2) a file with the instructions, items, scoring, and suggested cut-offs for high and low resilience, (3) an article on the relationship between the BRS and various outcomes, (4) an article showing how the BRS can be adapted for specific stressors, and (5) an article on the validated Spanish translation of the BRS. As far as we know, there are also many other translations of the BRS including German, Dutch, Italian, Chinese, Japanese, Turkish, Finnish, Croatian, and Serbian translations.

In addition, there is also now a large number of articles reporting results when examining the BRS as a predictor, outcome, and/or mediator of other variables, intervention studies showing that it often increases during interventions, and also how much of the BRS scores may be accounted for by genetics (10% or

Re: Research Instrument Request- Cognitive and Affective Mindfulness Scale-Revised

Gregory Feldman <gregory.feldman@simmons.edu>

Mon 2/4/2019 11:28 AM

To:Chollett, Shelby A. <chsh0703@stcloudstate.edu>;

Hi Shelby,
Please feel free to use the CAMS-R for your study. Can you tell me a bit more about how you plan to modify it? It is not uncommon to modify the instrument a bit to meet study aims (e.g., modify verb tense or time frame of items, translations to new languages); with that said, if it is modified considerably, it may be best to refer to this in your methods as "a new instrument developed for this study that is modeled on / draws items from the CAMS-R." Hope that makes sense. Either is fine and happy to advise if you send specifics if you'd like. Let me know if you need a copy or have any questions.
Best,
Greg

--

Greg Feldman, Ph.D.
Professor and Chair
Simmons University
Department of Psychology
Park Science Center
300 the Fenway
Boston, MA 02115
Phone: 617-521-2606

Email: greg.feldman@simmons.edu

http://www.simmons.edu/Faculty/Gregory-Feldman

On Sun, Feb 3, 2019 at 2:08 PM Chollett, Shelby A. <chsh0703@stcloudstate.edu> wrote:

> Greetings Dr. Feldman,
>
> My name is Shelby Chollett, a doctoral student from St. Cloud State University in Minnesota. Currently, my study involves a look at teachers' motivation as related to mindfulness practices. More specifically, mindfulness practices for stress-management, and it's outcomes.
>
> I came across your instrument, "Cognitive and Affective Mindfulness Scale-Revised" (CAMS-R) (Feldman et al., 2007), and found it relevant to my research design. I am wondering if I may utilize the "Cognitive and Affective Mindfulness Scale-Revised" (CAMS-R)(Feldman et al., 2007) and possibly modify it to my intended study.

Re: Research Instrument Request- Kentucky Inventory of Mindfulness Skills

Chollett, Shelby A.

Mon 2/4/2019 8:14 PM

Sent Items

To:Baer, Ruth <rbaer@email.uky.edu>;

Dr. Baer,

I am most appreciative of this! Your work continually inspires me.

Thank you so very much.

Take care,

Shelby Chollett
Ed.D Student, Educational Administration & Leadership
St. Cloud State University Doctoral Studies
TechID: 00607116
chsh0703@stcloudstate.edu
612-702-8103

From: Baer, Ruth <rbaer@email.uky.edu>
Sent: Monday, February 4, 2019 10:42:36 AM
To: Chollett, Shelby A.
Subject: Re: Research Instrument Request- Kentucky Inventory of Mindfulness Skills

Dear Shelby,

You're welcome to use the KIMS, permission is not required. I usually recommend the FFMQ, which is a follow-up to the KIMS. You can find it on my website: www.ruthbaer.com,

Home - Ruth Baer, PhD

www.ruthbaer.com

My academic work on mindfulness, including published research papers, books for professionals, and mindfulness questionnaires. For more information on this aspect of my work, please visit the Academics page.

on the Academics page under Questionnaires.

Re: Research Instrument Request- Questionnaire on the Experience and Assessment of Work

M.J.P.M. van Veldhoven <M.J.P.M.vanVeldhoven@uvt.nl>

Mon 2/18/2019 1:52 AM

Inbox

To:Chollett, Shelby A. <chsh0703@stcloudstate.edu>;

1 attachments (2 MB)

Measuring general and specific stress causes and stress responses among beginning secondary school teachers in the Netherlands.pdf;

Dear Shelby Chollett,

Thank you very much for your interest in the QEEW.
The QEEW is a copyrighted instrument and the rights are held by SKB Amsterdam,
a research and consultancy agency. Use of the full survey and support in data processing/reference materials
is only available through SKB.

That said, it is widely accepted that if 1 or 2 of the scales from the QEEW are used
in a study for academic purposes, for example in thesis research, this is allowed
under the condition that:
- the survey source reference is mentioned in any products from the study
- all data processing and interpretation is done by the researchers in question.
If you want to use longer parts of the questionnaire, you are advised to contact SKB.

In addition:
recently I collaborated in project that tested/expanded the QEEW for the
target group of (beginning) teachers.
This may be of interest to you, so I'm attaching a copy if this paper FYI.

Best regards,
Marc van Veldhoven.

Marc van Veldhoven - Professor of Work, Health & Well-being
Department of HR Studies - Tilburg University - Room S517
P.O. Box 90153 - 5000 LE Tilburg - the Netherlands
+31 13 4662749 - m.j.p.m.vanveldhoven@uvt.nl

On 16 Feb 2019, at 20:29, Chollett, Shelby A. <chsh0703@stcloudstate.edu> wrote:

Greetings Dr. Marc van Veldhoven,

Re: Research Instrument Request- School Mindfulness Scale (M-Scale)

Chollett, Shelby A.

Mon 2/4/2019 8:15 PM

To:Wayne Hoy <whoy@mac.com>;

Dr. Hoy,

I am most appreciative of this! I truly enjoy the work you do, and find it inspiring.

Thank you so very much.

Take care,

Shelby Chollett
Ed.D Student, Educational Administration & Leadership
St. Cloud State University Doctoral Studies
TechID: 00607116
chsh0703@stcloudstate.edu
612-702-8103

From: Wayne Hoy <whoy@mac.com>
Sent: Sunday, February 3, 2019 5:52:30 PM
To: Chollett, Shelby A.
Subject: Re: Research Instrument Request- School Mindfulness Scale (M-Scale)

Dear Shelby,

You may use the School Mindfulness Scale in your research.

The scale and other pertinent information are found on my webpage [www.waynekhoy.com].

Best wishes.

Wayne

Wayne K. Hoy
Fawcett Professor Emeritus in
Education Administration
The Ohio State University
www.waynekhoy.com

7655 Pebble Creek Circle, #301
Naples, FL 34108
Email: whoy@mac.com
Phone: 239 595 5732

On Feb 2, 2019, at 3:59 PM, Chollett, Shelby A. <chsh0703@stcloudstate.edu> wrote:

Re: Teacher Stress Inventory Research Use

CA Chollett, Shelby A.
Today, 11:45 AM
fimian@instructionaltech.net

Reply all

Sent Items

Dr. Fimian,

Thank you so much for your quick and positive response! This is great news.

I will be sure to share with you my study and results.

Have a wonderful day!

Shelby Chollett
Ed.D Student, Educational Administration & Leadership
St. Cloud State University Doctoral Studies
TechID: 00607116
chsh0703@stcloudstate.edu
612-702-8103

From: fimian@instructionaltech.net <fimian@instructionaltech.net>
Sent: Saturday, March 2, 2019 11:14:31 AM
To: Chollett, Shelby A.
Cc: fimian@instructionaltech.net
Subject: RE: Teacher Stress Inventory Research Use

Hi Shelby;

How are you today?

Mindfulness. None of the TSI users have used that variable, to my knowledge… Very interesting!

Sure, no problem. Click on the link below, then click on TSI on the main menu. On that page, you'll find both the Inventory and the test manual…

Let me know what you find! I'm sure that will be interesting…

Regards,

Michael

Appendix C: Survey Tool

Teacher Survey

Gender	Number of Years of Teaching Experience	Number of Years with District	Grade Level(s) Taught (*Check all that apply*)
☐ Female ☐ Male	☐ 0-5 years ☐ 6-10 years ☐ 11-15 years ☐ 16-20 years ☐ 21-25+ years	☐ 0-5 years ☐ 6-10 years ☐ 11-15 years ☐ 16-20 years ☐ 21-25 years ☐ 26-30 years ☐ 31+ years	☐ Early Childhood ☐ Elementary ☐ Middle School ☐ High School ☐ Transition Programs

Please indicate how often you practiced the following activities:	Times Per Week Practicing Activities				
Positive Mantras, Reminders, and Restructuring *Daily Gratitudes, Exercise, Conscious Acts of Kindness, Positive Journaling, Meditating, consciously looking for the positive, seeing setbacks as Growth, writing positive reminders on cards.*	☐ 0	☐ 1-2	☐ 3-4	☐ 5-6	☐ 7+
Converting Stress to Learning Experiences *Consciously adjusting our mindset to be more positive, writing stressors down, and identifying coping strategies.*	☐ 0	☐ 1-2	☐ 3-4	☐ 5-6	☐ 7+
Problem-Solving *Breaking down goals into smaller steps, making small adjustments to help achieve your goals easier.*	☐ 0	☐ 1-2	☐ 3-4	☐ 5-6	☐ 7+
Seeking Information and Support *Finding and having a network of support to actively seek out, especially during times of challenges and setbacks.*	☐ 0	☐ 1-2	☐ 3-4	☐ 5-6	☐ 7+

Please respond to the following statements based on your experience working at work IN GENERAL:	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. I feel supported and respected at work.	①	②	③	④	⑤	⑥
2. I feel connected to others at work.	①	②	③	④	⑤	⑥
3. When things go badly, employees bounce back quickly and do not give up.	①	②	③	④	⑤	⑥
4. It does not take me long to recover from a stressful event.	①	②	③	④	⑤	⑥
5. I can tolerate emotional pain.	①	②	③	④	⑤	⑥
6. I can accept things I cannot change.	①	②	③	④	⑤	⑥
7. I am able to accept the thoughts and feelings I have.	①	②	③	④	⑤	⑥
8. I am able to focus on the present moment.	①	②	③	④	⑤	⑥
9. I am able to pay close attention to one thing for a long period of time.	①	②	③	④	⑤	⑥
10. There is not too much work to do.	①	②	③	④	⑤	⑥
11. I respond to stress by feeling vulnerable, anxious, and/or unable to cope.	①	②	③	④	⑤	⑥
12. I get recognition for the extra work and/or good work I do.	①	②	③	④	⑤	⑥
13. I enjoy being at work.	①	②	③	④	⑤	⑥

Appendix D: Survey Coding Document

MINDFULNESS/ SELF-REGULATION	**STRESS-MANAGEMENT**	**RESILIENCE**	**JOB SATISFACTION**
1. Focus on present task(s) (intentional) **2.** Flexible/Adaptable **3.** Accepting of emotions and situations (self-regulation)	**4.** Personal priorities unaffected **5.** Coping for emotional regularity (positive reappraisal)	**6.** Ability to overcome obstacles.	**7.** Stimulated by work tasks **8.** Feeling of respect and recognition
1+7 | 2+4 | 2+5 | 3+4 | 3+5 | 3+8	4+2 | 4+3 | 5+2 | 5+3 | 5+6	6+5 | 6+7 | 6+8	7+1 | 7+6 | 8+3 | 8+6

1. I feel supported and respected at work. ORANGE FROG CLIMATE SURVEY (Achor &ILTN, 2017)
DIRECT DATA: Environment of mindfulness/regulation, job satisfaction
SCORE MEANING: (*High Score= High Mindful Environment & High Job Satisfaction*)

2. I feel connected to others at work. ORANGE FROG CLIMATE SURVEY (Achor &ILTN, 2017)
DIRECT DATA: Environment of mindfulness/regulation, job satisfaction
SCORE MEANING: (*High Score= High Mindful Environment & High Job Satisfaction*)

3. When things go badly, teachers bounce back quickly and do not give up. M-SCALE (Hoy et al., 2004)
DIRECT DATA: Environment of mindfulness/regulation, resilience
SCORE MEANING: (*High Score= High Mindful Environment & High Resilience Environment*)

4. It does not take me long to recover from a stressful event. BRIEF RESILIENCE SCALE (Smith et al., 2008)
DIRECT DATA: Self mindfulness/regulation, resilience
SCORE MEANING: (*High Score= High Mindful Self & High Resilience Self*)

5. I can tolerate emotional pain. CAMS-R (Feldman et al., 2007)
DIRECT DATA: Self mindfulness/regulation
SCORE MEANING: (*High Score= High Mindful Self*)

6. I can accept things I cannot change. CAMS-R (Feldman et al., 2007)
DIRECT DATA: Self mindfulness/regulation
SCORE MEANING: (*High Score= High Mindful Self*)

7. I am able to accept the thoughts and feelings I have. CAMS-R (Feldman et al., 2007)
DIRECT DATA: Self mindfulness/regulation
SCORE MEANING: (*High Score= High Mindful Self*)

8. I am able to focus on the present moment. CAMS-R (Feldman et al., 2007)
DIRECT DATA: Self mindfulness/regulation
SCORE MEANING: (*High Score= High Mindful Self*)

9. I am able to pay close attention to one thing for a long period of time. CAMS-R (Feldman et al., 2007)
DIRECT DATA: Self mindfulness/regulation
SCORE MEANING: (*High Score= High Mindful Self*)

10. There is not too much work to do. TEACHER STRESS INVENTORY (Fimian & Fastenau, 1990)
DIRECT DATA: Self mindfulness/regulation, stress level
SCORE MEANING: (*High Score= Low Stress & High Mindful Self*)

11. I respond to stress by feeling vulnerable, anxious, and/or unable to cope. TEACHER STRESS INVENTORY (Fimian & Fastenau, 1990)
DIRECT DATA: Self mindfulness/regulation, stress level
SCORE MEANING: (*High Score= High Stress & Low Mindful Self*)

12. I get recognition for the extra work and/or good work I do. TEACHER STRESS INVENTORY (Fimian & Fastenau, 1990)
DIRECT DATA: Stress level, job satisfaction
SCORE MEANING: (*High Score= Low Stress & High Job Satisfaction*)

13. I enjoy being at work. ORANGE FROG CLIMATE SURVEY (Achor &ILTN, 2017)
DIRECT DATA: Self motivation, mindfulness/regulation
SCORE MEANING: (*High Score= High Motivation & High Mindful Self & High Job Satisfaction*)

Appendix E: Institutional Review Board (IRB) Approval

ST. CLOUD STATE UNIVERSITY
EDUCATION FOR LIFE.

Institutional Review Board (IRB)

720 4th Avenue South AS 210, St. Cloud, MN 56301-4498

Name: Shelby Chollett

Email: chsh0703@go.stcloudstate.edu

IRB PROTOCOL DETERMINATION: Exempt Review

Project Title: A Study of Selected Minnesota Public School Teacher's Mindfulness as it Relates to their Stress-Management, Resilience, and Job Satisfaction for Motivation

Advisor John Eller

The Institutional Review Board has reviewed your protocol to conduct research involving human subjects. Your project has been: **APPROVED**

Please note the following important information concerning IRB projects:

- The principal investigator assumes the responsibilities for the protection of participants in this project. Any adverse events must be reported to the IRB as soon as possible (ex. research related injuries, harmful outcomes, significant withdrawal of subject population, etc.).

- For expedited or full board review, the principal investigator must submit a Continuing Review/Final Report form in advance of the expiration date indicated on this letter to report conclusion of the research or request an extension.

-Exempt review only requires the submission of a Continuing Review/Final Report form in advance of the expiration date indicated in this letter if an extension of time is needed.

- Approved consent forms display the official IRB stamp which documents approval and expiration dates. If a renewal is requested and approved, new consent forms will be officially stamped and reflect the new approval and expiration dates.

- The principal investigator must seek approval for any changes to the study (ex. research design, consent process, survey/interview instruments, funding source, etc.). The IRB reserves the right to review the research at any time.

If we can be of further assistance, feel free to contact the IRB at 320-308-4932 or email ResearchNow@stcloudstate.edu and please reference the SCSU IRB number when corresponding.

IRB Chair:

Dr. Benjamin Witts
Associate Professor- Applied Behavior Analysis
Department of Community Psychology,Counseling, and Family Therapy

IRB Institutional Official:

Dr. Latha Ramakrishnan
Interim Associate Provost for Research
Dean of Graduate Studies

OFFICE USE ONLY

SCSU IRB# 1922 - 2475	**Type:** Exempt Review	**Today's Date:** 10/14/2019
1st Year Approval Date:	**2nd Year Approval Date:**	**3rd Year Approval Date:**
1st Year Expiration Date:	**2nd Year Expiration Date:**	**3rd Year Expiration Date:**

ST. CLOUD STATE UNIVERSITY
EDUCATION FOR LIFE.

Institutional Review Board (IRB)

720 4th Avenue South AS 210, St. Cloud, MN 56301-4498

Name: Shelby Chollett

Email: chsh0703@go.stcloudstate.edu

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If we can be of further assistance, feel free to contact the IRB at 320-308-4932 or email ResearchNow@stcloudstate.edu and please reference the SCSU IRB number when corresponding.

IRB Chair:

Dr. Benjamin Witts
Associate Professor- Applied Behavior Analysis
Department of Community Psychology,Counseling, and Family Therapy

IRB Institutional Official:

Dr. Latha Ramakrishnan
Interim Associate Provost for Research
Dean of Graduate Studies

OFFICE USE ONLY

SCSU IRB# 1922 - 2473	**Type:** Exempt Review	**Today's Date:** 10/14/2019
1st Year Approval Date: 10/14/2019	**2nd Year Approval Date:**	**3rd Year Approval Date:**
1st Year Expiration Date:	**2nd Year Expiration Date:**	**3rd Year Expiration Date:**

Appendix F: Survey Item Responses

Item 1

Respondents Reporting to I Feel Supported and Respected at Work

(n= 418)

Response	Frequency	Percent
Strongly Disagree	10	2.39%
Disagree	11	2.63%
Somewhat Disagree	31	7.42%
Somewhat Agree	118	28.23%
Agree	184	44.02%
Strongly Agree	64	15.31%
Total	418	100%

Of the 418 teachers who responded to this survey item regarding if they feel supported and respected at work, a majority of one hundred and eighty-four or 44.02% selected *agree*. One hundred and eighteen or 28.23% selected *somewhat agree* to feeling supported and respected at work. Sixty-four or 15.31% selected *strongly agree* to feeling supported and respected at work. Thirty-one or 7.42% selected *somewhat disagree* to feeling supported and respected at work. Eleven or 2.63% selected *disagree* to feeling supported and respected at work. Ten or 2.39% selected *strongly disagree* to feeling supported and respected at work.

Item 2

Respondents Reporting to I Feel Connected to Others at Work

(n= 418)

Response	Frequency	Percent
Strongly Disagree	5	1.20%
Disagree	8	1.91%
Somewhat Disagree	30	7.18%
Somewhat Agree	120	28.71%
Agree	182	43.54%
Strongly Agree	73	17.46%
Total	418	100%

When responding to the survey item regarding feeling connected to others at work, a large majority of responses totaling 89.71% were *somewhat agree, agree,* or *strongly agree*. One hundred and eighty-two or 43.54% of teachers selected *agree* to feeling connected to others at work. One hundred and twenty or 28.71% of teachers selected *somewhat agree* to feeling connected to others at work. Seventy-three or 17.46% of teachers selected *strongly agree* to feeling connected to others at work. Thirty or 7.18% of teachers selected *somewhat disagree* to feeling connected to others at work. Eight or 1.91% of teachers selected *disagree* to feeling connected to others at work. Five or 1.20% of teachers selected *strongly disagree* to feeling connected to others at work.

Item 3

Respondents Reporting to When Things Go Badly, Employees Bounce Back Quickly and Do Not Give Up

(n= 418)

Response	Frequency	Percent
Strongly Disagree	5	1.20%
Disagree	25	5.98%
Somewhat Disagree	55	13.16%
Somewhat Agree	142	33.97%
Agree	155	37.08%
Strongly Agree	36	8.61%
Total	418	100%

Of the 418 responses, a majority of teachers indicated in strong agreeance to the survey item when things go badly, employees bounce back quickly and do not give up. One hundred and fifty-five or 37.08% of teachers selected *agree* to the survey item when things go badly, employees bounce back quickly and do not give up. One hundred and forty-two or 33.97% selected *somewhat agree* to the survey item when things go badly, employees bounce back quickly and do not give up. Fifty-five or 13.16% selected *somewhat disagree* to the survey item when things go badly, employees bounce back quickly and do not give up. Thirty-six or 8.61% selected *strongly agree* to the survey item when things go badly, employees bounce back quickly and do not give up. Twenty-five or 5.98% selected *disagree* to the survey item when things go badly, employees bounce back quickly and do not give up. Five or 1.20% selected *strongly disagree* to the survey item when things go badly, employees bounce back quickly and do not give up.

Item 4

Respondents Reporting to It Does Not Take Me Long to Recover from a Stressful Event (n= 418)

Response	Frequency	Percent
Strongly Disagree	2	0.48%
Disagree	23	5.50%
Somewhat Disagree	54	12.92%
Somewhat Agree	142	33.97%
Agree	149	35.65%
Strongly Agree	48	11.48%
Total	418	100%

A large percentage of teachers (81.1%) reported themselves not taking long to recover from a stressful event. One hundred and forty-nine or 35.65% selected *agree* when indicating that they do not take long to recover from a stressful event. One hundred and forty-two or 33.97% selected *somewhat agree* when indicating that they do not take long to recover from a stressful event. Fifty-four or 12.92% selected *somewhat disagree* when indicating that they do not take long to recover from a stressful event. Forty-eight or 11.48% selected *strongly agree* when indicating that they do not take long to recover from a stressful event. Twenty-three or 5.50% selected *disagree* when indicating that they do not take long to recover from a stressful event. Two or 0.48% selected *strongly disagree* when indicating that they do not take long to recover from a stressful event.

Item 5

Respondents Reporting to I Can Tolerate Emotional Pain

(n= 418)

Response	Frequency	Percent
Strongly Disagree	5	1.20%
Disagree	18	4.31%
Somewhat Disagree	48	11.48%
Somewhat Agree	141	33.73%
Agree	155	37.08%
Strongly Agree	51	12.20%
Total	418	100%

When indicating whether they can tolerate emotional pain, one hundred and fifty-five or 37.08% of teachers selected *agree.* One hundred and forty-one or 33.73% of teachers selected *somewhat agree* to tolerating emotional pain. Fifty-one or 12.20% of teachers selected *strongly agree* to tolerating emotional pain. Forty-eight or 11.48% of teachers selected *somewhat disagree* to tolerating emotional pain. Eighteen or 4.31% of teachers selected *disagree* to tolerating emotional pain. Five or 1.20% of teachers selected *strongly disagree* to tolerating emotional pain.

Item 6

Respondents Reporting to I Can Accept Things I Cannot Change

(n= 418)

Response	Frequency	Percent
Strongly Disagree	3	0.72%
Disagree	9	2.15%
Somewhat Disagree	42	10.05%
Somewhat Agree	135	32.30%
Agree	180	43.06%
Strongly Agree	49	11.72%
Total	418	100%

A majority of respondents (n=364, 87.08%) indicated that they can accept things they cannot change. One hundred and eighty or 43.06% of teachers selected *agree* to accepting things they cannot change. One hundred and thirty-five or 32.30% of teachers selected *somewhat agree* to accepting things they cannot change. Forty-nine or 11.72% of teachers selected *strongly agree* to accepting things they cannot change. Forty-two or 10.05% of teachers selected *somewhat disagree* to accepting things they cannot change. Nine or 2.15% of teachers selected *disagree* to accepting things they cannot change. Three or 0.72% of teachers selected *strongly disagree* to accepting things they cannot change.

Item 7

Respondents Reporting to I Am Able to Accept the Thoughts and Feelings I Have

(n= 418)

Response	Frequency	Percent
Strongly Disagree	1	0.24%
Disagree	4	0.96%
Somewhat Disagree	30	7.18%
Somewhat Agree	93	22.25%
Agree	220	52.63%
Strongly Agree	70	16.75%
Total	418	100%

Of the 418 responses to the survey item regarding the ability to accept the thoughts and feelings a teacher has, two hundred and twenty or 52.63% of teachers selected *agree* to their ability to accept the thoughts and feelings they have. Ninety-three or 22.25% of teachers selected *somewhat agree* to their ability to accept the thoughts and feelings they have. Seventy or 16.75% of teachers selected *strongly agree* to their ability to accept the thoughts and feelings they have. Thirty or 7.18% of teachers selected *somewhat disagree* to their ability to accept the thoughts and feelings they have. Four or 0.96% of teachers selected *disagree* to their ability to accept the thoughts and feelings they have. One or 0.24% of teachers selected *strongly disagree* to their ability to accept the thoughts and feelings they have.

Item 8

Respondents Reporting to I Am Able to Focus on the Present Moment

(n= 418)

Response	Frequency	Percent
Strongly Disagree	1	0.24%
Disagree	9	2.15%
Somewhat Disagree	28	6.70%
Somewhat Agree	116	27.75%
Agree	199	47.61%
Strongly Agree	65	15.55%
Total	418	100%

A prevalent number of teachers (n=380, 90.91%) indicated that they were able to focus on the present moment. One hundred and ninety-nine or 47.61% of teachers selected *agree* to their ability to focus on the present moment. One hundred and sixteen or 27.75% of teachers selected *somewhat agree* to their ability to focus on the present moment. Sixty-five or 15.55% of teachers selected *strongly agree* to their ability to focus on the present moment. Twenty-eight or 6.70% of teachers selected *somewhat disagree* to their ability to focus on the present moment. Nine or 2.15% of teachers selected *disagree* to their ability to focus on the present moment. One or 0.24% of teachers selected *strongly disagree* to their ability to focus on the present moment.

Item 9

Respondents Reporting to I Am Able to Pay Close Attention to One Thing for a Long Period of Time

(n= 418)

Response	Frequency	Percent
Strongly Disagree	4	0.96%
Disagree	12	2.87%
Somewhat Disagree	35	8.37%
Somewhat Agree	114	27.27%
Agree	190	45.45%
Strongly Agree	63	15.07%
Total	418	100%

When reporting on the ability to pay close attention to one thing for a long period of time, one hundred and ninety or 45.45% of teachers selected *agree*. One hundred and fourteen or 27.27% of teachers selected *somewhat agree* to their ability to pay close attention to one thing for a long period of time. Sixty-three or 15.07% of teachers selected *strongly agree* to their ability to pay close attention to one thing for a long period of time. Thirty-five or 8.37% of teachers selected *somewhat disagree* to their ability to pay close attention to one thing for a long period of time. Twelve or 2.87% of teachers selected *disagree* to their ability to pay close attention to one thing for a long period of time. Four or 0.96% of teachers selected *strongly disagree* to their ability to pay close attention to one thing for a long period of time.

Item 10

Respondents Reporting to There Is Not Too Much Work to Do

(n= 418)

Response	Frequency	Percent
Strongly Disagree	125	29.90%
Disagree	83	19.86%
Somewhat Disagree	97	23.21%
Somewhat Agree	72	17.22%
Agree	29	6.94%
Strongly Agree	12	2.87%
Total	418	100%

Of the 418 teachers responding to the survey item regarding there not being too much work to do, one hundred and twenty-five or 29.90% of teachers indicated they *strongly disagree*. Ninety-seven or 23.21% of teachers selected *somewhat disagree* to there not being too much work to do. Eighty-three or 19.86% of teachers selected *disagree* to there not being too much work to do. Seventy-two or 17.22% of teachers selected *somewhat agree* to there not being too much work to do. Twenty-nine or 6.94% of teachers selected *agree* to there not being too much work to do. Twelve or 2.87% of teachers selected *strongly agree* to there not being too much work to do.

Item 11

Respondents Reporting to I Respond to Stress by Feeling Vulnerable, and/or Unable to Cope (n= 418)

Response	Frequency	Percent
Strongly Disagree	61	14.59%
Disagree	133	31.82%
Somewhat Disagree	87	20.81%
Somewhat Agree	83	19.86%
Agree	39	9.33%
Strongly Agree	15	3.59%
Total	418	100%

When answering the survey item regarding teachers responding to stress by feeling vulnerable, and/or unable to cope, one hundred and thirty-three or 31.82% of teachers selected *disagree*. Eighty-seven or 20.81% of teachers selected *somewhat disagree* to them responding to stress by feeling vulnerable, and /or unable to cope. Eighty-three or 19.86% of teachers selected *somewhat agree* to them responding to stress by feeling vulnerable, and /or unable to cope. Sixty-one or 14.59% of teachers selected *strongly disagree* to them responding to stress by feeling vulnerable, and /or unable to cope. Thirty-nine or 9.33% of teachers selected *agree* to them responding to stress by feeling vulnerable, and /or unable to cope. Fifteen or 3.59% of teachers selected *strongly agree* to them responding to stress by feeling vulnerable, and /or unable to cope.

Item 12

Respondents Reporting to I Get Recognition for the Extra Work and/or Good Work I Do (n= 418)

Response	Frequency	Percent
Strongly Disagree	43	10.29%
Disagree	62	14.83%
Somewhat Disagree	92	22.01%
Somewhat Agree	145	34.69%
Agree	57	13.64%
Strongly Agree	19	4.55%
Total	418	100%

When responding to the survey item regarding teachers getting recognition for the extra work and/or good work they do, one hundred and forty-five or 34.69% of teachers selected *somewhat agree*. Ninety-two or 22.01% of teachers selected *somewhat disagree* to getting recognition for the extra work and/or good work they do. Sixty-two or 14.83% of teachers selected *disagree* to getting recognition for the extra work and/or good work they do. Fifty-seven or 13.64% of teachers selected *agree* to getting recognition for the extra work and/or good work they do. Forty-three or 10.29% of teachers selected *strongly disagree* to getting recognition for the extra work and/or good work they do. Nineteen or 4.55% of teachers selected *strongly agree* to getting recognition for the extra work and/or good work they do.

Item 13

Respondents Reporting to I Enjoy Being at Work

(n= 418)

Response	Frequency	Percent
Strongly Disagree	4	0.96%
Disagree	17	4.07%
Somewhat Disagree	29	6.94%
Somewhat Agree	113	27.03%
Agree	178	42.58%
Strongly Agree	77	18.42%
Total	418	100%

When reporting enjoying being at work, one hundred and seventy-eight or 42.58% of teachers selected *agree*. One hundred and thirteen or 27.03% of teachers selected *somewhat agree* to enjoying being at work. Seventy-seven or 18.42% of teachers selected *strongly agree* to enjoying being at work. Twenty-nine or 6.94% of teachers selected *somewhat disagree* to enjoying being at work. Seventeen or 4.07% of teachers selected *disagree* to enjoying being at work. Four or 0.96% of teachers selected *strongly disagree* to enjoying being at work.

Appendix G: Survey Item Attribute Responses

Respondents Reporting to Self-Resilience Survey Items

(n= 418)

Response	Frequency	Percent
Strongly Disagree	2	0.48%
Disagree	23	5.50%
Somewhat Disagree	54	12.92%
Somewhat Agree	142	33.97%
Agree	149	35.65%
Strongly Agree	48	11.48%
Total	418	100%

When analyzing items related to teacher reported self-resilience, answers closest to *strongly agree* indicates a high level of resilience. Answers closest to *strongly disagree* indicates a low level of resilience. Out of the 418 responses, one hundred and forty-nine or 35.65% of teachers selected *agree*. One hundred and forty-two or 33.97% of teachers selected *somewhat agree*. Fifty-four or 12.92% of teachers selected *somewhat disagree*. Forty-eight or 11.48% of teachers selected *strongly agree*. Twenty-three or 5.50% of teachers selected *disagree*. Two or 0.48% of teachers selected *strongly disagree.*

Respondents Reporting to Job Satisfaction Survey Items

(n= 418)

Response	Frequency	Percent
Strongly Disagree	62	3.70%
Disagree	98	5.86%
Somewhat Disagree	182	10.88%
Somewhat Agree	496	29.66%
Agree	601	35.94%
Strongly Agree	233	13.93%
Total	1672	100%

When analyzing items related to teacher reported job satisfaction, answers closest to *strongly agree* indicates a high level of job satisfaction. Answers closest to *strongly disagree* indicates a low level of job satisfaction. Out of a population of 418 teachers and one thousand six hundred and seventy-two item responses, a majority of responses were in agreeance to job satisfaction (1,330, 79.53%). Six hundred and one responses or 35.94% of teachers selected *agree*. Four hundred and ninety-six responses or 29.66% of teachers selected *somewhat agree*. Two hundred and thirty-three responses or 13.93% of teachers selected *strongly agree*. One hundred and eighty-two responses or 10.88% of teachers selected *somewhat disagree*. Ninety-eight responses or 5.86% of teachers selected *disagree*. Sixty-two responses or 3.70% of teachers selected *strongly disagree*.

Respondents Reporting to Motivation Survey Items

(n= 418)

Response	Frequency	Percent
Strongly Disagree	4	0.96%
Disagree	17	4.07%
Somewhat Disagree	29	6.94%
Somewhat Agree	113	27.03%
Agree	178	42.58%
Strongly Agree	77	18.42%
Total	418	100%

When analyzing items related to teacher reported motivation, answers closest to *strongly agree* indicates a high level of motivation. Answers closest to *strongly disagree* indicates a low level of motivation. One hundred and seventy-eight or 42.58% of teachers selected *agree* to being motivated. One hundred and thirteen or 27.03% of teachers selected *somewhat agree* to being motivated. Seventy-seven or 18.42% of teachers selected *strongly agree* to being motivated. Twenty-nine or 6.94% of teachers selected *somewhat disagree* to being motivated. Seventeen or 4.07% of teachers selected *disagree* to being motivated. Four or 0.96% of teachers selected *strongly disagree* to being motivated.