AWARENESS FOR TEACHER WELL-BEING: EXPLORING KEY FACTORS OF TEACHER EXPERIENCE, MINDFULNESS, AND SELF-EFFICACY

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The Supervisory Committee certifies that this ***disquisition*** complies with North Dakota State University's regulations and meets the accepted standards for the degree of

DOCTOR OF PHILOSOPHY

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ABSTRACT

Self-reported job satisfaction in K-12 teachers has decreased and it at its lowest in over twenty years. This study explored mindfulness levels—acute attentiveness and awareness of self-judgment and judgment on others—and teacher self-efficacy (TSE) levels-- how well teachers felt they perform teaching tasks—in student engagement, instructional strategies, and classroom management. The construct *mindfulness* and its subfactors were specifically measured for teachers' attentiveness, teachers' attitudes and willingness to forgive their weaknesses, their personal perceptions of how they act with awareness, and their perceptions of their own nonjudgmental attitudes. Three mindfulness scales measured teachers' perceived acute self-awareness, and one teacher self-efficacy scale measured levels of teacher self-efficacy (TSE). Three models using multiple linear regression analyzed three different types of teacher efficacy: student engagement, instructional strategies, and classroom management. Results indicated a significant difference between TSE for student engagement for male teachers and how observant these teachers were of how their students were engaged in the classroom. Female teachers showed a slight increase but not significantly in TSE for student engagement in relation to how they observed their students' engagement. A negative correlation was found between determiners *age* and *attitude* or how a teacher pays attention to their making of critical judgments or their being non-judgmental. In addition, TSE for instructional strategies and mindfulness factors *describing*, *attention*, and *attention awareness* positively correlated. Interaction of years of experience and acting with awareness also revealed a strong positive relationship but gradually weakened as teachers' years of experience increased. After ten years of teaching, the relationship between TSE with instructional strategies became non-significant with teachers' sensitive awareness of their present situations. Both factors *years of experience* and *job satisfaction*

significantly predicted participants' TSE with classroom management. Nearly retired teachers had lower efficacy in student engagement and instructional strategies, possibly indicating that near-retirement teachers are becoming mentally tired from years of hard work and are not actively engaged in professional development. Furthermore, these teachers feel less confident in how they are performing in the classroom.

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I am also deeply indebted to Dr. Nate Wood, who helped me discover my direction for measuring teacher mindfulness. Nate steered me in the right direction as I struggled with how to measure bullying intervention. And finally, I cannot begin to express my sincere thanks to all of the building principals and school teachers who made it possible for me to collect and analyze data. Most importantly, it would not have been possible to complete this doctoral dissertation without the support and encouragement of my children—Jaden, Tricia, Danielle—who sacrificed a great deal while my time was often in the textbooks and on my laptop. I love you for staying positive during this journey.

DEDICATION

I dedicate this dissertation to my loving mother, Marlene, who always lived by the mantra that time should be spent well with those whom you love. She taught me that the most important thing in life is to spend time making others happy and showing them kindness. She was always reminding me that I could do whatever I wanted to do, and any time I went to visit her, she was always leaving me with the words “You can do it! Get it done!” In life, we are here to serve others. My mother passed away on September 17, 2017, of ovarian cancer, but she was my number one support.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

TSE .....Teacher Self-Efficacy

TSES .....Teachers' Sense of Efficacy Scale

MAAS .....Mindful Attention Awareness Scale

FMI .....Freiburg Mindfulness Inventory

KIMS.....Kentucky Inventory of Mindfulness Skills

NCES .....National Center for Education Statistics

DPI .....Department of Public Instruction

OECD.....Organization for Economic Co-operation and Development

CHAPTER I: INTRODUCTION

Teaching has been described as one of the most stressful professions (Kyriacuo, 2001). A profession is defined as an occupation that requires extensive formal education and often formal requirements (Lusch & O'Brien, 1997). If teachers wish to be considered professionals, they must have a highly complex set of skills, as well as sound reasoning abilities, and a rich, knowledge-based competency (Hodson & Sullivan, 1995). Teachers who felt they were not satisfied with their jobs were at greater risk of leaving the profession (Klassen & Chiu, 2010).

Research shows a connection with how teachers perceive their effectiveness and student learning. For decades, what educational stakeholders have believed to be the major catalyst for inadequate school performance is the inability of schools to "adequately staff classrooms with qualified teachers" (Ingersoll, 2003, p. 3). K-12 Teacher Education continues to feel the impacts of K-12 teacher retention. Educational researchers viewed the teacher retention problem from two perspectives. First, some researchers, such as the National Commission on Teaching and America's Future (2003), viewed teacher shortage evolving from the significant decrease in newly graduated teachers. For example, in North Dakota, State Superintendent of Public Instruction Kirsten Baesler reported what ESPB figures indicate: "The number of students earning bachelor's degrees from educator preparation programs at state institutions has trended downward from 816 in 1994 to 660 in 2013" (Forum News Service, 2015). The California State University Systems Chancellor's report revealed that in 2012, nearly 11,257 students entered teacher education programs, whereas in 2005, teacher education enrollment reached approximately15,134 students (California State University, 2012).

Yet the teacher shortage is not solely attributed to insufficient supply of individuals entering teacher training programs. The concern that is revealed in the data on teacher demand

showed most shortage is attributed to teachers is in pre-retirement attrition, meaning teachers are quitting due to poor working conditions or extreme demands (Camera, 2016). In fact, several educational researchers viewed the number of students entering teacher education as an adequate supply (Ingersoll, 2003). However, it is difficult to track if there are sufficient numbers of teachers who are actually qualified to teach in specific disciplines. The Learning Policy Institute (2018) reported that North Dakota does not report the number of teachers who are teaching in areas they are not qualified to teach; however, the state did report that 11% of teachers who taught core coursework were not highly qualified teachers. According to Sutcher, Darling-Hammond, & Carver-Thomas (2016), the concern about the classroom teacher shortage has heightened since 2015. Although it is expected that teachers will retire, it is also expected that new teachers will fill these vacancies, but these new teachers are not necessarily new to teaching but new to teaching in a content area in which they are not comfortable teaching.

What Cowan, Goldhaber, Hayes, and Theobold (2016) have found is that since 1985, the number of Teacher Education graduates has actually increased, yet only about 50% of these teachers are hired by school districts. Figure1.1 indicates that between 175,000 and 300,000 new teachers were produced, but only 60,000 to 140,000 of these new teachers actually received a teaching job. Most others took jobs outside their teaching career (Cowan et al., 2016).

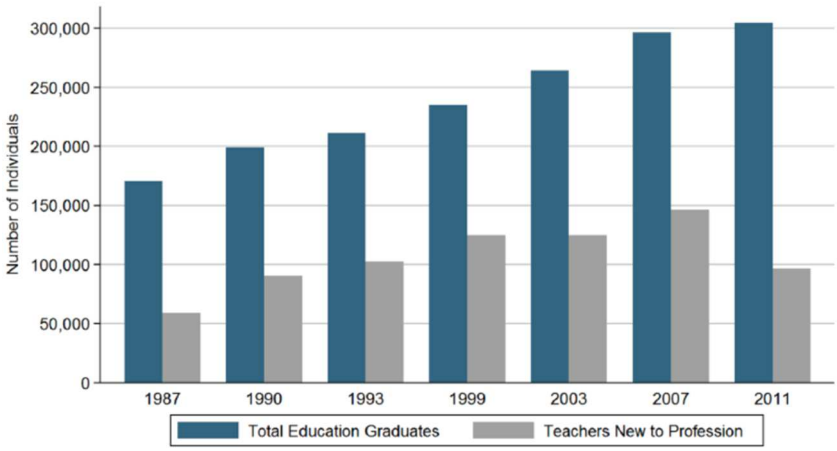


Figure 1.1. New teacher (education graduate) counts from the IPEDS completion data; hiring data (new to profession) from the Schools and Staffing Survey (SASS).

No matter the perception one may take with the reasons for the short supply of teachers, whether it is newly graduated students deciding against a career of teaching or if teachers are prematurely leaving the profession, the views of teacher shortage begs to be scrutinized when teacher retention has been a topic of concern for decades (Johnson, Berg, & Donaldson, 2005). Overall, the current focus is on recruiting more teachers with less thought of keeping the teachers in the classroom.

Ingersoll's (2003) findings confirmed that teacher recruitment programs will not help keep math teachers teaching math, science teachers teaching science, or any teachers from leaving teaching altogether. The bigger picture is keeping teachers teaching what they initially were trained to teach and teach is with dignity and confidence (Ingersoll, 2003). Figure 1.2 presents a visual of possible reasons K-12 teacher retention is decreasing.

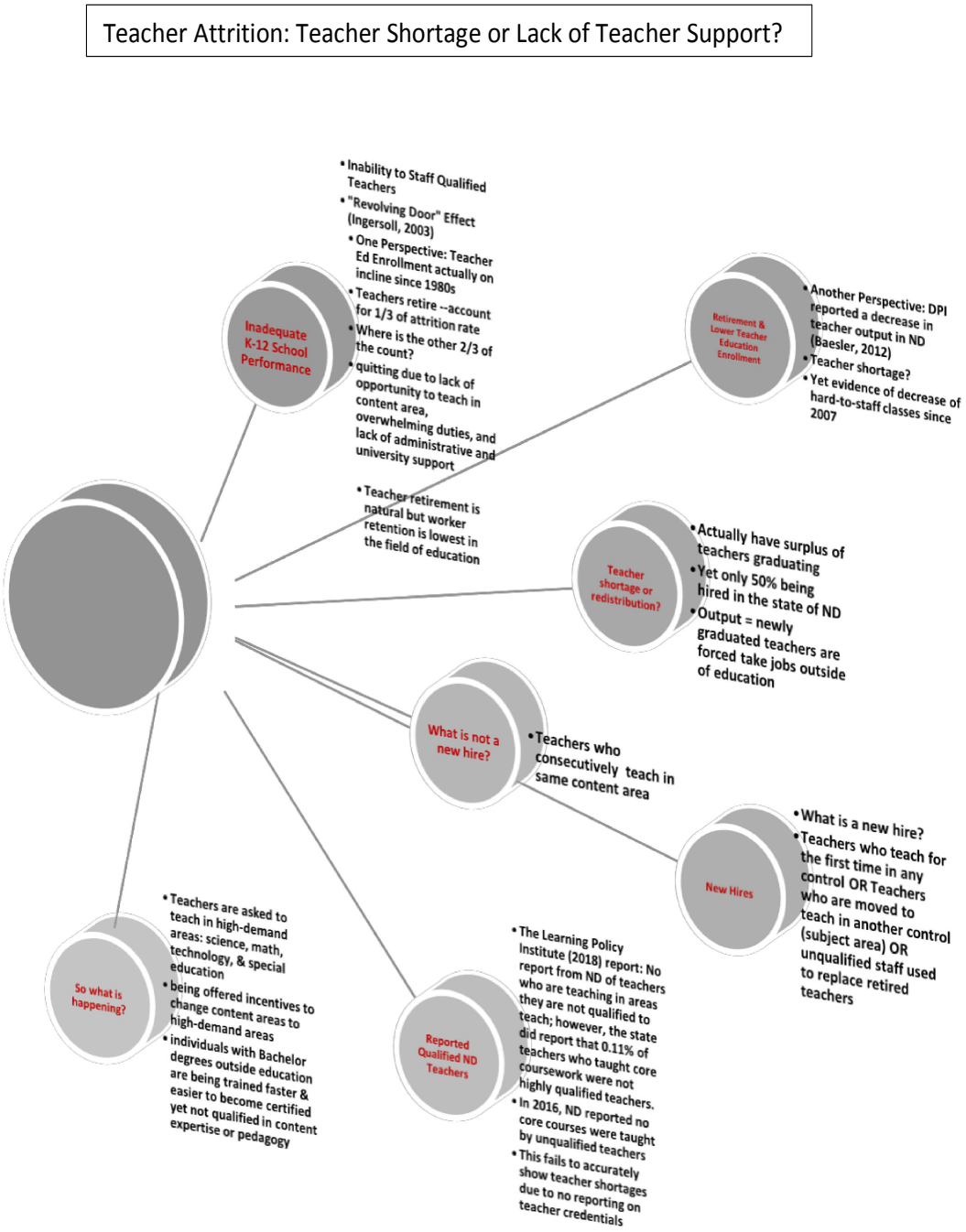


Figure 1.2. Arguments for decreases in K-12 teacher retention.

Sutcher, Darling-Hammond, & Carver-Thomas (2016) addressed that only about one third of these vacancies are attributed to teacher retirement. The other two thirds of these vacancies are due to teachers leaving the profession. Some factors include dissatisfaction with

work conditions in a profession that was expected to be more satisfying (Sutcher et al., 2016). The fact that teachers are voluntarily choosing to leave the teaching profession—contributes to as much as 9% teacher attrition rate (Camera, 2016). Worldwide, teachers feel a high stress and burnout compared to other career choices (Stoeber & Rennert, 2008). Other researchers have also concluded that initial teacher motivation and commitment to the profession, as well as the quality of these teachers' first teaching experience, are main factors toward teachers' quitting (Rots, I., Aelterman, A., Vierick, P., & Vermulen, K., 2007). Teachers are to be "responsive to new demands and changing needs" (Allen, 2010), and teachers are simply overwhelmed by the actualities of the job, especially those aspects related to classroom management and behavior (Overbay, Patterson, & Grable, 2009). Since the Florida shootings, President Donald Trump urged K-12 teachers to be willing to be trained to carry guns in an event of a school shooting situation. Trump stated "you won't have these shootings" if teachers are armed and ready to act (NBC News).

Ingersoll (2003) further reported that the common belief for K-12 teacher shortage is due to retirement and lower teacher preparation program enrollments; thus, also supported the argument that fewer teachers are being produced. However, what Cowan, Goldhaber, Hayes, and Theobald (2016) have found is that this is not the case, as indicated in Figure 1.3. Cowan et al. (2016), show that teacher production has been increasing since the mid-1980s.

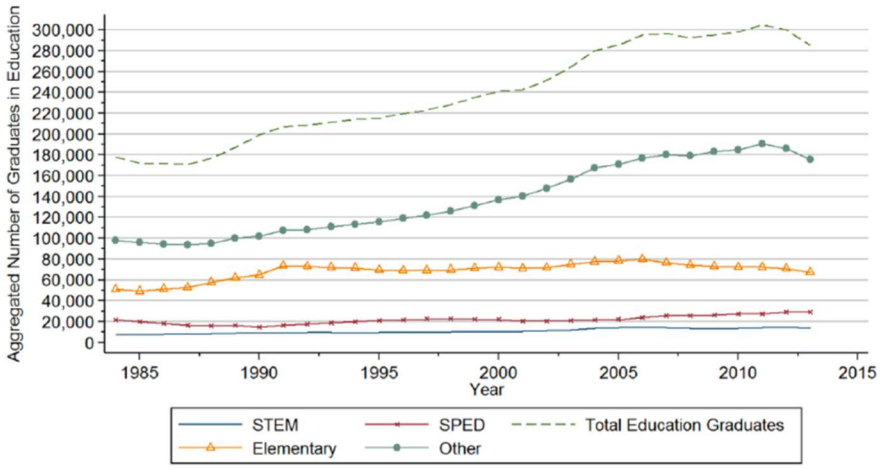
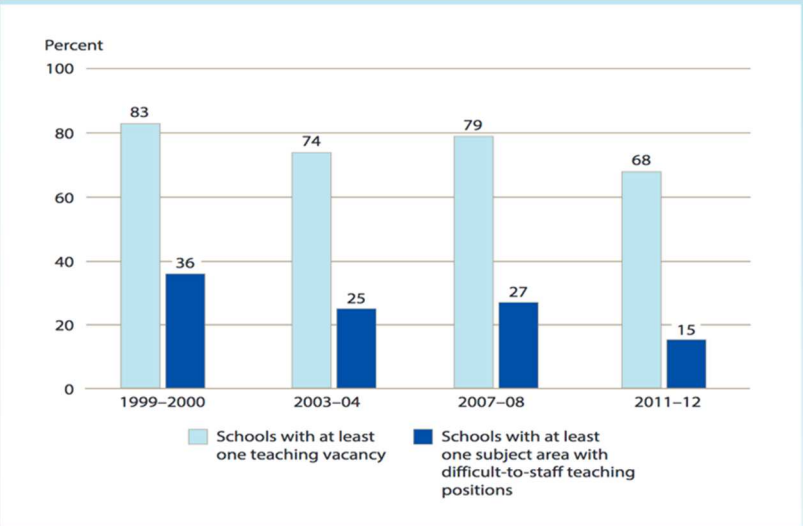


Figure 1.3. Aggregated number of graduates in education (1984-2013).

What researchers have also hypothesized is what Ingersoll (2003) referred to as a "revolving door" effect, meaning myriad teachers are quitting teaching not due to retirement, but these teachers are reporting other reasons, such as overwhelming teaching duties, teaching out of their content areas, or lacking support from administration and public stakeholders. As indicated in Figure 1.4, from 1999 to 2012, teaching vacancies in public schools have decreased since 2007, as well as decreased in the number of difficult-to-staff teaching positions since 2007 (Malkus, Hoyer, & Sparks, (2015).



NOTE: Schools were considered to have a difficult-to-staff teaching position when principals reported that a teaching vacancy was "very difficult" to fill or that the principal "could not fill the vacancy" in a particular subject area. Schools were considered to have no difficult-to-staff positions if principals reported there were no vacant teaching positions, or that there were vacant positions but no subject area that was "very difficult" to fill or for which the school "could not fill the vacancy."

Figure 1.4. Public school teaching vacancies with at least one difficult-to-staff teaching position (1999-2000, 2003-2004, 2007-2008, and 2011-2012).

Woolfolk Hoy (2000) speculated that new teachers attributed self-efficacy levels to stress and commitment toward teaching. Woolfolk (2000) found in her studies that new teachers who had high self-efficacy were also happier in their teaching, had higher job satisfaction, had more positive attitudes in teaching, and felt less stressed than those teachers who reported lower self-efficacy. Efficacious teachers experience less job-related stress (Gilbert, Adesopea, & Schroeder, 2014), which aids in decreasing student-related stress. Student-related stress has been found to reduce teacher efficacy and, in the long run, invade job satisfaction (Sass, Seal, & Martin, 2011). In cross national studies with over 73,100 teachers combined over 23 countries, teacher self-efficacy has been found to be significantly associated with effective teaching instruction and job satisfaction across all countries involved (Vieluf, S., Kunter, M., & F. J. R, van de Vijver, 2013). According to the Bellwether MetLife Survey of the American Teacher in 2012, teachers reported that they were not as satisfied with their teaching career as they reported in the past. Job satisfaction decreased from 59% to 44% over the course of two years, bringing job satisfaction

for teachers to its lowest ever recorded in over twenty years (Riley, 2012). This same survey also revealed that the number of teachers leaving the teaching profession prematurely has doubled in three years' time and that 30% are taking jobs or seeking training outside of Teacher Education (Riley, 2012).

Teachers are also being asked to teach specific content matter in areas such as math, science, technology, and special education for which they are not being prepared to teach, even though they have graduated with teaching degrees in these content areas. Because of the shortage of teachers who teach high-demand classes, such as math, science, technology, and special education, teachers who normally teach English, the Arts, or history are being forced to teach upper level math and science classes, which only threatens the validity of the student learning (Fensterwald, 2017). Teachers teaching outside of their subject matter also makes it more challenging to attempt to close academic achievement gaps (Fensterwald, 2017). Likewise, many teachers are offered incentives—student loan forgiveness programs, or, to recruit more teachers, teacher preparation credentials are being made easier and faster to complete—both of which do not focus on teachers leaving the profession or creating more support for teachers who do choose to teach areas such as math, science, technology, and special education (Cowan, Goldhaber, Hayes, & Theobald, 2016). The cost to replace teachers on a consistent basis only defeats the solution to the problem of teacher demand (Sutcher, Darling-Hammond, & Carver-Thomas, 2017). Miller, Brownell, and Smith (1999) suggested that it is imperative to understand teachers' types of stress and anxiety.

However, education researchers have found results from those teachers who feel low in self-efficacy. Tara Kinney, director of state policy for the Palo Alto-based Learning Policy Institute, found that two-thirds of new special education teachers and two-fifths of new science

and math teachers feel too incompetent to teach, lack a preliminary teaching credential, or are asked to teach classes where they feel even more incompetent (Fensterwald, 2017). The Statewide Longitudinal Data System reported through the Department of Public Instruction (DPI) that the number of teachers with emergency or provisional certificates has steadily increased since 2014. In 2014-2015, 23 teachers had emergency teaching certificates in North Dakota. In 2015-2016, 44 teachers had emergency teaching certificates in North Dakota. In 2016-2017, 65 teachers had emergency teaching certificates in North Dakota. In 2017-2018, 112 teachers had emergency teaching certificates in North Dakota (ND Insights, 2018). So, the result is an increasing attrition rate, and this attrition rate is double the attrition rates compared to other countries such as Finland and Singapore, and the projection by 2018 is an annual shortage of 112,000 teachers (Camera, 2016).

The subject matter of what teachers teach has become a determining factor for teachers leaving the profession. Math, science, and language teachers are the most prevalent teachers who leave teaching (Worth & De Lazzari, 2017). One of the solutions for teacher shortage today is to place teacher aides or para professionals into classrooms without formal training (Podolsky, Kini, Bishop, & Darling-Hammond, 2016). Other solutions for the teacher shortage are giving pay increases and hiring teachers from other countries, such as the Philippines (Edelman, 2017).

According to Darling-Hammond, Chung, & Frelow, 2002), teachers who were put into classrooms on emergency credentials with no classroom experience felt less prepared to design curriculum and instruction, teach subject matter, and use effective instructional strategies. Another strong determiner to successful teaching includes ample experience teaching hands-on in a real classroom setting (Anderson & Stillman, 2013; Caires, Almeida, & Vieira, 2012; Darling-Hammond, Chung, & Frelow, 2002; Henson, Kogan, & Vacha-Haase, 2001). Therefore,

it seems that the more these new teachers are exposed to experiences in the classroom and engaged with students, the more these teachers feel their teaching performance improves. As a result, teacher efficacy increases as well. Thus, the solutions of simply putting any person with a degree with very little or no pedagogical experience have been reported to defeat the purpose of developing and growing the effective teacher population (OECD, 2017). The OECD clearly articulated what is needed for professionalism in education:

> We view teaching as a knowledge-rich profession with teachers as 'learning specialists.' As professionals in their field, teachers can be expected to process and evaluate new knowledge relevant for their core professional practice and to regularly update their knowledge base to improve their practice and to meet new teaching demands. (OECD, 2017, p. 3.)

A person's self-efficacy level has a direct influence on a person's attitude and behavior toward not only themselves but on those around them, and in this case, these are the students (Schwerdtfeger, Konermann, & Schonhofen, 2008). Furthermore, several researchers have consistently found that teacher efficacy to be strongly linked to how teachers react to certain situations in the classroom (Ghaith and Yaghi, 1997; Gusky, 1988; Milner, 2002; Napoles & MacLeod, R. B.). Teachers feel they do not have control over their successes or failures and also lead to teachers moving on to what they feel they have better outcomes for success (Wang, Hall, & Rahimi, 2015).

According to Langer (1998), teachers may have more of a fixed mindset as they are initiated into a system. When first given new information, the information is taken in without thinking of other ways to use or manipulate the information, in a more mindless way (Langer, 2000). In addition, teachers are to have mastered five domains of emotional aptitude, as Peter

Salovey from Yale University found (Goleman, 1995, p. 43). Teachers must be able to know one's emotions, manage emotions, handle emotions in others, handle relationships, and motivate oneself (Goleman, 1995). Dreyfus (2004) addresses five levels of competency: novice, advanced beginner, competent, proficient, and expert. At the novice level, a person feels no responsibility yet will follow rules. At the competent level, a person gains much experience and feels confident in what he or she does, and at the expert level, a person has a graceful flow to one's work, almost to the point where the person does a job without thinking. Tang, Geng, Schultz, Zhou, & Xiang (2017) expressed that if a person is paying close attention to the information being learned, the information will be able to be used in more innovative ways in the future. Bandura (1977) had postulated this same concept ten years earlier: "Without attentiveness to modeling influences, competencies cannot be easily developed because of limited opportunities for observational learning" (p. 93).

Research done in America on K-12 teacher attrition found that of all professions that are studied by college graduates, teacher education continues to hold the lowest rates of retention (Guarino, Santibanez, & Daly, 2006). Educational reporter Camera (2016) conveyed that K-12 education is in the midst of one of the most crucial teacher shortages since the 1990s. With K-12 student enrollment increasing, teacher/student ratios increasing, and teacher attrition rising, teacher demand continues to elevate (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). According to the National Center for Education Statistics (NCES) (2011), the student-to-teacher ratio is projected to decrease from 15.0 to 14.7 by 2020, which is not a significant decrease. The NCES also reported that the projection for new teacher hires is an increase by 12% by 2020. However, the definition of a new teacher hire, according to the NCES, is the following:

> A teacher is considered to be a new teacher hire for a certain control of school (public or private) for a given year if the teacher teaches in that control that year but had not taught in that control in the previous year. A teacher who moves from teaching in one control to the other control is considered a new teacher hire, but a teacher who moves from one school to another school in the same control is not considered a new teacher hire. It is important to note that these projections measure the total number of teacher hires, including those hired to replace teachers retiring or leaving the teaching profession permanently or temporarily. (NCES, 2011)

This projection suggested that those teachers who switch content in which they teach would be considered a new hire, even if they have been teaching for more than one year. This information does not suggest that the number of new teachers will increase, but that this increase may be due to teachers are leaving certain subjects and teaching new subjects. The main concern is that until teacher retention rises, K-12 students will feel the highest impact. School districts, likewise, will be forced to hire unprepared and ineffective teachers (Camera, 2016).

One aspect that does put strain on teachers is the pressure of being an effective teacher. A high percentage of school leaders agree that teacher effectiveness is a major factor in student learning success (Gates Foundation, 2013; Odden & Wallace, 2008). Teacher effectiveness is currently seen as the pathway to improving student academic achievement (Wilson et al., 2008). In regard to effectiveness, the teacher characteristics currently in the limelight are not what most would think, such as content expertise, classroom management, and quality lesson planning. Psychological qualities such as kindness, patience, and flexibility, are now being sought out by hiring administrators. What these qualities ensure are that teachers will be able to provide strong emotional support and develop positive rapport with students (Strong, 2011). Teachers who offer

high-quality instructional support have higher odds of developing positive student/teacher relationships that are direct, intentional, and focused (Hamre & Pianta, 2005).

Moreover, discovering what teachers think about their own teaching performance is the key aspect of making changes in teacher development (Manning & Payne, 1996), especially in the areas of strategic instruction and classroom management. Teachers who have high teacher self-efficacy tend to be more effective teachers: "Teachers who set high goals, who persist, who try another strategy when one approach is found wanting—in other words, teachers who have a high sense of efficacy and act on it—are more likely to have students who learn" (Shaughnessy, 2004).With classroom instruction, effective and reflective teachers have higher performance rates and do better when planning lessons of instruction. In addition, effective teachers can better choose and use instructional strategies and evaluate student as they teach (Tournaki et al., 2009). Classroom management, the skill of creating a classroom environment that is conducive to learning (Evertson & Weinstein, 2006), has always been one of the most anxiety-laden areas of teaching, especially for new teachers and still remains a top reason for teachers leaving the classroom (Ingersoll & Smith, 2003). Classroom management is the foundation to a successful learning environment. Teachers will employ various methods to attempt to change behavior in the classroom. Teachers often feel controlling negative student behaviors as a necessity to establish a learning environment (Lewis, Romi, Qui, & Katz, 2005). However, if these methods of controlling behaviors are aimed to punish or possibly socially and negatively affect students, these methods, such as sending students out of the room, sending them to the principal's office, or forcing them to call their parents, can do more harm and create more pushback from students. Research supports these types of methods having an adverse effect on student learning, as well as a deterrent to positive learning environments (Dibapile, 2012).

Weiner (2000) acknowledged a clear relationship between ineffective classroom management and larger classroom size, and controlling behavioral issues is mainly done through punishment-type consequences and other authoritarian compliance tactics (Weiner, 2000). The assumption is that teachers tend to resort to how they were taught, even if they believe that style of teaching is not most effective. What is more likely to be true is that teachers tend to teach in a style that is likely most effective for their personal learning (Dunn & Dunn, 1979). With regard to classroom management, the same phenomenon may hold true. How students respond to content and instruction also plays a role in what method teachers choose to use, and these students who do well with a particular style with learn better. Some students learn best working independently without any outside influence. Any outside noises or distractors inhibit their learning. Other learners need to work collaboratively with others, including the teacher, while doing independent work. Still others rely on structure and specific auditory, visual, or kinesthetic learning, such as using flash cards, brainstorming ideas, working in situational settings (like cooking in a real kitchen), working in literature circles, or engaging in meaningful discussion with the class. Some can learn only if permitted to learn through specific relationships. It might be assumed then that teachers tend to observe more acutely the learners who learn more in the style of the teacher, for these students learn best in a particular style of teaching (Dunn & Dunn, 1979). Nevertheless, teachers tend to evaluate their teaching effectiveness based in part by student performance and how they are reacting to the teacher's teaching instruction style. Teachers are taught to be authentic in their assessments, however the students feel the teacher then is not teaching, according to Weimer (2014):

> The teacher is making students figure out things for themselves. They are doing the hard, messy work of learning. This is a style of teaching that promotes learning, but that's not

> how students see it. Based on experiences in lots of other classrooms, they have come to believe that "good" teachers tell students what they need to know. If a teacher makes the students come up with examples when she has a perfectly good list she could be giving them, that teacher is not doing her job. (para. 2)

In his book *Mindful Learning*, Strahan (1997) maintained that "successful teachers encourage students to think through their choices and consequences in ways that build on their strengths and that provide both structure and support" (p. 109). Yet to offer such support for students suggests teachers have strong emotional intelligence themselves. Shernoff, Marinez-Lora, Frazier, Jakobsons, Atkins, & Bonner (2011) stated that the reason teachers leave the profession was due to overwhelming demands and challenges. Two other highly reported reasons for teachers leaving the teaching profession is the lack of new teacher support and low self-confidence (Beran, 2005). People who develop a higher self-efficacy naturally have motivation to challenge themselves in task performance (Luszczynska, A., Gutiérrez-Doña, B., and Schwarzer, R. (2005).

Self-efficacy plays an integral part of teaching and learning (Woolfolk Hoy, 2000). Woolfolk Hoy (2000) claimed that for students, self-efficacy has been a factor that is correlated with higher student achievements. Research suggests that the classroom teacher is the most important factor on student academic performance, such as math and science standardized tests. Bandura (1977) proclaimed that self-efficacy is a fundamental factor in learning and motivation. According to Bandura's (1977) social cognitive theory, *efficacy* is a measure of how well someone perceives themselves in performing a task. This performance is a main predictor of how likely humans will engage in this specific task. Bandura defined self-efficacy as "people's beliefs about their capacities to produce designated levels of performance and exercise influence over

events that affect their lives" (Bandura, 1994, p. 71). According to Bandura (1977), people act in response to certain stimuli, but these acts are not left unanalyzed. Humans have acute sensors of the effects these actions have on us and on the environment. Human beings are good at analyzing situations they find themselves in or that they are actively observing and discriminate how certain reactions are affecting the situation and if these responses are giving desired consequences. However, efficacy is increased when the consequences are reinforcing and not punishing (Bandura, 1977). A person who feels comfortable performing a task will view difficult or demanding situations as a challenge rather than a burden (Cudre-Mauroux, 2010).

Increasing efficacy levels are determined by three dimensions: magnitude of a task, generality, and strength (Bandura, 1977). First, the *magnitude of a task* and a task's difficulty level determine how comfortable a person feels in performing a particular task. Easier tasks that people know can be performed well will ensure a certain level of efficacy; however, performing a task in which one feels incompetent will be less performed for fear of bad performance. Second, *generality* determines the effects of efficacy levels. Some tasks in everyday situations are performed just for a short period of time and can be seen as a task that does not need to be mastered on a daily basis. Other tasks, however, must be done daily in one's career and are expected to be mastered. Third, *strength* of one's own efficacy is determined by how much an individual sees a task as something important to master. If a task is expected to be performed well, individuals tend to strive through the learning and building of expertise, even if the learning process is full of challenges. If a task is viewed as important to master, then people tend to keep working at it diligently to ensure they master the task performance. This perseverance tends to be strong enough to increase self-efficacy (Bandura, 1977).

For teachers, mastery experiences are impactful for developing self-efficacy (Bandura, 1994; Woolfolk Hoy, 2000). People feel successful in task performances when these successes are consistent and are of mastery level performance. If task performance is unsuccessful or looked upon as failure, self-efficacy can be negatively influenced (Bandura, 1994). Cherry (2018) explained two key ideas that derive from Bandura's social cognitive theory. First, people learn through observation, and second, that internal mental states of mind are key roles in this process. Woolfolk Hoy (2000) confirmed from her own research Bandura's social cognitive theory in that self-efficacy may be the most adjustable teacher characteristic. Both positive and negative teacher performances play a powerful part in the first years of teaching in the long-term development of teachers' well-being. People who develop a higher self-efficacy naturally have motivation to challenge themselves in task performance (Schwarzer et al., 2004).

Research supports that new teachers who had negative experiences with competency and task performance also had lower efficacy, and it is much more difficult to change self-perception but is possible to change once life's experiences have contributed to the development of low efficacy (Woolfolk Hoy, 2000). The key is to keep the teachers we have already invested time and energy on in the classroom (Sutcher, Darling-Hammond, & Carver-Thomas, 2016).

Tschannen-Moran, Woolfolk Hoy, and Hoy (1998) have defined teachers' self-efficacy as the "beliefs regarding one's ability to teach, to regulate classroom behavior, as well as to motivate students to learn" (p. 121). Dweck (2016) argued that time and experience should be factored into how learners should be viewed as they are learning, but this concept works similarly with any learner, including new teachers. Dweck (2016) suggested that time and expert support are necessary to grow and develop self-efficacy. According to Bandura (2006a), a

person's self-efficacy of weakness and strength is self-measured in performance levels; furthermore, Pajares (1997) also concurred that teachers "do" what they feel they do best.

Research shows that those teachers with a high self-efficacy are often correlated with less teacher burnout (Schwerdtfeder, Konermann, and Schonhofen, 2008). Shapiro stated (as cited in Palause, 2015) in her work on mindfulness the awareness that neuro plasticity, the growth of brain cells that allow us to grow cognitively, mentally, and socially. So, if self-efficacy is" a direct factor of teachers feeling they have poor classroom management skills and feeling incompetent in teaching, then managing self-efficacy would be the concern to improve" (Aloe, Amo, & Shanahan, 2014, p. 101-102). A perceived self-efficacy is also a direct catalyst to one's competence to tackle difficult or novel tasks to cope with adversity in specific demanding situations (Bandura, 1997; Luszczynska & Schwarzer, 2005).

Thus, what is known to be found true is those people who practice awareness of their present surroundings are long believed to have a healthier well-being (Brown & Ryan, 2003). When mindfulness is utilized in daily life, it allows a person to be more aware of what is happening around a person, and then accepting of what is happening in the present attentional field at the present time and not being judgmental of these experiences (Kabat-Zinn, 2003). Woolfolk Hoy (2000) stated that efficacious beginning teachers reported they felt optimistic of staying in the teaching world.

Berridge and Goebel's (2013) study found that this need for teacher support is also of concern today and may be a catalyst for teachers quitting the profession. Their findings suggest that teachers may be leaving the teaching profession partly due to unrealistic optimism. Quality teaching, according to Vanassche and Kelchtermans (2014), is a ubiquitous concern. When teachers have confidence in teaching, it is life experiences that make a teacher successful

(Woolfolk Hoy, A. 2000). In a RAND corporation (Armor et al., 1976) study, teacher efficacy—a confidence that motivates and aids teachers effectively help students to learn—became a determining factor in teacher effectiveness almost nearly 40 years ago that attributed to student achievement. In motivational research, the term *attribution* is defined as "an individual's perceived cause of a success or failure experience" (Wang, Hall, & Rahimi, 2015, p. 122). In other words, it is what attributes to one's outcome in any given situation. Weiner's (1985) attribution theory stated that individuals analyze how much control they have in an outcome called locus of causality. Locus of causality, according to Wang, Hall, and Rahimi (2015), "refers to whether the perceived cause is internal or external to the individual" (p. 122). One's behavior or the attributions they choose to formulate are dependent on to what extent they believe that control lies within themselves and their own contribution to a situation and the control that lies outside of themselves associate with others' forces or behaviors in a situation (Rotter, 1954). According to Lefcourt's (1976) predictive nature to different social behaviors, learning outcomes, and achievement levels as illustrated in Figure 5, there are four attributed causes individuals choose to believe: the first two choices individuals can choose with a stable mentality is that 1) the control is internal and attributed to whatever happened was due to their own lack of ability or knowledge, or 2) that the control was external and was an arduous task that was encountered. The second two choices individuals may choose to attribute the outcome with an unstable mentality: 3) the individual simply did not apply himself or herself or put in any effort to be successful, or 4) the individual attributes to the unsuccessful situation to themselves or others to luck.

		Locus of Control	
		Internal	External
Stability	Stable	Ability	Task Difficulty
	Unstable	Lack of Effort	Luck

Figure 1.5. Locus of control: Lefcourt's (1976) four common attributed causes.

As was found in Guskey's (1981) study, past studies have focused on the premise that student attitudes may be strong determiners of how positive classroom learning was perceived. What Guskey (1981) pointed out is that teachers who feel they are more responsible in how students perform academically tended to desire more control in the classroom; thus, those teachers who felt the students were more responsible for their own academic success tended to desire less control of the classroom. What this study measured was teachers' perceptions on student achievement and teacher beliefs on regarding responsibility for academic successes and failures of their students. What Guskey (1981) found was that female teachers tend to feel more responsible for student achievement than male teachers, regardless of age of the teachers. Likewise, Crandall, Katkovsky, and Crandall (1965) found similar results. They had concluded that the teachers who felt most responsible for student achievement attributed to the creation of self-expectancies of ensuring students are mastering learning outcomes. In 2001, research found similar results. Depending on how external or internal a teacher's locus of causality remains to determine levels of self-efficacy (Henson, Kogan, & Vacha-Haase, 2001). Teachers are expected to be able to handle every social situation that may arise, including the presence of bullying and other violent situations (Yoon & Bauman, 2014, p. 308-309). Corcoran (1981) explained the beginning teacher's paradox as the shift of exiting the safe environment of the university campus to one's very own classroom. This transition from being the student teacher to being the

classroom teacher in charge may attribute to teachers feeling stressed and incompetent (Ingersoll & Smith, 2003). Teachers have reported that they are not easily transferred to a classroom experience (Rozelle & Wilson, 2012). Teachers may resort to what they know in nature to do—to make students comply or enforced punishment (Milner, 2006). Yet this behaviorist-type punishment/reward reinforcement is problematic in that it only creates more friction between student and teacher (Kwok, 2017). The more inviting approach requires the teacher to use a more relational approach, which involves strong student engagement and positive student/teacher interactions and respect (VanTartwijk, den Brok, Veldman, & Wubbels, 2009).

The gap between theory and practice is described as a ubiquitous problem across the nation (Brouwer & Korthagen, 2005), and this creates much stress for new teachers. Weinstein (1988) found in her study of new teacher perceptions of self-image that many student teachers felt "they would experience less difficulty than the 'average first-year teacher' on 33 different teaching tasks" (p. 31). This occurrence in new teachers has been identified as "Unrealistic optimism," a construct derived from health psychology (Weinstein, 1988, p. 31). Many teachers, possibly due to these unrealistic expectations, enter a teaching job with a mindset of a person at expert level. However, the mindset may be due to what is commonly seen in new teachers: unrealistic optimism. A phenomenon, the Dunning-Kruger effect, discovered by Dunning and Kruger in 1999, is an inflated confidence that finds individuals (often times most of us) who tend to overrate how well one can perform certain tasks, such as how well they can run a race or write a short story (Kruger & Dunning, 1999). Likewise, the more people learn a task, the more they understand that they are not as proficient in this task as they first perceived (Kruger & Dunning, 1999). At some point in the first year of teaching, teachers with an unrealistic ego of expertise soon realize they do not have the skills and knowledge of much of the social characteristics so

high in demand. So, they either fall into deep anxiety or feel overwhelmed, or they seek support to help them develop mindsets that will eventually lead to using their own intuition and rules to reach high levels of self-efficacy in their teaching.

Because of "unrealistic optimism", it is necessary for new teachers to overcome transition shock (i.e. reality shock). Culture or transition shock is an incompetency that increases new teacher anxiety levels since the societal view of a teacher is to be knowledgeable, which contradicts the idea of being a beginning teacher. To admit to not knowing how to handle daily issues in teaching is a huge risk of admitting to ignorance, and this makes the new teacher extremely vulnerable (Corcoran, 1981, pp. 20). More recently, Latifoglu (2014) found in his study that new teachers feel competent in teaching if they are prepared well; however, this should include "the amount and quality of support should include induction processes, mentoring and worthwhile professional development" (p. 64). Rots et al. (2007) found that one major contributor to K-12 teachers leaving the teaching field within the first three years of teaching is because of lack of self-trust. DuFour and Eaker (1998) have found that many new teachers fail to see treating setbacks as formative challenges as part of the learning process rather than as summative failures. DuFour and Eaker (1998) stated that "schools operate as if their teachers already know all that they need to know as soon as they enter the profession" (p. xii). Because of this lack of self-trust and competence, new teachers experience low self-efficacy. Teachers with higher self-efficacy are more likely to be unique in lesson plan instruction, to use strategies to create a positive classroom environment (Mojavezi & Tamiz, 2012), and to manage classroom dilemmas (Chacon, 2005).

Teaching can be an overwhelming task no matter what how many years a person has taught. According to Melnick and Meister (2008), over the past thirty years, numerous studies

confirmed that new teachers do not have the required knowledge to successfully manage social issues, classroom management, and academic planning. As was found by Nixon, Packard, and Dam (2013), teachers enter the teaching profession with at least four knowledge bases: their disposition, knowledge of pedagogy, subject matter knowledge, and context. One presumption is that teachers begin teacher preparation with some level of subject content knowledge (SCK), and as they begin to learn to teach, they transform and develop pedagogical content knowledge as well.

Woolfolk (2000) has been stating since the turn of the millennium that the strongest influence of the development of teacher efficacy are mastery experiences, which is also supported by Bandura's theory on the development of self-efficacy and the power self-efficacy provides with student motivation and learning (Bandura, 1977). As these new teachers develop skills as they see modeled, they engage in what Woolfolk called "pep talk" on specific performance feedback from the experts for which they work among (Woolfolk, 2000, p. 3). Teachers reported that their levels of confidence of how to handle situations affected how they would handle certain social issues and concerns (Novicka & Isaacs, 2010). Teachers have also reported that if they felt confident in these areas of dealing with power social interactions between students, they would intervene; otherwise, they would not feel comfortable in taking any action (Bradshaw et al., 2007).

Since the 1990s, many teachers reported feeling low self-efficacy and incompetent in tasks other than those that directly involve subject content, such as student motivation and engagement, classroom management, and bullying intervention (Duck, 2007; Freiberg, 2002; Meister & Melnick, 2003; Merrett & Wheldall, 1993; Stoughton, 2007). What Stanford University education professor Bridges (1985) has postulated is that administrators should be

able to pinpoint why teachers may be incompetent in areas such as classroom management or in delivering lesson plan strategies. The administrator's responsibility is to "identify the poor performers, help them to improve their performance, and recommend then for dismissal if improvement is not made" (Bridges, 1985, p. 57). Ellis (1984) stated that the appropriate way to dismiss a teacher is to keep precise, written records of teachers' behaviors and performance; written reports of specific and times and dates such behaviors and performances took place; and documented statements from other students, teachers, parents, or others involved with the teacher being evaluated. Bridges (1985) acknowledged the danger of collecting such documents is that these set a teacher up for failure. The outcome is headed toward dismissing the teacher rather than supporting the teacher to improve. Therefore, teachers develop anxiety over time due to lack of administrative support and self-efficacy continually decreases.

Teacher mindfulness or metacognition is a strong factor of teacher effectiveness development. Teachers who can manage their learning ability and reflectiveness is imperative over the course of a teacher's career (Kramarski & Michalsky, 2009). Therefore, teacher professional development should include a strong self-inventory of their teaching styles and beliefs (Jiang, Ma, & Gao, 2016). Recent research has also posited that metacognition or mindfulness practices could increase teachers' teaching efficacy (Fathima et al., 2014). Teachers themselves have reported the necessity and their desire to increase their awareness and mindful performances as an essential part of curriculum development (Ben-David & Orion, 2013). If there is a feasible way to improve teacher teaching and student learning, metacognitive teaching may be more impactful. Therefore, teachers should develop a meta-perspective on their instructional activities as a prerequisite.

M*indfulness,* a "flexible state of mind in which we are actively engaged in the present, noticing new things and sensitive to context" (Langer, 2000, p. 220). Furthermore, mindfulness *refers* to the process of developing awareness of learning to be nonjudgmental in character because of self-reflection and awareness in cognitive, affective, and perceptive ways of what is currently happening (Brown & Ryan, 2003). In addition, mindfulness allows one to possess an acute self-awareness of such sights and sounds in the present moment (Bishop et al., 2004; Brown & Ryan, 2003; Brown, Ryan, & Creswell, 2007; Kabat-Zinn, 2003). Germer (2004) qualifies mindfulness as a skill that allows for one to be less apt to overreact to what is happening in the moment. Overall, it is a way of relating to all experience—positive, negative, and neutral—in such a way that anxiety is reduced and sense of well-being increases. A universal definition for *mindfulness* cited by many researchers is the awareness that arises through "paying attention in a particular way: on purpose, in the present moment, and nonjudgmentally" (Kabat-Zinn, 1994, p. 4). Another similar definition defines mindfulness as "the nonjudgmental observation of the ongoing stream of internal and external stimuli as they arise" (Baer, 2003, p. 125). Being mindful requires a person to give full attention to what is presently occurring, as well as change focus as they occur in present situations in order to understand how one is analyzing his or her present attitude, being open to what is taking place in a situation, and the curiosity to explore what is happening and accepting what is happening (Keng, Smoski, & Robins, 2011). This acceptance, however, should be clarified as not being a sense of complacency in a situation or "resigning" to what is happening (Cardaciotto, Herbert, Forman, Moitra, & Farrow, 2008). Rather, acceptance should be understood as to be in any given situation without overreacting or judging others or oneself in in these experiences. Instead, the mindful person is fully observant of what is happening and aiming to understand why certain

behaviors or emotions are being exhibited at the present moment (Keng, Smoski, & Robins, 2011). Effective teachers, according to Danielson (2007), must identify when and why students are not engaged, when and why a lesson was not effective, or why students behave the way they behave, and this reflection will likely not be successful without being present in the moment and mentally note what is explicitly happening. A frame of mind of being attentive and what sorts of things to pay attention to every day, especially in the realm of being evaluated by administration.

Hattie (2015) qualified the importance of defining and improving effective teaching. There is universal agreement that the current system of teacher evaluation in the United States is ineffective. Seventy-five percent of teachers reported that their evaluation process by their principals are irrelevant to their teaching instruction and do nothing to help improve their teaching (Duffett, Farkas, Rotherham, & Silva, 2008).According to Strahan (1997), the most impactful thinking a person can engage in is the purposeful controlling of one's own thinking and to understand how one is thinking, and mindfulness is one practice teachers can incorporate into their daily lives to heighten awareness of what is taking place around them (Jennings, 2015). At the time of this study, research on mindfulness has become a national trend. Self-efficacy, as well, has been studied for several decades. Woolfolk Hoy (2000) stated "although few studies have looked at the development of efficacy beliefs among novices [teachers], it seems that efficacy beliefs of first-year teachers are related to stress and commitment to teaching, as well as satisfaction with support and preparation" (p. 6). Research has found that teachers often have this unrealistic optimism that they can perform well in all areas of teaching, but they soon find out that they really don't know the complexities of daily teaching. This study's focus is built around the conceptual framework that paying attention to what research is stating about efficacy and its impact on new and experienced teachers. Woolfolk Hoy (2000) postulated that once low efficacy

is established, it is can be an arduous task to change or increase, so it is worth it in Teacher Education to find out if practicing mindfulness may be one channel for increasing efficacy in both new and experienced teachers.

Chapter1 includes the background of teacher attrition and some of the assumptions of why some teachers are leaving the teaching profession prematurely. Chapter 1also provides a statement of the problem that makes connections between the literature of the constructs of Mindfulness and Self-Efficacy. Finally, the purpose of the study, the research questions, the significance of the study, definition of terms, limitations of the study, delimitations of the study, definitions, and the organization of the remainder of the study.

Statement of the Problem

A strong component of a healthy well-being is "keeping one's consciousness alive to the present reality" (Hanh, 1976, p. 11). According to Brown and Ryan (2003), awareness and attention are difficult to be cognizant of when a person is preoccupied with worry. According to the American Psychological Association (2017), it may be difficult for teachers to be mindful of the amount of stress they may be putting themselves under. Yet, even more dangerous, is the type of stress for with which they may be self-inflicting themselves. Everyone experiences *eustress* (good stress) when they need to prepare for a task (Selye, 1976), and the outcomes of this good stress are usually positive (Quick, Quick, Nelson, & Hurrell, 1997). When stressors multiply or begin to make a person feel rushed and out of control, the American Psychological Association (2017) defined this as episodic acute stress. With new teachers, stress from pressure to perform well as a teacher later probes questions such as: "Am I good enough?" Do I measure up?" What if I let others down? Or, worse yet, "What if I fail?" These types of thoughts then lead to chronic stress (APA, 2017).

Stress alone can lead to leaving a profession altogether (APA, 2017). The more a person is under stress yet able to mindfully control it, the more stress levels can be controlled and reduced (Brown, Marquis, & Guiffrida, 2013). In a study conducted by the John Hopkins University of Research on mindfulness, the research indicated that 20 to 30 minutes of meditation a day may improve feelings of anxiety and depression. In addition, this study of mindfulness showed that not only does mindful thinking relieve stress, but it even shows reduction in levels of physical pain (Goyal et al., JAMA Internal Medicine, 2014).

Mindfulness, a concept rooted from Buddhist psychology, is the act of making a conscious effort to pay attention to what is taking place at the present moment (Brown & Ryan, 2003). Practicing mindful behavior can alter the amounts of stress and anxiety produced in a positive way for a person (Bishop et al., 2004). Mindfulness is a booster for resiliency, perhaps, for new teachers. It is in the practice in mindfulness that can bring into focus what is happening at any given time and change thought processes in a person to prevent heavy stress (Baer, 2003). This practicing of mindfulness, though, is not a reflexive behavior. It must be practiced while in a moment of such stressful situations. In any given situation, a person's mind can be elsewhere rather than on what is currently happening in their midst, such as preoccupation with past memories or worries of the future, thus creating behaviors with little awareness of one's actions (Brown & Ryan, 2003). Yet research has shown that through training the mind to be aware and conscious of what is happening can increase well-being (Kabat-Zinn, 1990).

This study asks the question whether mindfulness practice levels may be associated with increasing teacher self-efficacy. Dibapile (2012) acknowledged that teacher self-efficacy is becoming more prevalent in the area of research due to a strong correlation between teacher efficacy and teacher effectiveness, which provides avenues to find solutions to teacher job

satisfaction and increased teacher retention rates. Furthermore, "it enhances teacher productivity" (Dibapile, 2012, p. 89). Teacher efficacy has become a fundamental construct necessary in the formula in the development of effective "in every part of the world" (Berman, MacLaughlin, Bass, Paully and Zellman, 1997, as cited in Cheung, 2008). Self-efficacy, which is the foundation of social cognitive theory, has been defined as a person's own beliefs about his or her capabilities of performing a task at a proficient level (Bandura, 1977). Teacher efficacy has been defined as the to which the teacher believes he or she has an impact on how well students learn (Berman, McLaughlin, Bass, Pauly, & Zellman, 1977). To develop self-efficacy, it is imperative to encounter two basic steps: one, to cognitively understand a specific task can successfully be carried out, and two, to effectively assess how well the task was completed (Kaley & Cloutier, 1984). Self-efficacy levels have been accurate predictors of how someone then carries out that same task in the future (Lapan, Boggs, & Morrill, 1989; Lent & Hackett, 1987). "New teachers are generally taught by the last generation of teachers with the methods of the past and present and will teach the next generation of students with the methods of the future. The practices of new teachers will become a substantial overall component of the practice of teachers through generational turnover" (Townsend & Bates, 2007). Teacher self-efficacy has been studied through the lens of Bandura's (1977) four main concepts that have influence on the levels of self-efficacy: enactive mastery experiences, which means that the more a person works to master particular skills, the more success a person feels they have; vicarious experiences, which means that the more one can replicate a skill that has been modeled, the more the efficacy levels increase; verbal persuasion, in which a person receives feedback from others and feeling they can be successful; and physiological arousal, in which a person who feels strong emotions such as fear or anxiety while performing a task will choose to stop that task. What has gone

unexplored is the impact or effect mindfulness may play a role in helping increase self-efficacy and better mentally prepare teachers for the challenges of teaching.

Purpose of the Study

The purpose of this study was to explore mindfulness levels, as well as job satisfaction, in conjunction with levels of self-efficacy in K-12 teachers. Albert Bandura (1997) asserted that the degree at which individuals feel capable and competent in how well they perform or handle specific tasks determines their level of self-efficacy. Pajares' (1997) likewise discovered that teachers will do (perform) what they feel they themselves are confidently capable of doing. Thus, the following two questions were formulated.

Research Question 1

How do the various aspects of mindfulness (attention awareness, attention, attitude, observing, describing, acting with awareness, and accepting without judgement) predict the three different types of teacher self-efficacy (student engagement, instructional strategies, and classroom management)?

This question should take into consideration the possible impact of and moderation by various demographics, such as overall job satisfaction, age, teaching experience, gender, number of classes periods taught per day, content area, and school type (public or private).

Research Question 2

What is the nature of the relationships among the teacher self-efficacy constructs (student engagement, instructional strategies, and classroom management)?

Significance of the Study

Although the construct of mindfulness is growing in the research conversation, much of what is researched about mindfulness does not include assessing mindfulness, especially with

new teachers. Furthermore, what research has found is that feeling confident in one's work raises efficacy and overall job satisfaction (Bandura, 1977). Bandura's social cognitive theory has revealed that whatever a person chooses to do to advance in their work depends greatly on how confident a person feels in performing certain tasks. If this study finds that teachers have significant higher levels of mindfulness in correspondence with high self-efficacy, then we may begin to explore what it is teachers do to reach a more mindful demeanor to reach a higher efficacy over time, especially in the areas of classroom management, utilizing instructional strategies, and student engagement.

If it is found that experienced teachers have higher mindfulness levels, then perhaps we can be a step ahead of this exploration by preparing new teachers by engaging them in mindfulness practices while teaching (reflections before, during, and after teaching; dealing with classroom behaviors; and self-evaluations or their teaching and student learning). This teaching of mindfulness may alleviate teacher stress, culture shock, and feelings of incompetency. If teachers are happier overall (self-efficacy) if they are more mindful, teachers can work toward advancing much more quickly in reaching self-efficacy in their career by implementing mindfulness practices into daily life.

Definition of Terms

K-12 Teacher: Teachers who are currently teaching in grades K-12 in the state of ND in either a public or private school district and have their own classroom.

Teacher Attrition Rates: The issue in K-12 education of teachers quitting the teacher profession altogether and choosing another career outside of teaching or teachers deciding to teach in another subject area other than science, math, or technology, leaving shortages of teachers in these crucial subject areas.

Teacher Retention: The idea of keeping teachers teaching actively in K-12 education.

Self-efficacy: "People's beliefs about their capacities to produce designated levels of performance and exercise influence over events that affect their lives" (Bandura, 1994, p. 71).

Attention Awareness: a state of mind where a sensitive awareness of what is happening in the present moment (Brown and Ryan, 2003); what is paid attention to by the teacher in the present moment or situation and exercise influence over events that affect their lives" (Bandura, 1994, p. 71).

Attention: what is paid attention to by the teacher in the present moment or situation, a teacher paying attention and understanding why they do what they do or don't do, and a teacher paying attention to how they are making critical judgments or being non-judgmental.

Attitude: a teacher paying attention to how they are making critical judgments or being non-judgmental about themselves or about others.

Enactive mastery: when one performs well and come to believe he or she will succeed at this task.

Vicarious Experience: when one sees another succeed at a task and believes that he or she can be successful as well.

Verbal Persuasion: when one is given feedback from others and formulating a sense of what one is capable of doing.

Physiological Responses: One's pre-conceived emotional, physiological, and psychological responses as a result of how one thinks he or she will fail at a task or find tasks too challenging.

Mindfulness: Intentional, reflective style of introspection or self-observation that, in addition, differs from concentrative meditation (Smith, 1975); "Paying attention in a particular

way: on purpose, in the present moment, and non-judgmental" (Wyatt, 2011, p. 4); A "flexible state of mind in which we are actively engaged in the present, noticing new things and sensitive to context" (Langer, 2000, p. 220); the process of developing awareness of learning to be nonjudgmental in character (Brown & Ryan, 2003); and, a skill that allows for one to be less apt to overreact to what is happening in the moment (Germer, 2004).

Efficacy in Student Engagement: a sense of motivating students in the learning environment, increasing curiosity, and bringing out student potential.

Efficacy in Instructional Strategies: a sense of the ability to develop curriculum and utilize instructional strategies for effectiveness in learning and in making more meaningful and appropriate opportunities for learning (Page, Pendergraft, & Wilson, 2014).

Efficacy in Classroom Management: a sense of being able to create a classroom environment that allows students to learn to their highest potential, to ensure students feel safe, and to keep learning positive where bias and conflict are controlled through positive relationship-building.

Observing: mindfulness involves noticing what one is sensing at a present moment, both internally (what one is thinking, feeling, etc. or bodily sensations) or externally (what the five senses are perceiving at a given moment) (Baer, Smith, & Allen, 2004).

Describing: being able to describe in detail without being critical or judgmental of the situation (Baer, Smith, & Allen, 2004).

Acting with Awareness: being fully attentive and highly engaged and participating in one's current environment or activity (Baer, Smith, & Allen, 2004).

Accepting (or allowing) without Judgment: to allow what is happening in a present moment to happen without judging, overreacting, changing, or escaping it (Baer, Smith, & Allen, 2004).

"A" Classification School: a North Dakota K-12 or 9-12 school with a grade 9-12 enrollment of 1-125 students.

"AA" Classification School: a North Dakota K-12 or 9-12 school with a grade 9-12 enrollment of 126-234 students.

"AAA" Classification School: a North Dakota K-12 or 9-12 school with a grade 9-12 enrollment of 235-411 students.

"AAAA" Classification School: a North Dakota K-12 or 9-12 school with a grade 9-12 enrollment of 412 students and higher.

Urban School: a school with more than 500 people in one city block, based on the definition of the U. S. Census Bureau.

Overclaiming: a mechanism in which people who know little about a topic will admit they do not have much knowledge on that topic (Atir, Rosenzweig, and Dunning (2015). Simultaneously, people who have no knowledge of a subject will pretend they do (even when the topic is completely fabricated or untrue) to prevent embarrassment of the unknown.

Limitations of the Study

Due to feasibility, the sample frame was limited to three defined regions in North Dakota: western central ND, central ND, and eastern central ND, which included cities in each region to be within 50 miles of the Interstate Highway 94, which still intends to represent the teacher population of North Dakota.

With sample collecting, even if principals dispersed the surveys, the teachers had the right to opt out of participating in the study and collecting surveys from all of the teachers was more difficult collecting them individually in their schools.

The data collected from the completion of the four scales was self-reported, which leaves the possibility of inaccurate reports, since this was a measure of mindfulness and self-efficacy.

It is true that mindfulness is not necessarily a skill that is always taught. It may be an innate skill for some more than others. Therefore, levels of mindfulness may simply be innate in nature and not due to teacher training in mindfulness.

On the contrary, some of the participants may have had training in mindfulness prior to the study and would interfere with the results in comparing mindfulness and self-efficacy.

Some teachers may come into teaching with existing experience in working with others and being in a leadership role that already offered great experience in learning ways to be mindful. Therefore, this may also skew new teacher levels of mindfulness and may show insignificance due simply to prior experience in other areas of life.

All pre-service teacher preparation programs have different curricula; therefore, it is possible that some new teachers may be learning more pedagogy, and some may be learning more content knowledge. Not all new teachers enter a new teaching career with the same training.

Delimitations of the Study

A definition of *mindfulness* has been created to fit the context of what *mindfulness* looks like or can be described as in teaching.

Since this study aims to look at the mindfulness levels of new and experienced teachers, a delimitation exists in that the schools selected will need to have a balance of new and

experienced teachers. Therefore, individual teachers were selected from various schools by contacting the individual teachers and getting permission to send them a survey to fill out.

A further delimitation considered is the usage of only close-ended responses on the survey instrument and not providing any open-ended questions. This decision to ask only close-ended questions is due to teachers simply not having a lot of time to complete a survey; in addition, the sample size of 100 participants would take large amounts of time for the researcher to code responses.

Organization of This Dissertation

In Chapter II, a review of the literature related to new and experienced teacher and at what stages of teaching they develop self-efficacy in relation to the levels of mindfulness they possess. The literature explores the current new teacher attrition rates, the culture shock that new teachers experience, and the evaluation process new teachers experience. It defines and explains the factors of mindfulness—attention, intention, and attitude—and how the development of mindfulness will help teachers feel more competent as effective teachers. The literature also discusses the importance of teachers having the skills to develop strong relationships with students and faculty, as well as being competent in pedagogy, such as knowing how to use learning strategies, using assessment data, and acquiring strong, classroom management in order to reach high self-efficacy.

Chapter III provides explication of the research design, sample frame, participants, data collection, measures, and data analysis. The results of the data are found in Chapter IV. Chapter V will contain a summary or brief recap of the entire study, a conclusions section formulated by the findings and results of the data analysis, a discussion section that attempts to explain findings and conclusions that have emerged from the study, and finally a recommendations section will

offer two sections: Recommendations for Practice and Recommendations for Further Study. Recommendations for Practice will focus directly on recommendations for action or practice, based on the study's findings and conclusions. Recommendations for Further Study, such as replication studies using different methodologies, using larger sample frames, or changes in the instrumentation.

CHAPTER II: REVIEW OF THE LITERATURE

This review of literature first explores the background of K-12 teacher attrition rates and the educational researchers' initial argument that explains the phenomenon of teachers leaving the field of education. The literature also explains the nature of teachers choosing to quit the profession. Next, the constructs Mindfulness and Self-efficacy are explained how they both play an integral part in job satisfaction and overall well-being of all human beings. The conversation includes the breakdown of the concepts of stress, anxiety, and burnout, which may be leading contributors to teachers leaving teaching or feeling distressed at work. Culture shock, ineffective and unrealistic teacher evaluations, new teacher "unrealistic optimism," the art of teaching, and unfair teacher expectations are also discussed. This literature review concludes with a summary of the importance of high self-efficacy and how being mindful may contribute to a higher efficacy, based on what psychological and education research has found.

In 2009, approximately 3.5 million teachers were teaching full time in the United States (Haynes, 2014). According to the U. S. Department of Education and the National Center of Education Statistics, the number of teachers remained at 3.5 million for full-time teachers in elementary and secondary schools in 2014. Backtracking to 2007, approximately 50% of new teachers left the profession in their first five years of teaching (Jennings, 2015). In 2009, 13% of the American workforce (3.4 million being teachers) either moved to another school or left the profession altogether (Haynes, 2014). Richard Ingersoll from the University of Pennsylvania, as cited by Haynes (2014), reported that in North Dakota alone, out of 8,921 teachers full-time employed, almost 700 teachers left the profession. As a result, North Dakota paid between 3 and 7 million dollars to hire new workers to fill these vacant teacher positions, as well as offer incentive plans to keep teachers teaching and cut teacher training credit requirements to make the

teacher preparation programs more desirable. In the U. S., out of 3.5 million teachers, 230,000 left the profession. Carver-Thomas and Darling-Hammond (2017) reported that key factors for teacher turnover include lack of support from principals, low pay, accountability and responsibility pressures, and working conditions that increase stress levels.

Thus, it cost the U. S. paid $3 billion dollars due to attrition rates and teacher turnover. As a result, public school systems were forced to quickly hire teachers to fill vacancies (Haynes, 2014). The U. S. attrition rate rose from 7% in 2009 to 9% in 2014 (Westervelt, 2016).

Changes in the duties, responsibilities, and expectations for teachers over time should be expected (Krecic & Grmek, 2008). Lyon (2015) claimed that teaching is not just a profession but vocation that transforms and maintains society (p. 88). Yet according to ABC News (2017), the teaching profession is also the fourth most stressful profession in America. In fact, teachers' daily work includes understanding diverse populations, teaching diverse students who may or may not speak English, and being experts in dealing with social issues, such as bullying and adolescent development (OECD, 2005 as cited in Watt et al., 2012).

Rots, Aelterman, Vierick, and Vermulen (2007) claimed that the reason teachers may be leaving the profession can be found in in how teachers perceive the quality of their early teaching experiences. A teacher is required to have high levels of professionalism because of growing competitiveness among schools and among national systems, new findings in the field of teaching and learning, in the increasing diverse populations, and in the increase of school violence, addiction, and truancy (Krecic & Grmek, 2008, p. 59-60).

Teachers and Stress

Theorists have defined generalized stress as such: "a state of psychological arousal that results when external demands tax or exceed a person's adaptive abilities (Lazarus, 1966;

Lazarus and Folkman, 1984). The day-to-day environmental factors that human beings encounter that produce stress for individuals are referred to as *stressors* (Pearlin, 1989), and the greatest stressor for teachers is dealing with student behavior issues (Geving, 2007). For centuries, teaching has been characterized as a profession that is "emotionally taxing and potentially frustrating" (Lambert, O'Donnell, Kusherman, & McCarthy, 2006, p. 105). Stoeber and Rennert (2008) posited that high stress and burnout in teaching are not just national concerns but also global concerns, compared to other professions. Unrealistic demands and expectations of newly qualified teachers create high amounts of stress and lead to teacher burnout in the first few years of teaching, developing low self-efficacy in new teachers due to extrinsic dissatisfaction rather than leading to a progression of job satisfaction (Purcell et al., 2005). In regard to job responsibilities, teacher pay is not comparable to other professions with similar educational requirements, and teachers are under constant scrutiny to improve test scores year after year (ABC News, 2017). As a result, teachers quit. Compared to other non-teaching professions whose departure rate is at 11% (Ingersoll, 2002), the teaching profession lost 16% of teachers every year prior to 2007 (Cox, Parmer, Tourkin, Warner, & Lyter, 2007). DeAngelis and Presley (2011) reported attrition rates in North America were at approximately 30% over the past 40 years, with one third of new teachers quitting within three years and 10% quitting in their first year of teaching (Boyd, Grossman, Lankford, Loeb & Wyckoff, 2009). In a study of 400 secondary education teachers, Fisher (2011) reported one of the teacher stressors is student behavior, especially among secondary level teachers, with one main factor being "students' hostility toward other students" (Fisher, 2011, p. 7). In addition, other educational research has found that teachers are burned out or quit the profession due to low job satisfaction, commitment, and occupational stress (Barmby, 2006; Davis &Wilson, 2000; Kyriacou, 1987),

with many teachers admitting to not knowing the severity of student victimization, such as in bullying or in other threatening social contexts and believe that students will solve their own issues (Bradshaw, Sawyer, & O'Brennan, 2007). Skaalvik & Skaalvik (2007) also found that teachers who felt less efficacious and are not performing at a satisfactory level in their work also struggle in their teaching instruction and lower student academic mastery and growth. Therefore, less efficacious teachers may not be as apt or as motivated to be involved or feel confident enough to intervene in social situations, such as bullying incidents taking place in the classroom. Many teachers believe students' social issues are solved among the students themselves. With this assumption that teachers believe students will eventually fix their own problems, such as with bullying, this is cause for concern, for it has also been found that teachers who have lower efficacy also feel the effects of higher stress due to their lack of confidence in managing stress. Teachers, therefore, who feel more confident in their job performance also handle stress more effectively (Canrinus, Helms-Lorenz, Beijaard, Buitink, & Hofman, 2012).

As reported by the National Bullying Prevention Center (2016), students reported that what is most dangerous for students in bullying situations is to "tell the student to solve the problem themselves, tell the student that the bullying wouldn't happen if they acted differently, ignored what was going on, or tell the student to stop tattling" (Davis & Nixon, 2010). Yet, Davis & Nixon (2010) have also found that students want teachers to be caring and check in with the students to ensure they are safe, as well as provide the students with support and advice for help.

Bandura (1997) found that individuals who see they are capable of performing certain tasks have higher self-efficacy. Higher self-efficacy has been linked to greater effort, persistence, optimism, and success in challenging achievement settings (Bandura, 1977, 1993). In addition,

research pertaining to teachers has found self-efficacy to directly correlate with student motivation and more prevalent mastery learning (Tschannen-Moran & McMaster, 2009; Tschannen-Moran & Woolfolk Hoy, 2001; Woolfolk Hoy, Hoy, & Davis, 2009).

How students are reacting to situations may contribute to higher levels of stress and lower self-competency. Batsche and Knoff (1994) reported that roughly "23% of adolescents do experience bullying and 25% of students surveyed stated a top stressor is the anxiety of what bullies will do to them" (p. 165). Almost 20 years later, the National Bullying Prevention Center (2017) reported approximately 22% of students ages 12–18 reported being bullied at school during the school year. A concern for teachers, especially new teachers, is incompetence early in their first year of teaching with such social situations, for there is often a disconnect between young people's experience of bullying and what the adults see. Teachers do not always know how to respond when bullying is present (U.S. Dept. of Education, 2012). What research is continuing to find is that teachers who feel competent in their work tend to work harder and feel more successful with difficult students (Redmon, 2007).

Hollins (2015) hypothesized that in most teacher education programs, it is the assumed that the classroom observations student teachers engage in will be the important contribution for the development of effective teaching. Likewise, Hollins (2015) stated the beliefs of many teacher education researchers is that the benefits of the field experience takes precedence over content knowledge gained in core courses. To affirm these findings, Brown, Lee, and Collins (2015) also found upon studying and interviewing over seventy pre-service teachers at a larger university was that these new teachers (post pre-service teaching) reported significantly that they grew confidence and efficacy through three imperative learning channels: opportunity to teach actively and independently during their experience (hands-on), opportunity to see other

experienced teachers in action, and the opportunity to develop great rapport and find strong mentoring in all cooperating teachers they worked with during their pre-service teaching experience. And, in conjunction with these findings, teachers who feel they have high teacher self-efficacy tend to be more resilient and have the motivation and desire to try harder in making their teaching and instructional plans more effective (Pendergast, Garvis, & Keogh, 2011). In contrast, Britzman (1991) and Perry & Power (2004) strongly supported the need for teachers in training that these field experiences must be closely tied to the knowledge and skills gained in core methods courses in order to benefit new teacher effectiveness. Research has found that teachers who felt they had less control or inept in conventional wisdom come to know in time felt higher burnout, lower job satisfaction, weak immune systems, and more tendency to quit (Manassero et al., 2006).

The Construct Mindfulness

Along with, and in conjunction with, self-efficacy is the idea of to what extent teachers pay attention to or acutely self-evaluate their own performance. According to Bandura (1977), the overall factor that influences teacher self-efficacy is the quality and amount of experience in the classroom. In addition, Bandura also found that performance task success and responses to their own moods and reactions to specific situations matter greatly in teacher self-efficacy. Factors such as one's one moods and mood changes, one's ways of reacting to situations, and overall stress levels play a huge role in how teachers perceive their own worth in the classroom. Therefore, there is strong evidence that mindfulness or how well one pays attention to their particular physical surroundings, as well as one's emotional states, has a direct impact on teacher self-efficacy (Brown et al., 2015). Interest in mindfulness and its enhancement has quietly exploded in recent years (Brown, Ryan, & Creswell, 2007, p. 211). The interest to incorporate

mindfulness has become a foundation for therapy in the medical field (Sauer, Walach, Offenbacher, Lynch, & Kohls, 2011). For almost thirty years, the study of mindfulness has also helped in the world of mental health with more innovative ways for treatments and has become more prevalent in several contexts (Lau, Bishop, Segal, Buis, Anderson, Carlson, Shapiro, Carmody, Abbey, & Devins, 2006; Williams & Kabat-Zinn, 2011, 2012). Mindfulness, a concept that originates from Buddhist psychology, is a deep awareness and full attention given to a present situation with no judgment on one's thoughts (Hayes & Shenk, 2004). Although viewed as deriving from the Buddhist philosophy, mindfulness is a ubiquitous way of being attentive to how one takes in stimuli and makes sense of it (Zindel, Williams, & Teasdale, 2002). Goleman (2006) acknowledged what is known about human companionship. He stated that empathy or the awareness of others' emotions, is vital to developing relationships. Rapport cannot be established alone. It takes another person to develop such a relationship by interacting with each other. Goleman (2006) also stated that empathy is an individual ability that is learned by paying close attention to others' emotional states. Therefore, mindfulness is a practice that increases empathic qualities in others, thus increasing rapport.

Mindfulness is a construct in many disciplines that is defined diversely, depending on the social context for which it is being analyzed. Kabat-Zinn's (1994) definition for mindfulness is "paying attention in a particular way: on purpose, in the present moment, and non-judgmental" (p. 4). Wyatt (2011) acknowledged that mindfulness is a difficult construct to define due to its necessity to derive from unique experiences. Other researchers agree that mindfulness refers to a process that leads one to be nonjudgmental and nonreactive in present-moment experiences, including emotions, cognitions, and bodily sensations, as well as external stimuli such as sights,

sounds, and smells (Bishop et al., 2004; Brown & Ryan, 2003; Brown, Ryan, & Creswell, 2007; Kabat-Zinn, 2003).

Germer (2004) defined *mindfulness* as a skill that allows us to be less reactive to what is happening in the moment. Shapiro (2014) defines mindfulness as sort of "thinking happy thoughts" and "to be positive" to benefit the immune system and to take care of a person's well-being. The definition of mindfulness can be quite complex. Shapiro (2014) explained that when that positive and negative emotions look different in the brain. Studies show that when individuals are feeling happy, joyful, vital, and alert, the left to right ratio of the brain's frontal cortex has more brain activity. When individuals are feeling anxious, depressed, distressed, or worried, the right to left ratio of the brain's frontal cortex has higher activity. What this study showed was that those who tend to practice mindfulness and meditation generally have higher happiness set points (Shapiro, 2014). In other studies, it is posited that mindfulness may enhance communication through the ability to attend to emotional, cognitive, and verbal content of both parties (Goleman, 2006). However, what one needs to be attentive to in all of these definitions of *mindfulness* is that the common factor of each definition is that mind frames develop over time.

The construct Mindfulness is a main element used to help in all other professions. It is a practice that measures how much one pays attention or how one reacts to everyday situations (Martin, 1997). Shapiro, Carlson, Astin, and Freedman (2005) have posited that studies of mindfulness are new to the world of research, and many perspectives of how mindfulness should be measured or what factors may arise is still in a strong exploratory stage. Smith (1975) defined mindfulness as intentional self-observation rather than meditation. In 2004, Bishop, Lau, Shapiro, Carlson, Anderson, Carmody, Sega, Abbey, Speca, Velting, & Devins (2004). Proposed

that mindfulness can be learned through training, and using the practice allows for one to choose a more mindful state in any given situation.

Shapiro (2005) and her fellow contributors to their study of mindfulness have discovered three factors that could be explored: Attention—or paying attention; Intention, or "on purpose"; and Attitude, or "in a particular way" (p. 375). These three factors are not happening at different times; they work together in this process of awareness and should be thought of and three factors working together. With the factor Intention, a unique mental image of what a person wants to happen or not happen in a given present moment is necessary (Kabat-Zinn, 1990). This personal vision is powerful and transforming for the individual (Freedman, 2005). The focus is on working on being more caring to oneself and others (Freedman, 2005). With the construct *attention*, an individual is paying attention to the senses and what one is sensing or experiencing with a strong awareness of how these senses are being perceived (Brown & Ryan, 2003). And, with the construct *attitude*, the focus is on the behavior that is exhibited. This is full awareness of how an individual is reacting to a situation, how one is choosing to be compassionate, or how one attentively provides a friendly presence and love for others (Shapiro et al., 2005). Through different experiences and perceptions by using mindfulness, individuals grasp a new sense of who they are, what they tolerate, what they dislike, or opinions about others and create a new way of acting upon these stimuli rather than how one would mindlessly react ((Alexander, Langer, &Newman, 1989; Levesque & Brown, 2006).

When particular stimuli stand out, people tend know what they should be paying attention to with the stimuli (Nyaniponika, 1973). Brown & Ryan (2003) constructed the idea that people learn to think about the present moments with high attentiveness. One of the benefits to practicing *mindfulness* is its power to develop ways to be compassionate, not only with others

but with oneself (Shapiro, 2014). In addition, being mindful aids in developing relationships (Shapiro, 2014). When individuals have an awareness of what is going on around them, they can also be more aware of what it is they "intend" to do, which may contribute to overall quality of relationships (Brown, Ryan, Cresswell, 2007). For example, when teachers are teaching, they sometimes find themselves appearing to be listening to students, maybe as students are working on a project or taking a test, but then soon realize they (the teachers) had strayed thoughts. However, the moment teachers realize they drifted in thought, they have now come back to the present moment. It is in this moment they find themselves back is when they notice any thoughts and feelings that arise, without judging, elaborating, or acting on these thoughts and feelings (Kabat-Zinn, 1990). It is at this moment of return that new teachers come to know that they were in a mindless state.

Psychological well-being is typically a main priority in many philosophical, spiritual, and psychological traditions, with consciousness being the focal point of maintaining health of mind through these traditions (Wilber, 2000). Mindfulness is not a strategy to use or a method to use; rather, practicing mindfulness is "a way of being, or a way of seeing, one that involves 'coming to one's senses' in every meaning of the phrase" (Zindel, Williams, & Teasdale, 2002, viii). The factors awareness and attention are common factors that are measured in this purposeful consciousness; however, as Brown & Ryan (2003) stated, the amount of attention placed on the quality of consciousness and its correlation with well-being has not been given as much thought (Brown & Ryan, 2003). Mindfulness, an attribute of consciousness, on the other hand, has been persistently studied for several years (Brown & Ryan, 2003). Langer (2000) pointed out that when people are in a state of mindlessness, the behavior is one of responding to situations based on how one is acclimated to responding rather than truly responding with an open mind. For

example, the routine may be made to yell at a student who shows up late for class. It is difficult to pay attention to one's mindlessness, for then it is a state of mindfulness (Langer, 2000). It is a contradictory statement to be mindful of one's mindlessness unless it is a retro-cognitive reflection on one's thinking. Langer (2000) argued that there is another way to be mindless, which is a practice seen more so in teachers. Langer (2000) explained that when one becomes so used to doing a task, such as driving to a particular destination every day, the drive becomes one that is not even remembered once the destination is reached due to its familiarity. Thus, one is not even paying attention to something so familiar. This act of knowing something too well, therefore, also can lead to mindlessness. For experienced teachers, this is information processed mindlessly.

Mindfulness has been found to contribute to overall well-being of mind (Brown & Ryan, 2003). Teacher's competence has been shown to increase positive attitudes and improve student/teacher relationships. In addition, research has also shown that those who had high self-efficacy had lower cortisol secretions, (which is released during high stress periods) and reported low fatigue (Wang, Hall, & Rahimi, 2015). How teachers perceive their own efficacy levels determines what tasks teachers choose to perform, to what extent a teacher will continue to perform that task, and how much time and effort are put into a task (Bandura, 1977).

There are several assumptions as to why teachers feel inept. In the United States, policies place demand on teachers to ensure students pass high-stakes tests (Plank, S. & Condliffe, B., 2013). In 2006, another challenge for teachers is 20% of all school-age children spoke another language other than English (Bunch, Aguirre, & Tellez, 2009). In addition, teachers are expected to understand the existence of diversity in their classrooms and know the impact of creating strong learning environments (Milner, 2010). As Gold (1996) found, the first year of teaching is

vital to teacher growth: “Few experiences in life have such a tremendous impact on the personal and professional life of a teacher as does the first year of teaching” (p. 548). Many teachers take teaching positions where student backgrounds and community culture are not well known. New teachers find content area to be the main predictor of teaching competence (Schempp et al., 1993) and not student rapport or classroom management. What happens then when these teachers find there is so much more to know, they feel inadequate. This inadequacy interferes with what new teachers felt they had the ability to teach and discover they have not acquired all abilities (Khamis, 2000, p. 5).

One of the most profound concepts that John Dewey presented decades ago was to help students understand what it means to be free to develop the capacity to have self-control and be a good citizen (Chaltain, 2012). What Tschannen-Moran, Woolfolk Hoy, and Hoy (1998) have found in their research on teacher self-efficacy is that teachers factor in their ability to effectively use learning strategies, to effectively manage their classrooms, including students’ behaviors, and how effectively they feel they can engage and motivate students. However, it is also interesting what researcher Matteucci (2007) had later discovered. When teachers attribute student failure to lack of student effort, the student consequences were more punishment-like. However, if the teacher interpreted student failure due to lack of skills and knowledge, the teacher was more likely to help the student. Therefore, what Matteucci (2007) found is that personal control over situations also contributes to teachers’ self-efficacy fluctuations, proving Weiner’s attribution theory to be correct in that individuals perceive where and how much control they have in a situation. Teachers who feel students may be exhibiting low effort will feel frustrated, angry, and critical toward these students (Georgiou, Christou, Stavrinides, & Panaoura, 2002). It would be helpful for teachers to have a mentor for guidance.

Many new teachers assume they will be assigned a mentor when they are hired for a new position. Mentors help a new teacher strengthen skills of classroom instruction, classroom management, and student engagement. Research has discovered that an alarming number of new teachers go without a mentor. The New Teacher Center (2016b) reported that mentors are expected to be assigned to new teachers, yet many do not have one. Many new teachers are left to figure out student engagement and classroom management ideas on their own. The New Teacher Center reported that seven states, one of which is North Dakota, do not require a new teacher induction where mentors are appointed. If the new teacher is seeking a teaching alternative flexibility alternative, then a mentor is appointed. Even if a mentor is assigned to a teacher, one person cannot be there to support a teacher at any given time or place (Ginsburg, 2011).

Researchers who have studied motivational research have concluded that individuals make decisions and about how they feel and behave based on success or failure. What individuals feel is able to be controlled or not controlled in a situation plays a strong determiner in how people evaluate their competency (Atkinson, 1957, 1964). What some researchers have suggested is for teachers to build an awareness of cultural responsiveness in themselves and how they view the present moment (Darling-Hammond, 2010). Since research points out is that self-efficacy level in teachers is considered to be a correlating factor in a successful teaching career (Sezgin & Erdogan, 2015), then it is worth looking into how levels of mindfulness can affect teacher efficacy.

Self-Efficacy

According to Howard (2016), student success is dependent on, at least in part, on the teacher's skills and expertise. It is necessary for teachers to perform tasks to a high standard. A

large part of expertise comes from experience which is gained by working with students on a consistent basis. Because teachers play such a significant role, it is crucial to address the factors that influence their decisions to leave or stay in schools. With teachers from a variety of backgrounds teaching in a variety of school settings, many factors impact their professional lives and decisions to remain in teaching or exit the profession, job satisfaction being chief among them. "Job satisfaction includes any set of circumstances that leads an individual to be "satisfied" with his or her job. Job satisfaction plays a critical role in the effectiveness of teachers as lack of satisfaction can hinder a teacher's motivation. Gibson and Dembo (1984) found that in regard to engaging with students, teachers who perceived a higher efficacy of themselves are more apt to be patient with students, manage their time more efficiently, are less judgmental of students, and have more acceptance of challenging situations with maladaptive students. Guskey (1988) also found that efficacious teachers are more likely to try new innovative teaching methods, as well as use a variety of instructional teaching strategies more often (Chacon, 2005). Higher teacher efficacy has been found to be directly linked to motivation and putting in more effort in instruction, thus student achievement and mastery learning increase. In turn, teachers develop confidence in how well they perform teaching tasks and increase student learning (Wang, Hall, and Rahimi, 2015). With respect to teacher well-being, self-efficacy is a highly researched construct that is typically studied in conjunction with other constructs, such as stress levels and self-regulation skills. For this study, the construct *mindfulness* is researched in conjunction with teacher efficacy.

Self-efficacy refers to "how capable or prepared we believe we are for handling particular kinds of tasks (Bandura, 1997, 2001, & 2002). It cannot be confused with self-esteem; however, there is undoubtedly a strong positive correlation between self-efficacy and self-esteem. Self-

esteem is an overall self-evaluation we make of ourselves (Bandura, 1997, as cited in Snowman & Biehler, 2006, p. 279). If we look at well-being of new teachers from a social cognitive standpoint, social cognitive theorists have found that there must be a relationship among self-efficacy, self-regulation processes, and achievement. Since self-efficacy was defined, self-regulation processes must also be understood.

Self-regulatory processes are steps people undertake in order to successfully regulate what we do in life. First, we set goals, then we set our attention to what tasks we are to do (along with self-observation of how well we are doing in the task), and finally if these tasks are giving us self-satisfaction. In other words, we decide in anything that we do at any given moment, whether we are novice or expert in that task and if we think we are performing to our own satisfaction level (Snowman, McCown, & Biehler, 2006). Snowman, McCown, and Biehler (2006) have discovered that "meaningful learning occurs when people actively try to make sense of the world—when they construct an interpretation of how and why things are—by filtering new ideas and experiences through existing knowledge structures...." (p. 291). According to Semb (1974), University of Kansas Department of Human Development, we begin to adopt what is called mastery criterion (Keller, 1968). Keller defined mastery as perfect performance, or 100% correct. Semb et al. (1973) had redefined mastery to be performance at 90% correct. Nevertheless, whether 90% or 100%, we create a system in our personal evaluation to score our performance from novice (we perform at very beginner level) to expert (we perform at expertise level). What we create is an absolute standard of performance and decide is we are capable of making progress in this performance task and continue, or "if we dismiss or avoid the task due to lack of trust that we can improve in such areas of performance" (Snowman, McCown, & Biehler, 2006, p. 284). Thus, the argument in this study is not only do we need to self-regulate in order to

make progressions in our tasks, but we as professionals in any career need to be aware that a relationship does exist among how we think of ourselves, what we observe in what we produce, and our actual achievement (Snowman, McCown, & Biehler, 2006). The focus, I postulate, for new teachers (as they complete their teacher education programs), is not on how well they know and understand the skills needed or the strategies to be more aware of their own behaviors in teaching. Rather, the focus is on if they pass student teaching--it is the letter grade, and the attitudes and underestimate the correctness of their responses in their career (Schunk, 2001).

Teacher Self-Efficacy

Teachers who perceive themselves to be sufficiently proficient in their teaching have greater commitment to their teaching (Coladarci, 1992; Evans & Tribble, 1986; Trentham, Silvern, & Brogdon, 1985) and are more likely to stay in teaching (Glickman & Tamashiro, 1982). Teachers strive to look upon themselves to be professionals, and for many teachers, this confidence at a professional level, sometimes is not personally developed the first years of teaching. Managers of most workplaces are challenged with finding ways to increase professionalism and confidence in what their workers do. Increasing self-efficacy is not only a positive characteristic that raises morale in a workplace but having a high perception of oneself dictates what one will attempt to learn and master (Lunenburg, 2011). In the late 1970s, more attention was given to teacher self-efficacy and its direct impact on student academic success (Zee & Koomen, 2016). Bandura (1986) posited that self-efficacy not only affects teachers' actions with what they do or not do as a result of efficacy, but it also affects the way teachers feel and think about their abilities. More recently, Guo et al., (2012) had also found that the more a teacher feels incompetent about what he or she can or cannot do in teaching, the more this is a contributor to what extent students feel or even become successful. This self-doubt that teachers

formulate is psychologically referred to as self-fulfilling prophecy, which she defined as "a groundless expectation that is confirmed because it has been expected" (Woolfolk, 2016, p. 444). Bandura's (1977) social cognitive theory, in addition, stressed self-efficacy as one's own faith in how they perform a task rather than on merely what they know about a particular task. In other words, many people can feel they know and understand a topic, but it is the level of having faith in oneself to actually perform or learn to perform the task (Sezgin & Erdogan, 2015). Bandura posited Bandura (1977) observed extensively four factors that are necessary for high efficacy to develop. First, Bandura stated that one of the most effective ways of increasing self-efficacy is through *enactive mastery* or past performance. When people have experiences in previous work or other duties that were successful, they have the confidence it takes to want to learn more. Second, people also develop efficacy through *vicarious experience* or modeling behavior (Bandura, 1971). As people see how others perform successfully, they then learn to steps to also perform successfully in a particular task. Third, Bandura stated that people use *verbal persuasion* or verbal encouragement. They continually process and analyze feedback that builds confidence to perform tasks proficiently. When tasks are performed well, self-efficacy tends to rise (Baron, Kaufman, & Stauber, 1969; Kaufman, Baron, & Kopp, 1966). Finally, Bandura (1995) that *physiological arousal* or responses of individuals to stress and anxiety increase chances of weakening self-efficacy. When people expect to fail at a task, emotional, physiological, and psychological responses then aid in developing symptoms such as racing heart, blushing, sweating, headaches, etc. (Bandura, 1995). In essence, Bandura stated that when people have a lower self-efficacy level, they refrain from challenges, they lose confidence that they can do challenging tasks, they tend to focus more on what they cannot do rather than what they can do,

and fall into learned helplessness, which virtually makes a person accept that they are not able to perform certain tasks (Cherry, 2017).

In Walker's (2010) study, he explored the reasons why education teachers who worked with special needs students were leaving the teaching profession. This study utilized a 27-question survey that aimed to find a level of knowledge of how well these teachers felt they could apply what they learned in their teacher education programs to their teaching instruction. The researcher analyzed ways these teachers could or could not take the information they learned about teaching strategies and what they knew about children with developmental disabilities and successfully apply the information. What Walker (2010) reported finding was that new special education teachers wanted knowledge of how to gain trust, consistency, patience, early intervention strategies, brainstorming skills, and proper identification skills. Furthermore, the study found that these pre-service teachers felt knowing research theory to practice was a vital skill in teaching. Thus, being able to understand children with special needs is vital for overall job satisfaction. In a recent study on teacher self-efficacy as a predictor of teacher burnout, Cansoy, Parlar, and Kilinc (2017) examined the relationship between how teachers perceived self-efficacy as an impactful characteristic to teacher burnout. A total of 416 teachers in elementary, middle, and high school teaching positions from Istanbul, Turkey, were given the Maslach Burnout Inventory to determine levels of burnout, as well as a Teachers' Sense of Efficacy Scale to determine their efficacy level. Results indicated that teachers experienced mid-level burnout. Three independent variables—*depersonalization*, *personal achievement*, and *emotional exhaustion*—were manipulated in this study. Results of the study found the independent variable *depersonalization* and *self-efficacy* were negatively correlated, while the independent variable *personal achievement* positively correlated with *self-efficacy*. Furthermore,

the study found self-efficacy significantly predicted teacher burnout. What was suggested in this study is for administrators to study burnout and ways to help new teachers cope with it. It was also suggested that teachers suffering from burnout have some sort of intervention or help to aid these teachers overcome burnout and increase self-efficacy.

In a similar study (Sezgin & Erdogan, 2015), 600 teachers from the Ankara, Turkey, region, mostly female (64%), various teaching experience (in years), and from all three levels of socio-economic status, were given the 24-item Teachers' Self-Efficacy Scale (TSES) to measure efficacy on student engagement. Furthermore, these teachers were also given a Perceived Success Scale, a Teacher Academic Optimism Scale, the Hope Scale, and the Zest for Work Scale. These scales analyzed levels of perceived success, academic emphasis on such items as "I give my students challenging work" or "To what extent can you craft good questions for your students?", items such as "I can think of many ways to get the things in life that are most important to me," and "I'd rather be involved in the task than observe it." What the researchers found in this study was the strongest correlation between perceived success and academic optimism ($r = 0.63$, $p < 0.01$. A strong positive correlation was also found between self-efficacy and success ($r = 0.60$, $p < 0.01$), and self-efficacy and zest for work ($r = 0.50$, $p < 0.01$). What the study has found is that what teachers perceived as being successful in helping students be successful was a strong determiner in the levels of self-efficacy (Sezgin & Erdogan, 2015). Bandura (2012) found that teachers are more likely to try new challenges if they had developed a high self-efficacy in performance, but they likely will not develop high levels of efficacy until they can perform teacher tasks well.

According to Abraham Maslow's hierarchy of needs, a person needs to feel high esteem before one reaches a feeling of self-actualization, a sense of feeling self-fulfillment or like one

has reached full potential and left a healthy impact on others (Huitt, 2007). Many studies indicate that self-efficacy is necessary in order to successfully carry out one's goals and accomplish tasks and gain job satisfaction; furthermore, a perceived self-efficacy also is a direct catalyst to one's competence to tackle difficult or novel tasks to cope with adversity in specific demanding situations (Bandura, 1997; Luszczynska & Schwarzer, 2005). Bandura (1977, 1993) has also posited that, in regard to how teachers perceive themselves in how they perform certain tasks, self-efficacy is a main component that determines the level of effort a teacher may put into a task. Furthermore, individuals with high efficacy are more apt to set higher or more challenging goals yet be more realistic because they understand realistic limits (Wang, Hall, & Rahimi, 2015). Thus, people who develop a higher self-efficacy naturally have motivation to challenge themselves in task performance (Schwarzer et al., 2004). What is most important is that self-efficacy aims at a broad and stable sense of personal competence to deal effectively with a variety of stressful situations (Luszczynska, Gutiérrez-Doña, & Schwarzer, 2005).

Self-efficacy is a fundamental construct found in the theoretical framework of Albert Bandura's social cognitive theory, which suggests that people want to feel like they can exercise their individual agency and have some influence in what they do as professionals and feel good about it (Bandura, 2006a). Perceived self-efficacy is concerned with people's beliefs in their capabilities to produce given attainments (Bandura, 1997, as cited in Bandura, 2006b, p.307). Self-efficacy is a perceived judgment of how capable one is in a task, whereas self-esteem is a judgment of self-worth (Bandura, 2006b, p. 309). However, more recent research suggests that these teachers are not feeling confident in their capabilities after one year of teaching (Beran, 2005). According to Darling-Hammond et al. (2002), "Teachers' ratings of their overall

preparedness are significantly related to their sense of efficacy about whether they are able to make a difference in student learning" (p. 294).

What Bandura posits is the idea that teachers are well aware, for the most part, that particular instruction or strategies will result in higher achievement, such as creating growth mindsets in students; however, these teachers may not have the confidence to even try to implement strategies they simply do not feel they know enough about to do so (Bandura, 1977). Zee and Koomen (2016) provided example with using scaffolding to increase student learning. Many teachers know that teaching students by basically being one step ahead of their zone of proximal development, will yield high learning outcomes. However, teachers are unlikely to use this strategy of scaffolding if they feel they do not have the knowledge to implement it correctly. Other studies have found that teachers who feel confident in their teaching are more apt to have high-quality learning environments due to better reflective planning and feeling competent enough to implement learning strategies to help students achieve to the highest level (Chacon, 2005; Woolfolk, Rosoff, & Hay, 1990).

Self-efficacy was found to be the main influence on what teachers reported they would do if they encountered social issues and concerns (Novicka & Isaacs, 2010). Shapiro, Brown, and Biegel (2007) further found that higher levels of mindfulness negatively correlated with decreases in stress and anxiety, as well as positively correlated with self-compassion. This strongly suggests, then, that if mindfulness is able to develop, teachers will find lower stress levels and gain higher self-efficacy over time. These notions also then make sense with the confession of teachers that if they felt confident in these areas of dealing with power social interactions between students, they would intervene; otherwise, they would not feel comfortable

in taking any action (Bradshaw et al., 2007). When teachers realize that teaching is more challenging than perceived.

Teacher Culture Shock: Four Stages of Cultural Adjustment

It is assumed that one has a general theory about how one goes from novice to expert. This study grounds itself in how one builds skill acquisition, so for the purpose of this study, we can rename this theory skill acquisition theory, based upon Dreyfus's (2004) model of skill acquisition. Human development naturally finds that most people depend on cultural familiarities to sustain us in comfort and peace. As Oberg (2006) suggested, this culture familiarity keeps people feeling confident and comfortable in knowing one's particular discourse community and social culture so well that they are able to function satisfactorily without strenuously thinking about how to survive in a culture. People find ways to know and adapt to a culture quickly and to the point of being mindless or rote over time.

Cultural adjustment, conceptualized by anthropologist Kalervo Oberg in 1954, explained the adjustment coming from a safe and comfortable environment to the unknown environment. As a person goes through a process of moving from novice to expert, there are cultural stages for which to pass" (Dreyfus & Dreyfus, 1980, p. 89).

In 1960, Valero Oberg compiled the "Rites of Passage", an experience when they are placed in a different culture or if life changes are made. Furthermore, cultural adjustment is typically explained in four stages:

Stage 1: The Honeymoon. This stage is very comfortable, where teachers are in their university classrooms under the direction of faculty and cooperating teachers. Most situations are artificial settings where the teacher is protected from any real fear in dealing with unpleasant situations.

Stage 2: Culture Shock. This stage of adjusting has been the most researched and is known as "the culture shock" stage where a person is primarily focused on the differences between the new culture and the home culture (Oberg, 1960). Oberg referred to this stage as a "territorial passage" because this a stage where one is not quite not yet fully commissioned into the next stage, but you are heading there imminently. This stage connects with what is discussed later in this literature review—unrealistic optimism in new teachers. This unrealistic feeling of overconfidence leaves new teachers feeling guilty when they fail at meeting challenges (Wang, Hall, & Rahimi, 2015).

Stage 3: Gradual Adjustment, Humor, and Perspective. This stage of adjusting is the becoming more aware of the change and its logic, and cultural cues are easier understood and acclimated to. It is also described as being "betwixt and between" social stage. This stage is gradually acclimating to an environment by adjusting as "a threshold…the entry and exit point between zones of experience or understanding" (Oberg, 1954). This period is the transformational period and humbles the teacher is because the old identity is often replaced with what new experiences have done to change the mindset of the person (Meyer & Land, 2005). This stage then ties to teachers having knowledge of the art and science of teaching. When teachers have the experience of how to help students meet objectives and use different strategies to help teach, they will feel more confident in accepting new challenges in teaching, especially in working with new practices or with assessment findings to revise instruction.

Stage 4: "Feeling at Home": Adaption and Biculturalism. This stage of adjustment is no longer new; the new environment and culture you are in is comfortable to you, and if teachers can reach this stage, they have a far greater chance of staying in teaching. What this stage

development implies is that idea that a process must take place in order to develop these characteristic constructs called *mindfulness*.

This stage 4 is directly connected to feeling self-confident in a person's environment. What this means for teachers is that if mindfulness is practiced, they may be learning the skills of deep reflection and critical thinking as they are teaching or in a specific situation rather than thinking about teaching improvements and revisions in the past. Or, more concerning, not at all. Therefore, stage 4 is a stage in which new teachers eventually find themselves in as they gain experience in teaching.

Inequitable Teacher Evaluation

In most states, teacher evaluation consists of the same criteria for measuring teacher effectiveness. It has also been a bought-into thought that teacher effectiveness cannot be objectively measured (Chaltain, 2012). Carver-Thomas and Darling-Hammond (2017) suggested to federal, state, and district policymakers to focus on these key reasons why teachers decide to quit, and the top concerns are teacher preparation, support, and teaching conditions.

However, this study is not directly interested in focusing on the criteria to measure teacher effectiveness themselves. This study's focus is on the administrator's (the building principal, primarily) expectations that these criteria will all be mastered during the first year of teaching (Danielson, 2007). Danielson (2007) also makes a good point in that "other professions have support beyond graduation. Doctors work as interns and residents, attorneys practice as clerks and then join a legal firm, and social workers work under supervision before they earn a license" (p. 11). Teachers, on the other hand, are thought to be a professional who can teach independently as soon as they receive that license. (Danielson, 2007). What is of further interest to this study is the supported fact that beginning teachers are practicing instructional teaching

skills as they gain experience their first years of teaching. "As teachers increasingly are blamed for lack of student performance, as politicians choose to offset any responsibility they have for the conditions under which teachers work, so too, teacher educators are targeted as being one of the problems associated with what is perceived to be low levels of student achievement" (Townsend & Bates, 2007, p. 3).

Research indicates that highly-qualified mentors can improve new teachers' professional growth and mindfulness to help them reach these levels of highly effective teachers (New Teacher Center, 2016a, p. 1). However, the reality of mentoring for many teachers does not show to be promising. A sizable number of new teachers regularly report that in NTC's TELL surveys that they were not given a mentor their first few years of teaching, even in states mandated with a mentoring requirement. According to the New Teacher Center (2016a), "of the 29 states that now require some type of support for new teachers, barely half (15 states) require support in teachers' and second years. In 2012, twenty-seven (27) states required some type of support for new teachers, and barely half (15 states) require support in teachers' first and second years with minimal contact—or require no support at all (p. 5). This is a starting fact for new teachers who are expected to perform at a high level of effectiveness but have no support system, which is what is expected to be provided by administration. What research tells us is that new teachers need time to gain experience; time to develop teacher experience does matter (Walker, 2010).

In the Stronge Teacher and Associate's Teacher Effectiveness Performance Evaluation System handbook (2015), two of several goals for the evaluation are to provide a support system with assistance when needed, and to "implement a performance evaluation system that promotes collaboration between the teacher and evaluator and promotes self-growth, instructional effectiveness, and improvements of overall job performance" (p. 1). In addition, Stronge

educational consultants train administrators to utilize the Teacher Effectiveness Performance Evaluation System (TEPES) based on the Goals and Roles Model, developed by Stronge (2015, p. 1). In evaluating teachers based on this teacher effectiveness performance educational system, four levels of performance are offered: effective, partially effective, effective, and highly effective. The level of effectiveness should be expected level of performance. The emphasis is on the word *expected*. What is expected is that new teachers (this model is developed for all teachers) to perform effectively in instructional knowledge, professional knowledge, instructional delivery, learning environment, classroom management, professionalism, student progress, and, the one this study is most interested, to teacher mindfulness is "the teacher systematically gathers, analyzes, and used all relevant data to measure student academic progress, guide instructional content and delivery methods, and provide feedback to both students and parents throughout the school year" (Strong, 2012, p. 3). All of these criteria are to be met at the expected level of effective teaching. However, the contrast that raises concern for new teachers is the fact that only 3 of the 50 states currently meet the New Teacher Center's (NTC) (2016) high quality criteria that is aimed at mentoring new teachers and get them on a trajectory to develop into highly effective teachers over time.

Soleas (2015) suggested that teacher candidates are students in a teacher education program who have met their university requirements. They have not necessarily met the requirements of any school for which they will teach. They fit the title of "new teachers." However, these new education practitioners are the next generation of teachers. They were "likely taught by the last generation of teachers with the methods of the past and present and will teach the next generation of students with the methods of the future. The practices of new teachers will become a substantial overall component of the practice of teachers through

generational turnover" (Townsend & Bates, 2007). However, research with new teacher evaluations has been in the conversation of teacher evaluation. A shift of what criteria is chosen to evaluate teachers is evidence that teacher evaluations are not done fairly, for any level of teacher. For example, the state of New York made this announcement to the public in April 2016: Past New York teacher evaluations derived mainly from classroom observations and students' test scores, which have been debated and deemed as unfair for quite some time. The usage of grades 3-8 English and math scores have been banned from being a part of the teachers' evaluations for the next four years (Disare, 2016).

What is already known in education, as is made clear by Eubanks, director for Teacher Quality at the National Education Association is that "working conditions and benefits are very important to teachers, just as they are to any professional," (Long, 2015). But perhaps most importantly, educators want a sense of purpose, success, and a feeling that they are making a difference in their students' lives" (Long, 2015). Self-efficacy increases only if a teacher feels he or she is competent in engaging and motivating students (Wang, Hall, & Rahimi, 2015). In over 30 studies on teacher effectiveness and teaching experience in the past 15 years, it is affirmed that teaching experience is positively associated with career achievement and student success (Kini & Podolsky, 2016). Kini and Podolsky (2016) posited that there is no real guarantee that teacher experience will automatically create effective teachers: "Although the research does not indicate that the passage of time will make all teachers better or more competent it does indicate that, for most teachers, effectiveness increases with experience" (para. 4). What research does support is that if teachers do not learn to handle occupational stress or find happiness in their jobs, not only does this lead to attrition, but teachers will not adjust well in psychological health (Barmby, 2006; Davis & Wilson, 2000; Kyriacou, 1987) or physical health (Jamal, 1990; Sagie

& Weisberg, 1999; Schaefer, Long, & Clandinin, 2012; Stoeber & Rennert, 2008). Thus, what is aimed to be explored is how the various aspects of mindfulness (attention awareness, attention, attitude, observing, describing, acting with awareness, and accepting without judgement) predict the three different types of teacher self-efficacy (student engagement, instructional strategies, and classroom management). Likewise, what must be taken into consideration is the possible impact of and moderation by various demographics, such as overall job satisfaction, age, teaching experience, gender, number of classes periods taught per day, content area, and school type (public or private) may play on teacher efficacy levels and overall job satisfaction. In addition, do the natural relationships among the teacher self-efficacy constructs (student engagement, instructional strategies, and classroom management) play a role in how teachers perceive their teacher self-efficacy?

Summary

Brown & Ryan (2003) pointed out that "The relation between quality of consciousness and well-being has received little empirical attention" (p. 822). Since most people have the capacity to be attentive and aware, assumptions are often made that individuals are paying attention to some level of awareness. It has also been found that individuals are unique in what level of intensity and awareness of attention they choose to practice. Levels of awareness change from moment to moment due to changing stimuli in any moment (Brown & Ryan, 2003). Teacher effectiveness and student achievement have been found to be associated with teacher self-efficacy levels (Early et al., 2006, 2007), and self -efficacy is a single predictor of quality of classroom learning (Guo, Justice, Sawyer, & Tompkins, 2011). When teachers are not motivated to teach, they may prove ineffective at teaching" (Howard, 2016, p. 12). Teachers themselves may not be fully aware of their own feelings about current situations, or these feelings seem to be

controlled by one's past behaviors (Langer, 2000). Emotional intelligence is an initiative that is being implemented into K-12 curricula. Students explore and practice five factors, such as personal emotional awareness and others' emotional states, and being aware of one's own emotions as well as others' emotions helps students make healthy decisions in how they interact with people. The first factor in social emotional learning is self-awareness, so being socially aware requires paying close attention to how one is reacting to one's own emotions (Brown & Ryan, 2003). The expectation is that teachers will teach students to have a growth mindset, and teachers are asked to also build a growth mindset. Strahan (1997) acknowledged that learning self-control for any human being is an essential part of developing a growth mindset. Mindfulness is a direct connect to social emotional learning. Thus, if teachers are able to train themselves to be aware of self-control and how their behaviors can positively change through being more attentive, this will help students perceive their self-worth as being valued, being able, and being responsible. What Strahan (1989) concludes, then, is the idea that a positive self-perception is a strong pre-cursor to a high self-efficacy, and if teachers are able to learn positive discipline, they are more apt to learn self-control through positive self-discipline. This self-discipline then serves as a catalyst for developing patience and understanding in teachers. The result for students is the feeling of being more connected, whether to the teachers or their peers, and if students feel a sense of connectedness in a classroom environment, students are more likely to exceed teacher's expectations (Strahan, 1989). According to Langer (2000), it is not so much "what we teach" but "how we teach." Research has found that teachers who have higher efficacy tend to plan lessons and organize more effectively overall (Allinder, 1994).

The goal in teaching teachers is to model not only teaching content matter, such as how to use the strategy *demonstration* to teach how to do a math problem, but to teach them how to

use the strategy and reflect how it is increasing student comprehension of the math. According to Langer (2000), teachers are focusing on how to watch students do the math problem and get the correct answer. There is little to no attention being paid on how students are reacting to a complex problem or why some students are absent every test day. The focus is very direct and not moving around to also be aware of new things about the environment and the students (Langer, 2000). The hope for this research is to explore the idea of whether mindfulness offers support in building high teacher self-efficacy. What recent research has shown is that when mindfulness is actually taught to individuals, it benefits those trained with increased healthy well-being (Kabat-Zinn, 1990). However, little research has been done to examine this construct of mindfulness as an element that greatly correlates with high self-efficacy and overall well-being to any large extent. Therefore, this study aims to use mindfulness scales and Bandura's Teacher Self-Efficacy Scale to explore the impact of mindfulness and its correlation with self-efficacy. If any significant differences are found between self-efficacy and mindfulness, perhaps this will be a call for training in mindfulness to actually train teachers to look for certain stimuli and to train teachers to not only focus on how they are consciously aware of what they are presently experiencing and observing, but that they are also able to train their thinking to be open to what is happening around them in a non-judgmental way before they even enter their first teaching position. Thus, the purpose of the study was to explore the following questions:

Research Question 1: How do the various aspects of mindfulness (attention awareness, attention, attitude, observing, describing, acting with awareness, and accepting without judgement) predict the three different types of teacher self-efficacy (student engagement, instructional strategies, and classroom management)? This question should take into consideration the possible impact of and moderation by various demographics, such as overall

job satisfaction, age, teaching experience, gender, number of classes periods taught per day, content area, and school type (public or private).

Research Question 2: What is the nature of the relationships among the teacher self-efficacy constructs (student engagement, instructional strategies, and classroom management)?

CHAPTER III: METHODS

This chapter presents a description of the specific research methods used in this study. To reiterate, the purpose of this study is to explore the potential relationships between and among the various facets of mindfulness and self-efficacy in K-12 teachers. More specifically, this study seeks to address the following two research questions:

1. How do the various aspects of mindfulness (attention awareness, attention, attitude, observing, describing, acting with awareness, and accepting without judgement) predict the three different types of teacher self-efficacy (student engagement, instructional strategies, and classroom management)?
2. What is the nature of the relationships among the teacher self-efficacy constructs (student engagement, instructional strategies, and classroom management)?

When feasible, the impact of other ancillary and demographic variables will also be analyzed.

Research Design

An ex post facto research design along with survey methods for data collection were used for this study. The primary variables of interest in this study are the various facets of two broad constructs—mindfulness and self-efficacy. These facets refer to specific types or styles of these constructs as operationalized by their respective measurement instruments. In most analyses, the various specific types of mindfulness serve as independent (predictor) variables, and the types of teacher self-efficacy are dependent (response) variables. There were also a number of demographic and ancillary variables such as job satisfaction, teaching experience, gender, content area, and school type (public or private). These variables were included in the analyses as potential nuisance variables or moderators.

Target Population

Ideally, the target population for this study would be teachers from K-12 school systems in the United States. However, for practical reasons, the more reasonable target population would be teachers in K-12 schools in North Dakota. More specifically, the target population for this study is defined as all full-time K-12 teachers currently teaching at a public or private school in the state of North Dakota. Since the focus of this study is on current full-time teachers, substitute teachers and retired teachers were excluded from the population.

Sampling Procedures

Sampling was conducted as a two-stage process. The first phase was the purposive sampling of specific school districts with respect to multiple characteristics in order to produce a representative sample. School size classification (as defined by the North Dakota High School Activities Association and the North Dakota Department of Public Instruction), funding type (public or private), and locale (rural or urban) were identified as key school district traits to be considered during the selection process. Another important dimension was the geographical region within North Dakota. More specifically, the school districts were purposefully chosen to represent regions in western, central, and eastern North Dakota along the Interstate Highway 94 corridor (as illustrated in Figure 3.1). A total of nine school districts (three from each geographical region) were selected and subsequently agreed to participate in the study.

Figure 3.1. The western, central, and eastern sampling regions in North Dakota along the Interstate Highway 94 corridor. School districts were selected within each of these regions.

The second phase of sampling involved the selection of individual teachers within these nine school districts. This was a straightforward process as all full-time K-12 teachers at each of these nine school districts were contacted and recruited for this study. There were approximately 180 potential respondents in total across the nine selected school districts.

Participants

Eighty, K-12 teachers were chosen based on geographical location in North Dakota. As shown in Figure 3.1, teachers were chosen based on school locations in order to include school districts along the entire central part of North Dakota. Of these 80 participants, 68.8% were female (n = 55) and 31.2% were male (n = 25). In this sample, 78.7% of the participants taught in public schools and 21.3% taught in private schools. This proportion was valid taking into consideration that the ratio of public to private schools in North Dakota is 10 to 1, with a total of 532 public K-12 schools and 53 private K-12 schools in North Dakota (North Dakota Dept. of Public Instruction, 2018).

As illustrated in Table 4.6, the average age of the teacher participants was 43.58, with the youngest teacher being 22 and the oldest teacher being 69. The number of years of teaching

experience was 15.73 years, as shown in Table 4.6, with a standard deviation of 12.051. The fewest years of teaching was one year, and the most years of teaching was 46 years. With the number of classes taught on a daily basis, most teachers reported an average of 5.06 classes a day. Sixty-seven percent (67%) of the participants taught five or more classes per day, while 33% of the participants taught fewer than five classes a day. One teacher reported teaching nine class periods every day. Ten percent (10%) of participants reported engaging with 25 or fewer students every day, 24% of participants engaged with 26-50 students every day, 32% of the participants engaged with 51 to 75 students every day, and 34% of participants engaged with over 76 students daily.

Data Collection Procedures

A pre-notification letter to recruit schools (and their teachers) was sent to each principal of the selected schools (see Appendix A). The letter contained a brief description of the study, consent procedures, the researcher's contact information, and specific details regarding the data collection process. Approximately four days after the letters were mailed, follow-up contact (telephone or e-mail) was made with each school principal to ascertain their willingness to participate. The researcher visited the schools that agreed to participate to deliver the data collection materials (questionnaires, protocol letter, and invitation letters) to the building/site principal.

Each individual teacher was provided with a questionnaire form along with an invitation letter for teachers to participate in the study (see Appendix B). This letter also included general information regarding the nature of the study, data security, their right to decline, and expected time expenditure. Individual envelopes were provided to each respondent to ensure the questionnaire remained confidential after completion.

The protocol letter (see Appendix C) contained instructions for principals to read to the teachers when he or she dispersed the questionnaires. This protocol letter also provided instructions to the principals for dispersing the questionnaires to the teachers and collecting the forms after completion. Respondents were explicitly instructed not to place their names on the questionnaires. Participating teachers were instructed by their building principal to seal their completed questionnaires in individual envelopes (provided with the questionnaires). These sealed forms were then returned to the principal. The researcher received the completed questionnaires from each principal approximately one week later either in person or via the U.S. Postal Service (pre-paid envelopes were provided as needed). All participants were voluntary and received informed consent, in line with the North Dakota State University Institutional Review Board and APA's ethical standards.

Instruments

All data was collected via conventional paper-and-pencil questionnaire forms composed of four different instruments (plus a brief demographics section). Only one scale was used to measure self-efficacy--namely, the Teachers Sense of Efficacy Scale (TSES; Tschannen-Moran & Woolfolk Hoy, 2001). Three different scales were used to measure different aspects of mindfulness: the Mindfulness Attention Awareness Scale (MAAS; Brown & Ryan, 2003); the Freiburg Mindfulness Inventory (FMI; Walach, Buchheld, Buttenmuller, Kleinknecht, & Schmidt, 2006); and the Kentucky Inventory of Mindfulness Skills (KIMS; Baer, Smith, & Allen, 2004). The four psychometric instruments used in this study were all previously developed and validated. Using existing well-established instruments also makes the results from this study accessible for possible meta-analyses. The entire questionnaire form is given in Appendix D.

Teachers Sense of Efficacy Scale (TSES)

Teacher self-efficacy was measured using the Teachers Sense of Efficacy Scale (TSES), an instrument developed by Tschannen-Moran and Woolfolk Hoy (2001). The TSES measures three related constructs (factors) specifically for teachers in the K-12 setting. These three factors are efficacy in student engagement, efficacy in instructional practices, and efficacy in classroom management. These are subsequently the three subscales in this instrument.

The TSES contains 24 items. Each item in the instrument has a statement regarding some challenge or difficulty K-12 teachers commonly face. Respondents were instructed to circle one number on a nine-point numerical rating scale to indicate their opinion regarding each statement. Response options ranged from 1 to 9, with a score of 9 indicating high self-efficacy. There were semantic anchors shown with the odd-numbered response options: 1 = *nothing*, 3 = *very little*, 5 = *some influence*, 7 = *quite a bit*, and 9 = *a great deal*. Each item in the TSES specifically taps one of the three constructs (efficacy in student engagement, efficacy in instructional practices, and efficacy in classroom management). Hence, three subscales with eight items per subscale. The subscale-item map and directions for computing subscale scores is provided in Appendix E.

The TSES has been shown to be a reliable and valid scale. Tschannen-Moran and Woolfolk Hoy (2001) showed an oblique (correlated) factor structure with three dimensions. These subscales were further shown to have very good internal-consistency reliabilities (Cronbach's alpha): instructional practices, $\alpha = .91$; classroom management, $\alpha = .90$; and student engagement, $\alpha = .87$. While not quite as high as the reliabilities reported by Tschannen-Moran and Woolfolk Hoy (2001), a separate study by Stalikas, Trivila, and Roussi (2012) also found the TSES subscales to have good reliability, ranging from $\alpha = .78$ to .82. Furthermore, the data collected for the TSES in the present study ($n = 80$) also showed good reliabilities for each of the

TSES subscales (student engagement, α = .85; instructional strategies, α = .83; classroom management, α = .85).

Mindfulness Attention Awareness Scale (MAAS)

Originally developed by Brown and Ryan (2003), the Mindfulness Attention Awareness Scale (MAAS) is an instrument that measures attention awareness, a specific form of mindfulness. Attention awareness refers specifically to the extent a person is typically cognizant of the happenings in the immediate present. One of the main reasons the MAAS was selected for this study is the demonstrated reliably across various populations/contexts. According to Carlson and Brown (2005), this general applicability of this instrument is because it focuses on how a person is reacting in the present moment rather than on attributes (such as trust, empathy, and gratitude) that emerge as a result of what is happening.

The MAAS was designed to measure only a single construct (unidimensional) using 15 items. Each item presented a brief description of a situation or experience for the respondent to consider. Respondent were instructed to indicate how often they find themselves in the situation described using a six-point numerical rating scale. The response options were scored as follows: 1 = *almost never*, 2 = *very infrequently*, 3 = *somewhat infrequently*, 4 = *somewhat frequently*, 5 = *very frequently*, and 6 = *almost always*. The MAAS is a summated scale, so a person's scale score is computed as the mean score of their responses to all 15 items.

Factor analyses have been conducted on the MAAS with a variety of populations (such as undergraduates, cancer patients, and counseling clients) and consistently show a single-factor structure (Brown & Ryan, 2003; Carlson & Brown, 2005). The MAAS has demonstrated high test-retest reliability, discriminant and convergent validity, known-groups validity, and criterion-related validity (Brown & Ryan, 2003). Brown and Ryan (2005) reported that the MAAS also

has very good internal-consistency reliability using data from two different populations (α = .86 and .87). The reliability computed from the data collected on the MAAS for the present study is consistent with prior findings (α = .89).

Freiburg Mindfulness Inventory (FMI)

The Freiburg Mindfulness Inventory (FMI) was originally developed by Walach, Buchheld, Buttenmuller, Kleinknecht, and Schmidt (2006). Although the FMI was initially developed to measure the lone general construct of mindfulness, other studies (such as Bergomi, Tschacher, & Kupper, 2013, and Kohls, Sauer, & Walach, 2009) have shown it to be multidimensional, measuring the more specific constructs of attention (the state of awareness in the present moment) and attitude (openness to and acceptance of certain situations). In this study, the FMI was utilized primarily as a two-factor scale.

The FMI consists of 14 items, each presenting a short statement describing some behavior or reaction in a given context. Respondents are instructed to rate each item according to how often they perceive themselves reacting or behaving in the manner described. Each item uses a four-point numerical rating scale (1 = *rarely*, 2 = *occasionally*, 3 = *fairly often*, and 4 = *almost always*). Each item in the FMI is intended to reflect one of two specific mindfulness constructs—namely, attention and attitude. Hence, three subscales with eight items per subscale. The attention and attitude subscales are composed of six and eight items, respectively. The subscale-item map and directions for computing subscale scores is provided in Appendix E.

The FMI is a widely used instrument that has been validated in a number of studies (Sauer, 2011). The initial pilot study (n = 115) showed the FMI to have very good internal-consistency reliability (α = .86) with respect to the single-factor model (Walach et al., 2006). Using confirmatory factor analysis (n = 244), Kohls, Sauer, and Walach (2009) showed the one-

factor model to have good reliability (α = .83), while the reliability of the alternative two-factor model was not quite as good, but still acceptable (attention, α = .77; attitude, α = .69). However, both models produced suboptimal fit indices. The data collected on the FMI in the present study produced very similar results (one-factor model: α = .83; two-factor model: attention α = .70, attitude α = .76).

Kentucky Inventory of Mindfulness Skills (KIMS)

Originally developed by Baer, Smith, and Allen (2004), the Kentucky Inventory of Mindfulness Skills (KIMS) is a self-report inventory which measures four distinct facets of mindfulness. The first construct is *observing*, which refers to how a person notices or attends to various stimuli, including bodily sensations and external stimuli, such as smells and sounds. The second dimension, *describing*, involves a person's ability to communicate specific situations to another person. The third construct is *acting with awareness*, which is the extent to which a person is aware and attentive to what he or she is doing at the present moment. Finally, the fourth factor is *accepting without judgment*. This construct deals with a person's openness to experiences and acceptance of reality without undue or excessive bias.

The KIMS is a 39-item self-report instrument on which respondents are asked to rate how closely each statement reflects their own behaviors, thoughts, or actions. Responses are given on a five-point numerical rating scale (1 = *never or very rarely true*, 2 = *rarely true*, 3 = *sometimes true*, 4 = *often true*, and 5 = *very often or always true*). Each item in the KIMS was designed to measure one of the four constructs (observing, describing, acting with awareness, and accepting without judgment). Accordingly, there are four subscales in this instrument. The subscale-item map and directions for computing subscale scores is provided in Appendix E.

Baer et al., (2004) reported good internal-consistency reliabilities for the subscales in the original pilot study (observing, α = .91; describing, α = .84; acting with awareness, α = .76; and accepting without judgment, α = .87). Adequate to good test-retest reliabilities were also reported (observing, $r_{xx'}$ = .65; describing, $r_{xx'}$ = .81; acting with awareness, $r_{xx'}$ = .86; and accepting without judgment, $r_{xx'}$ = .83). Data collected on the KIMS for the present study produced good to very good coefficient alpha values (observing, α = .87; describing, α = .91; acting with awareness, α = .79; accepting without judgment, α = .83); these reliabilities were fairly consistent with those reported by Baer et al. (2004).

Demographic Information

A set of demographic questions were included at the end of the questionnaire for age, gender, years of teaching experience, subject areas taught most of the time, enrollment size of school, type of school (public/private), typical number of students engaged with daily, number of class periods they teach every day. There was also a single item for respondents to rate their overall level job satisfaction. It is also important to note that the number of students engaged with every day could be considered as an estimated number rather than an actual number, and this may skew the data or the results/conclusions sections. Details on the demographic items can be found in Appendices D and E.

CHAPTER IV: RESULTS

The purpose of this study was to explore mindfulness levels, as well as job satisfaction, in conjunction with levels of self-efficacy in K-12 teachers. In regard to mindfulness, this study explored to what level they feel they are aware of present surroundings and sensations, how they feel they can accurately describe what these happenings or situations are in the present moment and how their minds and bodies are responding to certain situations, how they feel they act with awareness, and how they perceive themselves being able to accept what is happening in a present moment and not act with judgment on themselves or on others. In regard to efficacy levels, this study looked mainly in the areas of how teachers perceive themselves in having control over student engagement, classroom management, and in using instructional strategies that helps students reach mastery learning. This chapter reports the details of the research questions and the data analyses to answer these questions.

Results include the descriptive statistics for the sample demographics as well as the analyses needed to address the research questions. For convenience, brief descriptions of the relevant mindfulness and self-efficacy constructs are provided in Table 4.1.

Table 4.1

Definitions for Key Mindfulness and Self-Efficacy Concepts

Concept	Definition
Attention awareness	A state of mind where a sensitive awareness of what is happening in the present moment or exercising influence over events that affect their lives (Brown & Ryan, 2003; Bandura, 1994)
Attention	What is paid attention to by the teacher in the present moment or situation and an understanding why they do what they do; being non-judgmental
Attitude	A teacher paying attention to how they are making critical judgments or being non-judgmental about themselves or about others
Observing	Mindfulness involves noticing what one is sensing at a present moment, both internally (what one is thinking, feeling, etc. or bodily sensations) or externally (what the five senses are perceiving at a given moment; Baer, Smith, & Allen, 2004)
Describing	Being able to describe in detail without being critical or judgmental of the situation (Baer, Smith, & Allen, 2004)
Acting with awareness	Being fully attentive and highly engaged and participating in one's current environment or activity (Baer, Smith, & Allen, 2004)
Accepting without judgment	To allow what is happening in a present moment to happen without judging, overreacting, changing, or escaping it (Baer, Smith, & Allen, 2004)
Efficacy in Student Engagement	A sense of motivating students in the learning environment, increasing curiosity, and bringing out student potential
Efficacy in Instructional strategies	A sense of the ability to develop curriculum and utilize instructional strategies for effectiveness in learning and in making more meaningful and appropriate opportunities for learning (Page, Pendergraft, & Wilson, 2014)
Efficacy in Classroom management	A sense of being able to create a classroom environment that allows students to learn to their highest potential, to ensure students feel safe, and to keep learning positive where bias and conflict are controlled through positive relationship-building.

Descriptive Statistics

The means and standard deviations for each of the four scales measures are given in Table 4.2. The teachers had high composite TSES self-efficacy levels, $M = 6.91$, $SD = .674$. Overall scores for the MAAS factor attention awareness showed average mindfulness levels, $M = 4.22$, $SD = .782$. Overall scores for the FMI factors attention and attitude showed average to high levels of mindfulness, $M = 2.82$, $SD = .421$. Overall scores for the KIMS factors for observing, describing, acting with awareness, and accepting without judgment showed average to high levels of mindfulness, $M = 3.35$, $SD = .447$.

Table 4.2

Descriptive Statistics for the Overall Composite Scores from Each Instrument

Instrument	*M*	*SD*	Min	Max
TSES[a]	6.91	0.67	4.88	8.50
MAAS[b]	4.22	0.78	2.20	5.73
FMI[c]	2.82	0.42	1.88	3.71
KIMS[d]	3.35	0.45	2.22	4.33

Note. All statistics based on $n = 80$ observations.

[a]TSES = Teachers' Sense of Efficacy Scale; scores range from 1 to 9.

[b]MAAS = Mindful Attention Awareness Scale; scores range from 1 to 6.

[c]FMI = Freiburg Mindfulness Inventory Scale; scores range from 1 to 4.

[d]KIMS = Kentucky Inventory Mindfulness Skills; scores range from 1 to 5.

Descriptive statistics for the TSES (self-efficacy) subscales are summarized in Table 4.3. Mean scores of the three subscales were calculated of the 80 teachers who participated in this study. For the Teachers' Sense of Efficacy Scale, three factors have been identified by Megan Tschannen-Moran and Anita Woolfolk Hoy (2001). The subscales were scored by computing a mean score for the items that loaded into each factor. For the first factor, efficacy in student

engagement, an average to high efficacy score was reported for K-12 teachers ($M = 6.44$, $SD = .895$). This subscale included a total of eight items, ranging from 1 to 9. For the second factor, efficacy in instructional strategies, a high level of efficacy was reported for K-12 teachers ($M = 7.13$, $SD = .790$). This subscale included a total of eight items, ranging from 1 to 9. For the third factor, efficacy in classroom management, also measured high on the efficacy scale for K-12 teachers ($M = 7.17$, $SD = .849$). This subscale included a total of eight items, ranging from 1 to 9.

Table 4.3

Descriptive Statistics for the TSES Subscale Scores

Subscale	*M*	*SD*	Min	Max
Self-Efficacy in Student Engagement	6.44	0.90	3.38	8.63
Self-Efficacy Instructional Strategies	7.13	0.79	5.00	8.38
Self-Efficacy Classroom Management	7.17	0.85	3.38	9.00

Note. All statistics based on $n = 80$ observations.

Data regarding the study's factor mean scores and the minimum/maximum scores for the three mindfulness scales are summarized in Table 4.4. For the Mindfulness Attention Awareness Scale, one subscale has been identified by the developers Kirk Warren Brown and Richard M. Ryan (2003). The factor attention and how the 80 teachers perceived everyday experiences indicated a high mindfulness level, $M = 4.22$, $SD = .782$ on the MAAS. The lower the score, the lower the mindfulness on a scale of 1 to 6. For each item, a mean score of 1 = "extremely low" mindfulness levels; a mean score of 2 = "very low" mindfulness levels; a mean score of 3 = "low" mindfulness levels; a mean score of 4 = "high" mindfulness levels; a mean score of 5 = "very high" mindfulness levels; and a mean score of 6 = "extremely high" mindfulness levels. This subscale included a total of 15 items, ranging from 1 to 6. The mean score indicated the

teacher population to have a "high" mindfulness level based on their amount of "radar" that exists in the conscious mind that constantly scans both the external environment and the state of one's internal thinking (Brown & Ryan, 2003). In other words, teachers in this study reported high attention or consciousness of noticing things on a regular basis.

For the Freiburg Mindfulness Scale, the one measurement of consciousness (Walach et al., 2005) labeled attention for this study, was found to have an average level of mindfulness, *M* = 2.82, *SD* = 0.421. This scale was scored from 1 to 4, with 4 being an extremely high level. This concludes that teachers, on the average, approach experiences "with an open and nonjudgmental awareness, as well as curiosity and openness to the experience" (Walach et al., 2006, as cited in Ackerman, 2017).

On the KIMS inventory, the overall composite mindfulness levels were average to high, *M* = 3.35, *SD* = .447. The factor observing indicated a high mindfulness level, *M* = 3.30, SD = .626. The factor describing indicated a high mindfulness level, *M* = 3.74, *SD* = .735. The factor acting with awareness indicated a medium high mindfulness level, *M* = 3.07, *SD* = .509, and the factor accepting without judgment indicated a high mindfulness level, *M* = 3.31, *SD* = .627. The scale asked participants to circle in a range from a score of "1" meaning very low mindfulness to a score of "5" meaning very high mindfulness. This mean score indicates that K-12 teachers have average awareness of how they notice stimuli or external occurrences, how they can explain what is happening around them, how they engage fully in what is happening around them, or how they accept what is taking place around them and within their own minds and accept without judging.

Scores for the FMI were based on the mean of all 14 items. The Freiburg Mindfulness Inventory (FMI) was treated as a two-factor instrument to measure attention and attitude of

experiences. For this study, the item numbers 4, 6, 8, 9, 11, 12, 13, and 14 were used to observe more closely the factor of attitude, since the items pay close attention to how attitudes are perceived. The item numbers 1, 2, 3, 5, 7, and 10 were used to observe more closely the factor *attention*. Scores were based on the mean of all 14 items.

The Kentucky Inventory of Mindfulness Skills (KIMS), a 39-item self-report inventory used to assess self-mindfulness skills perceived by the participants. This scale is especially helpful in this study because it measures the perceptions of the teachers on their own skills in mindfulness. This scale was used to measure four confirmed factors set by the developers Baer, Smith, and Allen (2004). This survey consists of a 5-point scale in which each item is scored on a Likert scale with 1 as "Never or very rarely true,"; 2 as "Rarely true"; 3 as "Sometimes true"; 4 as "Often true"; and 5 as "Very often or always true." A mean score was calculated for each factor observing, describing, acting with awareness, and accepting without judgment. The highest score each participant could receive for a total score in this scale was 195. The break-down of the mindfulness levels were as follows: 1-65 = low mindfulness, 66-131 = medium mindfulness, and 132-195 = high mindfulness. All items marked with "R" were reverse coded. The scale items are rated on a 5-point Likert scale ranging from 1 (never or very rarely true) to 5 (almost always or always true). The items reflected either direct descriptions of the mindfulness skills the teachers self-reported or the absence of mindfulness skills. Therefore, reverse coding was necessary. This process entailed changing 1 to 5, 2 to 4, 4 to 2, and 5 to 1 (3 stays the same). The sum of scores were computed for each factor as shown below (Baer et al., 2004):

Observe: 1, 5, 9, 13, 17, 21, 25, 29, 30, 33, 37, 39

Describe: 2, 6, 10, 14R, 18R, 22R, 26, 34

Act with Awareness: 3R, 7, 11R, 15, 19, 23R, 27R, 31R, 35R, 38

Accept without Judgment: 4R, 8R, 12R, 16R, 20R, 24R, 28R, 32R, 36R

Some sample items are "I'm good at thinking of words to express my perceptions, such as how things taste, smell, and sound" and "I tell myself that I shouldn't be thinking the way I am thinking." This scale took approximately 10 minutes to complete.

To measure teacher self-efficacy, the Teachers' Sense of Efficacy Scale (TSES), a 24-item scale measured loaded levels of teacher efficacy in areas of efficacy in student engagement, efficacy in instructional practices, and efficacy in classroom management. Scoring was done by computing each of these confirmatory factors by grouping the items in the following manner: Items 1, 2, 4, 6, 9, 12, 14, 22 were added together for the factor efficacy in student engagement; Items 7, 10, 11, 17, 18, 20, 23, 24 were added together for the factor efficacy in instructional strategies; and Items 3, 5, 8, 13, 15, 16, 19, 21 were added together for the factor efficacy in classroom management. Teachers were asked to specify for each item what they perceived to be their level of efficacy. The TSES scale items were measured on a 9-point Likert scale. For each item in the TSES, scores ranged from 1 to 9, with a score of 9 being the highest score for each item, indicating high self-efficacy. The item responses were the following: 1-2 = "nothing"; 3-4 = "very little"; 5-6 = "some influence"; 7-8 = "quite a bit"; and 9 = "a great deal." The participants viewed the five choices and circled one number on the spectrum of 1-9 where they perceived themselves to be for each item. For example, if participants wanted to express an answer of "very little," they circled number 3. However, if they perceived their efficacy for that item fell between "very little" and "some influence," then participants circled a score of 4. In scoring this scale, the maximum overall score was 216. A mean score for teacher efficacy was calculated by taking the sum of all items and dividing by the total number of items, which was 24. This provided for each participant a total mean efficacy level score. The mean scores were

coded such that the higher the score, the higher the efficacy: 1-2 = "very low"; 3-4 = "low"; 5-6 = "average"; 7-8 "high"; and 9 = "very high." In context, a participant's total mean score of a 6 would be analyzed as an average score on the efficacy scale.

Table 4.4

Descriptive Statistics for the Subscale Scores from the Mindfulness Instruments

Instrument	Subscale	*M*	*SD*	Min	Max
MAAS	-	4.22	0.78	2.20	5.73
FMI	Attention Mindfulness	2.99	0.46	2.00	3.83
	Attitude Mindfulness	2.64	0.48	1.50	3.75
KIMS	Observing Mindfulness	3.30	0.63	2.17	4.75
	Describing Mindfulness	3.74	0.74	1.63	5.00
	Act with Awareness	3.07	0.51	1.80	4.20
	Accept with No Judgment	3.31	0.63	1.78	4.67

Note. All statistics based on $n = 80$ observations.

Table 4.4 reveals teachers' overall scores for KIMS fourth sub-factor Accept with No Judgment. There were no statistically significant differences between Accept with No Judgment and self-efficacy ($M = 3.31$, $SD = 0.63$) with a minimum score of 1.78 and a maximum score of 4.67, on a scale of 1 to 5, with 5 being "very true" or "always true." A mean score of 3.31 indicated that most teachers felt most of the following items were "sometimes true": "I criticize myself for having irrational or inappropriate emotions"; "I tend to evaluate whether my perceptions are right or wrong"; "I tell myself that I should not be feeling this way"; "I believe some of my thoughts are abnormal or bad and I shouldn't think that way"; "I make judgments about whether my thoughts are good or bad"; "I tend to make judgments about how worthwhile or worthless my experiences are"; "I tell myself that I shouldn't be thinking the way I'm

thinking"; "I think some of my emotions are bad or inappropriate and I shouldn't feel them"; and "I disapprove of myself when I have irrational ideas."

School size classification was based on the total of number of students enrolled in each school from grades K-12. Reported data revealed that most of the teachers taught in schools that were in Classification AA (126-234 students) and in Classification AAA (235-411 students). Based on each district's grades 9-12 student population, 23.8% taught in schools that were in Classification A (125 students or fewer), 27.5% taught in schools that were in Classification AA (126-234 students), 7.5% taught in schools that were in Classification AAA (235-411 students), and 41.3% taught in schools that were in Classification AAAA (412 students or more). These classifications are based on the North Dakota High School Activities Association's classification system for determining sports' placements for all North Dakota school districts. Participants provided subject area most taught: 20.00 taught English, 17.50% taught math, 13.75% taught "other" subjects, 10% taught history, 10.00% science, 8.75% taught physical education, 7.50% taught elementary education, 5.00% taught special education, 3.75% taught art/music, 2.50% taught foreign language, and 1.25% taught agricultural education.

Table 4.5

Descriptive Statistics for Sample Demographics (Categorical Variables)

Demographic	Category	*n*	Percent
Gender	Male	55	68.8
	Female	25	31.2
Type of school	Public	63	78.7
	Private	17	21.3
School size classification	A (125 students or fewer)	19	23.8
	AA (126-234 students)	22	27.5
	AAA (235-411 students)	6	7.5
	AAAA (412 students or more)	33	41.3
Main subject taught	English	16	20.00
	Mathematics	14	17.50
	Other	11	13.75
	History	8	10.00
	Science	8	10.00
	Physical education	7	8.75
	Elementary	6	7.50
	Special education	4	5.00
	Art/Music	3	3.75
	Foreign language	2	2.50
	Agriculture education	1	1.25

Table 4.6

Descriptive Statistics for Sample Demographics (Numerical Variables)

Demographic	*M*	*SD*	Min	Max
Age	43.58	126.30	22	69
Years of experience	15.73	12.051	1	46
Classes taught daily	5.06	3.278	2	9
Overall job satisfaction (five-point scale)	4.03	.711	2	5
School size classification	2.66	1.242	1	4

Note. All statistics based on a sample of $n = 80$.

Table 4.5 shows frequencies of the categorical covariates. Of the 80 participants, 68.8% were female (n = 55) and 31.2% were male (n = 25). In this sample, 78.7% of the participants taught in public schools and 21.3% taught in private schools. This proportion was valid taking into consideration that the ratio of public to private schools in North Dakota is 10 to 1, with a total of 532 public K-12 schools and 53 private K-12 schools in North Dakota (North Dakota Dept. of Public Instruction, 2018).

As illustrated in Table 4.6, the average age of the teacher participants was 43.58, with the youngest teacher being 22 and the oldest teacher being 69. The number of years of teaching experience was 15.73 years, as shown in Table 4.6, with a standard deviation of 12.051. The fewest years of teaching was one year, and the most years of teaching was 46 years. With the number of classes taught on a daily basis, most teachers reported an average of 5.06 classes a day. Sixty-seven percent (67%) of the participants taught five or more classes per day, while 33% of the participants taught fewer than five classes a day. One teacher reported teaching nine class periods every day. Ten percent (10%) of participants reported engaging with 25 or fewer students every day, 24% of participants engaged with 26-50 students every day, 32% of the participants engaged with 51 to 75 students every day, and 34% of participants engaged with over 76 students daily. An analysis of the frequencies indicated K-12 teachers reported high overall job satisfaction (M = 4.06, SD = .711). Figure 4.1 shows most teachers feel they are highly satisfied with their teaching jobs. Job satisfaction was reported on a scale of 1= "extremely low satisfaction," 2 = "low satisfaction," 3 = "average," 4 = "high satisfaction," and 5 = "extremely high satisfaction." Four percent (4%) of teachers reported low job satisfaction, 13% reported average job satisfaction, 61% reported high job satisfaction, and 22% reported extremely high job satisfaction. No reports were stated of "very low" job satisfaction. No

significant differences were found between private school teachers versus public school teachers. Sample demographics such as specific school name where the participants taught was not requested to ensure participant confidentiality. Table 4.7 reveals teachers perceived their self-efficacy levels to be highest in classroom management and lowest in student engagement.

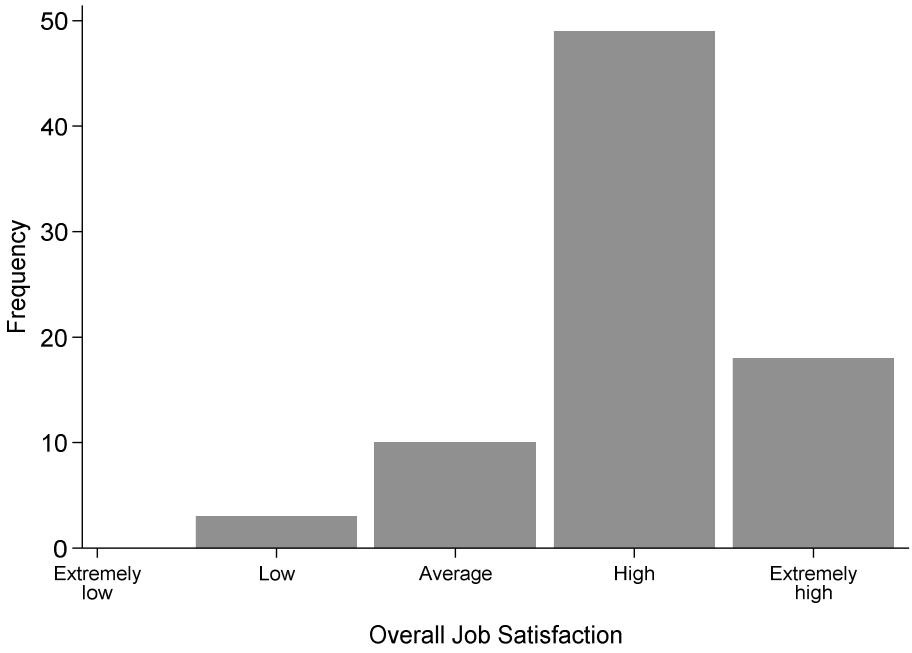


Figure 4.1. Histogram for the teachers' overall job satisfaction ratings (n = 80).

Table 4.7

Descriptive Statistics for Subscale Scores

Instrument	Subscale	*M*	*SD*	Min	Max
TSES	Student engagement	6.44	0.90	3.38	8.63
	Instructional strategy	7.13	0.79	5.00	8.38
	Classroom management	7.17	0.85	3.38	9.00
KIMS	Observing	3.30	0.63	2.17	4.75
	Describing	3.74	0.74	1.63	5.00
	Acting with awareness	3.07	0.51	1.80	4.20
	Accepting without judgement	3.31	0.63	1.78	4.67
FMI	Attention	2.99	0.46	2.00	3.83
	Attitude	2.64	0.48	1.50	3.75
MAAS	-	4.22	0.78	2.20	5.73

Note. All statistics based on $n = 80$ observations.

Table 4.8

Bivariate Correlations Among Subscale Scores

	TSES Student engagement	TSES Instructional strategy	TSES Classroom management	KIMS Observing	KIMS Describing	KIMS Acting w/ awareness	KIMS Accepting w/o judgement	FMI Attention	FMI Attitude
TSES Instruc. Strategy	.582*								
TSES Classroom mgmt.	.374*	.407*							
KIMS Observing	.360*	.330*	.137						
KIMS Describing	.174	.385*	.177	.522*					
KIMS Act. w/ aware.	.319*	.292*	.130	.332*	.336*				
KIMS Accept. w/o judge.	.177	.225*	.137	.114	.363*	.374*			
FMI Attention	.333*	.357*	.137	.601*	.427*	.598*	.324*		
FMI Attitude	.328*	.225*	.135	.472*	.389*	.431*	.417*	.614*	
MAAS	.246*	.017	.084	.289*	.195	.523*	.373*	.563*	.358*

Note. Sample size for all correlations is $n = 80$.

* $p < .05$

Color-code legend for correlation magnitude:

Small	Medium	Large
$.1 \leq r < .3$	$.3 \leq r < .5$	$r > .5$

Results Relevant to Research Question 1

The first research question is restated here for reference: How do the various aspects of mindfulness (attention awareness, attention, attitude, observing, describing, acting with awareness, and accepting without judgement) predict the three different types of teacher self-efficacy (student engagement, instructional strategies, and classroom management)? This question should take into consideration the possible impact of and moderation by various demographics, such as overall job satisfaction, age, teaching experience, gender, number of class periods taught per day, content area, and school type (public or private).

General Analytical Approach

Multiple linear regression (MLR) was used to analyze three different models, one for each type of teacher self-efficacy (measured by the three TSES subscales) as the dependent variable. The initial pool of independent variables was composed of the various aspects of mindfulness (as measured by the KIMS, FMI, and MAAS) as well as other demographic covariates, such as age, gender, years of experience, type of school (public or private), school size (using the classification system from the North Dakota High School Activities Association), number of course periods taught per day, and overall job satisfaction (single item using a five-point rating scale). First-order interactions were allowed between the mindfulness variables and the demographic covariates.

Forward stepwise variable selection ($p_{in} = .05$, $p_{out} = .10$) was used to determine the most important independent variables for each model. The stepwise procedure was modified to accommodate interaction terms (principle of marginality); specifically, if an interaction term was retained in a model, then both component main effects were also retained (Fox, 2016). Since

interaction terms are being considered in all three models, all numerical predictors were centered to preemptively mitigate collinearity.

The standard battery of diagnostic checks was conducted for each model: basic assumptions (linearity, normality of residuals, etc.), collinearity (using VIF), and excessively influential cases (using Cook's *D*).

MLR for Teacher Self-Efficacy Regarding Student Engagement

A total of six regressors were retained in the model for student-engagement self-efficacy: two interaction effects (gender × KIMS observing and age × FMI attitude) and four main effects (age, gender, KIMS observing, and FMI attitude). This overall model produced a significant squared multiple correlation: $R^2 = .294$, adjusted $R^2 = .236$, $F(6, 73) = 5.07$, $p < .001$. Hence, this model accounts for nearly 30% of the variability observed in the TSES student engagement scores. While none of the main effects were statistically significant, both interaction effects were. Specifically, the interaction of gender and KIMS observe was significant, $b = 0.855$, $\beta = .316$, $p = .011$, as was the interaction of age and FMI, $b = -0.033$, $\beta = -.224$, $p = .028$. The summary of results for the overall model are given in Table 4.9.

Table 4.9

Summary of MLR for Teacher Self-Efficacy Regarding Student Engagement

Regressor	*b*	*SE*	*B*	*t*	*P*
Intercept	6.529	.109	-	60.163	< .001
Age	0.009	.007	0.132	1.323	.190
Gender[a]	-0.063	.211	-0.033	-0.299	.766
KIMS Observing	0.143	.190	0.100	0.755	.453
FMI Attitude	0.379	.219	0.202	1.734	.087
Gender[a] × KIMS Observing	0.885	.338	0.316	2.618	.011
Age × FMI Attitude	-0.033	.015	-0.224	-2.240	.028

Note. All *t*-tests based on 73 degrees of freedom.

[a]Female used as the base reference category.

Gender as a moderator for the relationship between KIMS observing and teacher self-efficacy for student engagement. In order to reveal the nature of the interaction between gender and KIMS observe, the simple slopes (conditional regression weights) for KIMS observe were computed at both levels of gender (Table 4.10). While the relationship between teacher self-efficacy for student engagement and KIMS observe was not significant for female teachers ($b = .143$, $p = .453$), there was a significant positive relationship between these variables for male teachers ($b = 1.028$, $p = .002$). Figure 4.2 illustrates the simple slopes of both male and female teachers, indicating a significant relationship for male teachers in observing and teacher self-efficacy for student engagement, whereas females indicated no significant relationship between observing and teacher self-efficacy and student engagement.

Table 4.10

Simple Slopes by Gender for Teacher Self-Efficacy Regarding Student Engagement Predicted from KIMS Observing

Gender	*b*	*SE*	*T*	*P*
Female	0.143	.190	0.755	.453
Male	1.028	.312	3.297	.002

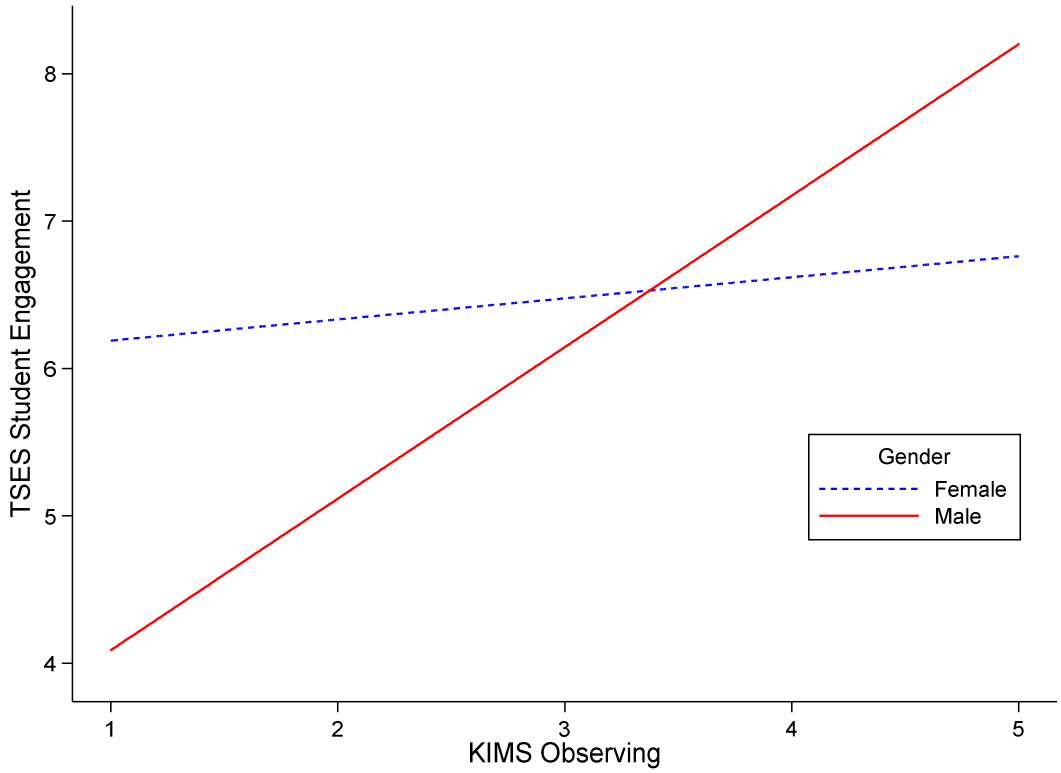


Figure 4.2. Simple slopes by gender for teacher self-efficacy in student engagement predicted by KIMS observing. Solid and dashed lines represent significant and non-significant slopes, respectively.

Age as a moderator for the relationship between FMI attitude and teacher self-efficacy for student engagement. In order to reveal the nature of the interaction between age and FMI attitude, the simple slopes (conditional regression weights) for FMI attitude were computed for ages 25 to 65 at five-year intervals (roughly covering the range of observed ages in the sample; Table 4.11). The relationship between teacher self-efficacy for student engagement

and FMI attitude was significant for age 25 (b = 0.993, p = .004; significant for age 30 (b = 0.828, p = .004; significant for age 35 (b = 0.663, p = .008; and significant for age 40 (b = 0.497, p = .027), at age 45, there is no significant relationship, (b = 0.332, p = .138), no significant relationship at age 50, (b = 0.167, p = .501), no significant relationship at age 55, (b = 0.001, p = .997), no significant relationship at age 60, (b = -0.164, p = .632), and no significant relationship at age 65, (b = 0.329, p = .414). However, interestingly enough, at around age 60, the relationship between self-efficacy for student engagement and FMI attitude for age begins to become a negative relationship. Figure 4.3. further illustrates this interaction of student engagement and attitude starting out as a positive relationship with student engagement but begins to lose strength or flatten out at age 55. At around age 65, a negative relationship is revealed between the interaction of FMI attitude and student engagement and the main effect age.

Table 4.11

Simple Slopes by Age for Teacher Self-Efficacy Regarding Student Engagement Predicted from FMI Attitude

Age	*B*	*SE*	*T*	*P*
25	0.993	0.334	2.971	.004
30	0.828	0.282	2.932	.004
35	0.663	0.242	2.737	.008
40	0.497	0.220	2.261	.027
45	0.332	0.221	1.499	.138
50	0.167	0.246	0.676	.501
55	0.001	0.288	0.004	.997
60	-0.164	0.341	-0.481	.632
65	-0.329	0.401	-0.822	.414

Note. All t-tests based on 73 degrees of freedom.

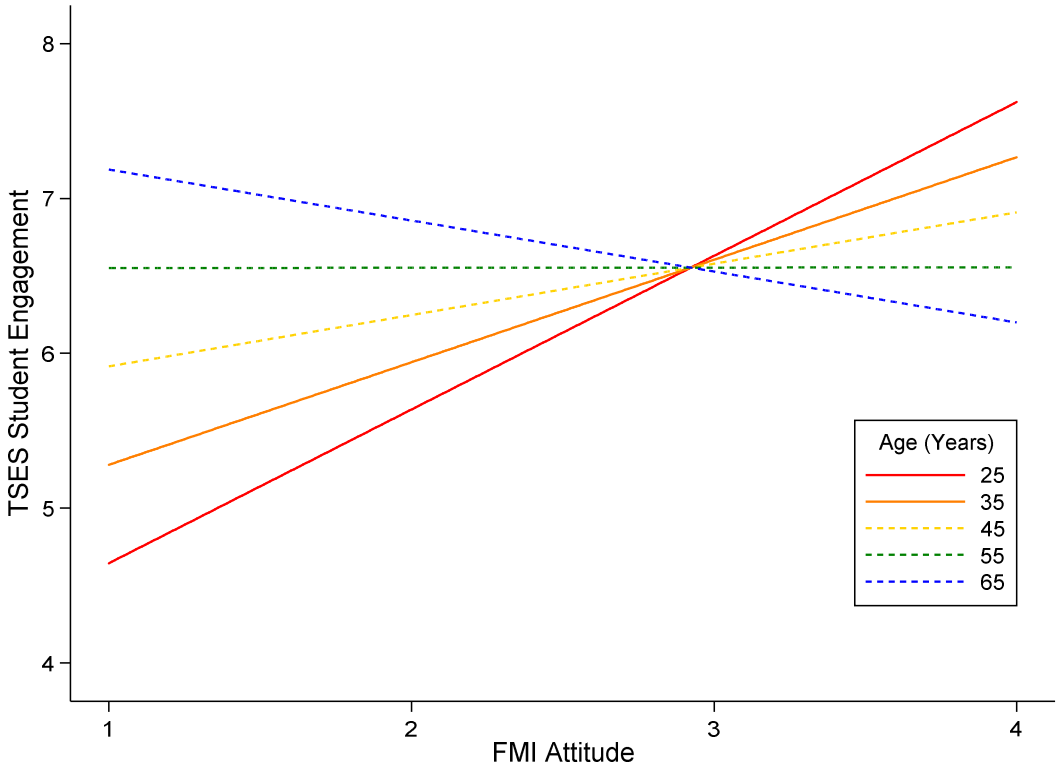


Figure 4.3. Simple slopes by age for teacher self-efficacy in student engagement predicted by FMI attitude. Since age is a numerical variable with many observed values in this sample, only a few age values are shown in this graph to exemplify the moderation. Solid and dashed lines represent significant and non-significant slopes, respectively.

MLR for Teacher Self-Efficacy Regarding Instructional Strategies

A total of six regressors were retained in the model for instructional strategies self-efficacy: one interaction effect (Years of experience × KIMS acting with awareness × FMI attitude) and five main effects (Years of experience, KIMS describing, KIMS acting with awareness, and FMI attention, and MAAS attention awareness). This overall model produced a significant squared multiple correlation: $R^2 = .328$, adjusted $R^2 = .273$ $F(6, 73) = 5.95$, $p < .001$. Hence, this model accounts for nearly 33% of the variability observed in the TSES instructional strategies scores. Three of the main effects were statistically significant, as well as interaction effect. The regressor KIMS describing and instructional strategies were significant, $b = 0.272$, $\beta = .254$, $p = .021$. The regressor FMI attention and instructional strategies were significant, $b =$

0.577, β = .336, p = .016. The regressor MAAS attention awareness and instructional strategies were significant, b = -0.324, β = -.321, p = .010. The interaction of Years of experience and KIMS acting with awareness was significant, b = -0.038, β = -.267, p = .011. A summary of results for the overall model are given in Table 4.12.

Years of experience as a moderator for the relationship between KIMS acting with awareness and teacher self-efficacy for instructional strategies. In order to better illustrate the nature of the interaction between Years of experience and KIMS acting with awareness, the simple slopes for KIMS acting with awareness were computed for years of experience 0 to 45 at five-year intervals (roughly covering the range of observed years of experience in the sample; Table 4.12.

The pattern of the simple slopes in Table 4.13 shows that the relationship between teacher self-efficacy for instructional strategies and KIMS acting with awareness starts at positive values but became weaker as teachers' years of experience increased. Figure 4.4 illustrates the conditional regression weights are significant for the relatively lower years of experience then become non-significant after ten years of teaching experience.

Table 4.12

Summary of MLR for Teacher Self-Efficacy Regarding Instructional Strategies

Regressor	*B*	*SE*	*β*	*t*	*P*
Intercept	7.151	0.076	-	94.277	< .001
Years of experience	0.011	0.007	.163	1.625	.108
KIMS describing	0.272	0.115	.254	2.360	.021
KIMS acting with awareness	0.163	0.200	.105	0.815	.418
FMI attention	0.577	0.234	.336	2.465	.016
MAAS attention awareness	-0.324	0.123	-.321	-2.636	.010
Years of experience × KIMS acting with awareness	-0.038	0.015	-.267	-2.626	.011

Note. All *t*-tests based on 73 degrees of freedom.

Table 4.13

Simple Slopes by Years of Experience for Predicting Teacher Self-Efficacy Regarding Instructional Strategies from KIMS Acting with Awareness

Years of experience	*b*	*SE*	*t*	*p*
0	0.767	0.271	2.827	.006
5	0.575	0.227	2.536	.013
10	0.383	0.200	1.917	.059
15	0.190	0.198	0.964	.338
20	-0.002	0.221	-0.008	.993
25	-0.194	0.264	-0.736	.464
30	-0.386	0.318	-1.216	.228
35	-0.579	0.378	-1.530	.130
40	-0.771	0.443	-1.742	.086
45	-0.963	0.509	-1.892	.063

Note. All *t*-tests based on 73 degrees of freedom.

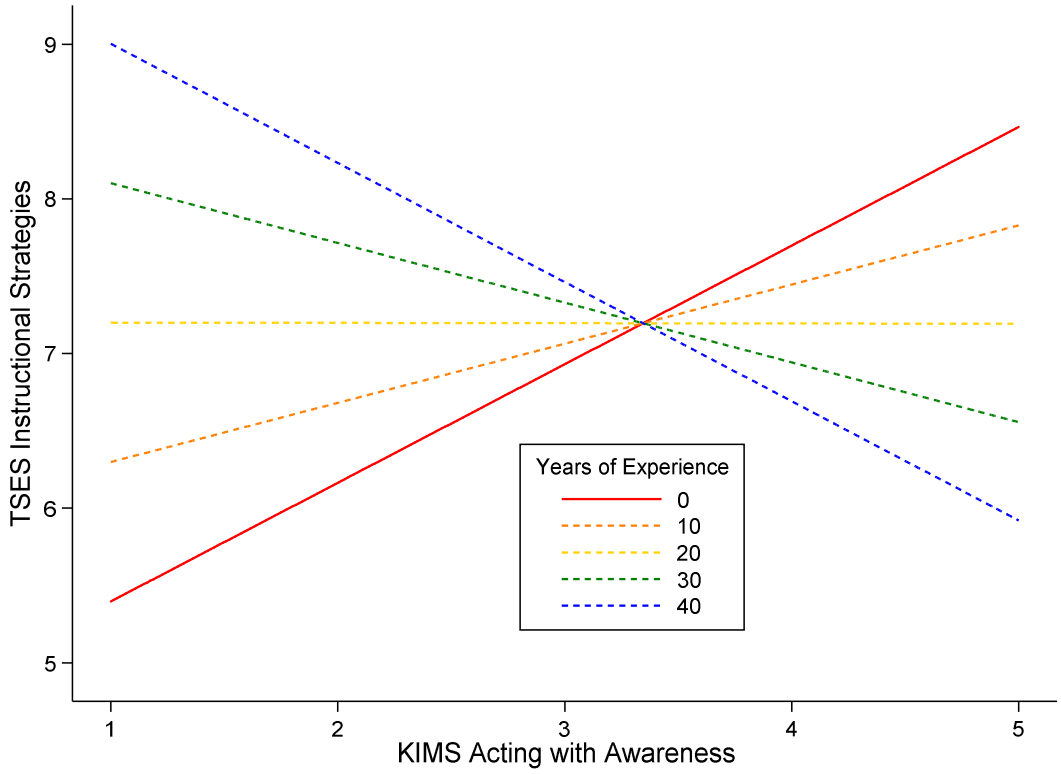


Figure 4.4. Simple Slopes by years of experience for teacher self-efficacy in instructional strategies predicted by KIMS acting with awareness. Since years of experience is a numerical variable with many observed values in this sample, only a few values for years of experience are shown in this graph to exemplify the moderation. Solid and dashed lines represent significant and non-significant slopes, respectively.

MLR for Teacher Self-Efficacy Regarding Classroom Management

A total of two regressors were retained in the model for classroom management self-efficacy: two main effects (Years of experience and overall job satisfaction). This overall model produced a significant squared multiple correlation $R^2 = .207$, adjusted $R^2 = .187$ $F(2, 77) = 10.06$, $p < .001$. Hence, this model accounts for nearly 21% of the variability observed in the TSES classroom management scores. Both of the main effects Years of experience and Overall job satisfaction were statistically significant. The regressor Years of experience and classroom management were significant, $b = 0.021$, $\beta = .302$, $p = .004$. The regressor Overall job

satisfaction and classroom management were significant, $b = 0.376$, $\beta = .315$, $p = .003$. The summary of results for the overall model are given in Table 4.14.

Table 4.14

Summary of MLR for Teacher Self-Efficacy Regarding Classroom Management

Regressor	*B*	*SE*	*B*	*T*	*p*
Intercept	7.166	0.086	-	83.711	< .001
Years of experience	0.021	0.007	.302	2.964	.004
Overall job satisfaction	0.376	0.122	.315	3.088	.003

Note. All *t*-tests based on 73 degrees of freedom.

Results Relevant to Research Question 2

The second research question is provided here for reference: What is the nature of the relationships among the teacher self-efficacy constructs (student engagement, instructional strategies, and classroom management)?

Table 4.15 shows a correlation matrix comparing the factors student engagement, instructional strategies, and classroom management. The relationship among the three subscales indicated strong interactions among all three factors. Efficacy in student engagement strongly correlated with efficacy in instructional strategies, $r = .58$, $p = .000$. The relationship between student engagement and classroom management also strongly correlated, $r = .38$, $p = .000$. The relationship between instructional strategies and classroom management strongly correlated, $r = .41$, $p = .000$. Correlation is significant at the .05 level. The subscale student engagement highly correlated at a 0.01 level with teacher efficacy levels, $r = .75$, $p = .000$. All eight items within the subscale student engagement correlated very strongly with self -efficacy. Item #1 “How can you get through to the most difficult students?”, $r = .49$, $p = .000$; item #2 “How much can you do to help your students think critically?”, $r = .47$, $p = .000$; item #4 “How much can you do to

motivate students who show low interest in school work?", $r = .65$, $p = .000$; item # 6 "How can you do to get students to believe they can do well in school work?", $r = .54$, $p = .000$; Item #9 "How can you help your students value learning?", $r = .53$, $p = .000$; item #12 "How much can you foster student creativity?", $r = .39$, $p = .000$; item #14 "How much can you do to improve the understanding of a student who is failing?", $r = .63$, $p = .000$; and item #22 "How much can you assist families in helping their children do well in school?", $r = .53$, $p = .000$. See Appendix D for complete list of survey items.

The second subscale in the TSES found strong correlations between seven of the eight subscale items for instructional strategies and self-efficacy levels. Item #7 "How well can you respond to difficult questions from your students?", $r = .45$, $p = .000$; item #10 "How much can you gauge student comprehension of what you have taught?", $r = .24$, $p = .03$; item # 11 "To what extent can you craft good questions for your students?", $r = .46$, $p = .000$; item # 17 "How much can you do to adjust your lessons to the proper level for individual students?", $r = .36$, $p = .001$; item # 18 "How much can you use a variety of assessment strategies?", $r = .46$, $p = .000$; item # 23 "How well can you implement alternative strategies in your classroom?", $r = .40$, $p = .000$; and item #24 "How well can you provide appropriate challenges for very capable students?", $r = .41$, $p = .000$. Item # 20 did not correlate with efficacy levels, $r = .10$, $p = .405$ "To what extent can you provide an alternative explanation or an example when students are confused?" The mean for this item was 7.51, the highest mean of this subscale.

In the final subscale in the TSES, classroom management, seven of the eight subscales in classroom management strongly correlated with self-efficacy levels. Item #3 "How much can you do to control disruptive behavior in the classroom?", $r = .45$, $p = .000$; item #5 "To what extent can you make your expectations clear about student behavior?", $r = .56$, $p = .000$; item # 8

"How well can you establish routines to keep activities running smoothly?", $r = .34$, $p = .002$; item #13 "How much can you do to get children to follow classroom rules?", $r = .64$, $p = .000$; item #15 "How much can you do to calm a student who is disruptive or noisy?", $r = .51$, $p = .000$; item # 16 "How well can you establish a classroom management system with each group of students?", $r = .34$, $p = .002$; item #19 "How well can you keep a few problem students from ruining an entire lesson?", and item #21 "How well can you respond to defiant students? $r = .52$, $p = .000$. Since the overall mean for student engagement for the teachers was moderately high, $M = 6.42$, it can be assumed that to what extent teachers feel they can manage a classroom is strongly associated with increasing efficacy levels. See Appendix D for complete list of survey items.

Table 4.15

Correlation Matrix for the TSES Subscales: Student Engagement, Instructional Strategies, & Classroom Management.

	Student Engagement	Instructional Strategies
Instructional Strategies	.582	-
Classroom Management	.374	.407

Note. All correlations are statistically significant ($p < .001$).

Summary of Results

Concerning the demographic data of the participating K-12 teachers, 69% of the sample population was female and 31.2% was male. The average age of the teachers was 43.58, with the minimum age of 22 and the maximum age of 69. The average years of teaching experience was 15.73 years, with a minimum of one-year teaching experience to a maximum of 46 years of teaching experience. School size or total number of students enrolled in each school district's

high school ranged from 24% of the teachers teaching in a school district of 125 students or fewer in grades 9 to 12, 28% of the teachers teaching in a school district with 126-234 students in grades 9 to 12, 7% of the teachers teaching in a school district with 235-411 students enrolled in grades 9 to 12, and 41% of the teachers teaching in a school district with 411+ students in enrolled in grades 9 to 12. The average mean for job satisfaction for the teacher participants was 4.05, indicating a high level of job satisfaction. No teachers reported having very low job satisfaction of the 80 subjects. Job satisfaction was reported on a scale of 1= "extremely low satisfaction," 2 = "low satisfaction," 3 = "average," 4 = "high satisfaction," and 5 = "extremely high satisfaction." Four percent (4%) of teachers reported low job satisfaction, 13% reported average job satisfaction, 61% reported high job satisfaction, and 22% reported extremely high job satisfaction. No reports were stated of "very low" job satisfaction (See Figure 4.1). The average years of teaching experience in the sample population was 15 years and 22% of these teachers felt they were highly satisfied with their job as a teacher.

With regard to the analysis of Teachers' Sense of Efficacy Scale (Table 4.3), the sub-factor student engagement showed an average of 6.44 among K-12 teachers, indicating that teacher self-efficacy in conjunction with student engagement is average to high. The self-efficacy sub-factor instructional strategies showed an average of 7.13 among K-12 teachers, indicating that teacher self-efficacy in conjunction with student engagement is high but not extremely high. The third self-efficacy sub-factor classroom management showed an average of 7.17 among K-12 teachers, indicating that teacher self-efficacy in conjunction with student engagement is high but not extremely high.

Results of Construct Teacher Self-Efficacy

Table 4.12 shows a correlation matrix comparing subscale factors student engagement, instructional strategies, and classroom management. The relationship among the three subscales indicated strong correlations among all three factors. Teacher efficacy in student engagement strongly correlated with efficacy in instructional strategies, $r = .58$, $p = .000$. What this finding may indicate is that teachers who sense they can effectively create innovative lessons and use instructional strategies, such as engaging students in discussion or helping students to use strategies to provoke higher order thinking and problem solving, the more these teachers have control in increasing student engagement.

The results to research question #1 look at the three subscale factors of teacher self-efficacy in regard to student engagement, instructional strategies, and classroom management. What is indicated in Table 4.10 is that the interaction of gender and KIMS observe were significant in regard to self-efficacy sub-factor student engagement self-efficacy for males can be predicted by the levels of observation male teachers are exhibiting.

Female teacher efficacy, as was also indicated in Table 4.10, did not reveal a significant relationship between KIMS observe and student engagement; however, the relationship is positive, meaning that when teachers are more observant of their ability to engage students, self-efficacy tends to increase because being able to engage students in areas such as getting through to difficult students, formulating good discussion questions, getting students to think critically, motivating students with low interest in school, helping students see the value in learning and that they can do well in school, assisting families in helping their children succeed, improving the understanding of students who are failing, and a confident feeling they are doing an effective job as a teacher, all contribute to this self-efficacy. In 1981, Guskey found that female teachers

tend to feel more responsible for student achievement than male teachers, regardless of age of the teachers. The idea that females tend to evaluate teacher ability to promote learning much higher than males. Therefore, females tend to be much more forgiving of themselves in areas that may be somewhat challenging. In addition, this finding may indicate that female teachers feel much more confident in their performance of motivating students, increasing student curiosity, and bringing out student potential.

Age as a moderator for the relationship between FMI attitude and teacher self-efficacy for student engagement found significant results. Females tend to be much more forgiving of themselves in areas that may be somewhat challenging. In addition, this finding may indicate that female teachers feel much more confident in their performance of motivating students, increasing student curiosity, and bringing out student potential.

As age increased, attitude decreased until about the age of 40. Figure 4.8 illustrates the interaction of student engagement and attitude starting out as a positive relationship with TSE student engagement but begins to lose strength with no significant correlation at age 55. However, at around the age of 65, the relationship begins to show a negative correlation, meaning that over time and near retirement age, as mindfulness levels of attitude tend to increase, TSE student engagement increases, indicating that teachers in the beginning years of teaching who have a high mindfulness levels in accepting unpleasant experiences, who are able to smile when life gets difficult, or are patient and friendly to themselves no matter the situation, tend to have higher TSE in student engagement. However, an interesting opposite trend was found at approximately retirement age, where teachers tend to feel a drop in TSE in student engagement in these areas as their mindfulness or awareness of what is happening in their lives and how well they can accept difficult situations and successfully engage students.

Results also suggest that TSE with instructional strategies indicate significant positive links with the mindfulness factors describing, attention, and attention awareness. The interaction of years of experience and acting with awareness also revealed a strong positive relationship but became weaker as teachers' years of experience increased. After approximately ten years of teaching, the relationship between TSE with instructional strategies became nonsignificant with acting with awareness. Both factors years of experience and job satisfaction significantly predicted participants' TSE with classroom management.

Three of the main effects—describing, FMI attention, and instructional strategies—were statistically significant. As main effect describing increases, TSE in instructional strategies also increases. As KIMS describing increases, TSE for instructional strategies also increases. When MAAS attention awareness increases, TSE for instructional strategies significantly decreases.

Years of experience as a moderator for the relationship between KIMS acting with awareness and TSE for instructional strategies showed significant results. Table 4.9 shows that the relationship between instructional strategies in conjunction with a main effect acting with awareness. The pattern of the simple slopes in Table 4.13 show that after ten years of teaching, TSE decreases in regard to instructing their students, such as how well they can provide suitable challenges for the more advanced students, how well they can challenge students to critically think and problem solve, how well they feel they assess students' comprehension of the teaching material, and how confident they feel in providing students with alternative examples and explanations when students are confused with the content.

Finally, Table 4.14 illustrates that both Years of experience and Overall job satisfaction significantly correlated with efficacy in classroom management. Teachers who feel they can effectively get students to follow classroom rules and prevent students from disrupting the

classroom, as well as impose daily procedures to maintain a well-managed classroom and deal with aggressive students, find increased overall job satisfaction. Job satisfaction increases when teachers feel they can manage their work surroundings.

CHAPTER V: DISCUSSION

Chapter V presents a brief overview of the present study, including a recapitulation of the introduction, problem statement, research questions, literature review, methodology, and findings. The summary provides an overview of the purpose of the study and ties the literature review to the data in formulating conclusions, discussion, and recommendations. The conclusion/discussion section provides conclusions drawn based on the results, and the discussion section provides the explanations of the results and how theories presented in the study tie into conclusions of the study. The discussion section also provides evolving questions deriving from the conclusions. Finally, the recommendations offer ideas for further studies that have emerged from these findings and the conclusions of the study.

Overview

Teaching is one of the most challenging careers. Kindergarten to grade 12 (K-12) teaching is certainly viewed as one of the most stressful occupations one can undertake (Johnson et al., 2005). It is expected that teacher education programs will provide new teachers (and even experienced teachers through professional development) with theoretical knowledge and skillsets to be successful in teaching, especially with classroom management of some of the toughest kids. However, mindfulness skills, which are crucial skills, are taught little if at all, in teacher education programs. Mindfulness, as was found in this study, provides an opportunity for teachers to think about their teaching performance and their overall content knowledge, and if their performance and teaching of content are increasing student learning and achievement. Mindfulness has been found to increase the general well-being of individuals (Brown & Ryan, 2003). The results of this study revealed that there were significant correlations between teachers' self-efficacy levels and their awareness of engaging students in their school work, their

success in managing their classrooms, and how well they implement instructional strategies to both manage the classroom and to increase student learning. Male teachers' teacher self-efficacy is more highly predictive in how well they perceive their ability to engage students. In regard to females, there was no significant correlation between teacher self-efficacy in student engagement and gender. This conclusion is supported with Guskey's (1981) findings in that female teachers tend to feel more responsibility for student achievement than male teachers, regardless of age of the teachers. However, this finding in conjunction with Guskey's theory does not suggest that females are more sensitive to students' well-being or personal situations. This may suggest that males tend to want to solve issues immediately, whereas females tend to find a variety of ways to solve issues. This could further imply that male teachers are more acutely aware of how they themselves are reacting to situations in student engagement. Overall, this study has concluded that practicing mindfulness is an imperative skill due to its enhancing agents that help people enjoy their jobs, as was found by other research (Germer, Siegel, & Fulton, 2005). Germer, Siegel, and Fulton (2013) explained that mindfulness is "awareness of present existence with acceptance."

Understanding the difference of being in a mindful state and a mindless state is helpful in teacher reflection. One can be mindful by being aware of one's anger in any given moment. Brown and Ryan (2003) defined mindfulness as an awareness and attentiveness that resembles our consciousness to our surroundings. One can be mindful of one's lack of supervision of students and maintaining classroom expectations. Teachers are with students approximately eight to ten hours a day, depending on after-school activities that teachers supervise and coach. Research supports that people are cognizant of things they are doing well or not doing well. People either accept that they are doing their job well, or they place blame on others (such as

students) for their deficient skills and teaching (Rotter, 1966). Awareness in daily living helps prevent individuals from rushing through activities and being inattentive to situations. Awareness also helps to be more attentive to others' emotions and self-aware of one's own emotions and protecting the mind from being in the future or in past experiences when one should be in the present moment (Brown & Ryan, 2003).

The correlations between student academic performance and adequately filling classrooms with effective and qualified teachers has been an ongoing debate for decades. The two areas of debate that have been argued is the idea that there are few students going into Teacher Education across North Dakota universities. Teacher production is not keeping up with the continual increase of students in the K-12 school districts. The other side of the argument proclaims that even though teachers are naturally retiring, teachers are reporting other reasons for leaving the teaching profession. Some of these reasons are overwhelming teaching duties, teaching out of their content areas, or lacking support from administration and public stakeholders. Yet from 1999 to 2012, teaching vacancies in public schools have decreased since 2007, as well as decreased in the number of difficult-to-staff teaching positions since 2007 (Malkus, Hoyer, & Sparks, 2015).

Teacher vacancies in classrooms in areas such as math, science, technology, and special education are more prevalent due to lack of professional development or inadequate content knowledge to teach more sophisticated and complex science, math, technology, and special education classes. These teachers often go back to school to teach fewer complex classes, such as English, history, physical education, or family and consumer science. Therefore, these math, science, technology and special education classrooms are being filled with teachers who teach outside these subjects by offering incentives—student loan forgiveness programs or quicker

teacher preparation programs—both of which do not focus on teachers leaving the profession or creating more support for teachers who do choose to teach areas such as math, science, technology, and special education (Cowan, Goldhaber, Hayes, & Theobald, 2016). The focus on recruiting more teachers is not helping the well-being of those teachers already teaching in the classroom. Teacher recruitment programs will not help keep math teachers teaching math, science teachers teaching science, or any teachers from leaving teaching altogether. The bigger picture is keeping teachers teaching what they initially were trained to teach and teach is with dignity and confidence (Ingersoll, 2003).

Based on all professions that are studied by college graduates, teacher education continues to hold the lowest rates of retention (Guarino, Santibanez, & Daly, 2006). With K-12 student enrollment increasing, teacher/student ratios increasing, and teacher attrition rising, teacher demand continues to elevate (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). According to the National Center for Education Statistics (NCES) (2011), the student-to-teacher ratio is projected to decrease from 15.0 to 14.7 by 2020, which is not a significant decrease. In addition, new teacher hire, according to the NCES, is misleading North Dakota with what a new hire consists of. Those teachers who change content subject areas in which they teach would be considered a new hire, even if they have been teaching for more than one year. This information does not suggest that the number of new teachers will increase, but that this increase may be due to teachers are leaving certain subjects and teaching new subjects.

The main concern is that until teacher retention rises, K-12 students will feel the highest impact. School districts, likewise, will be forced to hire more unprepared teachers (Camera, 2016). In 2012, teachers reported that they were not as satisfied with their teaching career as they reported in the past. The idea of teaching job satisfaction is decreasing and that 30 percent of

teachers are taking jobs or seeking training outside of Teacher Education (Riley, 2012) is alarming. In addition, the concept that teachers feel high stress and burnout compared to other career choices (Stoeber & Rennert, 2008) is also alarming. Other researchers have also concluded that initial teacher motivation and commitment to the profession, as well as the quality of these teachers' first teaching experience, are main factors toward teachers quitting (Rots, I., Aelterman, A., Vierick, P., & Vermulen, K., 2007). Teachers are overwhelmed by the actualities of the job, especially those aspects related to classroom management and behavior (Overbay, Patterson, & Grable, 2009). Dissatisfaction with work conditions in a profession that was expected to be more satisfying (Sutcher et al., 2016) and the fact that teachers are voluntarily choosing to leave the teaching profession—contributes to as much as 9% teacher attrition rate (Camera, 2016). What most administrators likely believe are most important stipulations for hiring quality are content expertise, classroom management, and quality lesson planning, yet with higher amounts of teacher stress and anxiety, this study has found that psychological qualities such as kindness, patience, and flexibility, are now being sought out more prevalently to ensure that teachers will be able to provide strong emotional support and develop positive rapport with students (Strong, 2011). Most importantly, it is crucial that teachers are equipped with skills to take care of their personal well-being. Teachers who offer high-quality instructional support have higher odds of developing positive student/teacher relationships that are direct, intentional, and focused (Hamre & Pianta, 2005).

What teachers think about their own teaching performance is the key aspect to making changes in teacher development (Manning & Payne, 1996), especially in the areas of strategic instruction and classroom management. Teacher self-efficacy (TSE) tends to be predictive of for more positive teacher welfare, such as feeling more accomplished rather than feeling stressed or

burned out (Aloe et al., 2014). With classroom instruction, effective and reflective teachers have higher performance rates and do better when planning lessons of instruction. Classroom management, the skill of creating a classroom environment that is conducive to learning (Evertson & Weinstein, 2006), remains a top reason for teachers leaving the classroom, if they feel their classroom management is poor (Ingersoll & Smith, 2003). However, if methods of controlling behaviors are aimed to punish or socially and negatively affect students, these methods, such as sending students out of the room, sending them to the principal's office, or forcing them to call their parents, can do more harm and create more pushback from students. Research supports these types of methods having adverse effects on student learning, as well as a deterrent to positive learning environments (Dibapile, 2012). Thus, this study has found that being aware of how one is reacting to situations and diffusing classroom behaviors could increase teacher self-efficacy. Students' responses to content and instruction play a role in what method teachers choose to use, and these students who do well with a particular style will learn better. Some students learn best working independently without any outside influence. Any outside noises or distractors inhibit their learning. Nevertheless, teachers tend to evaluate their teaching effectiveness based in part by student performance and how they are reacting to the teacher's teaching instruction style. Effective teachers encourage students to critically think for themselves and make good choices, yet to offer such support for students suggests that teachers have strong emotional intelligence themselves. Shernoff, Marinez-Lora, Frazier, Jakobsons, Atkins, & Bonner (2011) stated that the reason teachers leave the profession was due to overwhelming demands and challenges and low self-confidence (Beran, 2005). People who develop a higher self-efficacy naturally are motivated to challenge themselves in task performance (Luszczynska, A., Gutiérrez-Doña, B., and Schwarzer, R. (2005).

Therefore, self-efficacy plays an integral part of teaching and learning (Woolfolk Hoy, 2000). Research suggests that the classroom teacher is the most important factor on student academic performance, and self-efficacy is a fundamental factor in learning and motivation. This study was fundamentally based on Bandura's (1977) social cognitive theory, which states that efficacy is a measure of how well someone perceives themselves in performing a task. This performance is a main predictor of how likely humans will engage in this specific task. A person who feels comfortable performing a task will view difficult or demanding situations as a challenge rather than a burden (Cudre-Mauroux, 2010). If task performance is unsuccessful or looked upon as failure, self-efficacy can be negatively influenced (Bandura, 1994). Yet new teachers who have high self-efficacy are happier in their teaching, have higher job satisfaction, have more positive attitudes in teaching, and feel less stressed than those teachers who report lower self-efficacy, as well as low or no mentoring and support in what a collaborative environment for all teachers should be.

Research supports that new teachers who had negative experiences with competency and task performance also had lower efficacy, and it is much more difficult to change self-perception but is possible to change once life's experiences have contributed to the development of low efficacy (Woolfolk Hoy, 2000). The key is to keep the teachers we have already invested time and energy on in the classroom (Sutcher, Darling-Hammond, & Carver-Thomas, 2016). People who practice mindfulness or acute awareness of their present surroundings are believed to have a healthier well-being (Brown & Ryan, 2003). Mindfulness has been found to increase the general well-being of individuals (Brown & Ryan, 2003). Practicing mindfulness is enticing due to its enhancing agents that help people enjoy their jobs (Germer, Siegel, & Fulton, 2005). Germer, Siegel, and Fulton (2013) explained that mindfulness is "awareness of present existence with

acceptance." It is a type of awareness that one must practice knowing what it means to be in a mindful state, yet the mindset does not need to be positive to understand mindfulness. One can be mindful by being aware of one's anger in any given moment. Brown and Ryan (2003) defined mindfulness as an awareness and attentiveness that resembles our consciousness to our surroundings. Teachers are with students approximately eight to ten hours a day, depending on after-school activities. Awareness in daily living helps prevent individuals from rushing through activities and not being attentive to what happening, helps to be more attentive to others' emotions and self-aware of one's own emotions, and protecting the mind from being in the future or in past experiences when one should be in the present moment (Brown & Ryan, 2003).

Some stress cannot be eliminated. As addressed by Germer (2004), humans deal with illness, aging, and death. However, other ailments creating stress and suffering are more of a result of how we engage in situations or due to lack of social emotional awareness of others (Germer, 2004). Teachers are especially placed in such situations where students are from all emotional backgrounds and genetic predispositions. Therefore, practicing mindfulness may be a detractor of anxiety and stress for teachers. As Germer stated, "they [people] want to feel better" (p. 3). In addition, this study has also found on a consistent basis that teachers cannot be expected to grow as a teacher in isolation. An overall underlying component of teacher success and well-being links to Bandura's research that teachers benefit and raise efficacy by observing and modeling other effective teachers and strong educational leaders and getting opportunities to work collaboratively with these teachers in order to create a family-like atmospheres in the schools. It is highly suggested, based on this study, to create more opportunities for teachers of different subject areas to co-teach in order to create integrated subject learning and to allow teachers to observe each other teach.

Therefore, this study is also based on the idea that when mindfulness is utilized in daily life, it allows a person to be more aware of what is happening around a person, and then accepting of what is happening in the present attentional field at the present time and not being judgmental of these experiences (Kabat-Zinn, 2003).

Woolfolk Hoy (2000) stated that efficacious beginning teachers reported they felt optimistic of staying in the teaching world. When teachers have confidence in teaching, it is life experiences that make a teacher successful (Woolfolk Hoy, A. 2000). Teacher self-efficacy is a confidence that motivates teachers effectively to help students learn and that attributed to student achievement. In motivational research, the term *attribution* is defined as "an individual's perceived cause of a success or failure experience" (Wang, Hall, & Rahimi, 2015, p. 122). In other words, it is what attributes to one's outcome in any given situation. Whatever attributions teachers choose to formulate are dependent on to what extent they believe that control lies within themselves and their own contribution to a situation and the control that lies outside of themselves associate with others' forces or behaviors in a situation (Rotter, 1954). Therefore, how teachers perceive a situation and under what control they may have, attributes to how well they feel they are effectively teaching, thus also may play a role in teacher efficacy.

Depending on how external or internal a teacher's locus of causality remains to determine levels of self-efficacy (Henson, Kogan, & Vacha-Haase, 2001). Teachers are expected to be able to handle every social situation that may arise, including the presence of bullying and other violent situations (Yoon & Bauman, 2014, p. 308-309). Corcoran (1981) explained the beginning teacher's paradox as the shift of exiting the safe environment of the university campus to one's very own classroom, and this transition from being the student teacher to the classroom teacher in charge may attribute to teachers feeling stressed and incompetent (Ingersoll & Smith, 2003).

With this in mind, this study aimed to look at how mindfulness skills may help teachers focus more on what is happening around them as they teach and as they interact with students, for what was discovered by the researcher in previous research was that new teachers have elevated confidence that may lead to teacher burnout in the future. Weinstein (1988) found in her study of new teacher perceptions of self-image that many student teachers felt "they would experience less difficulty than the 'average first-year teacher' on 33 different teaching tasks (p. 31). This occurrence in new teachers has been identified as "unrealistic optimism," a construct derived from health psychology (Weinstein, 1988, p. 31). Many teachers, due to these unrealistic expectations, enter a teaching job with a mindset of a person at an expert level. However, the mindset is due to what is commonly seen in new teachers: unrealistic optimism. Because of this inflated confidence, the need to explore whether teachers rate themselves performing very well in the classroom, when they find out that they are not exhibiting effective teaching skills as they had perceived earlier. This phenomenon, the Dunning-Kruger effect, (Dunning & Kruger, 1999), found that individuals (often most of us) tend to overrate how well they can perform certain tasks, such as how well they can run a race or write a short story. Likewise, the more people learn a task, the more they understand that they are not as proficient in this task as they first perceived.

The one contributor to K-12 teachers leaving the teaching field within the first three years of teaching is because of lack of self-trust. Teachers fail to see treating setbacks as formative challenges as part of the learning process rather than as summative failures. Teaching can be an overwhelming task no matter what how many years a person has taught. Teacher mindfulness or metacognition is a strong factor of teacher effectiveness development. Teachers who can manage their learning ability and reflectiveness is imperative over the course of a teacher's career

(Kramarski & Michalsky, 2009). Therefore, teacher professional development should perhaps include mindfulness skills to help increase teacher self-efficacy. This skill of mindfulness would aid teachers in giving full attention to what is presently occurring, as well as change focus as they occur in present situations to understand how one is analyzing his or her present attitude, being open to what is taking place in a situation, and the curiosity to explore what is happening and accepting what is happening (Keng, Smoski, & Robins, 2011). The mindful person is fully observant of what is happening and aiming to understand why certain behaviors or emotions are being exhibited at the present moment (Keng, Smoski, & Robins, 2011). Effective teachers, according to Danielson (2007), must identify when and why students are not engaged, when and why a lesson was not effective, or why students behave the way they behave, and this reflection will likely not be successful without being present in the moment and mentally note what is explicitly happening. A frame of mind of being attentive and what sorts of things to pay attention to every may also contribute to increasing teacher self-efficacy, thus keeping teachers at a higher well-being and raising overall job satisfaction.

Research has shown that through training the mind to be aware and conscious of what is happening can increase well-being (Kabat-Zinn, 1990). This study asks the question whether mindfulness practice levels may be associated with increasing teacher self-efficacy. Dibapile (2012) acknowledged that teacher self-efficacy is becoming more prevalent in research due to a strong correlation between teacher efficacy and teacher effectiveness, which provides avenues to find solutions to teacher job satisfaction and increased teacher retention rates. Furthermore, "it enhances teacher productivity" (Dibapile, 2012, p. 89). Teacher efficacy has become a fundamental construct necessary in the formula in the development of effective "in every part of the world" (Berman, MacLaughlin, Bass, Paully and Zellman, 1997, as cited in Cheung, 2008).

Self-efficacy, which is the foundation of social cognitive theory, has been defined as a person's own beliefs about his or her capabilities of performing a task at a proficient level (Bandura, 1977). Thus, this study examined the possible relationships between mindfulness levels and teacher self-efficacy levels in North Dakota teachers. Understanding the possible factors that may contribute to increasing or decreasing teacher self-efficacy is imperative to increasing overall teacher well-being, including the re-building of collaborative teaching and mentoring. Thus, the two following questions were explored.

Research Question 1

How do the various aspects of mindfulness (attention awareness, attention, attitude, observing, describing, acting with awareness, and accepting without judgement) predict the three different types of teacher self-efficacy (student engagement, instructional strategies, and classroom management)? This question should take into consideration the possible impact of and moderation by various demographics, such as overall job satisfaction, age, teaching experience, gender, number of classes periods taught per day, content area, and school type (public or private).

Research Question 2

What is the nature of the relationships among the teacher self-efficacy constructs (student engagement, instructional strategies, and classroom management)?

To answer these research questions, three, pre-existing mindfulness scales and one, pre-existing teacher self-efficacy scale were used to ask 80, K-12 teacher participants questions that would self-evaluate their mindfulness levels and self-efficacy levels. These scales measured pre-loaded factors in each scale to look more closely at how teachers perceive how they can describe what is currently happening internally with their thinking, as well as what is happening with their

senses in any present moment. Furthermore, self-efficacy was measured based on how teachers perceived their ways of engaging students, using effective instructional techniques, and managing a classroom effectively. These four scales were all Likert scales and were scored by finding mean scores or averages for all factors loaded in both constructs: mindfulness and teacher self-efficacy.

If this study finds that teachers have significant higher levels of mindfulness in correspondence with high self-efficacy, then we may begin to further explore at what stages of teaching these teachers practice various levels of mindful demeanor and reflection to reach a higher efficacy over time, especially in the areas of classroom management, utilizing instructional strategies, and student engagement, and, more importantly, how the practice of awareness does increase overall teacher efficacy and job satisfaction. If it is found that experienced teachers have higher mindfulness levels, then perhaps we can be a step ahead of this exploration by preparing new teachers by engaging them in practices of awareness while teaching or, better yet, during teaching preparation (reflections before, during, and after teaching; dealing with classroom behaviors; and self-evaluations or their teaching and student learning). This teaching of mindfulness may alleviate teacher stress, culture shock, and feelings of incompetency. If teachers tend to make decisions about how they instruct, how they perceive they manage a classroom, and perceive how they engage students, then mindfulness, or awareness practices, may be beneficial to reflecting on how well they perceive they are doing in these areas. In addition, if teachers can implement mindfulness practices into their daily reflections, then they may have increased self-efficacy, which in the long run will develop better well-being and higher job satisfaction for teachers across the state of North Dakota.

The conclusion and discussion sections are structured in an integrated manner to answer the two research questions comprehensively from what was revealed in the results. The conclusions will begin with providing a review of the results in regard to each of the subscales for the two constructs mindfulness and teacher self-efficacy. The various aspects of mindfulness (attention awareness, attention, attitude, observing, describing, acting with awareness, and accepting without judgement) were found to predict the three different types of teacher self-efficacy (student engagement, instructional strategies, and classroom management. What was taken into consideration were the possible impacts of and moderation by various demographics, such as overall job satisfaction, age, teaching experience, gender, number of class periods taught per day, content area, and school type (public or private). Gender, years of experience, and age were all found to be contributing factors in the prediction of teacher self-efficacy. These more specific and more significant findings will be discussed following the general findings and conclusions of the constructs' sub-factors to bring this study's most critical findings to the conversation and offer conclusions made in light of these particular findings with teacher self-efficacy and job satisfaction.

Conclusions

In regard to research question #2—what is the nature of the relationships among teacher self-efficacy constructs of student engagement, instructional strategies, and classroom management? The following conclusions have been formulated.

As shown in Table 4.2, this study found teachers, in general, have high composite teacher self-efficacy levels. Teachers, likewise, believe they are mindful in their work, meaning teachers also believe they have a general awareness of what they are doing and feeling at any present moment. They feel they notice changes in their emotions and muscle tension or pay attention to

physical sensations, such as heart rate elevating or breathing slowing down or speeding up. However, it is also concluded that these levels of mindfulness could be heightened with more teacher training in practicing awareness. The FMI factors for attention and attitude revealed average to high levels of mindfulness, and overall scores for the KIMS factors for observing, describing, acting with awareness, and accepting without judgment revealed average to high mindfulness levels. Thus, it can be concluded that the average North Dakota teacher feels relatively confident in their performance as a teacher. The sub-factor Attitude was found to be lower, on average, in how these teachers perceived their practice with attitude. What this may indicate is that North Dakota teachers, on average, are less forgiving of themselves, less apt to be non-judgmental, and may find it more difficult to be non-reactive initially in challenging situations. Furthermore, these teachers tend to have more difficulty forgiving themselves when things go wrong. These teachers, we can assume from these findings, generally experience situations from a state of mind where they may react too quickly in negative ways or may be less in tune with their own emotions at specific times of instruction. Therefore, teachers would benefit from participating in training or mindful practices that would increase more healthy approaches to situations, such as remaining calm when a student gets frustrated in class or to boost their ways of forgiving themselves when teaching may not go as well, as is expected.

In regard to teacher efficacy, as shown in Table 4.3, mean scores for efficacy in student engagement was average to high, efficacy in instructional strategies was high, and efficacy in classroom management also measured high on the efficacy scale. From these results, it can be concluded that teachers generally see themselves as instructing students effectively by crafting good questions in the classroom, adjusting lessons when needed, and can effectively implement ways to challenge students or think of new ways to approach a concept when material may be

confusing or too challenging. However, efficacy was slightly lower in the area of student engagement and motivation. The reasons for this assessment are certainly not clear from this study's findings; however, student engagement is much harder to attain, since teachers must first find students' interests and intrinsic motivations, and this can be a much more difficult task that may or may not be out of a teacher's control. To corroborate this assumption that student engagement may be the most difficult to gain efficacy, the study of Brown, Lee, and Collins (2015) found similar results. Their study compared pre- and post-efficacy scores of 71 pre-service elementary teachers. These teachers completed the same efficacy scale that was administered in this study, the TSES. These teachers completed the test prior to their student teaching field experience and then again after their field experience had ended. What they found was that these 71 teachers exhibited highest efficacy in classroom management and lowest in instructional strategies prior to student teaching; however, these teachers exhibited high scores in classroom management once again in their post-student teaching and lowest in student engagement. Their study found student engagement to have the smallest amount of growth from pre-student teaching to post student teaching, and this is a significant finding that only affirms this study's findings with student engagement.

It is generally more difficult to guide students in finding their interests and to take charge of their own learning and assessing, for students are likely more acclimated to teachers making the decisions about assignments and the grading rather than the students; therefore, in an ever-changing environment where classrooms are more student-centered and student-led, these tasks of getting students to take charge of their own motivations and interests can be an arduous task for teachers. Simply getting students to derive discussion questions for a future discussion or to take a new slant on a topic may be difficult for both teachers and students. Thus, this is not

surprising that student engagement is lower in teacher self-efficacy perceptions. It can be concluded that teachers tend to struggle more in engaging students; thus, the efficacy is harder to build in this area.

Teacher self-efficacy levels in instructional strategies and classroom management indicated that teachers were one level higher in instructional strategies and classroom management versus teacher efficacy in student engagement. Teachers in this study have reported more confidence in controlling and maintaining disruptive behavior, responding to difficult situations, responding to defiant students, and implementing alternative strategies in their classrooms than they do in helping students think critically, getting through the most difficult and uninterested students, and helping students see the value of learning what they are asked to learn. Teachers who exhibit higher teacher self-efficacy are found to be less critical of students when they make mistakes (Ashton & Webb, 1986; Tsouloupas, Carson, & Matthews, 2014) and are more likely to handle situations of student behaviors much more productively (Poulou & Norwich, 2002). In addition, Brown et al. (2015) also found that the degree to which teachers feel they are prepared to teach effectively and can perform teaching tasks proficiently are direct links to higher teacher efficacy. However, what was interesting in their study, as well, was that they found pre-service teachers' efficacy at high levels, even though they had little or no teaching experience where they were the classroom teacher in charge and found most growth in instructional strategies and least growth in student engagement. Therefore, first it can be concluded that new North Dakota teachers do generally have that unrealistic optimism and efficacy going into student teaching. Second, it can be concluded that teachers feel more in control of classroom instruction and environment than they do in engaging students, which could lead to higher levels of stress in the first few years of teaching and again around retirement age

when most teachers are likely not interacting with an adequate amount of professional development or personal research and reflection on teaching.

In regard to the sub-factor classroom management, it was found, as shown in Table 4.14, that two main effects—years of experience and overall job satisfaction significantly correlated with teacher self-efficacy with classroom management. In addition, based on others' research, it was found for new teachers in regard to all three types of TSE—student engagement, instructional strategies, and classroom management—that TSE is found to be high during their teacher preparation (Wenner, 2001; Woolfolk Hoy, 2000) but plummets post student teaching to the end of their first year of being in their own classrooms (Moseley, Reinke, & Bookout, 2003; Woolfolk Hoy, 2000). Classroom management is the one area that student teachers and new teachers express the most concern (Jones, 2006; Otten & Tuttle, 2011). Therefore, it is concluded that the more classroom management one can practice with years of experience, the higher the chances of teachers being satisfied with their teaching job and obtaining high TSE.

In regard to mindfulness factors, the sub-factor attention awareness and how the 80 teachers perceived everyday experiences indicated an average mindfulness level, based on their amount of "radar" that exists in the conscious mind that constantly scans both the external environment and the state of one's internal thinking (Brown & Ryan, 2003). In other words, teachers in this study reported that their attention was average level in their perception to what extent they are staying focused in the present moment and being attentive to how they are feeling tension or discomfort. It can be concluded, then, that most teachers do feel they pay average attention to what they may be doing without being interrupted by some other emotions or situations. Teachers are generally focused on differentiating what types of outcomes they desire to see in a classroom and what they are actually seeing; however, this actuality of what they may

be seeing versus what they desire to see may be may potentially be a catalyst for decreases in teacher efficacy. Teachers, as stated before, tend to be less forgiving when lessons may not go as planned or may not have been as successful as they were projected to be. In addition, attention awareness significantly positively correlated with efficacy in instructional strategies, which leads to the conclusion that the more attentive teachers are to what is happening with students and their learning as lessons are being taught, the more these teachers feel more proficient in how well they can gauge student learning, craft good questions, provide alternative examples for challenged students, and more comfortable differentiating instruction as needed in their classrooms.

For the FMI scale, the one identified measurement of consciousness (Walach et al., 2005), which was labeled attention for this study, indicated the teachers possessing an average level of mindfulness, which concludes that teachers somewhat approach experiences "with an open and nonjudgmental awareness, as well as curiosity and openness to the experience" (Walach et al., 2006, as cited in Ackerman, 2017), but elevating these mindfulness levels may help improve reflective teaching and overall job satisfaction. With the second factor of attitude on the FMI, teachers exhibited that they occasionally accepted unpleasant experiences, occasionally were able to appreciate oneself, and fairly often had more of a quick-reaction in difficult situations rather than pausing to maintain composure and think the situation through. What can be concluded with this finding is that teachers may be feeling less in control how they react to situations, which could also be improved with providing teachers with awareness training and improve overall teaching satisfaction.

On the KIMS inventory, the factors of observing, describing, acting with awareness, and accepting without judgment were analyzed in relation to teacher self-efficacy. These factors

measured to what extent teachers notice internal and external stimuli and how they perceived themselves reacting to these stimuli, as well as how teachers felt they could describe these situations and understand what may be happening. These factors also measured the attentiveness and attention one put in their present happenings and giving their full attention rather than having the mind "somewhere else" and accepting unpleasant situations with an open mind and dealing with it positively and productively rather than over-reacting or being too hard on oneself for any mishaps in the classroom. The overall composite mindfulness levels for these four factors were average to high. The factors observing, describing, and accepting without judgement indicated high mindfulness levels, whereas the factor acting with awareness indicated a medium high mindfulness level. What was concluded is that North Dakota teachers have an average to high awareness of how they notice stimuli or external occurrences, how they can explain what is happening around them, how they engage fully in what is happening around them, or how they accept what is taking place around them and within their own minds and accept without judging.

More specifically, three major findings emerged from this study. These findings were separated by each type of interaction found with the three different types of teacher self-efficacy: TSE with student engagement, TSE with instructional strategies, and TSE with classroom management. Table 4.9 indicates the interaction with Gender as a moderator for the relationship between KIMS observing and teacher self-efficacy for student engagement. Results indicated, especially in male teachers, that the more teachers are aware of their own body signals, such as changes in breathing or muscle tension or how emotions affect their behavior is associated with TSE and how well they feel they can engage and motivate students.

Teacher Self-Efficacy and Student Engagement

Mindfulness levels for males in the area of observing was average and mindfulness levels for females was high, yet male teachers were found to have lower self-efficacy levels in how they perceive their capability of engaging students. Female teachers' perceptions of how well they engage students was higher than that of male teachers. What can be concluded from this first particular finding is that male teachers may not be practicing as high of levels of attentive awareness in their classrooms in regard to engaging students or how closely they observe students giving signs of struggling or of succeeding with classroom material. This is a possible indication that male teachers may not be as acutely aware of student behaviors or how they are giving signals of struggling in the classroom; therefore, the challenged students' failing work may be a concern for males in knowing what may be the underlying issues that play factors in students failing to succeed in the class. Or, another possibility may be that male teachers in general, who are not typically as vocal as female teachers, may see themselves as being less engaging in getting through to difficult students, formulating good discussion questions, getting students to think critically, motivating students with low interest in school, helping students see the value in learning and that they can do well in school, assisting families in helping their children succeed, and improving the understanding of students who are failing. Female teachers' perceptions of how well they engage students did not reveal a strong impact in their efficacy level, which was slightly higher overall than male teacher-efficacy in student engagement. Khurshid, Qasmi, and Ashraf (2012) found in their study of over 75 teachers and 225+ high school students that there is a positive relationship between TSE and perceived job performance. Second, they found that female teachers have overall higher TSE levels compared to male TSE levels. However, the interesting aspect they had found in their study that affirms this study's

findings is the fact that female high school students rated their teachers much higher and more leniently than male high school students. Therefore, it can be assumed that males are simply not as acutely aware of student signals or how they perceive themselves being aware of students' emotions and challenges in a classroom. Or, they are more inclined to be much more critical of teacher performance, which may very well carry into adulthood, which would explain male teachers rating their own teaching performance much more critically than how female teachers tend to rate their own levels of teaching performance. Male teachers, at any age level or years of teaching experience, may be much more likely than female teachers to see life situations in teaching more out of their control. Males may perceive their own teaching in an unstable mentality in which they know and weigh heavily in on simply not applying himself or failed to put in any effort to be successful; or, perhaps the individual attributes to the unsuccessful situation to themselves or others in just being lucky in life.

It may also be concluded that male teachers are more anxious about how their instruction in that it may be lacking ways to motivate and engage students, thus not being able to reach their goals as a teacher.

Female teachers did not show significant association between their self-efficacy levels in how well they engage students and help them feel successful and in their acute awareness of observing how students are interacting and how they themselves feel and behave when they see students not engaged or showing signs of failure. This does not indicate by any means that females are feeling less efficacious in their performance in engaging their students, for the results show females feel they have higher efficacy than their male colleagues. One possible reason for this may be that female teachers may have stronger verbal communication with students and tend to ask more questions. Thus, they may feel more apt to overcome feelings of failure on a daily

basis when they see students disengaged because they quickly try to resolve this through verbal communication.

This study also found the covariate Age to be a significant factor within the interaction between TSE with student engagement and Attitude. Table 4.11 indicates that the relationship between student engagement and how a teacher perceives how they accept unpleasant experiences, being able to remain calm and not react immediately in behavioral situations, being friendly to oneself, and appreciating oneself as a teacher, tends to decrease at approximately age 45; even still, at around age 60 or nearing retirement, the correlational relationship begins to turn negative. The trend seems to show that when teachers chronologically age, the lower the self-perceived teacher self-efficacy in how well they engage and motivate students. What this finding may suggest is that as teachers age, they tend to become more critical of themselves and their work or not being able to be as patient as a teacher as years of teaching accrue; they tend to feel less confident in how they effectively engage students. What may be happening is the phenomenon of the Dunning Kruger effect, in which in the beginning years as a new teacher, teachers' confidence levels are amplified. Yet the older a teacher becomes, the more the teacher knows and understands the need the necessity of being innovative and bringing into the classroom newer ideas to engage students, especially in maintaining current ways to use technology in order to keep students' interest. With professional development being a necessity for teachers, some veteran teachers or those nearing retirement may feel more resistant to new ideas simply because they either become so accustomed to what they have been using for instruction and feel comfortable continuing to use those methods; or, these veteran teachers may simply want to find new ways of teaching but may be intimidated by the newer technology and innovative strategies of instruction.

Teacher Self-Efficacy and Instructional Strategies

The results also indicated significant findings for efficacy in instructional strategies. A significant positive relationship between the factor Describing and TSE with instructional strategies provide a strong indication that having a good sense of how teaching is perceived, such as how lessons are received by students or even the reality that the reality of the classroom may be different than what one is used to seeing or that was told it would be by college professors. Teachers' awareness helps them stay in touch with their own emotions and understand how they are reacting to certain situations. When mindfulness pertaining to teachers being able to describe what they were experiencing increased, so did their teacher self-efficacy in regard to instructional strategies. In order to understand this finding, one must understand the importance of teachers being able to reflect on what is happening in a classroom before, during, and after teaching, and effective teachers are continually reflecting on how to improve instruction based on their observations. Therefore, this finding, which found that the more teachers are able to describe their feelings; put beliefs, opinions, and expectations into words; and being able to put their experiences into words, the more TSE in instructional strategies also increased. What this concludes is that those teachers who pay close attention to how they can describe their own feelings in how instruction is working or can describe situations from different perspectives, especially student perspectives, the more these teachers feel they can effectively respond to students' questions, craft good questions, and are better able to explicate different points of view or use different examples to clarify ideas, and this increases overall efficacy with student instruction. Teachers' self-efficacy is one of the few characteristics that aids in predicting instructional practice and student learning (Cantrell et al., 2013; Ross, 1994; Tschannen-Moran & Woolfolk Hoy, 2001; Woolfolk & Hoy, 1990). For decades, researchers have found strong

links between TSE and student achievement and continue to affirm this phenomenon (Ashton & Webb, 1986; Ross, 1992). When teachers are able to have more hands-on experiences in teaching and able to practice using different instructional strategies, along with being able to observe and collaborate with other teachers, they are much more apt to feel prepared to teach due to these highly engaging experiences. This study found a strong relationship between teachers who feel they can gauge student comprehension well, craft good questions, are able to adjust instruction based on students' needs tend to have higher TSE. In most cases, the focus in assessment is on student achievement and how they perceive teachers, when the focus should also be on teachers' well-being and the amount of support they are receiving in boosting confidence. Accurate perception of what teachers think they can do and what they actually can do is important to decipher (Plohl, Musil, & Slovenia, 2018). Therefore, it is concluded that the more teachers are practicing mindfulness and are finding ways to stay in tune with their own perceptions and emotions, the more they are able to develop instruction that takes into consideration one's own observations but also taking into consideration the emotions and perceptions of students as well. In most careers and situations in life, success depends on skills that allow us to practice correct procedures and feel good about being able to do these very specific career tasks proficiently. If these specific tasks cannot be done to a satisfying level, then teachers need to have access to professional development to gain mastery in these skills (Kruger & Dunning, 1999).

Likewise, the factors Attention Awareness and Attention were also significantly associated with TSE with instructional strategies; however, one main difference between these associations is that FMI Attention—being open to experience of the present moment and noticing absence of mind and returning quickly to the present experience—also was found to

predict higher efficacy levels in instructional areas. What is concluded is that the more teachers feel connected to the present situation and experience, the more they are also able to respond more in depth in how they are engaging with students.

Another finding with TSE with instructional strategies is the interaction among the factor Attention Awareness and TSE with instructional strategies. With the factor Attention Awareness, it is more than just being attentive, but it is also about how one stays focused and remembering what actually took place in a present moment. This correlation was found to be negative, indicating that when teachers are not paying attention to what is happening in a present moment, they may often "miss" some things that are going on and efficacy in instruction may suffer as a result.

Finally, the interaction among Acting with Awareness, the covariate of Years of Experience, and TSE with instructional strategies revealed that when years of experience and acting with increases, TSE tends to decrease. This was an interesting finding, for it only affirms that the more years of experience gained in teaching and the more teachers tend to pay really close attention to the present, the more TSE in instructional strategies tends to decrease. This makes perfect sense in that when teachers are aware of all of the things going on, they can objectively assess the challenges along with the successes and finding these challenges may develop more of an efficacy complex.

Teacher Self-Efficacy and Classroom Management

Classroom management is one area of teaching that creates the most concern for teachers (Jones, 2006; Otten & Tuttle, 2011). "Teachers who feel more confident in their capacity to manage classroom behaviors are more likely to deliver effective practices and observe positive student outcomes" (Herman, Hickmon-Rosa, and Reinke, 2018). In studies of newer teachers,

self-efficacy was surprisingly found to increase after the completion of student teaching experiences, while student engagement often remains an area of concern for these teachers (Brown, Joohi, & Collins, 2015). In this study, the results corroborate these preceding findings.

As was also discovered with teacher self-efficacy in instructional strategies and years of experience, in conjunction with acting with awareness, the more teachers pay close attention to how students are achieving and responding to instruction, the more this affects teacher self-efficacy. It was found that after 45 years of teaching or near retirement age, teachers tend to become sensitive or even less confident in the area of student engagement and instructional strategies and was shown to decrease efficacy even after many years of teaching; however, teacher self-efficacy in classroom management was not found to decrease as teachers approached retirement age or after 25 years of teaching. Teachers tend to gain higher teacher self-efficacy in the area of classroom management the more they gain teaching experience, and when teachers feel they can deal with a variety of classroom behaviors, more apt to use more effective teaching strategies, and are overall more positive in assessing student outcomes. In turn, positive student responses to effective classroom management also increases student achievement and more chances a teacher will work to set up better support systems for struggling students (Pas, Bradshaw, Hershfeldt, & Leaf, 2010).

Higher self-efficacy over time in classroom management tend to increase self-efficacy and the likelihood the teacher will deliver effective practices in the future (Han & Weiss, 2005). What this concludes is that teachers who feel confident in the way they develop a positive and strong rapport with students, can effectively handle all kinds of behaviors, and feel they have good teaching skills/use effective strategies predicts high teacher self-efficacy, which, in the long run, increases student achievement and student motivation. What this also concludes is that the

more teaching experience new teachers or pre-service teachers can gain teaching knowledge and experience work prior to taking a permanent teaching position, the higher the teacher self-efficacy this teacher will have after the first-year teaching independently. This is a significant finding, especially with the debate of whether more textbook knowledge and theory should be taught or if more field experience is needed to best prepare teachers, or both. It is further conclusive that what makes a huge impact on teacher self-efficacy and job satisfaction in the future of teaching is that the more teachers develop strong control of classroom environment, the better able teachers can manage learning and student engagement; therefore, it really takes all three areas of efficacy to maintain high teacher efficacy. Furthermore, as Sass, Seal, and Martin (2011) have found, this study endorses the idea that when a classroom runs effectively with an efficacious teacher, the students, as a result, the teachers are less likely to have student-related stress. This, in turn, increases overall teaching satisfaction and persistence in self-motivation in teachers.

Table 5.1

Summary of MLR for Teacher Self-Efficacy Regarding Classroom Management

Regressor	*b*	*SE*	*β*	*t*	*p*
Intercept	7.166	0.086	-	83.711	< .001
Years of experience	0.021	0.007	.302	2.964	.004
Overall job satisfaction	0.376	0.122	.315	3.088	.003

Note. All *t*-tests based on 73 degrees of freedom.

Non-Judgmental Awareness

Teachers in this study scored average in the area of KIMS sub-factor mindfulness score Accepting with No Judgment. What this concludes is that teachers, on average, feel they make

judgments about how worthwhile or worthless a situation may be, and this is a typical behavioral response (Jennings, 2015), but the results did not reveal any significant association with teacher efficacy. This concludes that teachers are somewhere in the middle with being aware of being judgmental but not strongly taking notice of when they are being judgmental, thus they do not practice the awareness of when they are judgmental and can work on subsiding this practice of possibly misjudging what may be happening. People tend to realize and are often aware they are making judgments, but they don't always disapprove of making judgments. For example, teachers may see students being critical in class with inquiry and think "He is just trying to make a scene in my classroom" or "She did not listen to my point of view very well." In regard to being self-judgmental, this study also concludes that teachers are not strongly aware of when they judge their own behaviors or feelings of failure, and they can become very critical of their own work in irrational ways. For example, teachers may feel critical about how they feel uncomfortable with how a discussion may be going in the classroom and feel some friction among student perspectives, so the teacher may be feeling guilty about creating such friction, when in reality, students need debate and critical thinking in order to discriminate ideas and to come to their own conclusions. Yet some teachers will feel uncomfortable and feel guilt for creating a bit of uneasiness in discussion and cease that type of inquiry in the future. What was not indicated in this study was the correlation between acting with no judgment and high overall TSE. However, the literature points us in the direction, specifically in the work of Jennings (2015), that the more aware teachers become in being aware of and understanding their own judgmental practices, the higher the efficacy, for these teachers tend to see a subsiding in feelings of frustration, guilt, and less "jumping to conclusions" with students' perspectives. What

this study concludes overall for accepting judgment is that teachers are not aware of their judgments and could benefit from practicing awareness with accepting judgment.

Research Question 2

In looking more closely at the second research question (What is the nature of the relationships among the teacher self-efficacy constructs [student engagement, instructional strategies, and classroom management]?), strong interactions were found among all three subfactors. Efficacy in student engagement strongly correlated with efficacy in instructional strategies. Results indicated that self-efficacy in student engagement for the teachers was moderately high; therefore, it can be assumed that to what extent teachers feel they can manage a classroom is strongly associated with increasing efficacy levels. These results confirmed the influence of how much impact or influence one performance area affects another in regard to how teachers perceive their overall teaching performance. All eight items within the subscale student engagement are strongly associated with teacher self-efficacy. Items on the TSES that were used to measure student engagement determined how teachers felt they could perform successfully as a teacher (See Appendix D for a complete list of survey items), such as "How much can you do to motivate students who show low interest in school work, "How can you get through to the most difficult students?", "How much can you do to help your students think critically?", "How can you do to get students to believe they can do well in school work?, "How can you do to help your students value learning?", "How much can you foster student creativity?", "How much can you do to improve the understanding of a student who is failing?, and "How much can you assist families in helping their children do well in school?" Teachers, especially new teachers, desire their students to be interested in what is being taught, and this can create a great deal of stress and possible anxiety for teachers to observe disinterested or

unengaged students. Thus, these teachers' self-reflections on their teaching possibly revert back to *what* the teacher is teaching, and even more importantly, *how* they are teaching a particular lesson. This finding highlights the importance of teaching having the knowledge of engaging students, but the link to instructional strategies and instructional planning is detrimental.

Teachers often enter a teacher preparation program with little to no experience in how to plan lessons using the best strategies for the content. If lesson planning skills are not stressed continually as pre-service teachers advance in the teacher preparation program, this can carry over into teaching great frustration (Bottoms, Egelson, Sass, & Uhn, 2013). To offer things such as choice in what they are learning about a topic, choice perhaps in what they are reading, and having knowledge of how to implement different teaching strategies, based on what students feel they can learn from more effectively.

An interesting find in this study is the decrease in TSE after ten years of teaching experience in conjunction with how teachers perceive themselves to act with awareness. Teacher efficacy decreases over time, especially near retirement age. What this may indicate is that teachers in their first ten years of teaching have higher efficacy regarding how well they can provide instruction due to the Dunning-Kruger effect. New teachers tend to have an overabundance of confidence entering their first years of teaching in how well they create suitable challenges for the more advanced students, how well they can challenge students to critically think and problem solve, to assess students' comprehension of the teaching material, and to provide students with alternative examples and explanations when students are confused with the content.

Several instructional strategies work much more effectively in learning specific types of information. For example, if a teacher is teaching force and motion, it may not be enough just to

have students watch a video of force in action. This study concludes that it may be more effective for students to build a model of a marshmallow shooter made from cutting out the bottom of a plastic Solo cup, cutting the bottom of the balloon off (the opposite end that you blow up), and stretching this opening over the open end of the cup and tying a knot at the end of the balloon, to make a type of shooting apparatus. A marshmallow is placed inside to measure how force impacts how far an object will go. When teachers observe how engaged students are in this instruction versus watching a video of this (plus, there are marshmallows to be eaten), this plays a major role in how well they feel they can instruct and perform, which increases teacher efficacy. Items that measured instructional strategies, such as "How well can you respond to difficult questions from your students?", "How much can you gauge student comprehension of what you have taught?", "To what extent can you craft good questions for your students?", "How much can you do to adjust your lessons to the proper level for individual students?", "How much can you use a variety of assessment strategies?, "How well can you implement alternative strategies in your classroom?", and "How well can you provide appropriate challenges for very capable students?". Item # 20 did not correlate with efficacy levels "To what extent can you provide an alternative explanation or an example when students are confused?" What this is revealing is that teachers who have an acute sense of how well they can assess students on the learning, how well they can ask quality questions that get students thinking, and how well they can gauge comprehension play an impact as well on teachers' self-efficacy. What is interesting is the fact that the question of whether teachers can provide alternative ways to rephrase a question or to provide another example did not associate as strongly with self-efficacy. What this suggests is that teachers may not be offering alternative questions, if needed. Many classroom discussions have textbook questions that are simply read by the students and written down, or, for many

teachers, especially new teachers, this skill is not yet developed, and possibly never introduced in their instruction. This is an interesting finding in that teachers are not presumably not placing emphasis on the skill of re-iterating a question to gain student comprehension. This may or may not be a catalyst for false comprehension scores to show up in reading assessments, which is likely students not understanding a vague or ambiguous question and not a reflection on their comprehension skills. Therefore, it would be worthwhile to implement this type of skill-building in generating alternative questions or providing multiple examples to improve student comprehension.

The teachers in this study also revealed the imperativeness of managing a classroom effectively. Student engagement and classroom management were found to be highly associated in the development of teacher self-efficacy, as well as the association of instructional strategies and classroom management. Kelley (2004) stated that other professions typically continue a second or third mentoring process of practice, such as with new lawyers or medical doctors, by providing continual internships until they are ready to be practicing alone. Teachers, however, are not treated as "new" teachers who need that mentoring just as much as a new doctor or lawyer. Teachers understand that they are to perform professionally, like a veteran teacher, and be evaluated as a seasoned professional. New teachers understand this culture entering their first year of teaching (Pannell, 2016). Furthermore, one of the main reasons teacher attrition is on the rise is the fact that they believe they are incompetent in managing a classroom (Evertson & Weinstein, 2006; Latham & Vogt, 2007). With the subscale TSES subfactors for classroom management, seven of the eight subscales in classroom management strongly correlated with self-efficacy levels. Items such as "How much can you do to control disruptive behavior in the classroom?", "To what extent can you make your expectations clear about student behavior?",

"How well can you establish routines to keep activities running smoothly?", "How much can you do to get children to follow classroom rules?", "How much can you do to calm a student who is disruptive or noisy?", "How well can you establish a classroom management system with each group of students?", "How well can you keep a few problem students from ruining an entire lesson?", and "How well can you respond to defiant students?" There are several interpretations of this finding. First, this finding suggests that teachers base self-efficacy on how well they can manage a classroom and that it is a necessity for fostering student learning. Good classroom management skills are expected in order to promote student learning. Another interpretation we can add to these findings is that in teachers of all ages, especially in new teachers and those teachers entering close proximity to retirement, how well they are able to calm disruptive students and carry forth lessons that are attempted to be sabotaged is key for teachers to feel successful. What this finding suggests is that teachers, especially novice teachers, need to be implemented not only in the curriculum in the classroom during teacher preparation, but pre-service teachers need field experiences and strong modeling of how to manage specific situations. As an integrationist and an avid believer of knowing the psychology of student behaviors, it can also be assumed that teachers are not skilled in knowing what to pay attention to in disruptive behavior or why these behaviors are happening. With this study finding a strong positive correlation between accepting what is going on and acting without judgment and teacher efficacy, what is needed is for teachers to be able to come to understand that low self-esteem, learned helplessness, and locus of control on the students' part may be key impacts, as well as outside influences such as personal issues that may be happening in their home lives or social lives, such as bullying. Teachers who can pay closer attention to how students are reacting and remaining calm and supportive as these situations are taking place, the higher the chances of

teachers being able to feel confident in how well they can perform such tasks and handle situations.

As was stated in the literature review, new teachers often refrain from seeking help when needed, especially from colleagues and administration, for it is often presumed by teachers themselves to be a sign of weakness if they need to seek outside help from colleagues. This type of mindset in teachers thus fights teachers, especially new teachers, for what was found in this study is the necessity to be able to use a variety of instructional strategies and manage a classroom. No teacher can effectively build a strong of learners solely in a classroom. It must be school-wide and collaborative, in order to build teacher self-efficacy, so this study concludes that if teachers feel they cannot effectively program students to follow classroom expectations and rules or fail to respond to difficult student questions and ignore the issue, this may merely create a sense of "chaos" in both the physical environment, as well as the cognitive processing of more complex material in which the teacher is not able to iterate, and teachers often develop even deeper feelings of inadequate performance in these particular teaching skills. Therefore, along with building up mindfulness awareness, as well as encouraging more teacher mentoring and collaboration, will further create a strong learning environment and support system for the teachers to be able to reach the highest teacher self-efficacy levels and increase overall job satisfaction.

Table 5.2

Correlation Matrix for the TSES Subscales: Student Engagement, Instructional Strategies, & Classroom Management

	Student Engagement	Instructional Strategies
Instructional Strategies	.582	-
Classroom Management	.374	.407

Note. All correlations are significant ($p < .001$).

Discussion

One of the main purposes for conducting this study was to find out if there is a general association between teacher self-efficacy and mindfulness levels. As predicted, the levels of awareness teachers significantly correlate with all three sub-factors of teacher self-efficacy: student engagement, instructional strategies, and classroom management. What was expected to be found in this study of connections between the levels of awareness teachers have and their efficacy levels, it was not expected to find that teacher self-efficacy actually decreases as these near-retirement teachers assess how well they think they engage students in their classrooms. This is one of significant findings that teachers are leaving teaching prematurely or moving into alternative subject areas within just a few years of teaching, and the concerns that brought this study forward were that teachers may have different attitudes toward their teaching and job satisfaction ideas, and these different attitudes may possibly have an impact on the trajectory of job satisfaction teachers find themselves in, which especially in the first few years of teaching, we want to support teachers in any way we can to ensure they receive the mentoring and feedback they deserve as they begin their new teaching position.

It seems that newer teachers (those who have taught fewer than ten years) who have higher mindfulness levels or are more aware of their classroom management tend to see increases in teacher self-efficacy. Teachers who are highly aware of how they are managing a classroom, such as creating a safe learning environment and positive relationship-building is taking place, will be more likely to make changes in their teaching to improve these areas of classroom management; thus, their self-efficacy increases over time when improvement are seen. This study has further revealed that those teachers who have been teaching between ten and twenty years show no significant correlation between their self-perceptions of how well they manage a classroom and their own teacher efficacy levels. This is not a surprising finding, for research supports that teachers who feel confident in their content knowledge and overall well-being of their instructional strategies tend to naturally feel more confident in their own teaching. However, the interesting turn in this study, which was not really expected but not surprising, is that the teachers who have been teaching over twenty years showed a negative correlation between years of teaching experience and their perception of how well they implement instructional strategies, such as developing their classroom curriculum, use instructional strategies for effective learning, and making more meaningful and interesting ways of learning in the classroom. After about twenty years of teaching, a gradual increase in significance between teacher self-efficacy and instructional strategies was found. What this finding implies is that teacher efficacy levels will likely be predicted to increase as acting with awareness increases. What this trend is likely showing is that as these more experienced teachers think about the new and innovative ideas they may or may not be using in their classrooms affects their overall teaching confidence. If these near-retirement teachers are not actively engaged in professional development or have been in contact with the newer, more innovative practices for teaching, then

they are more likely to feel less confident in their teaching because they have not implemented newer ideas. New teachers or those who have taught less than ten years may be more engaged in professional development that enhances their classroom teaching. Therefore, these teachers who plan to retire within five years may1) have been engaged in less professional development or 2) may have less collaboration with newer teachers or with teacher education faculty to have this knowledge of what new teaching/technological strategies are beneficial to student learning. Furthermore, new teachers who exhibit high levels of mindfulness tend to strive harder to increase self-efficacy, which explains the fight or flight response. Brain research shows that one of the brain structures consistently associated with emotional functioning is the amygdaloid complex (Phan, Wager, Taylor, & Liberzon, 2002). Brain research and emotional studies have shown that the amygdala, the almond-shaped part of the brain that deals with emotional experience plays an important role in how we remember associations (Anderson, 2007). For example, witnessing a student telling you "this class is dumb" every day of the week will make an imprint in a teacher's mind and is felt as being highly negative. This is now a trigger emotion of feeling incompetent or unworthy of engaging students and is the central focus of awareness, and as long as these emotions are not re-routed in the following months or even years, teachers could continue to feel unworthy or not as confident in their work as they should or could be due to not changing their teaching. How this phenomenon fits into this study's findings is that if the emotion s teachers "see" as associated with struggling students or defiant students, then these teachers will continue to feel fear and less efficacious, which either leads to lower student learning or higher attrition in education. So, newer teachers and more experienced teachers nearing retirement age may have much higher sensitivity when they witness negative student interactions, such as students not motivated and fail to do work or when students show signs of

not learning or find school boring. New teachers begin their first year with the mindset that they have learned all they need to know and will not foresee any major challenges. Yet, when they do encounter these challenges, they either ignore them or allow them to build up to larger issues. For example, if a new teacher sees unmotivated students mixed in with some "tough" kids who are regularly disruptive or defiant, they will often times not seek outside help, for they view it as a sign of weakness or lack of knowledge. This could be a product of the Dunning-Kruger effect and "unrealistic optimism," which implies that people tend to view their knowledge of a subject to be much higher than they actually know, and then they discover over time that they did not know nearly as much as they thought they knew. Kruger and Dunning (1999) found in their work that when people are not as skilled at a task as they believe themselves to be, they find themselves being more challenged than those teachers who truly admit to their naiveté. The literature on new teachers' attitudes and competence has found that many new teachers go into student teaching and their first year of teaching with very high optimism that students will love their lessons, be smiling every day, and listening attentively in every class because with the little time these new student teachers spent with students in their teacher preparation, it is likely their students were attentive and well-presented due to a new teacher in the room in conjunction with these new student teachers in practice being extra "nice" and friendly to the students (which all is done under the guidance of the cooperating teacher, who handles most of the hidden issues, such as students not in attendance or students tardy for class or students who don't turn in their work). So, these experiences are, for the most part, very friendly for the student teachers and present teaching as a "easy job." Therefore, when these teachers begin their semester of student teaching and into their first year of teaching independently, these realities of what can challenge them in a classroom reveal themselves. So, these new teachers often struggle dealing with classroom

management, keeping students interested, and ensuring new instructional strategies are implemented. What new teachers find themselves trying to do is acclimate to such realities that students and classrooms will not always be challenge-free, and students will need attention in various ways. Therefore, what this study has found is that if teachers are able to practice mindfulness and are reflecting on how they are teaching or how students are responding to the learning, then efficacy is likely to increase as well. If the Dunning-Kruger effect is what may be affecting teachers from moving forward, then these new teachers are feeling challenged yet will refrain from asking for help and guidance and continue to struggle more rather than ask for help (Plohl, Musil, & Slovenia, 2018). Second, the attitude that they know what they need to know to be entirely independent and successful in teaching is likely increasing anxiety levels, for these teachers will not admit they need help from colleagues and administration. Therefore, they will continue to decrease reflecting and avoid the issues, or they could be provided with mentoring support and collaborative teaching and professional development to help boost self-efficacy to a level that will lower anxiety and increase job satisfaction.

To help explain this phenomenon, the study of Plohl, Musil, and Slovenia (2018) exemplifies what likely is occurring with new teachers and then again affecting teachers as they near retirement age. In their study on people's possible overestimations of their knowledge, Plohl et al. had found of their 91 participants who were primarily female and average age of 20, that the more these participants actually knowledgeable of a topic, the more they estimated their knowledge to be lower. For example, the study asked participants questions about their knowledge of grammar. The first group, which got the most grammar questions correct, projected their scores to be much lower than their actual performance. The second group, which scored the lowest, projected their scores to be much higher prior to taking the quiz (Plohl et al,

2018). In this study on mindfulness and teacher self-efficacy, a similar phenomenon may be happening. Teachers who are new to teaching enter their first year of teaching with the idea that they know most all they need to know about classroom management, instruction (they will have students loving every lesson they write), and student engagement. These attitudes of unrealistic optimism develop during teacher preparation as a result of students thinking of themselves mainly as students, and during this time of training, students in teacher preparation are shielded from the challenges of teaching. Students attend class and receive grades on a particular flexible time frame. These students may also be limited in their active participation in classroom teaching or doing the teaching themselves and making decisions that reflect that of a classroom teacher's experience. These teachers in training are given little opportunity to meet such challenges of students with more guidance and differentiation, or they don't handle situations such as bullying or disengaged students for a length of time to really understand what challenges they may encounter as they teach on their own. In addition, newer teachers are not as receptive to mentoring due to their overactive self-confidence, and they may see help-seeking as a sign of weakness. Because of these pre-conceived mindsets during the first years of teaching, teachers find themselves in a culture shock. Therefore, it is the reflection they have of their experiences that pertain to how they are teaching, how students are responding, and how they handle with own reactions and thinking with all kinds of situations that will either allow them to grow from being more aware and practice being patient and forgiving, or they sometimes choose not to focus on how they could make changes in their own attitudes, to change how they react to students' behaviors, or how they decide to try new instructional strategies and try new ideas; however, the mentoring may or may not be received as a positive intervention but more of a negative intervention, since they had to ask for help. What could prevent such challenges from

becoming too anxiety-laden for newer teachers and teaching nearing retirement age is to build in a mentoring program for all teachers at all levels so that opportunities to co-teach, co-plan, and to observe each other is done on a regular basis so that no teacher is having to do their job isolation at any given point, especially during the crucial trial years for new teachers, which is where the highest rate of teacher drop-out is occurring. So, new teachers once again fight or flight, and they choose to either seek help and become more reflective on their teaching and professional development to be a more effective teacher in the classroom.

This study's topic seems paradoxical to begin because research concludes that it is expected of classroom K-12 teachers to motivate students, ensure these students are learning, and manage classrooms well; however, it is the classroom teachers who are often under the most amount of stress when these challenges are not supported by those more experienced in the teaching environment; therefore, teachers do not always have the healthiest self-efficacy levels and overall healthy well-being to try new ways to motivate students, try new teaching strategies, and manage classrooms, as early on as they are expected. This research closely examined K-12 classroom teachers and their current perceptions of their teacher self-efficacy levels in conjunction with their levels of mindfulness and how these two factors play a role in increasing or maintaining teacher self-efficacy while practicing awareness.

Jennings (2015) research with teacher burnout provides the reality of burnout being a main factor in teachers leaving teaching within the first five years of teaching, and often times this burnout is due to a lack of coping skills. What happens further, then, is emotional exhaustion and lack of efficacy and self-actualization (Maslach, Jackson, & Leiter, 1997). It seems from the findings of this study and from others' studies that teachers, especially as new and retired teachers, have many challenges and anxieties. They must have optimal classroom dynamics,

must be motivating and passionate about their jobs, be a good model for learning, help foster intrinsic motivation for learning, ensure their students are emotionally honest, and teach with collaboration in mind (Jennings, 2015).

In general, this study has found that mindfulness or teachers' awareness of their own attitudes of teaching and learning and their perceptions of students' learning are factors that affect teacher self-efficacy and to what extent teachers are happy with their jobs, especially in the first years of teaching and the very last years of teaching. What was profound yet not really surprising, based on knowing new teachers' unrealistic optimism, is that these teachers discover how their emotions impact how they react to situations and how their reactions affect students in the classroom. New teachers (typically around age 25 for most new teachers) who practice attentive observation and reflection, the higher the teacher self-efficacy in student engagement and instructional strategies. When these teachers take notice of their moods or emotions and how they change over time from situation to situation, these changes affect their own actions and thoughts, and may play a major role in how students are responding to the learning and classroom instruction. Another phenomenon that may explain the significant correlation between new teachers and self-perceived higher efficacy is what Atir, Rosenzweig, and Dunning (2015) refer to as overclaiming. Overclaiming is a mechanism in which those people who claim to know little about a topic will admit they do not have much knowledge on that topic. On the contrary, those who self-perceive themselves to know a great deal about a topic are more likely to pretend they know a great deal about a topic, even if the topic was completely fabricated and does not exist. This phenomenon may explain what young teachers do to avoid any confrontations with their colleagues or administrators, which is to pretend they know the information. This study found that those who have been teaching for 25 to 45 years have had years to understand their

areas of naivete and will honestly admit when they do not have particular knowledge of a topic. This admittance of lacking knowledge in a task or concept for experienced teachers is easier than for those who begin their first teaching job.

Another interesting discovery deriving from this study is, specifically for males, that when teachers are aware of how they pay attention to their emotions and how they control how they perceive situations, the more these reflections can help boost (or, with those with lack of mindfulness can lower efficacy) teacher efficacy. A very significant and interesting finding in this particular study is that male teachers of all ages tend to be much more sensitive or critical of what they notice about their students' engagement and motivation. Male teachers who find themselves to be more aware of their own reactions to situations or how their emotions drive their thinking and behavior also are more acutely aware of their control or effect on student engagement, which is what Rotter (1990) had discovered decades ago. What Rotter (1990) had found was that people in their younger adult ages and people around retirement age were more apt to have higher external locus of control, whereas middle age people are more likely to have higher internal locus of control. What this corroborates is that newer teachers and teachers close to retirement are more likely to accept that their lack of success may be due to too difficult of tasks to undertake or simply just being unlucky, whereas middle age teachers tend to believe that they simply had lack of knowledge or ability and perhaps lack of effort on their part to continue to develop professionally as education advances. However, this study found that teachers closer to retirement age had a negative association between teacher self-efficacy with student engagement and instructional strategies, which we can conclude that teachers beginning to feel tired and ready to retire also attribute their students' lower self-efficacy in these areas from more of an internal locus of control standpoint, meaning they admit they may lack ability to use newer

innovations (such as technology) or they simply have not put in the effort needed to keep students engaged and interested in the learning. Likewise, Weiner (1985, 2010) concurred that a person's controllability determines how much control a teacher has over student success, and self-efficacy, as found in this study, was strongly associated with higher levels of mindfulness. It is a great possibility, then, that these male teachers may possess more of a stable internal locus of control and admit their lack of student engagement is due to lack of their ability and may or may not feel like the situation is temporary and can be changed through changes in their instruction and professional development practices. However, this study did not explore the deeper reasons of why student learning and engagement was sufficient or non-sufficient. This could be a possibility for future research, taking on more of a qualitative approach to understand the fluctuation of teacher self-efficacy. This is possibly some strong conclusive evidence that teachers are, indeed, sensitive to how their students are engaging in the classroom, in conjunction, with how the teachers themselves are critiquing their own control and knowledge of student engagement, instructional strategy practices, and the level of classroom management they portray for their students. Teachers are sensitive to how they are performing in the classroom. New teachers and older teachers are also finding more challenges with the amount of knowledge they have and what they think they have, and this Dunning-Kruger effect puts these teachers in situations that lead them to make decisions of leaving teaching or retiring from teaching, and with more mentoring or support for these teachers, we could move them forward in teaching much more smoothly and pleasantly, rather than allowing teachers to feel they are all alone in teaching. With more mentoring for teachers, beginning in the teacher preparation programs will give teachers a sense of being supported to move forward. Second, with more opportunities to independently teach, to make group decisions in these first crucial years, and to

have opportunity to co-teach or be offered vicarious experiences where teachers see teachers in action in the classroom to offer ideas, is going to be a strong factor in reducing attrition rates for K-12 teachers in North Dakota schools. What drives self-efficacy more than anything, based on this research and others' research, is the reality that teachers need ongoing opportunities to enhance their work performance through collaboration and mentoring each other as they "critically examine classroom instruction and student learning" (Wei, Darling-Hammond, Andree, Richardson, and Orphanos, 2009, p. 42), which is also validated by Brown, Lee, and Collins (2015), in that urgency of hands-on teaching, being able to observe colleagues in their classroom teaching, developing relationships with other teachers is empowering and helps boost feelings of competency and professionalism for teachers; thus, teachers feel much more efficacious (Brown et al., 2015).

This finding is quite interesting, contradicting Guskey's finding in 1981, that female teachers tend to feel more responsible for student achievement than male teachers, regardless of age of the teachers. What this finding may possibly be suggesting is that females have the more maternal instinct of the responsibility of taking care of the students, similar to taking care of their own biological children. Therefore, female teachers may feel they do not pay attention to their own body sensations and how they are reacting emotionally in a classroom, whereas males react more with problem-solving in mind; therefore, they pay more attention to students more like a challenge to be solved, and if male teachers are thinking about what is happening and how to solve issues, they may feel better about their teaching as more of an obstacle to overcome, whereas females are constantly using their maternal gut-instincts to pick up on students' emotions rather than their own.

This study addresses the idea that TSE is a measure to what extent one believes he or she has the performance skills and potential to be highly successful in achieving tasks. It is of human nature to want to master particular skills in order to feel like one is doing well in their work. For teachers, research shows that having effective instruction, effective classroom management, and engaging students are factors that affect student learning and academic success. Teachers who feel they can successfully engage their students in quality inquiry or collaborative problem-solving activities that lead to high student learning success and intrinsic motivation to learn would be considered very successful in the teachers' perception of their teaching. A teacher who has higher self-efficacy naturally will feel much more open to trying new ideas in the classroom and feel a desire to continually improve their quality of instruction. In fact, these highly efficacious teachers will feel more comfortable trying new instructive ideas, such as flipping classroom instruction or using newer technology to enhance learning. However, it was also discussed in the literature that for the lower efficacious teachers, there is a reluctance to try new ideas, for even the familiar ideas may not be perceived as being successful to begin with. When teachers are feeling low in efficacy, they tend to be deterred from ideas that may pose an even greater risk of failure or startling student evaluations (Khurshid, Qasmi, and Ashraf, 2012). But one very huge enlightenment that has derived from this study is the fact that teachers need to be working closely and collaboratively in order to learn, grow, and solve problems, both independently and collaboratively. For many teachers, both new and experienced, they have been taught to face challenges alone in their traditional classrooms for decades. In this study, the relationship between student engagement and classroom management strongly correlated, possibly indicating that teachers who attribute their own ability to engage students by creating a safe and interesting classroom environment perceive a positive classroom environment as also

something they are successful at providing. Or, teachers may simply attribute student engagement on luck or lack of student engagement on the teacher's poor effort to try and engage students and may have a more of a disorganized, unsafe, perhaps biased, classroom environment. Teachers who perceive a positively managed classroom directly reflects how much students are engaged. A main finding in this study that was not originally discussed in detail was the reality of teachers needing teachers to grow in their teaching careers. Much of what was found from this study and through the literature of other researchers is the fact that teachers need modeling from other effective and experienced teachers just as much as students need modeling from their teachers. Modeling and vicarious experiential feedback are crucial for teachers to get critical feedback from their colleagues and administrators (and students—we tend to forget the students' feedback as being valuable). Many of these teachers felt they were mindful in attitude, yet the mindfulness levels were lower and just as critical to reflecting in simple awareness; however, teachers often do not know how much they miss in a classroom due to inattentiveness, and having other teachers point these things out to the other teacher can be a strong learning experience. Mentoring does not need to be defined as a someone superior over the other; rather, this is one colleague to another colleague who has each other's best interests in mind when learning to become more effective and attentive to student feedback and learning outcomes. This This begins with collaborative reflection, then strengthening independent reflection.

With most individuals, personal reflection takes place after these situations are finished, and with teachers specifically, they sometimes reflect on how learning took place or how students interacted or did not interact, and to what extent they understood and mastered the information. However, with many teachers, this reflection may not be taking place at all or is often done at different levels of complexities, depending on the effectiveness of the teachers, and

if they find paying attention to what is taking place to be valuable to bettering their own teaching. What this study's findings are suggesting is that teachers need more time to observe and grow from one another during teaching hours and during professional development time.

Yet mindfulness practices of awareness need to also be practiced independently in order for teachers to be able to self-assess their own efficacy and performance levels. The relationship between how well teachers perceive themselves to be able to create good discussions, construct good questions that keeps students interested and motivated, increases positive classroom behaviors, and use assessment strategies more productively also find themselves in situations of positive classroom environments. If teachers feel they have good control of getting students to follow the classroom rules and to express their classroom expectations due to making instruction more interesting by using more innovative, effective, and engaging techniques, such as collaboration and group discussions, then these teachers feel more efficacious in their overall performance as a teacher. If teachers perceive themselves getting into conflicts with students, using punishment rather than reinforcement, and continually sending unruly students out of the classroom, these teachers will likely view their classroom environments as unsatisfactory or unfulfilling. This study found that a lack of positive student/teacher rapport or having a more authoritarian teaching approach (as was seen in classrooms fifty years ago) does not provide for the best learning environments. Research supports that having more of a controlling and punishment type learning environment is an adverse effect on student learning, as well as a deterrent to positive learning environments (Dibapile, 2012). Therefore, teachers at all levels of experience will have more opportunity to develop mindfulness strategies if they are given these tools and skills during teacher preparation programs and then being able to put these skills into practice before they complete student teaching.

Whatever level of reflection taking place, most teachers will attribute learning outcomes in one of two directions: either students fail due to factors out of the teacher's control, such as lack of resources, students' lack of motivation, or students' attitudes; or, the reflection turns internal for teachers, such as low instructional motivation/offering student input, lack of teacher knowledge, or lack of effort to continually improve instruction. Along with Bandura (1977, 1993), who found that to what extent one believes he or she can perform certain tasks, to what extent one determines how much effort is put into teaching, how optimistic one may be, and how much success a teacher may have strongly affects to what teachers attribute their success.

Likewise, teachers benefit much from practicing being nonjudgmental, which is a factor in the KIMS survey, and for which this study found teachers to aware of these skills and performance tasks take strong mindfulness or awareness in order to "read" what is going on with students and learning. In teachers' preparation programs, student teachers typically do not have training in mindfulness practices, nor do new teachers have access to mindful awareness practices when offered professional development. This means that teachers, unless they practice awareness techniques on their own, will likely never have the training to practice being aware and attentive in their present moments and learning to understand how they react to challenging situations, as well as being forgiving of themselves and nonjudgmental when they are not performing tasks to their level of expectations. Furthermore, as Bandura (1977) has postulated, self-efficacy is directly related to how individuals perceive they can perform tasks, and in areas such as being able to engage students, perform and plan meaningful instruction, and manage classrooms, teachers want to perform these tasks professionally and without extra stress. However, as was found in this study, teachers tend to begin teaching with high correlations between mindfulness and teacher self-efficacy, and with high unrealistic optimism, finds

teachers becoming highly stressed when they find they do not have the knowledge and experience to handle situations such as unmotivated students, challenged students, or social issues such as bullying and emotional trauma in students; thus, these teachers feel less efficacious. This either moves teachers to quit teaching, teach in other areas, or to continue teaching with huge amounts of stress and low job satisfaction. This is then a huge factor that affects student learning, for the one factor that determines student success is teachers with high efficacy and high job satisfaction, for these teachers are motivated to continue to try new strategies and instruction, and they enjoy their job, and this is apparent to students. This intrinsic passion for learning is needed for students to also find education valuable.

The subscale student engagement highly correlated with teacher efficacy levels, $r = .75$, $p < .001$. All eight items within the subscale student engagement correlated very strongly with self -efficacy.

The second subscale in the TSES, instructional strategies, indicated strong correlations between seven of the eight subscale items for instructional strategies and self-efficacy levels.

The final subscale in the TSES, classroom management, indicated that seven of the eight subscales in classroom management strongly correlated with self-efficacy levels. Since the overall mean for student engagement for the teachers was moderately high, $M = 6.42$, it can be assumed that to what extent teachers feel they can manage a classroom is strongly associated with increasing efficacy levels.

The factor instructional strategies, $r = .42$, $p = .000$; and the efficacy factor instructional strategies was significantly related to the mindfulness factor describing, $r = .38$, $p = .001$. It is also interesting to report those factors that indicated very weak correlations. The mindfulness factor accepting without judgment indicated a very weak correlation with the mindfulness factor

observing, $r = .0.02$, $p = .90$ and a very weak correlation between the mindfulness factor attention and classroom instruction, $r = .06$, $p = .58$. As stated earlier, while none of the main effects were statistically significant, interaction effects were significant.

Hoy and Sparo (2005) suggested that teacher self-efficacy shifts substantially in different stages of teaching. Pre-service teachers typically are found to have higher teacher self-efficacy due to the main development under the secure comfort and support of their teacher education faculty and cooperating teachers as they undergo pre-service and student teaching field experiences. As these teachers begin their first few years of teaching in their own classrooms, teacher self-efficacy derives typically form challenges and experiences that naturally allows them to rate themselves on how well they handle these challenges and if they feel like they are competent to really be an effective teacher (Hoy and Sparo, 2005).

In the present study, what has been clearly identified is that teacher self-efficacy does shift in age and in the years of teaching experience gained. As teachers begin a new career and then again near retirement age, as well as the number of years of teaching these teachers experience, self-efficacy in both student engagement and in instructional strategies tend to be lower when mindfulness levels are higher. This finding supports Hoy and Sparo's suggestion that teacher self-efficacy does fluctuate at different stages of teaching and in different situations teachers are put in, such as going from a pre-service teacher and being supported very highly to being on one's own in a classroom that may be full of unexpected challenges and the discovery of a person's perceived deficiency in some areas of teaching that were not really expected or perhaps not really given any thought prior to independently teaching. The trend found in this study is that teacher self-efficacy can be forecasted by the levels of mindfulness teachers practice, especially in the areas of acute awareness of simply paying close attention to what is

happening inside or outside of the classroom and in how well teachers can be forgiving of themselves or accepting unpleasant experiences, such as students simply not being motivated to learn, students showing signs of academic failure, or the teachers being able to be friendly with and forgiving of oneself when things do not go as expected. Teachers who believe they have the ability to perform their teaching duties proficiently and can mindfully cope with daily challenges in teaching tend to have higher job satisfaction and teacher self-efficacy. Moreover, with respect to teacher/student interaction, teachers who possess high teacher self-efficacy also tend to be more patient and forgiving, especially with themselves; tend to have better time management in the classroom, are less criticizing of students; and have higher levels of mindfulness, which aids in dealing with challenging students and situations, as was also discovered decades ago by Gibson & Dembo (1984).

It was also reasoned in this study that teacher self-efficacy is contextually situated, such that the evaluations of one's self performing certain tasks to engage students, provide meaningful instruction, and in classroom management. Similar studies have found that these teacher self-perceptions impact how they truly believe they can teach, how they carry themselves in the classroom, and how well they can manage a classroom. A recent 2017 study similarly found teachers feeling high self-efficacy levels in how well they perceive they can respond to students, especially in the areas of how well they can create quality questions or respond to students' questions during instruction (Antoniou, Geralexis, & Charitaki, 2017). Furthermore, Antoniou, Geralexis, & Charitaki also discovered that the higher the teacher self-efficacy, the more these teachers resorted from more power-driven and hegemonic teaching styles. This study found similar results in that the more these teachers reflect and pay close attention to how well they see students engaging and learning, as well as how well they perceive themselves in using innovative

instruction, the more apt they are to be non-judgmental and more open to helping weaker or more challenged students with patience and motivation. This study has affirmed that a teacher's ability to focus on what is happening in any present moment and having the ability to remain calm and open to whatever is happening in any given moment while engaged in teaching are strong factors in developing high teacher efficacy. On average, most K-12 teachers have found that they possess a fairly high teacher self-efficacy. Female teacher self-efficacy was found to be slightly higher than males; however, both males and females' teacher self-efficacy were found to be in the high category. What may be assumed from these findings is that the average K-12 teacher in North Dakota are sensitive to their surroundings and pay close attention to how students are responding to instruction, as well as to the perceived messages students are projecting on the teacher in how they are learning. Teachers are reflecting on daily activities and situations and understanding how these reflections help them further instruct and motivate students. Based on the idea of Tschannen-Moran & Hoy (2007) that teachers who feel they have failed in reaching their professional teaching goals creates an uneasy, incompetent feeling of failure, this study has also raised some areas of concern, especially in later years of teaching, where efficacy levels may be decreasing due to lack of ongoing professional development or perhaps the a product of the Dunning-Kruger effect, in which teachers start to exhibit feelings of anxiousness at around age 60, or nearing retirement age, as well as around 45 years of teaching, in which a downward trend in teacher efficacy decreasing as teachers feel less competent in accepting unpleasant experiences, staying positive when teaching becomes challenging, maintaining peace within and refraining from reacting too quickly, or merely being friendly and forgiving of oneself. One assumption that could be taking place is that teachers are feeling the anxiety of the newest innovations in teaching and are feeling more pressured by themselves,

parents, students, and administrators to keep up with current teaching theory and best practices, thus creating feelings of uneasiness of possible failure in their later years of teaching, also discovered by Tschannen-Moran & Hoy (2007).

Culture shock Three major findings emerged from the study. First, multiple linear regression revealed that the relationship between teacher self-efficacy for student engagement and the factor observing for female teachers was not significant, yet this interaction among gender, KIMS observing, and TSE for student engagement for males did reveal a significant relationship.

The results of the study confirmed the impact that levels of mindfulness of North Dakota teachers perceive themselves to possess overall average to high mindfulness levels, meaning these teachers feel they have a fairly strong sense of being aware of what is happening in their present moments in the classroom. They feel they are aware of or sense internally what they are thinking about their own thoughts and behaviors, as well as the behaviors of others. They also perceive a stronger sense externally of what is happening in a present moment. Teachers need to have a certain degree of intuitiveness when it comes to student learning, but even more so, teachers need to have that "radar" of how students are reacting to certain situations or to be aware of certain behaviors being exhibited by their students. This type of attention takes more than merely taking attendance and being aware of who is in the room and who is turning in assignments. This type of attention allows a teacher to be open minded to understand first fully what is happening in a present moment, but even more, teachers who can accept situations for what they are, even when unpleasant, have opportunity to evaluate what is happening to further improve situations. Teachers who can appreciate oneself and to forgive oneself for mistakes or the mistakes of others tend to find the outcomes of these situations to be much more positive

overall. Shapiro (2015) had found that one of the greatest benefits of being mindful is a boost to the immune system and happy, more positive thinking is taking place. It is not just about being aware, but teachers who are aware of their own intentions and reasons for thinking things or reacting to things feel less anxiety. For example, when a student has an aggressive outburst while walking into class may have a personal reason for this outburst; however, this situation, depending on the teacher's reaction, can have a positive outlook or a negative outlook. As Bandura stated, individuals will not do what they feel they cannot do well. Therefore, a teacher who does not have any knowledge of how to handle a disturbed student will do nothing or engage in negative behavior by yelling at the student and sending that student out of the room. More mindful teachers can step back and reflect on such a moment and understand first that the situation is not a dangerous situation and that there may be several things going on with this particular student that may be triggering these behaviors. In addition, the mindful teacher can take notice of how he or she is feeling at the present moment, both physically and mentally, and be ok with these feelings that are natural in such situations. When teachers are able to do so, this decreases pressure to react immediately, or, even more adversely, to react in a punishing or harsh way. So, these teachers in this study perceive they have these skills to be fully aware of what is going on both mentally and physically in their classrooms. These teachers also feel more patient with themselves and with others and are able to smile when they make mistakes or feel they are making life more difficult than it needs to be. Based on these outcomes, it can be concluded that K-12 teachers, on average, practice mindfulness in their classrooms at a fairly high level.

Based on this study's teacher participants' perceptions of their teacher self-efficacy, these teachers also perceive their teacher self-efficacy to be very high. In conjunction with their teacher self-efficacy, 61% of K-12 teachers in this study also reported high job satisfaction and

22% reported extremely high job satisfaction. A strong relationship was found between the factor attention and job satisfaction and the factor attention awareness and job satisfaction. What can be concluded is that teachers who perceive a strong sense of awareness of their external and internal surroundings tend to have higher teacher efficacy. Those teachers who had the highest teacher efficacy were those who had taught for over thirty years, but what was found overall with teachers' years of experience is that new teachers begin with fairly high efficacy, but then the efficacy levels drop a small amount between 5 and 14 years of teaching. Then a slow increase occurs until 45 years of teaching, and then it drops once again. What can be concluded is that teacher efficacy is highest between 30 and 44 years of teaching. These teachers feel they have taught long enough and have the expertise in several areas of teaching that would be considered highly proficient.

As is confirmed in several studies and in conjunction with Bandura's (1977) idea that the more one feels he or she can perform a task, the more likely a person is going to continue to practice that task. What has also been found pretty consistently is that teachers who feel they have a higher efficacy teaching level tend to take more risks in trying more innovative and subjective ideas when teaching, rather than using only the traditional instructional strategies (Sartawi & Alghazo, 2006).

This study's findings show the relationships among the three subscales for teacher efficacy—student engagement, instructional strategies, and classroom management—and have indicated strong correlations between student engagement and instructional strategies. A strong correlation was also found between student engagement and classroom management, as well a strong correlation between instructional strategies and classroom management. The intercorrelations among subfactors of self-efficacy and mindfulness of the four scales have also

found high correlations between student engagement and FMI attention and attitude factors. A high correlation was also found between instructional strategies and observing, describing, and attention. Lastly, classroom management correlated much lower and without significance with all seven of the mindfulness subfactors.

From these findings, the following conclusions have been drawn: teachers' skills with being able to manage a classroom, engage students, and instruct effectively are equally important in how teachers consider their own efficacy levels. All three areas of teaching are important to teachers in how they feel they can instruct and guide students to learn. This conclusion validates further Bandura's theory in that teachers weigh all three tasks as equally important. The connections among student engagement, instruction, and classroom management impact each other a great deal and must be done on a regular basis; therefore, it is concluded that each of these areas of teaching must be performed well by these teachers in order to maintain a higher self-efficacy. In contrast, classroom management did not correlate significantly in isolation with any of the mindfulness subfactors; therefore, it was concluded one of two ways: First, that K-12 teachers' teacher self-efficacy of how they manage a classroom is not impacted by how well they reflect on what they are observing, by how well they can view behaviors and mistakes without judgment, and by how well they can stay calm and collected when behavior issues arise. Furthermore, teachers are not as critical in regard to teacher efficacy when students may not understand course content or if classroom routines are not being followed. Second, it may be that teachers, in general, view classroom management as merely controlling behavior issues. It may be that this is the main perception of classroom management and is defined as a task to control negative behavior and less of a task of how they can make expectations clear, establish effective routines, and how to keep groups of students on task. This is concluded based on the notion that

teacher self-efficacy motivates teachers to create a positive learning environment and to teach in ways that lead to student success (Bandura, 1993). If teachers felt they were low in how they managed a classroom, this study would have resulted possibly in lower efficacy levels. Furthermore, 61% of these teachers were highly satisfied with their jobs. Similarly, a study by Sezgin and Erdogan (2015) confirmed similar results between teacher efficacy and job satisfaction.

The two subfactors for the Freiburg Mindfulness Inventory (FMI), attention and attitude, are subjective experiences of awareness. More explicitly, these factors explore how meticulously teachers pay attention to not only what they do, but to what extent they are connecting to what they do. In addition, attitude explores more of how forgiving teachers are to themselves, how they can remain at peace even under pressure, and how they accept unpleasant experiences and accept them for what they are. The correlation between FMI attention and attitude is extremely strong. Thus, the conclusion is that the more teachers can be aware of what is happening in a present moment, the more teachers find themselves patient with themselves and others, can appreciate themselves more, and to see mistakes as opportunities to learn rather than obstacles in the way of success.

Gender and Teacher Self-Efficacy in Regard to Student Engagement

The first main finding in this study, using multiple regression analysis, found a significant predictive measure of male teachers' perceptions of their teacher self-efficacy and its association with mindfulness in the subfactor *Observe*, indicating how well they feel they engage and motivate students. Mindfulness levels for males in the area of observing was average (M = 3.07, SD = .547), compared to females revealing high levels of mindfulness in the area of observing (M = 3.41, SD = .636). Simultaneously, male teachers were also found to have lower

self-efficacy levels in how they perceive their capability of engaging students (M = 6.26, SD =1.076). Female teachers' perceptions of how well they engage students was higher than in male teachers (M = 6.52, SD =.799). It is also worthy to mention here that this study did not have a main intention of analyzing gender differences in self-efficacy but was not ruled out of certainly keeping the factor in mind as a determining factor in looking at teacher efficacy. Therefore, there is not a particular concentration of gender efficacy in the literature review. Yet based on this significant finding of males being much more sensitive to their self-perceived performance levels of student engagement, this discussion will include similar findings from others' research in regard to gender differences in teacher efficacy.

What this first particular finding reveals is that male teachers who are very attentive to how students are engaging in their classrooms tends to be very predictive of their TSE levels in this area of engagement. This is a possible indication that if male teachers feel they are effective in how they are engaging students, getting through to difficult students, formulating good discussion questions, getting students to think critically, motivating students with low interest in school, helping students see the value in learning and that they can do well in school, assisting families in helping their children succeed, and improving the understanding of students who are failing, the more they feel they are doing an effective job as a teacher. Female teachers' perceptions of how well engage students did not reveal a strong impact in their efficacy level, which was slightly higher overall than male teacher-efficacy in student engagement. Khurshid, Qasmi, and Ashraf (2012) found in their study of over 75 teachers and 225+ high school students that there is a positive relationship between TSE and perceived job performance. Second, they found that female teachers have overall higher TSE levels compared to male TSE levels. However, the interesting aspect they had found in their study that affirms this study's findings is

the fact that female high school students rated their teachers much higher and more leniently than male high school students. Therefore, it can be assumed that males are more inclined to be much more critical of teacher performance, which may very well carry into adulthood, which would explain male teachers rating their own teaching performance much more critically than how female teachers tend to rate their own levels of teaching performance. Male teachers, at any age level or years of teaching experience, may be much more likely than female teachers to see life situations in teaching more out of their control. This amount of control one has in situations may also be a factor in males more so than females. As discussed in the literature review, Lefcourt's (1976) predictive nature to different social behaviors, learning outcomes, and achievement levels as illustrated in Figure 5, may find females with a higher stable mentality where control is internal and attributed to whatever happened was due to their own lack of ability or knowledge, or that the control was external and simply encountered a difficult task that they overcame. Males, on the other hand, may likely be much more apt to attribute the outcome with an unstable mentality in which they know and weigh heavily in on simply not applying himself or failed to put in any effort to be successful; or, perhaps the individual attributes to the unsuccessful situation to themselves or others in just being lucky in life.

There are some effects of self-efficacy on human behavior. Motivation is stronger in teachers with higher self-efficacy, for this motivation informs their work. Bandura (1997) believed that those with higher efficacy felt more in control of their emotions and thus had better control of their challenges with teaching. Therefore, it may be that males are more anxious about how their instruction may be lacking ways to motivate and engage students, thus not being able to reach their goals as a teacher. Bandura's sources of self-efficacy may better explain what may ultimately be influencing how male teachers believe they are performing and how they are

interacting with their own performance evaluations. Low self-efficacy can lead people to believe tasks are tougher than they actually are if they feel they are not performing well in certain areas of work. Bandura's findings of developing TSE through enactive mastery, vicarious modeling, verbal persuasion, or emotional awareness or arousal may be one way to help teachers, especially male teachers, to overcome low self-efficacy. In this manner, male teachers need to feel successful may benefit from trying fewer complex tasks initially and reflecting on those smaller successes and build up to more complex tasks in order to increase TSE. Second, teachers need to see other successful teachers model effective teaching in order for lower efficacious teachers to model instruction in order to gradually feel more successful. Third, teachers need to practice mindfulness to self-talk their way to be more aware of how they are thinking about themselves and to be more forgiving of themselves rather than being overly critical of their teaching.

Teachers who are more attentive to how they are being open to any experience without judgment will set themselves up into a less risky environment and more positive growing environment. Developing coping strategies when they are in a situation that creates less confidence can benefit male teachers and help them to anticipate these situations and be prepared to react in a more forgiving way and improve in that type of mindset rather than in a fight/flight mode (Bandura, 1977, 1997). A recommendation stated in Khurshid, Qasmi, and Ashraf's (2012) study, which is a recommendation for this study, is to ensure teachers are given training or opportunity to attend seminars and programs of awareness to improve TSE.

Female teachers did not show significant association between their self-efficacy levels in how well they engage students and help them feel successful and in their acute awareness of observing how students are interacting and how they themselves feel and behave when they see students not engaged or showing signs of failure. This does not indicate by any means that

females are feeling less efficacious in their performance in engaging their students, for the results show females feel they have higher efficacy than their male colleagues. One possible reason for this may be that female teachers may have stronger verbal communication with students and tend to ask more questions. Thus, they may feel more apt to overcome feelings of failure on a daily basis when they see students disengaged because they quickly try to resolve this through verbal communication.

According to Bandura (1994), when a person has worked successfully on a continual basis, the confidence level rises. Furthermore, when they see others engaging students well, they tend to believe they can reach this same outcome if they replicate what such successful teachers are doing. Yet a very important factor in raising teacher efficacy is verbal feedback from others, but this feedback has to be based on how well teachers truly did the good work themselves and not being aided by others too much, for this does not tend to increase self-efficacy. Since females tend to be more vocal, it is a possibility that female teachers are offering each other more verbal affirmation and are asking for more verbal feedback, and they can build on this to increase efficacy, whereas male teachers tend to try and solve issues on their own and not in asking for others' help. Therefore, this may lead this study to conclude that both male and female teachers need that constant feedback from their students, parents, colleagues, and administration of doing effective work, even if they do not feel comfortable asking for it. Even more importantly for these teachers, especially male teachers, it is imperative that they be offered support in areas where they may need professional development or mentoring to be able to improve and perform well independently, on a continual basis, in order for them to feel like their teaching effectiveness and improvements are due to what they did rather than what someone else did for them.

Finally, with regard to research, these findings point to the need to further study the beneficial aspects of first providing mindfulness practices in teacher education programs and monitoring teacher self-efficacy along this trajectory. In particular, further understanding of how teachers build efficacy, based on Rotter's theory (1966) of locus of control and how they use attribution theory in their thinking, whether outcomes are based on external control (sheer luck, task difficulty, or lack of help from others) or based on internal control (lack of their own effort or low ability). Bandura's theory (1977, 1997) connects to this idea of control in that not only do individuals behave in certain ways just to steer their outcomes in a direction they want them to go, but people also behave and think based on their self-perceptions of how well they perform certain tasks (Bandura, 1977). It is of strong recommendation to further understand that although teachers may know that certain achievements result in particular outcomes, this is really irrelevant information when they know themselves that they do not have the skills and knowledge to produce such outcomes. As teacher efficacy and the reasons teachers may be burning out or exiting the teaching field continue to be a concern with teacher attrition rates and low teacher well-being, the importance of ensuring that all teachers have the skills, knowledge, and resources to become more mindful, as well as having access to quality mentoring and collaborative support, is imperative. The practice of simply placing new teachers into classrooms without support or the skills to truly reflect and be mindful of how students are achieving is not prudent in the education world, and teachers will only continue to feel anxious and burned out in their positions. These findings that merely adding more education to help teachers practice mindfulness and offering more in-house support in schools could be the catalyst to breaking the attrition rate trajectory. We know in education that the more we are supported, the more we feel confident in our abilities because we are offered continual critiques and can learn to be more

open to accepting situations without judgments. In the long run, these skills and avenues of support will strengthen teachers' mindsets and allow them to truly find job satisfaction.

Recommendations

Recommendations for Practice

This study's literature review brings forth the idea of collaboration to a whole new level in education, especially in the K-12 system. This study has found that teacher self-efficacy is raised by means of collaborating with other professional teachers. For example, teachers feel more confident when they are able to see and model good teachers. Second, teachers thrive on hearing constructive feedback from their colleagues. Third, teachers can discriminate between they are the ones making the difference in students and not another teacher simply doing the work for them and giving them credit. This is imperative that teachers feel that they are effective and are successful because of their efforts. Therefore, it may be beneficial to have pre-service teachers work closely with colleagues, faculty, and administration, not merely during student teaching opportunities, but from the beginning of their teacher education programs, and working with faculty in leading classroom lectures or preparing lessons that teach the standards. Teachers benefit greatly from working closely with and training with colleagues, so the way teacher education faculty plan lessons and curriculum should involve their pre-service teachers.

Second, this study found overall that practicing mindfulness makes teachers acutely aware of how well their classrooms are exhibiting success or how they are being aware of how they themselves are performing in the classroom. At the beginning of a new teacher's career, most new teachers have this "overly dangerous" confidence that allows them to evade the idea that there may be challenges in teaching. At approximately the end of the second semester of a teacher's first year, these teachers often begin to find that they don't know how to manage a

classroom, deal with bullying issues, or to teach parts of their content in their particular disciplines (such as math, science, history, language arts, etc.) Therefore, having a teacher who can act as mentor and work closely with new teachers could be extremely beneficial to allow for co-teaching to get that critical feedback that they need.

New teachers, with mindfulness skills, will be much more apt to meet the challenges of teaching and growing in teacher effectiveness. Merely student teaching for a few short weeks is not sufficient to prepare new teachers for their first few years of teaching. In returning to the Dunning-Kruger effect, new teachers have been found to have significant positive associations between teacher self-efficacy and student engagement, especially with attitude, such as how well they accept that it may be lack of knowledge or experience that may be attributing their beginning experiences to teaching to be a bit overwhelming or challenging. These teachers begin teaching with overly exaggerated confidence levels in teaching that begin to decrease as these teachers begin to realize the expectations of teaching and the complexity of classroom management and behavior. Even more so, many newer teachers fail to accept mistakes as learning, or they may not appreciate themselves as teachers, for they are very critical about what they need to know and what they really do know. These realities of not knowing everything and feeling "lost" or "overwhelmed" tend to ignore these issues and perhaps attribute failed moments to factors outside their control or due to lack of support from others. This thinking in newer teachers is often called unrealistic optimism, where teachers believe that challenges should be handled alone and with great proficiency; however, new teachers feel they cannot ask for help, for this makes them look very young and naïve. Teacher education programs tend to cushion student teachers and protect them from making the tough decisions while teaching under the direction of a cooperating teacher. Simultaneously, teacher culture shock also affects teacher

performance as teachers struggle to move to the next transition stage of being comfortable in the school culture. These teachers come to realize that not all students come to class engaged or fully motivated, and in new teachers, the idea that a lesson plan is not good or won't work is not comprehended until these teachers experience how other factors, such as how much they reflect on teaching or how strong their relationships are with students, will help build teacher efficacy. Thus, it is recommended that pre-service (student) teachers be able to practice awareness techniques and to work directly in classrooms with teachers who have been teaching for at least five years in order to integrate mindfulness practices with building self-efficacy.

Lastly, since teachers become more efficacious the more they feel confident in their performances, it is strongly recommended that that the correlations of student national test scores and teacher self-efficacy levels also be observed, which leads to recommendation for further studies in this research.

Recommendations for Further Research

Recommendations for Further Study, such as replication studies using different methodologies, using larger sample frames, or changes in the instrumentation). This further study would include collaborating with K-12 practitioners and building principals to ensure these teachers are given the resources to develop mindfulness practices and using them. These teachers can more closely monitor their efficacy levels and continually improve instruction by doing more co-teaching and receiving constant feedback from colleagues. Second, since the current study was completed using a survey design, this study could be further explored using a qualitative methodology and utilizing interviews and ethnographic observations of classroom teachers from both rural schools with fewer than 200 students in grades 9-12 and from more urbanized schools with more than 200 students in grades 9-12. By collecting discourse from teachers about how

they feel they perceive their own teaching and efficacy levels and how mindful they feel they are in school settings, emerging themes could guide us to where teachers are putting all of their thought in regard to their contribution to student learning and to what attributions of common causes they are choosing to believe.

In addition, since the correlation between the regressor Overall Job Satisfaction and classroom management was found to be significant, which means that job satisfaction is a good predictor of teacher self-efficacy in classroom management, it would be beneficial to explore what factors determine teacher job satisfaction. How do teachers determine if they are highly satisfied with their teaching career, and what are the most imperative factors that constitute high satisfaction in teaching?

What drives self-efficacy more than anything, based on this research and others' research, is the reality that teachers need ongoing opportunities to enhance their work performance through collaboration and mentoring each other as they "critically examine classroom instruction and student learning" (Wei, Darling-Hammond, Andree, Richardson, and Orphanos, 2009, p. 42). Brown, Lee, and Collins (2015) concur in that urgency of hands-on teaching, being able to observe colleagues in their classroom teaching, developing relationships with other teachers is empowering and helps boost feelings of competency and professionalism for teachers; thus, teachers feel much more efficacious (Brown et al., 2015).

Summary of Discussion

Teaching is an arduous task and certainly one of the most challenging global professions. Teachers who are highly aware of how they are managing a classroom, such as creating a safe learning environment and positive relationship-building is taking place, are intrinsically more likely to make changes in their teaching to improve these areas of classroom management.

Likewise, teachers who feel confident in their content knowledge and overall well-being of their instructional strategies tend to naturally feel more confident in their own teaching.

Yet, this study has also found that emotional functioning of the amygdaloid complex (Phan, Wager, Taylor, & Liberzon, 2002) creates a fight/flight response in those who experience moments in teaching when teaching does not go so well or ends up in less than favorable learning conditions. Brain research and emotional studies have shown that the amygdala, the almond-shaped part of the brain that deals with emotional experience plays an important role in how we remember associations (Anderson, 2007), and we tend to avoid any feelings of incompetence in order to further feel like failures in teaching.

This study addresses myriad times that TSE is a measure to what extent one believes he or she has the performance skills and potential to be highly successful in achieving tasks. What this finding may possibly be suggesting is that females have the more maternal instinct of the responsibility of taking care of the students, similar to taking care of their own biological children. Therefore, female teachers may feel they do not pay attention to their own body sensations and how they are reacting emotionally in a classroom, whereas males react more with problem-solving in mind; therefore, they pay more attention to students more like a challenge to be solved, and if male teachers are thinking about what is happening and how to solve issues, they may feel better about their teaching as more of an obstacle to overcome, whereas females are constantly using their maternal gut-instincts to pick up on students' emotions rather than their own.

After about twenty years of teaching, a gradual increase in significance between teacher self-efficacy and instructional strategies was found. Experienced teachers may be more cognizant of new and innovative ideas they may or may not be using in their classrooms, affecting their

overall teaching confidence. If these near-retirement teachers are not actively engaged in professional development or have not been exposed to newer, more innovative practices for teaching, then they are more likely to feel less confident in their teaching because they possibly have not had been taught the latest teaching instructional strategies.

New teachers or those who have taught fewer than ten years may be more engaged in professional development that enhances their classroom teaching. Therefore, these teachers who plan to retire within five years, first, may have been engaged in less professional development or, second, may presently have less collaboration with newer teachers or with teacher education faculty to have this knowledge of what new teaching/technological strategies are beneficial to student learning.

Furthermore, new teachers who exhibit high levels of mindfulness strive harder to increase self-efficacy, which explains the fight or flight response. For example, witnessing a student telling you "this class is dumb" every day of the week will make an imprint in a teacher's mind and is felt as being highly negative. Teachers may be feeling more incompetent or unworthy of engaging students and is the central focus of awareness, and as long as these emotions are not re-routed in the following months or even years, teachers could continue to feel unworthy or not as confident in their work as they should or could be due to not changing their teaching. So, newer teachers and more experienced teachers nearing retirement age may have much higher sensitivity when they witness negative student interactions, such as students not motivated and fail to do work or when students show signs of not learning or find school boring. New teachers begin their first year with the mindset that they have learned all they need to know and will not foresee any major challenges. Yet, when they do encounter these challenges, they either ignore them or allow them to build up to larger issues. Those teachers nearing retirement

need that boost of "I'm still doing ok" and are likely looking for this verbal affirmation both from students and colleagues.

Furthermore, teachers discover how their emotions impact how they react to situations and how their reactions affect students in the classroom. The more these new teachers (typically around age 25 for most new teachers) practice attentive observation and reflection, the higher the teacher self-efficacy in student engagement and instructional strategies. When these teachers take notice of their moods or emotions and how they change over time from situation to situation, these changes affect their own actions and thoughts, and may play a major role in how students are responding to the learning and classroom instruction.

Another phenomenon that may explain the significant correlation between new teachers and self-perceived higher efficacy is what Atir, Rosenzweig, and Dunning (2015) refer to as *overclaiming*. Overclaiming is a mechanism in which those people who claim to know little about a topic will admit they do not have much knowledge on that topic. On the contrary, those who perceive themselves to know a great deal about a topic (and do not) are more likely to pretend they know a great deal about a topic, even if the topic was completely fabricated and does not exist. This phenomenon may explain what young teachers do to avoid any confrontations with their colleagues or administrators, which is to pretend they know the information.

This study found that those who have been teaching for 25 to 45 years have had years to understand their areas of naivete and will honestly admit when they do not have particular knowledge of a topic. This admittance of lacking knowledge in a task or concept for experienced teachers is easier than for those who begin their first teaching job. Another interesting discovery deriving from this study is, specifically for males, that when teachers are aware of how they pay

attention to their emotions and how they control how they perceive situations, the more these reflections can help boost (or, with those with lack of mindfulness can lower efficacy) teacher efficacy.

Male teachers of all ages tend to be much more sensitive or critical of what they notice about their students' engagement and motivation. Male teachers who find themselves to be more aware of their own reactions to situations or how their emotions drive their thinking and behavior also are more acutely aware of their control or effect on student engagement, which is what Rotter (1990) had discovered decades ago. What Rotter (1990) had found was that people in their younger adult ages and people around retirement age were more apt to have higher external locus of control, whereas middle age people are more likely to have higher internal locus of control. What this corroborates is that newer teachers and teachers close to retirement are more likely to accept that their lack of success may be due to too difficult of tasks to undertake or simply just being unlucky, whereas middle age teachers tend to believe that they simply had lack of knowledge or ability and perhaps lack of effort on their part to continue to develop professionally as education advances.

However, this study found that teachers closer to retirement age had a negative association between teacher self-efficacy with student engagement and instructional strategies, which can conclude that teachers beginning to feel tired and ready to retire also attribute their students' lower self-efficacy in these areas from more of an internal locus of control standpoint, meaning they admit they may lack ability to use newer innovations (such as technology) or they simply have not put in the effort needed to keep students engaged and interested in the learning.

Likewise, Weiner (1985, 2010) concurred that a person's controllability determines how much control a teacher has over student success, and self-efficacy, as found in this study, was

strongly associated with higher levels of mindfulness. It is a great possibility, then, that these male teachers may possess more of a stable internal locus of control and admit their lack of student engagement is due to lack of their ability and may or may not feel like the situation is temporary and can be changed through changes in their instruction and professional development practices. Teachers are sensitive to how they are performing in the classroom. New teachers and older teachers are also finding more challenges with the amount of knowledge they have and what they think they have, and this Dunning-Kruger effect puts these teachers in situations that lead them to make decisions of leaving teaching or retiring from teaching, and with more mentoring or support for these teachers, we could move them forward in teaching much more smoothly and pleasantly, rather than allowing teachers to feel they are all alone in teaching. With more mentoring for teachers, beginning in the teacher preparation programs will give teachers a sense of being supported to move forward. Second, with more opportunities to independently teach, to make group decisions in these first crucial years, and to have opportunity to co-teach or be offered vicarious experiences where teachers see teachers in action in the classroom to offer ideas, is going to be a strong factor in reducing attrition rates for K-12 teachers in North Dakota schools.

Finally, it is of human nature to want to master particular skills in order to feel like one is doing well in their work. For teachers, research shows that having effective instruction, effective classroom management, and engaging students are factors that affect student learning and academic success. Teachers who feel they can successfully engage their students in quality inquiry or collaborative problem-solving activities that lead to high student learning success and intrinsic motivation to learn would be considered very successful in the teachers' perception of their teaching. A teacher who has higher self-efficacy naturally will feel much more open to

trying new ideas in the classroom and feel a desire to continually improve their quality of instruction. Therefore, it is of best interest to provide professional training for all teachers to invest in mindfulness training, as well as have the freedom to co-teach with colleagues, have the ability to observe each other teaching, and to receive constructive feedback in order to improve instruction to boost self-efficacy to ensure teachers enjoy their careers and reduce teacher shortage across in North Dakota.

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APPENDIX A: PRE-NOTIFICATION LETTER FOR RESEARCH

NDSU NORTH DAKOTA STATE UNIVERSITY

Administrative Offices
210 Family Life Center
Phone: 701-231-7921
Fax: 701-231-7416
www.ndsu.edu/education

School of Education
NDSU Dept. 2625
PO Box 6050
Fargo, ND 58108-6050

March 19, 2018

Subject: Pre-notification letter for Teacher Participants/Survey

Dear (Insert name of building principal):

Teacher well-being and mentoring support for new teachers are growing concerns for North Dakota. Our new teachers enter an evolving profession challenged by increasing content, socioeconomic, and political demands. It's not surprising that these new teachers often question their competency in teaching performance. As a doctoral graduate student at North Dakota State University, I am currently researching how teachers reflect on self-efficacy, because increasing self-efficacy has been strongly correlated with teaching longevity, thus, helping to build a stable, professional environment in K-12 schools. More specifically, I am looking at how mindfulness can affect teacher efficacy and, eventually, longevity.

In order to carry out this research, I plan to use a survey that measures specific characteristics and behaviors of mindfulness, as well as levels of self-efficacy. I will analyze this data for any correlations between mindfulness and self-efficacy.

I am inviting you to support this research by encouraging your teachers to be participants, by allowing me to administer the survey in your school, perhaps during a staff meeting.

To endure confidentiality, the surveys do not ask for names. NDSU and the researchers at the Institutional Review Board have taken every measure to ensure the confidentiality of the data collected. If you have any questions regarding the survey, please contact me at (701) 290-6965 or via e-mail at Vickie.conner.2@ndus.edu. Thank you in advance for supporting this endeavor.

Sincerely,

Vickie Conner

Vickie Conner, NDSU Teacher Education

Counseling
SGC Suite C

Educational Leadership
210 Family Life Center

Teacher Education
155 EML Hall

Institutional Analysis
216 Family Life Center

Occupational Adult Education
216 Family Life Center

APPENDIX B: INVITATION LETTER TO PARTICIPATE IN RESEARCH

NDSU NORTH DAKOTA STATE UNIVERSITY

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www.ndsu.edu/education

School of Education
NDSU Dept. 2625
PO Box 6050
Fargo, ND 58108-6050

Invitation Letter to Participate in Research

March 15, 2018

Dear Educator:

My name is Vickie Conner, and I am currently enrolled in the Education Doctoral Program at North Dakota State University in Fargo, ND, and working on my dissertation. If you, like me, as a practitioner in the K-12 schools, are concerned with teacher burnout, I invite you to participate in a research study investigating correlations between teachers' levels of mindfulness and teachers' self-efficacy.

The purpose of this study is to determine the levels of mindfulness teachers have in conjunction with self-efficacy levels. We are looking at self-efficacy because it may correlate with overall teacher job satisfaction.

Your participation in this research project is completely voluntary. You may decline altogether or leave blank any questions you do not wish to answer. Your responses will remain confidential. No names will be required to complete the survey. Data from this research will be kept under password-protected Stata software for one year after research is published. Since no names are on the surveys, no one will know your individual answers to this questionnaire. This survey should take approximately 25-30 minutes to complete.

If you have any questions about this project, feel free to contact me at 701-290-6965 or email at Vickie.conner.2@ndus.edu You may also contact Dr. Myron Eighmy, co-investigator, at 701-231-5775. You have rights as a participant in research. If you have questions about your rights, or complaints about this research, you may talk to the researcher or contact the NDSU Human Research Protection Program at 701.231.8995, toll-free 855.800.6717. Email: ndsu.irb@ndsu.edu

Sincerely yours,

Vickie Conner

Vickie Conner, NDSU Education Doctoral Student

APPENDIX C: BULDING/PRINCIPAL PROTOCOL

Dear Principal,

Thank you for allowing me to gather data within your school. I look forward to sharing my results in my doctoral studies in whether mindfulness levels of our teachers here in ND are correlated with self-efficacy levels. Our teachers here in ND are invaluable, and I want to take my studies a step further to ensure our teachers receive all of the support they need to do their jobs successfully.

I have enclosed in the envelope ____ # of surveys. I have also enclosed an envelope for each individual teacher to place and seal their surveys after they have completed them.
Here is the exact script to read to the teachers during your staff meeting and when you plan to disperse the surveys:

1. You are each receiving one survey and one envelope for the research.
2. Please read the letter and keep the letter that is attached to the survey. This will give you the opportunity to fully understand what my main purpose is for this study and to invite you to complete the survey. You may keep the letter for informational purposes.
3. Please complete the survey within two days of dispersing on your own time.
4. After they are done filling out the survey, you may fold the survey and put it into the envelope you are being given and seal it with tape to ensure confidentiality. You do not need to write anything on the envelope to further ensure confidentiality.
5. Please give the sealed survey to me, your building principal, or to the administrative assistant to put in an envelope in the main office, and he/she will place each of them in the large envelope that the surveys were originally mailed to your school.
6. After I, (Principal's name), have collected all surveys, I will seal the large envelope.
7. Vickie Conner, the main researcher, will pick up the surveys at our school within three to five days of the dispersing of the surveys.
8. I am also going to remind you that your participation in the research is 100% voluntary and you will not be penalized in any way in your teaching position for not participating.
9. If you have any questions, please contact Vickie Conner at 701-290-6965 or e-mail her at Vickie.conner.2@ndus.edu

Thank you again for your time and support in this research. I believe it will provide us with some revolutionary research that will help us to move forward with teacher well-being to not only retain our current teachers, but to ensure our teachers are feeling successful in their careers in education. We value our teachers and strive to make teaching the opportunity that no other profession could fulfill.

Vickie Conner
NDSU School of Education

APPENDIX D: RESEARCH QUESTIONNAIRE

Research Survey

Instructions: This questionnaire is designed to help the researcher gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinions about each of the statements below by circling the appropriate number. Your answers will be kept strictly confidential and will not be identified by name.

1. How much can you do to get through to the most difficult students?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

2. How much can you do to help your students think critically?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

3. How much can you do to control disruptive behavior in the classroom?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

4. How much can you do to motivate students who show low interest in school work?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

5. To what extent can you make your expectations clear about student behavior?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

6. How much can you do to get students to believe they can do well in school work?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

7. How well can you respond to difficult questions from your students?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

8. How well can you establish routines to keep activities running smoothly?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

9. How much can you do to help your students value learning?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

10. How much can you gauge student comprehension of what you have taught?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

11. To what extent can you craft good questions for your students ?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

12. How much can you to foster student creativity?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

13. How much can you do to get children to follow classroom rules?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

14. How much can you do to improve the understanding of a student who is failing?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

15. How much can you do to calm a student who is disruptive or noisy?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

16. How well can you establish a classroom management system with each group of

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

students?

17. How much can you do to adjust your lessons to the proper level for individual students?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

18. How much can you use a variety of assessment strategies?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

19. How well can you keep a few problem students from ruining an entire lesson?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

20. To what extent can you provide an alternative explanation or example when students are confused?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

21. How well can you respond to defiant students?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

How much can you assist families in helping their children do well in school?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

22. How well can you implement alternative strategies in your classroom?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

23. How well can you provide appropriate challenges for very capable students?

1	2	3	4	5	6	7	8	9
Nothing		Very little		Some influence		Quite a Bit		A Great Deal

Instructions: Below is a collection of statements about your everyday experiences. Using the 1-6 scale below, please indicate the frequency of each experience. Please answer according to what really reflects your experience. Please treat each item separately from every other item.

1	2	3	4	5	6
Almost Never	**Very Infrequently**	**Somewhat Infrequently**	**Somewhat Frequently**	**Very Frequently**	**Almost Always**

I could be experiencing some emotion and not be conscious of it until sometime later.	1	2	3	4	5	6
I break or spill things because of carelessness, not paying attention, or thinking of something else.	1	2	3	4	5	6
I find it difficult to stay focused on what's happening in the present.	1	2	3	4	5	6

1	2	3	4	5	6
Almost Never	**Very Infrequently**	**Somewhat Infrequently**	**Somewhat Frequently**	**Very Frequently**	**Almost Always**

I tend to walk quickly to get where I am going without paying attention to what I experience along the way.	1	2	3	4	5	6
I tend not to notice feelings of physical tension or discomfort until they really grab my attention.	1	2	3	4	5	6
I forget a person's name almost as soon as I have been told it for the first time.	1	2	3	4	5	6
It seems I am "running on automatic" without much awareness of what I am doing.	1	2	3	4	5	6
I rush through activities without really being attentive to them.	1	2	3	4	5	6
I get so focused on the goal I want to achieve that I lose touch with what I am doing right now to get there.	1	2	3	4	5	6
I find myself listening to someone with one ear, doing something else at the same time.	1	2	3	4	5	6
I do jobs or tasks automatically, without being aware of what I am doing.	1	2	3	4	5	6
I drive places on "automatic pilot" and then wonder why I went there.	1	2	3	4	5	6
I find myself pre-occupied with the future or the past.	1	2	3	4	5	6
I find myself doing things without paying attention.	1	2	3	4	5	6
I snack without being aware that I am eating.	1	2	3	4	5	6

Instructions: The following statements pertain to the ability to focus on immediate perception of the present moment. Circle the number that best describes what is generally true of you.

1	2	3	4
Rarely	**Occasionally**	**Fairly Often**	**Almost Always**

I am open to the experience of the present moment.	1	2	3	4
I sense my body, whether eating, cooking, cleaning, or talking.	1	2	3	4
When I notice of absence of mind, I gently return to the experience of the here and now.	1	2	3	4
I am able to appreciate myself.	1	2	3	4
I pay attention to what's behind my actions.	1	2	3	4
I see my mistakes and difficulties without judging them.	1	2	3	4
I feel connected to my experience in the here-and-now.	1	2	3	4
I accept unpleasant experiences.	1	2	3	4
I am friendly to myself when things go wrong.	1	2	3	4
I watch my feelings without getting lost in them.	1	2	3	4
In difficult situations, I can pause without immediately reacting.	1	2	3	4
I experience moments of inner peace and ease, even when things get hectic and stressful.	1	2	3	4
I am impatient with myself and with others.	1	2	3	4
I am able to smile when I notice how I sometimes make life difficult.	1	2	3	4

Instructions: Please rate each of the following statements using the scale provided. Write the number in the blank that best describes your own opinion of what is generally true for you.

1	2	3	4	5
Never or very rarely true	**Rarely true**	**Sometimes true**	**Often true**	**Very often or always true**

_____ 1. I notice changes in my body, such as whether my breathing slows down or speeds up.

_____ 2. I'm good at finding the words to describe my feelings.

_____ 3. When I do things, my mind wanders off and I'm easily distracted.

_____ 4. I criticize myself for having irrational or inappropriate emotions.

____ 5. I pay attention to whether my muscles are tense or relaxed.

____ 6. I can easily put my beliefs, opinions, and expectations into words.

____ 7. When I'm doing something, I'm only focused on what I'm doing, nothing else.

_____8. I tend to evaluate whether my perceptions are right or wrong.

____ 9. When I'm walking, I deliberately notice the sensations of my body moving.

____10. I'm good at thinking of words to express my perceptions, such as how things taste, smell, and sound.

____11. I drive on "automatic pilot" without paying attention to what I'm doing.

____12. I tell myself that I shouldn't be feeling the way I'm feeling.

____13. When I take a shower or bath, I stay alert to the sensations of water on my body.

____14. It's hard for me to find the words to describe what I'm thinking.

____15. When I'm reading, I focus all my attention on what I'm reading.

____16. I believe some of my thoughts are abnormal or bad, and I shouldn't think that way.

____17. I notice how foods and drinks affect my thoughts, bodily sensations, and emotions.

____18. I have trouble thinking of the right words to express how I feel about things.

1 Never or very rarely true	2 Rarely true	3 Sometimes true	4 Often true	5 Very often or always true

____19. When I do things, I get totally wrapped up in them and don't think about anything else.

____20. I make judgments about whether my thoughts are good or bad.

____21. I pay attention to sensations, such as the wind in my hair or sun on my face.

____22. When I have a sensation in my body, it's difficult for me to describe it because I cannot find the words.

____23. I don't pay attention to what I'm doing because I'm daydreaming, worrying, or otherwise distracted.

____24. I tend to make judgments about how worthwhile or worthless my experiences are.

____25. I pay attention to sounds, such as clocks ticking, birds chirping, or cars passing.

____26. Even when I'm feeling terribly upset, I can find a way to put it into words.

____27. When I'm doing chores, such as cleaning or laundry, I tend to daydream or think of other things.

____28. I tell myself that I shouldn't be thinking the way I'm thinking.

____29. I notice the smells and aromas of things.

____30. I intentionally stay aware of my feelings.

____31. I tend to do several things at once rather than on focusing on one thing at a time.

____32. I think some of my emotions are bad or inappropriate, and I shouldn't feel them.

____33. I notice visual elements in art and nature, such as colors, shapes, textures, or patterns of light and shadow.

____34. My natural tendency is to put my experiences into words.

____35. When I'm working on something, part of my mind is occupied with other topics, such as what I'll be doing later, or things I'd rather be doing.

____36. I disapprove of myself when I have irrational ideas.

1 Never or very rarely true	2 Rarely true	3 Sometimes true	4 Often true	5 Very often or always true

____37. I pay attention to how my emotions affect my thoughts and behavior.

____38. I get completely absorbed in what I'm doing, so that all my attention is focused on it.

____39. I notice when my moods begin to change.

Participant Demographic Information

Instructions: *To allow the researcher to better analyze survey results, please provide the following demographic information.*

Please indicate the following:

Age (*in years*) _____

With gender, I identify as: _____Male _____Female _____Other
(Select *all* that apply)

Years of Teaching Experience (*as a full-time teacher*):

_____ Years of full-time teaching experience (rounded to nearest year)

Subject(s) Taught Most of the Time:

_____Math _____History _____Science _____Art/Music

_____English _____Physical Ed _____Agricultural Ed

_____Foreign Language _____(Other) *Please specify what subject*: _____

Currently teaching in a _____ public school district _____private school district

C**urrently teaching in a**:

_____ **Classification A School** (student enrollment in 9-12 is 125 students and lower)

_____ **Classification AA School** (student enrollment in 9-12 is between 126 and 234 students)

_____ **Classification AAA School** (student enrollment in 9-12 is between 235 and 411 students)

_____ **Classification AAAA School** (student enrollment in 9-12 is 412 students and higher)

# of students engaged with daily: _____25< _____26-50 _____51-75 _____76+

# of class periods you teach in a day: _____

Overall Job Satisfaction: (Circle ONE)

1	2	3	4	5
Extremely low	**low**	**average**	**high**	**extremely high**

APPENDIX E: CODEBOOK & SCORING MANUAL

Demographic Items

Age

Numerical/discrete

Gender

1 Female

2 Male

Years of teaching experience

Numerical/discrete

Subject area

1 Math

2 History

3 Science

4 Art/Music

5 English

6 Physical Ed.

7 Agriculture Ed.

8 Foreign Language

9 Other

10 Special Ed.

11 Elementary

Type of school

1 Public

2 Private

School size classification

1 Class A (125 or fewer)

2 Class AA (126 to 234)

3 Class AAA (235 to 411)

4 Class AAAA (412 or more)

Number of students engaged per day

1 25 or fewer

2 26-50

3 51-75

4 76 or more

Number of class periods taught per day

Numerical/discrete

Overall job satisfaction (single item)

1 Extremely low

2	Low
3	Average
4	High
5	Extremely high

Instruments

Teachers Sense of Efficacy Scale (TSES)

Subscale-item map

Subscale	Items
Efficacy in student engagement	01, 02, 04, 06, 09, 12, 14, 22
Efficacy in instructional strategies	07, 11, 18, 23, 10, 17, 20, 24
Efficacy in classroom management	03, 05, 08, 13, 15, 16, 19, 21

Item response options and score values

Value	Response option
1	Nothing
2	
3	Very little
4	
5	Some influence
6	
7	Quite a bit
8	
9	A great deal

Mindfulness Attention Awareness Scale (MAAS)

Subscale-item map

All 15 items used for a single score.

No items are reverse coded.

Item response options and score values

Value	Response option
1	Almost never
2	Very infrequently
3	Somewhat infrequently
4	Somewhat frequently
5	Very infrequently
6	Almost always

Freiburg Mindfulness Inventory (FMI)

Subscale-item map

Subscale	Items
Attention	01, 02, 03, 05, 07, 10
Attitude	04, 06, 08, 09, 11, 12, 13*, 14

* Reverse-coded item.

Item response options and score values

Value	Response option
1	Rarely

2	Occasionally
3	Fairly often
4	Almost always

Kentucky Inventory of Mindfulness Skills (KIMS)

Subscale-item map

Subscale	Items
Observing	01, 05, 09, 13, 17, 21, 25, 29, 30, 33, 37, 39
Describing	02, 06, 10, 14*, 18*, 22*, 26, 34
Acting with awareness	03*, 07, 11*, 15, 19, 23*, 27*, 31*, 35*, 38
Accepting without judgment	04*, 08*, 12*, 16*, 20*, 24*, 28*, 32*, 36*

* Reverse-coded item.

Item response options and score values

Value	Response option
1	Never or very rarely true
2	Rarely true
3	Sometimes true
4	Often true
5	Very often or always true