

ALLEVIATING TEACHER BURNOUT:  
THE RELATIONSHIP BETWEEN JOB STRESS, TEACHER EFFICACY AND  
EMOTIONAL EXHAUSTION AMONG MIDDLE SCHOOL TEACHERS

by

Katie Jo Blevins

Liberty University

A Dissertation Presented in Partial Fulfillment  
Of the Requirements for the Degree of  
Doctor of Education

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## ABSTRACT

Despite increasing rates of teacher burnout, research is still unclear as to the exact triggers that eventually cause it. Two potential causes that are at the forefront of discussions regarding teacher burnout are job stress and teacher self-efficacy. Gaps in research indicate that more needs to be done to understand if there is a correlation between job stress, self-efficacy, and emotional exhaustion, a core component of burnout. Research is scant regarding stress, teacher self-efficacy, and emotional exhaustion at the middle school level even though there are a multitude of factors that can increase stress and decrease efficacy. To address research gaps this study sought to better understand the relationship between job stress, teacher self-efficacy, and emotional exhaustion middle school teachers. A correlational study was conducted using a cross-sectional survey design to identify correlations between the variables of (1) job stress, (2) teacher self-efficacy, and (3) emotional exhaustion. A sample of 75 participants was taken from two school districts in South Georgia to complete three surveys: (1) the Maslach Burnout Inventory – Educators Survey emotional exhaustion subscale, (2) a single-item stress question, and (3) the Ohio State Teacher Efficacy Scale. Data collected from the surveys were analyzed using Pearson’s Product Moment Correlation. The first research question pertaining to job stress and self-efficacy was statistically significant with a low to moderate negative correlation. This result indicates that as stress increased, efficacy decreased; however, efficacy remained moderately high regardless of stress level, suggesting that teachers remained resilient through the stress. Study implications, limitations, and future research directions are discussed.

*Keywords:* teacher self-efficacy, job-related stress, emotional exhaustion, teacher burnout, student-teacher relationship, adolescent development, middle school

### **Dedication**

This manuscript is first and foremost dedicated to my faithful husband and son. You have shown me support, kindness, and understanding throughout the many hours I have invested into this manuscript. Without your encouragement I would not be where I am today and for that, I am truly blessed and grateful. Thank you for your overwhelming love and support during this long journey.

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### **List of Abbreviations**

Confirmatory factor analysis (CFA)

Depersonalization (DP)

Effect size (ES)

Emotional exhaustion (EE)

Maslach Burnout Inventory – Educators Survey (MBI-ES)

Ohio State Teacher Efficacy Scale (OSTES)

Personal accomplishment (PA)

Teachers' Sense of Efficacy Scale (TSES)

## **CHAPTER ONE: INTRODUCTION**

### **Overview**

The purpose of this chapter is to deliver a comprehensible framework for the study by first providing background information on the topic of teacher efficacy. Additional variables such as teacher burnout, emotional exhaustion, job stress, and school climate are discussed to lay a solid foundation of knowledge on the subject. The problem statement is given followed by the purpose statement to orient the reader to the gap in research the study addresses. The significance of the study is discussed to disseminate the importance of addressing this particular gap in research before posing the research questions to be examined. Lastly, definitions of terminology applicable to the study are defined.

### **Background**

Teacher burnout is an issue that has persisted for decades but has materialized even more so in the last few years (Sutcher et al., 2019). Burnout issues were previously confined to a few states and only prevalent in specific subject areas; however, nearly all states now report issues with teacher shortages in multiple subject areas, escalating to the point in which teacher quality has been sacrificed to accommodate the influx of vacancies (Sutcher et al., 2019). Causes of burnout in the teaching profession can be attributed to a myriad of factors ranging from job stressors to elements that contribute to the overall school climate (Herman et al., 2018). One of the most critical components of teacher burnout is emotional exhaustion, which can have physical, mental, and emotional impacts on an individual (Arens & Morin, 2016). Emotional exhaustion is fatigue stemming from large amounts of stress over an extended period of time with low ability to cope with the stress appropriately (Eddy et al., 2019). If left unchecked,

similar to burnout, emotional exhaustion can be a leading motivation to leave the teaching profession all together (Corbin et al., 2019).

One avenue to address teacher burnout is by studying teacher efficacy, namely, how a teacher perceives his or her own ability to foster student learning and maintain content engagement (Oakes, et al., 2013). Similar to teacher burnout and emotional exhaustion, self-efficacy can be impacted by job stress and school climate because the two constructs share correlational factors. A specific example of job stress that impacts self-efficacy is high-stakes testing. Gonzalez et al. (2017) focused on high-stakes testing in relation to self-efficacy of teachers and found that simply having a tested subject does not significantly impact stress or efficacy; alternatively, it is the effects of high-stakes testing that impact them. Teachers become stressed and efficacy decreases when pressure is placed by administrators for students to perform well and, if student performance is less than desirable, teachers fear blame (Gonzalez et al., 2017). At the middle school level teachers face a specific set of challenges such as the responsibility of managing peer relationships (Ryan et al., 2015). At the same time, teachers are attempting to develop positive relationships with students who are going through many changes at the adolescent age, which can impact stress, efficacy, and ultimately burnout (Herman et al., 2020).

Bandura has worked to study various constructs of efficacy since the 1960s, positing that personal efficacy expectations are derivatives of performance accomplishments, vicarious experiences, verbal persuasion, and physiological state (Bandura, 1977). Bandura (1993) continued his study of efficacy and suggested that self-efficacy operates at three levels in academic development: (1) a student's efficacy determines their aspiration, motivation, and accomplishments; (2) perceived teacher efficacy relates to the ability to motivate students and

promote learning across all environments; (3) the collective efficacy of faculty and that of the student body have the ability to impact school achievement while student body efficacy impacts the efficacy of faculty. Within the last seven years Bandura has continued refining the definition of efficacy (Bandura, 2012). Similarly, Julian Rotter began work in the 1950s on internal and external control on behaviors and performance, which paved the way for researchers to make connections between the locus of control and teacher efficacy (Tschannen-Moran et al., 1998).

Klassen et al. (2009) conducted a study to test the validity of a teacher self-efficacy scale while also observing how the construct of efficacy was perceived across multiple cultures and countries in relation to job satisfaction. Results indicated that the sample found self-efficacy to be a valid construct and a positive relationship between efficacy and job satisfaction existed (Klassen et al., 2009). In order to highlight the importance of efficacy for teachers, Bray-Clark and Bates (2003) addressed professional development directly by pushing for frameworks to include teacher efficacy reforms due to the correlation that efficacy studies seemed to have with the overall well-being of teachers, the school climate, and student achievement. Teacher retention has been studied for the last two decades using a multitude of facets, with some results indicating that support from administrators and student stressors affected teacher retention and efficacy the most (Sass et al., 2010). Research began to focus on teacher burnout early on and included student teachers to understand how early burnout can actually begin. Fives et al. (2007) explored this relationship and found a significant correlation between efficacy and burnout, stating that student teachers who receive a lot of guidance and support indicated lower levels of burnout while gaining efficacy.

One job stressor that cannot be overlooked is that of education policies that push agendas such as high-stakes testing. Over the last decade policies have only increased and become much

more strict, which has the potential to cause higher levels of stress on teachers. Berryhill et al. (2009) cite that the intent of reform and actual outcomes have a very large gap between them as educational policies are producing unintended consequences that have been hypothesized to escalate issues surrounding teacher burnout. Similar to Fives et al. (2007), Pogodzinski et al. (2013) focused on school climate and the intent of new teachers to remain teaching. Climate is important because a school or organization itself can influence the attitude and behavior of the faculty, as well as the fact that teacher turnover rates can impact effectiveness (Pogodzinski et al., 2013). Multiple factors influence overall climate of the workplace, all of which have the potential to positively and negatively impact teacher efficacy (Tschannen-Moran et al., 1998).

Teacher efficacy itself is a construct that has often been situated within the theoretical framework of Albert Bandura's social cognitive theory. This theory posits that learning occurs in social settings in which the individual and the environment are interacting by means of a reciprocal relationship (Lacks & Watson, 2018). In relation to social cognitive theory, self-efficacy includes not only the individual's thoughts on his or her ability to perform, but shifts to encompass thoughts about outcome as far as what consequences may result from various actions (Tschannen-Moran et al., 1998). Julian Rotter utilized social learning theory in relation to locus of control theory and self-efficacy. The locus of control theory focuses on how the individual expects an outcome of their own behavior to be based on personal characteristics as opposed to other variables such as chance or fate (Rotter, 1990). In regards to teacher efficacy, Rotter's locus of control theory entails that a teacher has an internal control of reinforcement if they have high levels of efficacy; alternatively, teachers who acquiesce to the reasoning that efficacy is determined by environmental influences are considered to exhibit external locus of control (Tschannen-Moran, 1998). Lacks and Watson (2018) describe Rotter's theory and efficacy in

that if the individual has a sense of efficacy control is based on personal or internal factors, whereas those who have an external locus feel they do not have the ability to control outcomes.

Teacher burnout has proven to be a persistent yet elusive construct for years as studies have worked to find factors that influence it, along with ways to alleviate the issue (Sutcher et al., 2019; Herman et al., 2018). One way to examine burnout is through the lens of teacher efficacy, which is rooted in both Bandura's and Rotter's social learning theories (Lacks & Watson 2018). Teacher efficacy has been explored in various ways for over 50 years, with studies examining the relationships between efficacy and factors such as job stressors (Gonzalez et al., 2017), job satisfaction (Klassen et al., 2009), education policies and reform (Berryhill et al., 2009), and overall school climate (Tschannen-Moran et al., 1998). The following section addresses the problem by revealing gaps in literature that have not been addressed regarding efficacy.

### **Problem Statement**

Lacks and Watson (2018) attempted to study the relationship between school climate, efficacy, and beliefs; however, results were unclear and failed to match up with prior studies that found the three to be correlated. One review of research regarding sources of self-efficacy in teaching found that most studies were focusing on variables that more than likely mediated the relationship between sources of efficacy rather than having a direct effect (Morris et al., 2017). Furthermore, Morris et al. (2017) suggested that there needed to be a better measure of efficacy sources, as well as consideration of diverse and specific experiences to understand how teacher efficacy develops in the first place. There is a multitude of discourse surrounding variables that directly affect the self-efficacy of teachers because many are unclear on what solely effects efficacy. Many of the variables that are perceived to impact efficacy, such as student behavior,

also have the opportunity to be a result of a teacher's self-efficacy as opposed to being a cause of it; therefore, Morris et al. (2017) made the call for future studies to be more experimental in nature so that causal relationships can be explored and established regarding self-efficacy.

Unremitting stress on the job has the potential to result in burnout and can also contribute to feelings of inefficacy among teachers (Herman et al., 2018). This stress can specifically cause emotional exhaustion, which has detrimental impacts on the teacher, student, and even the overall climate of a school (Corbin et al., 2019). Studies that explore stress in the teaching field need to be cognizant of how stress may fluctuate depending on the time of year, leading Herman et al. (2018) to propose that future studies observe the effects of stress on efficacy and burnout throughout the full school year for the entire sample. Likewise, Hoglund et al. (2015) found fluctuations in emotional exhaustion responses depending on if the survey was taken right after a break or before a break. Herman et al. (2018) suggests that research explore single-item indicators of teacher stress and coping in order to diminish the negative effects of teacher stress. Ilies et al. (2015) explored relationships between workload, distress, and work-family conflict in schools to explain physical, cognitive, and emotional fatigue. This study furthered research regarding job stressors in education by directly comparing types of job fatigue to gain a clearer picture of job demands and how they impact education. Future studies need to explore how different types of fatigue affect different behaviors because helping to understand stress and fatigue has the potential to establish links with constructs like teacher burnout (Ilies et al., 2015). The problem is that there is a gap in literature regarding the fact that constructs affecting burnout remain unclear, specifically, the relationship between job stress, self-efficacy, and how the two may impact burnout rates among middle school teachers.

### **Purpose Statement**

The purpose of this non-experimental correlational quantitative study was to explore the relationship between teacher self-efficacy and job stressors as they relate to feelings of teacher burnout through the measurement of emotional exhaustion among middle school teachers. Using a correlational research design, the relationship between the variables of job stress, self-efficacy of teachers, and emotional exhaustion was explored. The variables are defined as follows: (1) job stress- the collection of negative emotions as a result of environmental and personal demands that exceed one's ability to cope (Gonzalez et al., 2017); (2) teacher self-efficacy- a teacher's belief in his or her ability to teach students and produce learning experiences (Ryan et al., 2015); (3) emotional exhaustion- feelings of being overextended and having expended emotional and physical resources to cope (Taxer et al., 2019). The study seeks to understand the relationship that exists between the variables of job stress, self-efficacy, emotional exhaustion and whether or not the relationship is positive or negative in nature. Lacks and Watson (2018) utilized a correlational quantitative research design to gain insight into the strength of the relationship between the general school climate and teacher self-efficacy, if there was any relationship at all.

This study focuses on middle school teachers due to stress stemming from developmental milestones experienced by adolescents, difficulties in transitioning to middle school, and stress stemming from high-stakes testing. The population selected for the study consisted of a cross-sectional sample of middle school teachers of all content areas in sixth through eighth grade. The majority of previous studies focus on either elementary or high school level, or include all grades from kindergarten through twelfth (Gonzalez et al., 2017; Khani & Mirzaee, 2015; Sass et al., 2010), indicating a gap exists at the middle school level. The variables in the current study include teacher self-efficacy, job-related stress, and emotional exhaustion, which have been

observed in a multitude of studies. Teacher burnout and emotional exhaustion have previously been observed as dependent variables (Aloe et al., 2014; Oakes et al., 2013; Herman et al., 2018) while job stress (Gonzalez et al., 2017; Khani & Mirzaee, 2015; Sass et al., 2010) and teacher self-efficacy (Ryan et al., 2015; Lacks & Watson, 2018; Gonzalez et al., 2017; Tschannen-Moran & Hoy, 2001) have been observed as independent variables impacting teacher burnout.

### **Significance of the Study**

Middle school is an extremely tumultuous time in the lives of students and often times many find themselves struggling personally and academically as they navigate the beginning of the teenage years (Ryan et al., 2015). Many studies seek to understand sources of teacher efficacy to ensure that teachers are performing at the highest level so that it translates into student achievement; however, stress and other factors can quickly derail levels of efficacy for teachers (Morris et al., 2017). Gonzalez et al. (2017) found medium and large effect sizes to understand teacher stressors across grade levels and content areas, finding that there were statistically significant differences in job related stress among secondary teachers. Given that middle school already presents its own challenges that are different than what is found in elementary or high school (Herman et al., 2020), it is even more imperative that middle school teachers receive the support they need to ensure high levels of self-efficacy and collective efficacy. This study is significant compared to other theories due to the fact its sole focus was on middle school, whereas others focus on elementary and middle (Gonzalez et al., 2017), or middle and high school combined (Sass et al., 2010; Abel & Sewell, 1999). The study contributes to this body of research by focusing particularly on middle grades to understand correlations between job stress, self-efficacy, and emotional exhaustion in hopes of alleviating teacher stress, and ultimately burnout at the middle school level. Efficacy plays a large role in the classroom

and middle school teachers have the perception that managing peer relationships is less efficacious than their ability to manage the classroom (Ryan et al., 2015). Due to the large role peer relationships play in middle school, further research is needed to target those grade levels.

Another pitfall to middle school relates to high-stakes testing that adds more stress to the environment. One factor contributing to stress in relation to high-stakes testing is the decrease in time available to teach with increases in demands and issues that require more time; additionally, administrators who place demands on teachers in regards to high-stakes testing decrease teacher efficacy and can negatively impact the school's climate, which in turn has negative consequences on both teachers and students (Gonzalez et al., 2017). There is a need for greater understanding of demands teachers face in order to help them cope with stress to alleviate teacher burnout (Herman et al., 2018). This study is significant because the results of this research could provide more clarity to current studies and future studies as to the strength of the relationships between job stress, teacher self-efficacy, and emotional exhaustion among middle school teachers specifically; furthermore, the study has the potential to shed light on whether or not subject area plays a mediating role.

### **Research Questions**

The following research questions were addressed in this study.

**RQ1:** Is there a relationship between job stress scores and teacher self-efficacy of middle school teachers?

**RQ2:** Is there a relationship between the self-efficacy scores and emotional exhaustion scores of middle school teachers?

**RQ3:** Is there a relationship between job stress and emotional exhaustion scores of middle school teachers?

### Definitions

1. *Collective efficacy* - Collective efficacy refers to the extent to which perceptions of efficacy are shared across multiple teachers in one school (Tschannen-Moran et al., 1998).
2. *Emotional exhaustion* – Emotional exhaustion is the core component of teacher burnout and consists of feeling fatigued and having expended the emotional and physical resources to deal with the stress (Taxer et al., 2019).
3. *Job-related stress* - Job-related stress, specifically for teachers, is a collection of negative emotions relating directly to work that stems from environmental and personal demands, and ends up exceeding the individual's capacity to cope with it (Gonzalez et al., 2017).
4. *Locus of control theory* - Julian Rotter developed the Locus of Control Theory in 1966, describing individuals have an internal locus of control when they believe self-efficacy is measured by factors within their control; alternatively, individuals with an external locus of control hold the belief that efficacy is impacted by environmental factors outside of their ability to control (Lacks & Watson, 2018).
5. *School climate* - School climate is considered to be a specific set of internal characteristics that set one school apart from another; furthermore, these characteristics have an influence on the behaviors of the members of the school (Lacks & Watson, 2018).
6. *Social cognitive theory* - Social cognitive theory, also known as social learning theory, states that learning occurs in social settings that allow the individual and the environment to interact by means of a reciprocal relationship (Lacks & Watson, 2018).

7. *Teacher burnout* - Teacher burnout occurs when an individual is subjected to stress that occurs specifically in the workplace for an extended period of time, causing emotional exhaustion, depersonalization, and low levels of self-efficacy (Herman et al., 2018).
8. *Teacher self-efficacy* - Teacher self-efficacy refers specifically to a teacher's belief in his or her ability to successfully teach students and produce learning experiences (Ryan et al., 2015).

## **CHAPTER TWO: LITERATURE REVIEW**

### **Overview**

The following chapter provides an in-depth discussion on the theoretical foundation and related research. Albert Bandura's social cognitive theory is the preeminent theory for the study, accompanied by Julian Rotter's locus of control theory. The related research section is comprised of information regarding (1) adolescent development, (2) teacher burnout, and (3) teacher efficacy. The literature review concludes by providing a summary of past and current research presented in the chapter.

### **Theoretical Framework**

This study is situated within two theoretical frameworks: the preeminent framework, Albert Bandura's social cognitive theory (Bandura, 1971; Bandura, 1993), and Julian Rotter's locus of control theory (Rotter, 1966). Behavioral learning theories and cognitive learning theories have often been challenged throughout history as psychologists have conducted experiments and combined aspects of the two theories to understand the human race. The Yale Institute of Human Relations was one of the first to begin exploring social learning theory to better understand personality and social development; however, Albert Bandura eventually took hold of the theory and transformed it into what is now known as social cognitive theory (Pajares, 2004). Bandura was of the opinion that prior research focused too heavily on the behavioral side of human nature, which helped shape his own research to take into account more cognitive capabilities of humans (Pajares, 2004). Social cognitive theory developed into an explanation of interactions between the individual, behavior, and the environment, emphasizing that learning occurs in social situations (Lacks & Watson, 2018). Bandura explained that as part of social learning theory, learning takes place through either direct experiences of the individual or

modeling of behaviors by other individuals, otherwise known as observational learning (Bandura, 1971). Social learning theory explains that human functioning is reliant on the regulatory processes of anticipating probable consequences through stimulus control and cognitive abilities, and reinforcement control as individuals understand behavioral cues but may react differently depending on positive or negative reinforcements (Bandura, 1971).

As social learning theory developed and Bandura made the transition towards changing it to social cognitive theory to separate it from other theories, more prominent constructs materialized. Self-efficacy, or the belief in one's own abilities, impacts four key processes: cognitive, motivational, affective, and selection (Bandura, 1993). Bandura (1993) identifies that: cognitive processes are essential to reasoning and thinking skills as it relates to an individual's capacity to execute tasks; the role of self-efficacy is integral in relation to motivation due to the desire to achieve certain standards; self-efficacy is fundamental to an individual being able to regulate emotion and cope with stressful situations; and that self-efficacy plays a role in selecting situations that an individual places themselves in determined by their awareness of whether or not they are capable of coping with that situation. Self-efficacy can be stripped down even further to apply directly to educational environments in what is termed as teacher self-efficacy. Emerging from social cognitive theory, teacher self-efficacy specifically relates to a teacher's perception of his or her own capabilities of creating experiences in which students successfully learn (Ryan et al., 2015). Delving deeper, efficacy can be divided into personal teaching efficacy as mentioned previously, or general teaching efficacy which encompasses more issues that are beyond the control of the teacher (Lacks & Watson, 2018).

The construct of teacher self-efficacy as developed by social cognitive theory is essential to understanding motivations and outcomes in teaching. According to Bandura self-efficacy

stems from prior mastery experiences that are similar to the task at hand, verbal supports from colleagues and administration, and even physiological responses to the task; however, the strongest, most influential cause of self-efficacy is prior mastery experiences (Skaalvik & Skaalvik, 2017). Although mastery experience and the other three sources of efficacy effect situations teachers encounter, each situation is different and teachers may not feel as efficacious in one situation as another even though the initial mastery experience is there (Tschannen et al., 1998). Teachers who teach a particular grade level or content area may feel a high level of self-efficacy until they are asked to work with another age group of students or teach a different content area (Skaalvik & Skaalvik, 2017; Tschannen et al., 1998). Bandura (1977) explains the sources of self-efficacy and states that successes experienced by the individual raise mastery expectations and failures lower the mastery expectations. Once self-efficacy has been lowered after failure during a particular experience, the individual is likely to avoid this task as he or she believes that after having failed once, it is likely to occur again (Tschannen et al., 1998). The earlier on in the experience that failure occurs the quicker failure is associated with the situation, highlighting the fact that the pattern and timing of successes and failures have the ability to contribute to the individual's ability to overcome failures and cope with them in a more productive way in future situations (Bandura, 1977).

Taking into account the experiences that shape self-efficacy, Bandura's social cognitive theory acknowledges that behaviors are impacted by efficacy expectations as well as outcome expectations. Efficacy expectations are the individual's belief as to whether or not he or she can achieve a particular level of performance during certain situations, whereas outcome expectations are the judgements made by the individual about potential consequences of the behaviors or situations (Guskey & Passaro, 1994). Bandura further separates the two constructs

of outcome and efficacy expectations by explaining that self-efficacy beliefs are predictors of outcome expectancies because they help the individual decide on course of action based on their belief in their own abilities (Bandura, 1977). Even further, Bandura (1977) relates the two directly to teaching in that students may benefit from a particular learning strategy such as scaffolding through an increase in learning, which would be the outcome expectation; however, Bandura makes the argument that had it not been for the efficacy expectation, the teacher would not have been confident in using such a strategy in the classroom had he or she not had a high efficacy expectancy (Zee & Koomen, 2016). Bandura claimed that efficacy expectations form from the perception of performance accomplishments and social influence placed by the organization (Guskey & Passaro, 1994). This information alone highlights the need for exploration of factors that influence the self-efficacy of teachers, including external factors such as job stress and other issues that may lead to decreases in efficacy or teacher burnout.

In conjunction with Bandura's social cognitive theory and self-efficacy, Julian Rotter's locus of control theory is also used in the theoretical framework. Rotter's theory is often intertwined with self-efficacy because it focuses on outcomes and actions. Locus of control theory posits that individuals fall somewhere between an internal locus and external locus of control; subsequently, those with internal control believe that their self-efficacy is attributed to factors they control whereas external control would feel that external factors beyond their control are what shape efficacy beliefs (Rotter, 1966). The locus of control is essential in understanding what may drive efficacy because successes and failures are attributed to either the individual if they have an internal locus of control, or the environmental external factors if the individual has an external locus of control (Lacks & Watson, 2018). One of the most influential sources that shape an individual's efficacy are mastery experiences which shape how an individual reacts to

new situations based on efficacy expectations and outcome expectations (Bandura, 1977). Similarly, Rotter's theory of locus of control shapes how individuals feel and react to situations based on whether or not they have an internal control or external control, which decides whether the person takes responsibility for their actions or if they believe the environment is responsible for how a situation turns out (Lacks & Watson, 2018). Shaping efficacy in teachers relies heavily on how teachers perceive their control because those who exude an internal locus of control have higher confidence levels when dealing with difficult situations in teaching (Tschannen et al., 1998). Alternatively, teachers with an external locus of control are of the mindset that external factors have the ability to overwhelm what the teacher is able to do (Tschannen et al., 1998). These two states of mind ultimately determine how teachers deal with various situations, particularly more stressful ones, and fall back to Bandura's work with efficacy expectancy and outcome expectancy.

Bandura (1977) made the distinction that much of Rotter's work is focused on causal beliefs that pertain to action-outcome possibilities rather than self-efficacy and states that individuals with perceived internal locus of control but lack skills to complete a task would have low self-efficacy. This information shows the necessity of utilizing both theories in that self-efficacy is determined and influenced by a variety of experiences as well as how the individual perceives their own control in the situation. Bandura argues that regardless of control a person believes they possess, knowing what is needed to be successful in a particular situation is useless if one doesn't have a high enough self-efficacy belief to achieve it (Zee & Koomen, 2016). Moving forward, this belief in addition to both the self-efficacy theory and locus of control theory influenced research on teacher self-efficacy in that personal efficacy is a predictor of outcome expectancies, and that efficacy among teachers is specific to the situation as opposed to

being generalized (Zee & Koomen, 2016). Rotter's theory of locus of control contributes more towards the understanding of how individuals cope with and adjust to situations that arise, with individuals possessing an internal locus of control having higher efficacy in their ability to effect change and accept responsibility for their actions (Crothers et al., 2010). While Rotter's theory seems to be more generalized according to Bandura, locus of control is subject to change over time as well as change depending on the circumstances (Jonsson & Nilsson, 2014).

Bandura and Rotter have both created inventories in an attempt to measure an individual's self-efficacy. The theories of both of these psychologists and their inventories have been utilized in multiple studies over the years as the realization of the importance of self-efficacy in teachers has come to fruition. Many studies have focused on teacher self-efficacy in regards to job satisfaction, stress, coping abilities, retention and burnout along with locus of control to better understand where responsibility of actions is being held accountable (Zee & Koomen, 2016). The purpose of the current study is to understand the relationships between teacher self-efficacy, job stress and emotional exhaustion as they relate to teacher burnout among middle school teachers. Situating the study within the theoretical framework based on Bandura's and Rotter's theories of self-efficacy and locus of control guide the study in understanding how the variables may or may not interact with one another in terms of personal beliefs, environmental influences, and causal beliefs of actions and outcomes (Lacks & Watson, 2018; Guskey & Passaro, 1994).

### **Related Literature**

The following section on related literature provides an in-depth synthesis of the existing body of research surrounding the topics to be examined in this study. Similar studies are

reviewed to address gaps in research as it relates to adolescent development, teacher burnout, emotional exhaustion, teacher self-efficacy, and job-related stress in the field of education.

### **Adolescent Development**

Adolescents experience a multitude of physiological, social and emotional changes throughout middle school making it an extremely tumultuous time for some students, impacting academic achievement, the development of self-concept, and academic motivation (Wigfield et al., 2005). At this point in development, students are beginning to reach puberty at different times beginning as early as the fifth grade (Ryan et al., 2015). Differences in maturation rates can impact a student's ability to transition and adjust properly between elementary and middle school and result in negative behaviors during school (Wigfield et al., 2005). In addition to the physiological changes of puberty there are also cognitive changes taking place at the same time. Adolescents begin transitioning into abstract and hypothetical thinking but still lack in the area of problem-solving skills due to poor judgement resulting from increased risk-taking behaviors (Office of Adolescent Health, 2019). Moods and emotions are constantly changing due to developmental changes within the brain, causing students to react differently to various situations which also segues into social changes that adolescents experience (Wigfield et al., 2005).

During middle school, students are working to sort out relationships in addition to sorting out their own development in regards to self-concept and self-esteem, especially as the transition from elementary to middle school can impact peer relationships (Wigfield et al., 2005; Office of Adolescent Health, 2019). Peer pressure, both negative and positive, begins to play a large role in the social nature of adolescents as they begin to explore relationships outside of their family circle (Office of Adolescent Health, 2019). The physiological, social, and emotional changes

experienced by adolescents collectively impact the overall school experience, as mentioned previously in terms of achievement, motivation, and behaviors. Just as important as peer relationships is the relationship between teachers and students as it can have impacts on student achievement, motivation, teacher efficacy, and more; moreover, research has indicated that the student-teacher relationship is integral in middle school but can be difficult to maintain due to scheduling and challenges that adolescents pose (Wigfield et al., 2005).

### ***Student-Teacher Relationship***

Over the last several years studies have indicated a downward trend for students as they transition from elementary to middle school (Duong et al., 2019). This downward spiral is evident in academic motivation, engagement in learning, belongingness, perception of school climate, and multiple facets of education performance for students (Scales et al., 2020). A mitigating factor to this issue is that of student-teacher relationships, as studies have shown that a positive student-teacher relationship can help students adjust, influence engagement, and predict both short and long-term academic success (Duong et al., 2019). One qualitative study reflected student-teacher relationships in an urban middle school. Results from the observations found the school to have a positive, familial-like atmosphere in which student-teacher relationships were strong (Masko, 2018). Though the school was challenging and academic achievement was not always positive, the strong relationships between the staff and students had the ability to mitigate a large majority of behavioral issues (Masko, 2018). During adolescence, students begin to seek out nonparental relationships for support and guidance and the student-teacher relationship becomes even more critical, particularly for those students who may face challenges or trauma at home (Wang & Holcombe, 2010). Trends indicate that student-teacher relationships are even more important in secondary grades compared to elementary and it is those relationships that

help activate and organizer cognitive, emotional, behavioral, and motivational states in adolescents (Duong et al., 2019). The better the relationship is between teachers and students, the less likely teachers are to become emotionally exhausted with their work, further emphasizing the importance of student-teacher relationships in the upper grades (Taxer et al., 2019).

There are a multitude of studies related to teachers and various stressors that are present in the teaching profession; however, research is scant regarding middle school teachers even though it is evident that adolescents require more guidance (Herman, et al., 2020). Adolescents who experience strong student-teacher relationships along with peer relationships are able to become emotionally invested in school because it creates a safe environment that results in a decrease of less desirable behaviors and higher levels of engagement (Scales et al., 2020). Negative interactions between students and teachers can have detrimental effects on both parties, including high stress, inability to cope, burnout, and even symptoms of depression (Herman et al., 2020). Since the mid-nineties, studies have indicated that teachers who build a good rapport with students and provide encouragement are able to motivate adolescents, build confidence, and help them to build self-regulatory strategies in addition to increases in motivation and engagement (Wang & Holcombe, 2010). A recent study observed the stress and coping profiles of middle school teachers, with results indicating that one class with high stress and low coping ability had consistently low levels of self-efficacy with high burnout levels; alternatively, the class with the lowest stress levels and highest coping ability had the lowest levels of harsh reprimands as well as the most parent involvement and prosocial skills of students indicating the importance of decreasing stress for teachers (Herman et al., 2020). An additional study on student-teacher relationships found that teachers who maintained positive relationships with their

students reported higher levels of personal accomplishment whereas those experiencing conflict with students experienced higher levels of emotional exhaustion, which is an indicator that can lead to teacher burnout (Corbin, Alamos, Lowenstein, Downer, & Brown, 2019).

Due to its influential nature, student-teacher relationships cannot be dismissed, especially in regards to teachers as it has the ability to effect stress levels, teacher self-efficacy, and ultimately teacher burnout through emotional exhaustion (Corbin et al., 2019; Herman et al., 2020). Ryan et al. (2015) compared teacher self-efficacy between elementary and middle school teachers, with results indicating that middle school teachers felt lower levels of self-efficacy and had low confidence in their ability to manage peer relations between adolescents compared to elementary teachers. The lack of knowledge in navigating adolescent relationships can quickly add to teacher stress and teachers who use more punitive strategies in their classrooms may create negative connections with students, leading to disengagement and behavioral issues (Herman et al., 2020). Given that it is a highly documented fact that middle school can be an extremely difficult time for adolescents (Wigfield et al., 2005; Scales et al., 2020) and that teachers feel ill-equipped to handle the needs of adolescents while keeping up with academics (Ryan et al., 2015), it is integral to continue the study of middle school students and teachers alike. Teaching is already a high-stress profession as teachers across all grade levels must be flexible and switch between individual student needs in addition to the specific needs of adolescents at the middle school level (Corbin et al., 2019). The importance of the middle grades cannot be underrated and the gap in research regarding stress, efficacy, and burnout for middle school teachers must be addressed further before it becomes unmanageable (Herman et al., 2020; Corbin et al., 2019).

## **Teacher Burnout**

There are increasing worries in regards to teacher shortages at both local and national levels without a lot of research present to delve into the issue and discover factors influencing this shortage (Sutcher et al., 2019). In addition to growing concerns with teacher shortages, teacher burnout is increasing in prevalence, adding to the issue due to a myriad of factors surrounding stress in the education field (Bottiani et al., 2019). Teacher burnout is characterized by emotional exhaustion, depersonalization, and low levels of self-efficacy (Herman et al., 2018). Interest in burnout has increased over time as burnout rates have increased in the United States due to factors surrounding the visibility of the profession, societal pressure placed on teachers, unrealistic expectations in what should be taught academically and socially, providing life skills in addition to academic knowledge, financial burdens, lack of resources, and because of teacher credibility being negatively impacted by the views of politicians, corporate executives, administrators, and others (Maslach et al., 2018). Burnout in education can have far-reaching detrimental effects on more than just the teacher and the area of education; rather, it has the potential to impact the health and home life of educators in addition to some studies indicating a close link between burnout and symptoms of depression (Schonfeld & Bianchi, 2015). Some studies have observed the physiological effects that feelings of burnout can have on the brain. Results from these studies indicate that individuals who experience high levels of burnout over time experience alterations in neural circuits that impact the amygdala, which controls emotions such as fear responses (Maslach et al., 2018). A portion of research focusing on the impact of burnout on an individual's health indicated that those with higher levels of burnout experience more health issues when compared to those who experience lower levels of burnout (Honkonen et al., 2006; Kim et al., 2011).

Teaching is a profession that has been shown to induce a large amount of stress that causes adverse responses whether they be psychological, physiological or behavior; subsequently, this stress and adverse reaction to situations quickly lead to burnout (Yu et al., 2014). More studies are finding job stressors such as workload and time constraints to be contributing factors to teacher burnout (Skaalvik & Skaalvik, 2017). In terms of measuring these factors and burnout in general, it is difficult to measure using generalized scales due to the fluctuation of experiences across multiple contexts such as grade, time in the year, content area, and variations across school districts (von der Embse et al., 2016). These fluctuations and differences make it difficult to track specific constructs to alleviate or avoid feelings of burnout and generalize the results to an entire population of teachers; however, it is important to continue identifying the main predictors of burnout such as various stress factors and issues related to school policy (Aloe et al., 2014).

One study found that approximately two-thirds of attrition rates in the United States were due to reasons other than retirement (Sutcher & Carver-Thomas, 2019). More than half of teachers that responded to a survey who left teaching in 2013 reported dissatisfaction as their reason for having left the profession due to class size, inadequate salary, frustration with administrative practices, policy issues, standardized testing, and accountability issues (Sutcher & Carver-Thomas, 2019). Low self-efficacy further contributes to feelings of burnout among teachers, and factors such as difficult studies and classroom management escalate those issues as well (Oakes et al., 2013). Some feel as though the salary coupled with the amount of time required to invest in the teaching profession is not worth the time taken away from family, pushing some teachers to leave the profession as well (Khani & Mirzaee, 2015). Lastly, changes in educational policy, the transition to an era in which parents are less involved, and lack of

support within the school organization and from home are driving sources that lead to teacher burnout (Aloe et al., 2014).

Aside from the impact that burnout has on the teacher and the potential of them leaving the profession, burnout has an effect on the academic achievement of students, morale of colleagues, as well as home life. Teachers who are experiencing feelings of burnout are disconnected from the classroom and the students, inevitably leading to poor student performance (Herman et al., 2018). Lack of time, resources, and ability to build and maintain positive relationships with students hinder performance as well due to teachers not being able to plan out and execute effective lessons that students can connect with (Bottiani et al., 2019). Teachers who are burnt out and have low self-efficacy have an extremely difficult time moving past difficult situations and coping with them effectively so that the learning experience continues for students (Bottiani et al., 2019). Poor classroom management causes a decrease in self-efficacy which leads to greater feelings of burnout as well as negatively impact student performance since learning cannot take place without proper management (Aloe et al., 2014; Zee & Koomen, 2016). Additionally, teacher burnout in which teachers exhibit negative behaviors or attitudes have been shown to transfer over to the student, who then shows the same negative behaviors towards others or the school in general (Herman et al., 2018).

Teachers who interact with colleagues have produced correlations to higher achievement than those who do not interact; unfortunately, those who have given up on the profession are less likely to contribute collaboratively due to the disconnect and lack of investment in the job (Zee & Koomen, 2016). School and organizational climate have an impact on teachers, either positive or negative, indicating that there is the potential to worsen the burnout situation if the climate is negative (Lacks & Watson, 2018). Research has indicated that components of burnout,

particularly emotional exhaustion, were closely associated with school climate factors such as community relations, student relations, and peer to peer relationships; furthermore, in regards to the personal accomplishment factor of burnout, instructional management of the school climate was closely related, while depersonalization and teacher relationships with colleagues were closely related in regards to burnout and school climate (Grayson & Alvarez, 2008).

Absenteeism is another issue among teachers experiencing stress and burnout, leading to staffing difficulties and student achievement (Herman et al., 2018). While dealing with high amounts of stress at school, education professionals may come home and have difficulty refusing to let work spill over into home life (Ilies et al., 2015). Studies have shown multiple links for emotional fatigue between work and family conflicts which makes it difficult for the individual to become fully invested in family activities after exerting themselves during school the entire day (Ilies et al., 2015). Given the alarming similarities between burnout and depression, family structure can be completely altered due to severe psychological stress that burnout inflicts upon an individual, making them even more detached from family (Schonfeld & Bianchi, 2015).

Knowing the prevalence and severe consequences of teacher burnout, it is essential to continue to research specific causes and effects of burnout so that a more proactive approach can be taken as opposed to running damage control (Schonfeld & Bianchi, 2015). In order to combat burnout and improve student outcomes as well, further research is needed to continue refining a way to identify stress in teachers sooner to prevent the issues escalating to the level of burnout (Herman et al., 2018). Longitudinal data is needed to understand the development of burnout and the effects of job demands and resources on classroom practices over time along with a broader range of participants to make results more generalizable to the greater population (Bottiani et al., 2019). Determining causal relationships that directly influence teacher stress,

self-efficacy, and job satisfaction would provide a clearer picture as to how these constructs impact teachers and could potentially escalate to the level of burnout (2016). Few studies specifically sample middle school teachers (Yu et al., 2014; Bottiani, 2019) and focus on burnout at that grade level. The current study seeks to help close that gap and conduct a study that specifically observes teacher burnout among middle school teachers through the lens of emotional exhaustion.

### ***Emotional Exhaustion***

While there are three main components that lead to burnout, the general consensus among research is that emotional exhaustion is the most critical component (Arens & Morin, 2016; Taxer et al., 2019; Eddy et al., 2019; Khani & Mirzaee, 2015). Emotional exhaustion is characterized as fatigue stemming from high levels of stress over an extended amount of time with inability to cope effectively (Eddy et al., 2019). If left unchecked, the inability to cope with high levels of emotional exhaustion can lead to negative impacts on health, both physically and mentally. Research has indicated that individuals suffering from emotional exhaustion experience symptoms ranging from headaches, issues getting rest at night to a general increase in reported illnesses on a day-to-day basis (Maslach et al., 2018). Teachers experiencing emotional exhaustion may feel like they don't have enough energy, chronic fatigue, and a general feeling of being worn out (Skaalvik & Skaalvik, 2017). Depending on the school or teaching environment, some educators face stressful days and large workloads. When this is the case teachers experience cognitive and physical fatigue because of the heavy reliance on those resources (Ilies et al., 2015). Suppressing or masking emotions while dealing with stress in the classroom are linked with emotional exhaustion, whereas cognitive reappraisals and expressive suppression

have direct impacts on emotional exhaustion with the latter leading to higher levels of emotional exhaustion and the former linked with lower levels of emotional exhaustion (Chang, 2013).

The cause of emotional exhaustion has been associated with a multitude of factors exposed in research. Particularly at the middle school level, research indicates that the perception of student-teacher relationships can impact emotional exhaustion depending on if a teacher experiences intense feeling such as anger while navigating these relationships (Corbin et al., 2019). A teacher's workload and time constraints have been found to strongly predict emotional exhaustion levels, and emotional exhaustion positively predicted intent of teachers to leave the education field (Skaalvik & Skaalvik, 2017). Teacher workload that influences emotional exhaustion includes handling student misbehavior, physical work, excess workload and the overall school environment (Taxer et al. 2019). Higher feelings of efficacy, or being able to adapt and overcome stress in the classroom and still teach, makes teachers less likely to experience emotional exhaustion (Fives et al., 2007). Student behaviors can have a detrimental impact on teacher efficacy and ultimately cause emotional exhaustion as feelings of frustration and anger at interruptions can overcome a teacher's ability to cope (Corbin et al., 2019). Emotional exhaustion is linked with low levels of positive behavior supports accompanied with a high number of reprimands when dealing with misbehaviors, leading to lower quality of teaching and negative relationships with students (Herman et al., 2018). Teachers who are emotionally exhausted rely on inefficient behavior management strategies when dealing with disruptive behaviors (Arens & Morin, 2016).

Aside from student discipline having a direct effect on emotional exhaustion, social support from colleagues and administration can impact exhaustion. Supportive environments that allow teachers to reappraise stress and find meaningfulness in their work is conducive to

managing stress appropriately and lowering the changes of emotional exhaustion (Hoglund et al., 2015). Students can also be adversely impacted by the emotional exhaustion of teachers. Some studies have indicated that students experience school dissatisfaction, decreased autonomy, and negative perceptions of competence (Arens & Morin, 2016). While behaviors do impact emotional exhaustion, the way a teacher perceives a student's behavior or the conflict can be more detrimental than the behavior itself (Corbin et al., 2019). Workload and time constraints strongly predict emotional exhaustion in addition to student behaviors (Skaalvik & Skaalvik, 2019). One thing that impacts these factors and has to be considered while conducting research is timing. Emotional exhaustion has been found to increase over time in longitudinal studies; however, it must be taken into consideration the timing in which surveys are conducted, as emotional exhaustion symptoms may not be as present right after a break, whereas they may be escalated at the end of a long semester (Hoglund et al., 2015).

### **Teacher Self-Efficacy**

Teacher self-efficacy has been proven to be one of the contributing factors that leads to teacher burnout (Herman et al., 2018). Teacher self-efficacy is studied in a variety of contexts such as social and academic, and has proven to be a construct difficult to nail down due to its versatility and adaptations to different situations that teachers may encounter (Khani & Mirzaee, 2015). Self-efficacy of teachers has the ability to impact the overall classroom climate, classroom management, and cognitive activation or engagement during lessons, all of which are essential to having a classroom that is conducive to learning for a considerable amount of time (Kunsting et al., 2016). Some research discusses self-efficacy as well as collective efficacy and it is important to note the differences in that teacher self-efficacy pertains to the individual and their perception of how they can inflict change or learning in students; alternatively, collective

efficacy refers to the perceptions of teachers within the same building as to whether or not they can work as one unit in order to improve student learning along with student behaviors (Klassen et al., 2009). Klassen (2010) also notes that collective efficacy of a group of teachers can be influenced by previous experiences, success of other groups, and encouragement given from those in highly influential positions in the school. Given the impact of outside circumstances on both self and collective efficacy, it is important to note that factors surrounding school climate can impact the attitude and perception of teachers, which could ultimately impact efficacy (Lacks & Watson, 2018). While self-efficacy can be impacted by high levels of stress in the workplace, it is also important to note that studies have found it to play a mitigating role in stress as well, particular as stress arises from curriculum changes (Putwain & von der Embse, 2018). High levels of teacher efficacy help individuals persist through difficult changes and situations, whereas lower levels of efficacy reveal decreased motivation and ability to adapt to stressful change, highlighting the importance in education which is extremely malleable (Putwain & von der Embse, 2018).

Teacher self-efficacy is also impacted by external factors aside from the teacher, such as administration. Lack of support from school leadership negatively impacts self-efficacy as it adds to stress levels that were already present; furthermore, school administrators have the ability to influence the instructional practices of teachers and their overall self-efficacy along with burnout and retention rates (Gonzalez et al., 2017). Formed by all individuals within a school and the community, school climate has been shown to have the potential to impact teacher efficacy as well, with more positive relationships and environments having a better impact on self-efficacy, though more research is needed to solidify the concept (Lacks & Watson, 2018). Research has indicated that coming together as a school and focusing on the skills teachers need

to be effective in eliciting learning from students has the means to increase efficacy, however, opportunities for mastery learning experiences must be provided (Morris et al., 2017). Research indicates that many teachers come into the teaching profession feeling inadequate regarding classroom management skills, calling for the need to address the matter up front before self-efficacy is impacted, and providing a program of professional development to mitigate efficacy issues early on before burnout occurs (Aloe et al., 2013).

Teacher self-efficacy has the potential to mediate teacher burnout due to the wide-reaching effects efficacy has on multiple facets in education as revealed by prior research (Khani & Mirzaee, 2015). When feelings of burnout begin, it is critical to find the source of what is impacting self-efficacy and working to alleviate it, as research has indicated that once a teacher feels they not proficient in areas such as classroom management, the issue will continue to spiral out of control as the teacher feels there is no need to attempt to correct something they are inept at (Herman et al., 2018). Research must continue in order to understand the exact impact of efficacy as well as the role it may play in mediating job stress and job satisfaction (von der Embse et al., 2016). Studies that observe teacher-efficacy at various grade levels have been significant as results indicate that various grade levels experience efficacy differently, an example of which is that elementary teachers appear to have higher levels of self-efficacy when compared to middle school teachers (Ryan et al., 2015). These differences could be attributed to developmental milestones that students are experiencing and the capacity in which teachers feel they are able to cope with those factors, such as peer relations in middle school, highlighting the need for further research (Ryan et al., 2015). The ability to connect with students has been shown to have slight correlations with self-efficacy with lower levels of efficacy leading to more

conflict with students; subsequently, this can also relate back to developmental milestones depending on the student's age (Zee & Koomen, 2016).

### ***Student Achievement***

Teachers who have high levels of self-efficacy have been proven to have consistent quality instruction overtime as compared to those who have a lower sense of self-efficacy (Kunsting et al., 2016). Teachers who utilize new teaching strategies, employ classroom management techniques that foster self-directed learning, differentiate instruction, and continually overcome failure are found to have high levels of self-efficacy (Lacks & Watson, 2018). Teacher self-efficacy in regards to managing peer-relations in middle school has been discovered to be on the lower end of the spectrum; the unfortunate consequence is that during the middle-grade years students invest a lot in navigating the tumultuous social zone of middle school (Ryan et al., 2015). Some students focus more on peer relations than academics during this time, making it essential that teachers are able to cope with those issues so that students can place a greater focus on learning (Ryan et al., 2015). Studies indicate that changes in curriculum and policy generate stress among teachers which can lower self-efficacy drastically, decreasing the chances that teachers will cope positively with changes and mitigate any detriments to student learning (Putwain & von der Embse, 2018).

While it has been discussed that student achievement is positively impacted by high levels of self-efficacy, the alternative cannot be dismissed. Teachers with lower self-efficacy in one study found disturbing results which revealed teachers made less referrals for students to receive academic support services that were needed (Herman et al., 2018). Teachers with low efficacy are less likely to spend a lot of time planning high-quality instruction for students and generally have a harder time keeping students engaged during learning due to poor management

style (Gonzalez et al., 2017). A strong sense of self-efficacy is correlated with job satisfaction, indicating the alternative option of low self-efficacy to correlate with dissatisfaction with the job, creating a spiral effect as it trickles down towards student performance (Skaalvik & Skaalvik, 2017). Low efficacy forces teachers to repeatedly see instances in which they have failed, whether it be through lack of student achievement or poor classroom management, which then pushes the teacher farther towards burnout (Oakes et al., 2013). This cycle of negativity can span out and lead to the teacher blaming students and parents for difficulties, being apathetic towards colleagues, and not even attempting classroom management, leading to an unsafe and unproductive learning environment for students (Oakes et al., 2013).

Research in regards to self-efficacy and sources that directly impact self-efficacy needs to continue by ramping up efforts to understand what constructs or situations directly impact it so that a predictive relationship can be determined; additionally, sample sizes must be increased to cover a more diverse sample and make results generalizable to a larger population (Oakes et al., 2013). A clearer connection of the sources that develop the self-efficacy of teachers needs to be studied (Morris et al., 2017). Self-efficacy has the potential to be a mediating factor between standardized testing and stress levels for teachers; therefore, finding more ways to increase efficacy and understand what particular stressors impact it directly would help mitigate cumulative stress that leads to burnout overtime (von der Embse et al., 2016). To have a clearer view of self-efficacy and its importance, it is also integral to conduct studies that focus on specific items pertaining to efficacy, such as classroom management, to better understand the construct and develop ways to increase efficacy in those areas (Kunsting et al., 2016). It is important that future studies bear in mind that the time in which surveys are administered during the school year has the potential to skew results, particularly if the study does not take place all

at once and individuals answer the survey at different points in the school year (Herman et al., 2018). Given the importance of peer relationships at the middle school level, it is important that future studies continue to delve into reasons why teachers may exhibit low efficacy in regards to managing student relationships, and whether or not the ability to do so has any impact on student achievement or engagement (Ryan et al., 2015).

### **Job Related Stress**

Stress plays a large role in self-efficacy beliefs and ultimately in teacher burnout, as studies have been reporting high-levels of stress in teachers since before the 2000's due to its detrimental effects on job satisfaction (Abel & Sewell, 1999). Teaching has unswervingly been rated as one of the most stressful careers to have (Putwain & von der Embse, 2018) due to a myriad of reasons ranging from accountability pressure, budgeting, resources, and large, diverse classrooms (Bottiani et al., 2019). Stress itself is characterized as circumstances of negative effects stemming from a job such as frustration or anxiety that teachers perceive as a risk to their own well-being (Abel & Sewell, 1999). Research suggests that repeated exposure to high levels of stress can culminate into burnout if not dealt with and appropriate coping techniques utilized, as inefficacy results from excessive job demands that cannot be met due to lack of resources (Herman et al., 2018). Increases in burnout rates are detrimental to retention in the education workforce and will add to teacher shortage issues if research does not uncover ways to support teachers by eliminating or alleviating major sources of stress and equipping teacher with proper coping mechanisms (Sass et al., 2010). Research must continue to explore stress factors in education and ways to alleviate it if burnout rates are to decrease and if efficacy levels are expected to increase (Herman et al., 2018).

Self-efficacy impacts stress just as stress has the ability to cause inefficacy among teachers due to those who find themselves as being unable to engage students properly experiencing higher levels of stress and emotional exhaustion (Khani & Mirzaee, 2015). Job related stress among teachers stems from a plethora of areas with the main sectors being educational policies (Berryhill et al., 2009), work environment (Sutcher et al., 2019), and issues surrounding students (Sass et al., 2010). All of these factors combined make teaching extremely stressful and difficult to do as self-efficacy is impacted and eventually feelings of burnout takeover as statistics indicate nearly one third of teachers in the United States quit within the first three years of teaching (McCarthy et al., 2016). Analysts conclude that a greening effect has occurred in the field of education in which teachers commonly have an average of one year of experience, exacerbated even more by the intense stress first-year teachers face in a rapidly changing educational environment (McCarthy et al., 2016). Future studies are needed to continue research on both teacher stress and burnout, as prior research indicates correlations between the two, yet there are few studies that seek to find direct correlations or causal relationships between them (Bottiani, 2019).

### ***Education Policy***

One of the largest and most memorable educational policies that was enacted happened in 2002 when George W. Bush signed the No Child Left Behind Act (NCLB). This policy sought close achievement gaps between poor and minority students with their peers by implementing large-scale accountability measures for schools using standardized testing measures (Klein, 2015). To become more competitive states were required to adopt standards that each grade level had to teach and subsequently be tested on (Berryhill et al., 2009) and the adequate yearly progress of schools would be monitored using a specific set of guidelines and steps with

consequences for inadequate performance (Klein, 2015). In 2015, the Every Student Succeeds Act was signed into law as a replacement to NCLB. This law still requires states to maintain and follow accountability plans along with standardized tests, but it relaxes involvement of the federal government, allowing states to take more control (Klein, 2016). NCLB inadvertently placed a large burden on the backs of teachers in regards to testing and who was to blame if scores fell short (Klein, 2015); however, Every Student Succeeds no longer requires schools to evaluate teachers based on student outcomes, alleviating some of the stress felt by teachers (Klein, 2016).

Testing policies such as those outlined in NCLB and the Every Student Succeeds Act, have pushed educators into the mindset that they must teach to the test, which has negative consequences like loss of instructional depth and catering to students who are on the verge of passing; unfortunately, this has a tendency for the system to lose interest in students who are above average or below average performers (von der Embse et al., 2016). Testing and curriculum reforms have focused on accountability measures that seek to improve retention and promotion of students to the next grade and merit evaluations for teachers (Gonzalez et al., 2017). As test scores are released, curriculum is constantly assessed for tested subjects to try to implement new policies to boost inadequate scores. Imposing new curriculum or modifications to old materials can inflict added stress to an already stressful environment as teachers try to keep up with changes (Putwain & von der Embse, 2018). Schools that are highly dedicated to closing achievement gaps and monitoring student scores will inevitably see a higher rate of stressed, burned out teachers (Berryhill et al., 2009), but self-efficacy can prove to be a mitigating factor in coping with the stress in a more manageable way (Putwain & von der Embse, 2018).

Policies regarding the actual work demanded of teachers in addition to the corresponding salary is another salient point of contrition in regards to stress leading to teacher burnout and poor self-efficacy. Salary varies from state to state and even between school systems within the same state, especially when considering cost of living; however, this creates competition and can influence the decision of many teachers to leave the profession or change schools due to perceived discrepancies between pay and job demands (Sutcher et al., 2019). As time moves on the demands placed on teachers by society and policy makers grows, though the compensation and benefits of the profession do not, causing many teachers to question whether or not they are being compensated enough and if the career is worth it due to the high stress (Crothers et al., 2010; Berryhill et al., 2009). One study indicated that one of the top two reasons in which teachers experienced the most stress dealt with accountability measures enforced by the state and found a close correlation between changes in curriculum and state testing (Gonzalez et al., 2017).

While there is a large body of research in regards to accountability measures used to assess student learning and school performance, such as standardized tests, research is lacking in terms of how such testing measures inflict stress on educators (von der Embse et al., 2016). Future studies should include a wider population for better generalized results as well as to determine cause and effect relationships between the educational work environment and teacher stress, particularly in regards to high-stakes testing (von der Embse et al., 2016). Research must also be directed to focus on how teachers cope with stress from educational reform and policies to understand the role of self-efficacy and how it might mitigate the stress (Putwain & von der Embse, 2018). Before enacting further policies for education legislatures must take the time to consider the impact it may have on the teaching workforce and whether the policy will actually

be effective or only add more stress, which would render it ineffective in the long run (Berryhill et al., 2009).

### ***Work Environment***

The true workload of a teacher goes well beyond teaching a lesson to students. Continuing education, planning for new instructional techniques, technology use, meetings, parental involvement, and other aspects pertaining to the community (Sass et al., 2010). Having a balance between workload and being in control of the job provides opportunities for deeper commitment to the profession; alternatively, if the workload is unbalanced and takes over, teachers are going to experience high levels of stress that could eventually lead to burnout (Sass et al., 2010). Stress in the work place can be divided into job demands and job resources. Demands pertain to everything the teacher must attend to with the act of teaching, working with students, planning for instruction, meetings, and so on (Putwain & von der Embse, 2018). Job resources refer to elements that can be manipulated to aid teachers in completing the job demands such as self-efficacy, relationships with colleagues, and leadership (Putwain & von der Embse, 2018). When observing demands and resources together, it becomes clear through research that when demands outweigh resources stress levels increase, whereas if demands increase but resources can be manipulated in a way that manages to keep up with the increase, stress levels are not going to become unreasonable (Putwain & von der Embse, 2018). Issues with disproportionate demands and resources are prevalent in urban school settings where resources are much scarcer and educators are drowning in work with little to no resources to help them, which has the potential to lead to attrition due to the amount of stress (Abel & Sewell, 1999).

One of the greatest contributing factors to teacher stress is lack of time, particularly as greater demands are placed on teachers without providing enough time to complete the demands, especially amid modifications to curriculum (Gonzalez et al., 2017). Further, administrative leadership has been shown to have an impact on stress levels and efficacy with supportive leaders having a more positive impact on the two constructs (Gonzalez et al., 2017). Statistics indicate that a strong, supportive leadership that allows teachers to take control of their own teaching and have more autonomy in the classroom helps to mitigate feelings of burnout and inefficacy; unfortunately, one aspect that is beyond teacher control and causes increases in stress is the proliferation of average class size over the years (Sutcher et al., 2019). Understanding the sources of stress in regards to the work environment for teachers is critical in pinpointing ways to meet professional development needs to help with coping skills and stress (Herman et al., 2018).

Mixed results in regards to class size should be further addressed, as results from studies have indicated inconsistent findings as to the severity of impact that class size has on stress, burnout and efficacy (Bottiani et al., 2019). Longitudinal studies are also needed in order to understand the long-term effects of stress and burnout in regards to job demands and resources of teachers (Bottiani et al., 2019). With an understanding of sources of stress and ways to mitigate them, research must also be done on ways to provide professional development support to teachers in order to teach coping skills when dealing with stress (Herman et al., 2018). Poor teaching conditions and work environments, particularly in urban schools or those struggling with poverty, are among the top reasons of teachers leaving schools or the profession; unfortunately, the stress caused in these situations can only be changed with new initiatives and policies to give teachers the necessary resources to meet job demands (Sutcher et al., 2019). More research into the exact needs of these schools and what generates the most stress for

teachers experiencing low efficacy and burnout due to work environment must be pinpointed so that legislatures understand the severity of the situation and have a specific issue to fix (Sutcher et al., 2019). Results from one study indicated that administrative leadership need to take time to truly understand the demands placed on teachers and develop plans to mitigate the stressors appropriately (McCarthy et al., 2016). Therefore, it is essential that researchers work to identify such stressors across multiple contexts and settings in order to provide administrators with adequate information to make knowledgeable decisions to provide teachers the aid they need (McCarthy et al., 2016).

### ***Students***

Individuals that have an external locus of control have been shown to be significantly related to higher levels of stress and lack of organizational support (Crothers et al., 2010). External factors such as students are one example of how stress in the workplace can be exacerbated. Findings from one study indicated that stress levels jump considerably among teachers who experience disproportionate groupings of students with academic or behavioral special needs without proper resources to meet their needs (McCarthy et al., 2016). Research has indicated that teachers find it highly stressful to teach students considered to be at-risk without supports in addition to second guessing their self-efficacy in being able to make a positive difference in the lives of students (Gonzalez et al., 2017). Beyond students with exceptional academic or behavioral needs are those who live in poverty, have experienced childhood trauma and exposure to violence (Bottiani, 2019). Coping with stress surrounding job demands and lack of resource, teachers must also be ready to cope with the issues that students themselves are dealing with personally (Bottiani, 2019).

One area of contention regarding the role students play in teacher stress is the level of impact class disruptions have on teachers, with studies finding mixed results, citing that while it is stressful other sources of stress take precedence (Abel & Sewell, 1999). Other studies indicated that student discipline did serve as a stressful factor for teachers (Sass et al., 2010); however, it is crucial to understand what is meant by discipline as some may perceive it as more severe than talking disruptions. Discipline and classroom management relates back to self-efficacy and whether or not teachers feel as though they are capable to deal with situations during class to continue teaching successfully. Prior research indicates that teachers who experience behavioral issues from students and are unable to manage classes successfully report higher feelings of inefficacy and stress (Yu et al., 2014). Another factor implicating a teacher's ability to manage a classroom setting deals with his or her aptitude for building and maintaining relationships with students. A few studies have indicated the importance of building strong relationships with students due to the critical time in an adolescent's life to build relationships outside of the home (Wang & Holcombe, 2010). A negative student-teacher relationship impacts students in regards to development and academics and reaches even further to impact the teacher as well by having to regulate their own emotions while also deal with the learning needs and social needs of individual students (Corbin et al., 2019). Studies indicate that stronger connections between educators and their students, particularly in middle school, decrease the rate of discipline issues, providing more time for learning, less classroom disruptions, and ultimately, less stress on the teacher (Masko, 2018).

In an attempt to better understand factors leading towards teacher burnout, research must seek to close the gap and shed light on stressors, such as those surrounding students, to understand more direct, causal relationships (Abel & Sewell, 1999). Regarding students and

their personal circumstances and socioeconomic status, research is needed to understand exactly how the stress is inflicted upon teachers to the point they reach the level of burnout or desire to leave schools (Bottiani, 2019). It is critical that research is able to provide firm evidence to pin down stressors and how they impact self-efficacy and burnout rates among teachers (Sass et al., 2010). Without a better understanding of those factors and knowledge of the causal relationships that may exist, it will be nearly impossible to predict how stress, such as issues directly relating to students, will impact burnout in the long run (Sass et al., 2010).

### **Summary**

The theories of both Bandura and Rotter are critical to understanding the purpose of this study. Bandura's theory of social cognitive learning and self-efficacy is important to understanding how stress impacts a teacher in their specific role of educating students (Skaalvik & Skaalvik, 2017). Beyond that, it is integral in understanding how teachers adapt to various situations after self-efficacy has been impacted, as research indicates that once self-efficacy has been lowered in relation to an experience, it is hard to change future perceptions of similar situations (Tschannen et al., 1998). Teachers use these experiences to determine efficacy and outcome expectations and make judgements on situations, impacting how they respond such as using new learning techniques in the classroom that students may find helpful (Bandura, 1977; Zee & Koomen, 2016). This segues into Rotter's theory of locus of control as it focuses on actions and outcomes of actions using either internal or external control (Rotter, 1966). In an effort to boost self-efficacy and steer away from feelings of burnout it is essential to help teachers cope with stress. In order to do so, it is necessary to understand if a teacher has internal control, meaning they take ownership of actions and have control over outcomes, or external control in which they believe they do not have control or responsibility because the environment

heavily affects the situation (Lacks & Watson, 2018). Those with internal control generally exhibit higher levels of self-efficacy which allows them to take ownership of teaching, cope with stress more productively, and ultimately alleviate burnout symptoms (Crothers et al., 2010). Furthermore, it is critical that developmental levels be taken into account depending on what age range an educator is dealing with. From a developmental lens, middle school adolescents bring an array of difficulties pertaining to physiological, emotional, and mental growth that impact academics and relationships (Wigfield et al., 2005). Though middle school presents these specific factors that can impede academics, student-teacher relationships, teacher stress, self-efficacy and burnout, there is a lack of research on the issue (Herman et al., 2020).

Teacher burnout is becoming increasingly prevalent in addition to problems with teaching shortages as it is (Bottiani et al., 2019). Measuring symptoms of burnout among teachers, especially emotional exhaustion, and determining the source of burnout can be extremely difficult because of how experiences vary by individual and the setting they are in (von der Embse et al., 2016). Furthermore, studies that have researched feelings of burnout and sources of stress contributing to it are not generalizable due to the focused nature of the studies and profession in general (Aloe et al., 2014). More specifically, emotional exhaustion has a strong correlation with teachers losing motivation and eventually leaving the profession (Skaalvik & Skaalvik, 2017). Furthermore, there are a multitude of causes of emotional exhaustion ranging from student behavior, teacher perception, student relationships, and school climate along with physical, emotional, and mental symptoms for the teachers and students (Corbin et al., 2019). Having difficulty determining consistent sources across grades and content areas also makes it difficult to create a plan to mitigate the damaging effects of teacher burnout (Schonfeld & Bianchi, 2015; Herman et al., 2018). Longitudinal studies are needed to

understand the progression of burnout (Bottiani et al., 2019) and it is necessary to continue specific studies to grade level to understand the effects of it in different developmental groups, as middle school is not frequently studied (Yu et al., 2014; Bottiani, 2019).

Similar to burnout, teacher self-efficacy is difficult to study due to its wide impact on other variables and inconsistencies across different settings and developmental milestones that students face at different ages (Ryan et al., 2015). Research must address gaps in which certain age groups are left out, as peer relations have been found to be specific to the middle school age group (Ryan et al., 2015). A gap is present regarding this information because the need for peer relations has been identified in research but the scant number of studies that have been conducted at the middle school level reveal that teachers do not have high levels of self-efficacy regarding the mediation of peer relationships, indicating a great need for teachers and students (Zee & Koomen, 2016). Teacher efficacy has been proven to impact student achievement (Lacks & Watson, 2018); however, it is critical to study the impact that self-efficacy regarding the management of peer relations at the middle school level may have on student achievement as well (Ryan et al., 2015).

Stress is a variable that brings both self-efficacy and burnout together, as stressful situations have proven to impact teacher self-efficacy and contribute to burnout rates (Abel & Sewell, 1999). Understanding the main points of stress that directly impact efficacy and burnout are essential if the problem is going to be corrected (Herman et al., 2018). Self-efficacy and stress have a symbiotic relationship in which one impacts the other. Studying the variables together is important to understand how stress directly impacts efficacy in teaching, but efficacy can also be used to help mitigate stressful situations (Khani & Mirzaee, 2015). Understanding stress from the top sources of educational policy (Berryhill et al., 2009), work environment

(Sutcher et al., 2019), and students (Sass et al., 2010) will allow for efforts to alleviate those stressors. Similar to burnout and teacher self-efficacy, further research is needed to connect stress and efficacy to understand the causal relationships between them (Gonzalez et al., 2017; Sass et al., 2010). Studying the relationships, between emotional exhaustion, teacher self-efficacy, and job-related stressors will provide a foundation of understanding between the three and specify direction for future research dependent upon the links found between the variables in the ultimate goal of reducing stress to alleviate teacher burnout at the middle school level.

## **CHAPTER THREE: METHODS**

### **Overview**

The purpose of the following chapter is to discuss the research methods to be used, first and foremost the correlational research design selected for the study. Next, the research questions and hypotheses are stated before providing the background information on the convenience sample used for the study. The instruments are discussed in depth along with the procedures for using them before concluding with how data were analyzed following the conclusion of the study.

### **Design**

The study used a quantitative approach with a non-experimental correlational design with cross-sectional surveys in order to explore the correlations found between the variables. The variables of this study are (1) job related stress, (2) teacher self-efficacy, and (3) teacher emotional exhaustion. Gall et al. (2007) describes the correlational research design as being simple, requiring the researcher to collect data on two or more variables and computing a correlational coefficient in order to understand the relationship between variables. Furthermore, calculating the correlation coefficient allows the type of relationship between variables to be understood, whether there is a positive, negative, or lack of correlation along the line of best fit. The variables are defined as follows: (1) job stress- the collection of negative emotions as a result of environmental and personal demands that exceed one's ability to cope (Gonzalez et al., 2017); (2) teacher self-efficacy- a teacher's belief in his or her ability to teach students and produce learning experiences (Ryan et al., 2015); (3) emotional exhaustion- feelings of being overextended and having expended emotional and physical resources to cope (Taxer et al., 2019).

Correlation coefficients were calculated in this study to examine the relationship between the variables of (1) teacher self-efficacy and stress, (2) teacher self-efficacy and emotional exhaustion, and (3) stress and emotional exhaustion. A multitude of preceding studies have utilized a form of correlational research to compare the variables found in this study of teacher self-efficacy, emotional exhaustion or burnout, and stress. Lacks and Watson (2018) selected a correlational design to understand the relationship between teacher efficacy, confidence in one's ability to effect change in students, and factors of school climate. Gonzalez et al. (2017) compared the relationship between efficacy and job-related stress using qualitative and quantitative methods, specifically using Pearson's Product Moment Correlation. Ilies et al. (2015) used a correlational design in addition to further statistical tests to examine the relationships between constructs situated in three types of fatigue and stress in teachers. Ryan et al. (2015) observed the relationship between self-efficacy differences among elementary and middle school teachers as it relates to classroom quality and ability to manage peer relationships, examining each comparison using correlational coefficients and descriptive statistics. Similarly, Tschannen-Moran and Hoy (2001) focused on teacher efficacy measurement scales to understand the relationship between questionnaire components by calculating correlational coefficients for each one to observe how they were interrelated. This study seeks to address the gap pertaining to middle school teachers in addition to the gap in research in which all three variables of teacher self-efficacy, stress, and emotional exhaustion are addressed together in the same study.

### **Research Questions**

**RQ1:** Is there a relationship between job stress scores and teacher self-efficacy scores of middle school teachers?

**RQ2:** Is there a relationship between the self-efficacy scores and emotional exhaustion scores of middle school teachers?

**RQ3:** Is there a relationship between job stress and emotional exhaustion scores of middle school teachers?

### **Null Hypotheses**

**H<sub>01</sub>:** There is no significant relationship between job stress scores, as measured by the single-item stress survey, and teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, of middle school teachers in the Southeast U.S.

**H<sub>02</sub>:** There is no significant relationship between teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale, of middle school teachers in the Southeast U.S.

**H<sub>03</sub>:** There is no significant relationship between job stress scores, as measured by the single-item stress survey, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale, of middle school teachers in the Southeast U.S.

### **Participants and Setting**

Participants for this cross-sectional study were selected from a convenience sample taken of middle school teachers, sixth through eighth grade, from four middle schools located in an area of southern Georgia. The sample was drawn during the 2020-2021 school year in the spring semester and consisted of teachers from the local city and county school districts. The convenience sample of the schools was taken, and teachers completed the questionnaires on a volunteer basis to participate in the study. The schools consisted of students from predominantly

low-income backgrounds with the overwhelming majority of students receiving free lunch at school.

The total population consisted of approximately 230 general education middle school teachers located a city and county school district in southern Georgia. A sample of 75 teachers were selected for the purposes of the study. According to Gall et al. (2007) the minimum sample needed is 66 in order to have a medium effect size with a statistical power of 0.7 at the 0.05 alpha level using correlation coefficients as a way to test the hypotheses. The sample size is larger than necessary to account for attrition rates or teachers who do not volunteer to complete the survey. Ryan et al. (2015) used a sample size of approximately 101 teachers for a correlational study on differences in self-efficacy. Gonzalez et al. (2017) used a sample of 145 teachers, which is well past the required 66 for a medium effect size. Lacks and Watson (2018) used a school district with 350 teachers but received only 56 surveys back, stating that one limitation to the study was the small sample size. Therefore, a sample of 75 teachers is larger than the necessary requirement for a medium effect size according to Gall et al. (2007), while staying within parameters set forth by prior studies.

The sample for this study consisted of 75 teachers from four middle schools in southern Georgia. Two schools of the schools sampled were a part of the local city school district, while the other two schools belonged to the county school district. Only teachers of middle grades who taught general education or special education courses were sampled, omitting those who taught elective courses such as physical education, art, and music. Out of the 75 participants the majority were overwhelmingly female, with 78.7% of the sample female and 21.3% being male. The majority of participants were Caucasian with a total of 69.3% with the next highest being African American at 25.3%. Four participants out of the 75 total that participated in the study

selected Native American, Hispanic, Multiracial, and Afro-Caribbean. The most common age range of teachers involved in the study was between 31 and 40 years old (33.3%), followed up by 51-60 years old (22.7%), 20-30 years old (21.3%), 41-50 years old (20%), and 61-70 years old (2.7%).

Given that the majority of teachers were older between 31 and 60 years old, 49.3% of the participants indicated that they had 11 or more years of teaching experience. Subsequently, 26.7% taught between 6 and 10 years, 12% taught 3 to 5 years, and the final 12% taught 0 to 2 years. Teachers in 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade were surveyed with 32% teaching 6<sup>th</sup>, 40% in 7<sup>th</sup>, and 28% in 8<sup>th</sup> grade. Among those grades, teachers taught mathematics (21.3%), Science, (16%), English Language Arts (24%), and Social Studies (18.7%), as well as a portion of the participants teaching two and three subjects at once (20%). The final part of the demographic breakdown consisted of the mode of instruction. Due to COVID-19, the virus driving the pandemic beginning in 2020, many schools are still offering virtual options for instruction; consequently, this aspect made the question regarding mode of instruction relevant as it could potentially impact stress, efficacy, and emotional exhaustion. The majority of participants are currently teaching students face to face and virtually at the same time (53.3%), while 44% are face to face and 2.7% are solely virtual. The demographics are summarized in Table 1 and Appendix H.

**Table 1**  
*Sample Demographics (n = 75)*

	<i>n</i>	<i>Percent</i>
<b>Gender</b>		
Male	16	21.3%
Female	59	78.7%
<b>Race/Ethnicity</b>		
Caucasian	52	69.3%

African American	19	25.3%
Native American	1	1.3%
Hispanic	1	1.3%
Afro Caribbean	1	1.3%
Multiracial	1	1.3%

**Age**

20-30 years old	16	21.3%
31-40 years old	25	33.3%
41-50 years old	15	20%
51-60 years old	17	22.7%
61-70 years old	2	2.7%

**Years of Teaching Experience**

0-2 years	9	12%
3-5 years	9	12%
6-10 years	20	26.7%
11 years or more	37	49.3%

**Grades Taught**

6 <sup>th</sup> grade	24	32%
7 <sup>th</sup> grade	30	40%
8 <sup>th</sup> grade	21	28%

**Subjects Taught**

Mathematics	16	21.3%
Science	12	16%
English Language Arts	18	24%
Social Studies	14	18.7%
More than one	15	20%

**Mode of Instruction**

Face to Face	33	44%
Virtual	2	2.7%
Both	40	53.3%

### **Instrumentation**

The study used three instruments to understand teacher emotional exhaustion, job stressors, and teacher self-efficacy: (1) the Maslach Burnout Inventory – Educators Survey, (2) a single-item teacher stress survey, and (3) the Ohio State Teacher Efficacy Scale. All three instruments used in this study have been determined to have internal reliability, construct validity, and criterion validity. A more descriptive overview of the type of reliability and validity as well as the data used to measure reliability and validity can be found in the following sections.

#### **Maslach Burnout Inventory – Educators Survey**

The purpose of the first instrument to be used in the study, the Maslach Burnout Inventory – Educators Survey (MBI-ES), is to identify feelings of burnout among educators, administrators, counselors, and other individuals who work in an education setting (Maslach et al., 2018). The instrument was originally published in 1981 when there was an increase in interest regarding burnout, prompting Maslach, Jackson and Leiter to create the original instrument that would be molded into various forms for different professional settings (Maslach et al., 2018). The MBI-ES, created in 1986, is a 22-item questionnaire in which emotional exhaustion (9 items), depersonalization (5 items) and personal accomplishment (8 items) are subscales and takes approximately 10 to 15 minutes to complete. The instrument is answered using a 7-point Likert-type scale ranging from 0 (never), 1 (a few times a year or less), 2 (once a month), 3 (a few times a month), 4 (once a week), 5 (a few times a week) or 6 (everyday), with the lowest possible score being zero and the highest possible score being 132. Subscales are measured separately as low, moderate and high. Higher scores on emotional exhaustion and depersonalization questions indicate higher degrees of burnout whereas lower scores on personal

accomplishment questions indicate higher degrees of burnout (Maslach et al., 2018). The inventory has been used in a multitude of studies to measure feelings of teacher burnout (Aloe et al., 2014; Oakes et al., 2013; Herman et al., 2018). Subscales are observed individually to understand how susceptible or likely the teacher is to experience burnout and subscale scores are aggregated as one main score only when used in comparison with other testing measures (Maslach et al., 2018).

After the survey was originally developed, internal reliability was determined in later studies (Maslach et al., 2018; Oakes et al., 2013) that calculated subscale alphas (emotional exhaustion (EE) = .90, depersonalization (DP) = .76, and personal accomplishment (PA) = .76). Maslach et al. (1996) indicate that reliability coefficients were .90 (EE), .79 (DP) and .71 (PA). Cronbach's alpha determined internal reliability in the most recent study cited in Maslach et al. (2018) as .0.87 (EE), 0.76 (DP), and 0.84 (PA) and test-retest reliability coefficients of 0.60, 0.54, and 0.57 respectively. The decrease in scores for test-retest reliability was suggested to be as a result of variance in work situations and environments among teachers at various points in the year; however, other studies indicated test-retest reliabilities ranging from 0.60 to 0.82 using two- and four-week retest intervals (Maslach et al., 2018).

Validity of the instrument was discussed in Maslach et al. (2018) in terms of criterion and construct validity. Sample scores were used to compare with individual behavioral ratings through observation such as job characteristics to understand how results measured up to factual, real-life instances of the individual, with results indicating that the instrument was accurate in testing and that participants did not distort answers based on social desirability; furthermore, long-term validity found that scores correlated with and predicted actual instances of burnout (Maslach et al., 2018). Further, Hoglund et al. (2015) found that the MBI-ES had predictive

validity in that results from the MBI-ES correlated with other factors that result from burnout such as lack in improvement and the quality of the student-teacher relationship ( $ES = 0.05$ ). Cross-validation studies using confirmatory factor analysis between three factors (EE, DP, and PA) indicated the instrument had construct validity with scores of 0.55 (DP to EE), -0.36 (PA to EE) and -0.44 (PA to DP) (Byrne, 1993). Other studies as cited in Maslach and Jackson (1986) indicated similar factor loadings and Iwanicki and Schwab (1981) determined factor loadings for frequency ( $r = 0.29$ ) and intensity ( $r = 0.26$ ). The MBI – ES instrument has been used in numerous studies (Berryhill et al., 2009; Herman et al., 2020; Herman et al., 2018; Skaalvik & Skaalvik, 2017). A license to the manual has been acquired and a license to replicate the survey in an online format was purchased.

### ***Emotional Exhaustion Subscale***

For the purposes of this study and to better suit the method of data analysis, only the emotional exhaustion scale consisting of 9 items was used (items 1, 2, 3, 6, 8, 13, 14, 16, 20). The emotional exhaustion scale is characterized by questions that assess a teacher's feelings of being overextended by their work as their energy and dedication to work are drained (Maslach et al., 2018). Ultimately, when teachers are unable to overcome and cope with emotional exhaustion it turns chronic, causing them to feel as though they cannot invest in their job and students as they previously did (Maslach et al., 2018). Reliability and validity scores indicate 0.90 internal reliability, 0.60 test-retest reliability (Maslach et al., 2018) and construct validity scores of 0.55 (depersonalization to emotional exhaustion) and -0.36 (personal accomplishment to emotional exhaustion) from confirmatory factor analysis (Byrne, 1993). Convergent validity indicated correlations between the emotional exhaustion subscale and the survey taker's real life through interviews and observations with the participant and those who interacted with them

(Maslach & Jackson, 1981). Factor loading scores indicated that the emotional exhaustion subscale had moderate to high correlations with burnout with scores ranging from 0.54 to 0.84, while the remaining subscales had much lower correlations to emotional exhaustion (Maslach & Jackson, 1981). Lastly, the emotional exhaustion subscale did not correlate with job satisfaction surveys and social desirability (-0.23), meaning that burnout was not influenced by either (Maslach & Jackson, 1981). Maslach and Jackson (1981) cited a previous study in regards to emotional exhaustion that they conducted in 1979 using police officers that indicated that there was high predicted validity (0.68,  $p < 0.001$ ) that individuals scoring high on emotional exhaustion would actually leave the profession. The higher the sum score is for emotional exhaustion the higher the degree of burnout is. Various studies have elected to use only the emotional exhaustion subscale, or just one or two of the other subscales as opposed to using all three subscales that make up the MBI-ES (Taxer et al., 2019; Arens & Morin, 2016; Corbin et al., 2019; Ilies et al., 2015; Skaalvik & Skaalvik, 2017). The MBI – ES emotional exhaustion subscale takes approximately five to seven minutes to complete and can be found in Appendix B.

### **Single-Item Teacher Stress Scale**

The second instrument consists of a single-item survey that simply asks “How stressful is your job?” and utilizes an 11-point scale ranging from 0 to 10 with a purpose to gain understanding of the overall stress level a teacher is feeling. The use of single-item instruments has been validated and correlated in multiple studies to be equal to the use of multiple-item measures, and are adequate replacements to multiple-item scales (Klassen et al., 2009). The purpose of using a single-item instrument to measure teacher-stress is to simply understand the amount of stress teachers are under rather than attempting to understand where the stress may be stemming from. This single-item survey question in particular was validated in a previous study

to understand stress and coping measures among teachers and found some test-retest reliability while comparing items, though official reliability scores cannot be determined while using single-item measures (Eddy et al., 2019). Klassen and Chiu (2010) utilized a single-item stress question as one instrument to understand connections between efficacy, job satisfaction and stress, mediated by gender and years of experience with results indicating that the item helped distinguish the relationships between variables. Test-retest reliability using Kendall's Tau indicated coefficients ranging between 0.46 and 0.58 (Eddy et al., 2019). Criterion validity was observed through concurrent (0.31 – 0.45) and predictive validity (0.44 – 0.53) measures using hierarchical regression and Pearson's correlation (Eddy et al., 2019). Construct validity was indicated through significant correlation ( $r = 0.42$ ) with emotional exhaustion measures from the MBI – ES (Herman et al., 2018).

In order to gain a better understanding of the scores in comparison to other studies, Eddy et al. (2019) utilized Gilpin (1993) to convert the Kendall's Tau correlations to Pearson's  $r$ . These results indicate that reliability scores range from 0.66 to 0.79 and correlation to emotional exhaustion scales of the MBI has a validity score of 0.65 (Eddy et al., 2019). Predictive validity scores increase to 0.73, and criterion validity ranges to 0.562 to 0.673. The conversion of these scores using the formulas and tables generated by Gilpin (1993) bring correlation scores up to more mid-range to high levels of validity. The eleven-point scale ranges from the lowest score possible of 0 (not stressful) to the highest possible score of 10 (very stressful) and only requires one to two minutes to complete. The higher the rating the higher the amount of stress is that the teacher is experiencing. The single-item survey question has been utilized in various studies (Klassen et al., 2009; Eddy et al., 2019; Herman et al. 2020; Herman et al., 2018). An email expressing acquiescence of permission to use the single-item measure and an example are

located in Appendix C.

### **Ohio State Teacher Efficacy Scale**

The main purpose of the last instrument to be used in the study, the Ohio State Teacher Efficacy Scale (OSTES), is to gain insight into a teacher's perception of their self-efficacy, or ability to elicit change within the classroom (Ryan et al., 2015). The instrument was originally developed and refined by Tschannen-Moran and Hoy (2001) with the name of the instrument developed at Ohio State University, subsequently adopting the OSTES; however, developers now prefer to simply use Teachers' Sense of Efficacy Scale (TSES). As a result, TSES is used throughout the remainder of the manuscript. The instrument consists of 12 items that are composed of questions relating to instructional strategies, classroom management, and student engagement. The survey takes participants less than 10 minutes to complete it. A 9-point scale is used for the short form of the TSES that ranges from 1 (nothing), 3 (very little), 5 (some influence), 7 (quite a bit), and 9 (a great deal), with 2, 4, 6, and 8 serving as in between markers. Multiple studies have used various items from this instrument whether it be from one entire subcategory of items from each one (Aloe et al., 2014; Sass et al., 2010; Tschannen-Moran & Hoy, 2001; Herman et al., 2018).

Reliability was established initially by Tschannen-Moran and Hoy (2001) using Cronbach's alpha for internal reliability ( $\alpha = 0.90$ ). Further studies found higher alpha scores for each subscale in which classroom management fell between 0.95 and 0.96 (Herman et al., 2018), 0.90 for student engagement (Sass et al., 2010) and 0.90 for instruction (Tschannen-Moran & Hoy, 2001). Construct validity was determined using second-order factor analysis of combined data from two studies, finding strong factors with loadings of 0.85 (instruction), 0.79 (classroom management) and 0.85 (engagement) for efficacy subscales (Tschannen-Moran & Hoy, 2001).

Discriminant validity was indicated through the observation of negative correlations to work alienation and pupil control ideology in regards to survey items (Tschannen-Moran & Hoy, 2001). Criterion validity was established through concurrent validity after the test was correlated with scales from the Rand research group using the Teacher Efficacy Scale surveys ( $r > .95$ ) with all three subscales scoring highly (Martin & Sass, 2010). To respond, teachers rate each section of the instrument using a 9-point Likert-type scale ranging from 1 (nothing) to 9 (a great deal). The lower the scores, the lower self-efficacy seems to be as the lowest score possible on the TSES 12-item questionnaire is a 12, meaning the teacher feels as though he or she can do nothing as far as student engagement, instructional strategies, or classroom management. The higher the scoring is on the items, the more a teacher feels that he or she can exert control over efficacy components of the classroom. The highest score possible is 108, meaning the teacher feels as though he or she has a great deal of influence on student engagement, instructional strategies, and classroom management. The TSES instrument has been used in multiple studies (Eddy et al., 2019; Herman et al., 2020; Herman et al., 2018; Lacks & Watson, 2018; Ryan et al., 2015) Permission to use this instrument and a copy of the instrument are located in Appendix D.

### **Procedures**

Institutional Review Board approval (Appendix A) was obtained prior to the collection of any data. The convenience sample of four middle schools in southern Georgia was taken after permission to contact faculty was obtained from each school's respective administrator using a copy of the letter located in Appendix E, along with approval from each school district's superintendent. The purpose of the study was detailed to the administrator in addition to the delivery of each inventory to be used. Upon acquiescence, each principal was given a document to send faculty containing a recruitment letter (Appendix F) to make faculty aware of the study.

Afterward, faculty were sent a link containing a thorough description of the study and consent forms to participate (Appendix G). Study participants were only accepted on a volunteer basis and the time spent taking the surveys should not have exceeded 30 minutes. The consent form and each of the three surveys were completed by participants electronically through Google Forms and anonymously without teachers having to include any other personal information other than grade level, content area, years of experience and gender. The Google Forms platform allows users to remain completely anonymous and it was stressed to faculty that the surveys require candid answers that will not be able to be traced back to the participant. Surveys were administered closer to the middle of the Spring semester and teachers had two weeks to complete the instruments. After the first week of having access to the surveys, principals were given a follow up email to send out to the faculty to remind them of the study, the completion date, and another link to access the surveys. Participants completed the survey during school in their planning period and on their own time before or after school depending on personal preference. After surveys were completed, each one was given numerical identifiers and divided out into a spreadsheet with a record of each answer for every instrument automatically by Google Forms. Following the last available day for surveys to be completed, the data found in the Google Sheets document generated by Google Forms was transferred to Statistical Package for the Social Sciences (SPSS) software for statistical analysis using Pearson's Product Moment Correlation.

### **Data Analysis**

Using bivariate correlation methods, data collected was first examined using descriptive statistics followed by inferential analysis using the Pearson's Product moment Correlation. For each item measure and category, the mean and standard deviation were calculated and Pearson's Product moment Correlation was found for items to identify any relationships present among the

variables and determine the type and strength of the relation the variables may have. Pearson's Product moment Correlation is an appropriate means of data analysis for this study because it explores the relationship between two continuous variables and the purpose of this study is to identify any relationships between the variables of (1) teacher self-efficacy and stress, (2) teacher self-efficacy and emotional exhaustion, and (3) stress and emotional exhaustion. (Gall et al., 2007). The correlations were used to test each research question hypothesis.

Data from the Google Forms surveys was automatically generated into a Google Sheets document and subsequently calculated and refined using SPSS. A multitude of studies focusing on constructs of teacher efficacy, stress, and burnout have utilized correlational coefficients to observe relationships between variables (Ryan et al., 2015; Gonzalez et al., 2017; Ilies et al., 2015; Lacks & Watson, 2018). Similarly, the study closely identifies with statistical analysis in Lacks & Watson (2018) in which descriptive statistics were used in conjunction with Pearson's Product moment Correlation to understand the significance of interaction, if any, between the variables as stated in the research questions and hypotheses. The effect size was determined using the correlation coefficient squared.

Data were screened for missing and incorrect values. Assumptions testing for Pearson's Product Moment Correlation includes assumption of bivariate outliers, assumption of linearity, and assumption of bivariate normal distribution. Assumption of bivariate outliers and linearity utilized a scatter plot to identify any extreme values between variables. The scatter plots were also used for assumption of bivariate normal distribution to identify the shape of the data in the scatter plot and whether or not the set had a normal distribution. Assumptions tests were conducted for all three of the null hypotheses.

In this study the normal alpha level of  $p < .05$  was reduced using a Bonferroni correction due to the study utilizing three tests; therefore, the alpha level was set at  $p < .017$  ( $PC\alpha = EW\alpha / k; .05/3 = .0167$ ). All data were presented using scatter plots for a visual representation of the relationship between two variables at a time. To test the first hypothesis the variables of job stress and teacher self-efficacy were compared using results from the single-item stress survey and TSES. The second hypothesis was tested through the comparison of teacher self-efficacy and feelings of burnout using scores from the TSES and the MBI – ES emotional exhaustion subscale. The last hypothesis was tested by comparing feelings of job stress and emotional exhaustion as measured by the single-item stress survey and the MBI – ES emotional exhaustion subscale.

### **Summary**

The purpose of this study was to explore the relationship between the variables of (1) job related stress, (2) teacher self-efficacy, and (3) teacher emotional exhaustion by utilizing a quantitative approach. The study is non-experimental and used a correlational design with cross-sectional surveys. The hypotheses were examined using Pearson's correlation to understand the relationship between each variable set of stress and self-efficacy, self-efficacy and emotional exhaustion, and stress and emotional exhaustion. The 75 participants were selected using a convenience sample of middle school teachers in South Georgia during the 2020-2021 school year. The instruments used to collect data were (1) the Maslach Burnout Inventory – Educators Survey, (2) a single-item teacher stress survey, and (3) the Ohio State Teacher Efficacy Scale. Each of the three instruments were found to be both reliable and valid. Prior to statistical analysis assumptions testing was conducted to include assumption of bivariate outliers, linearity,

and normal distribution. In addition to bivariate analysis, descriptive statistics were also studied using SPSS.

## **CHAPTER FOUR: FINDINGS**

### **Overview**

The following chapter revisits the research questions as well as the null hypotheses. Next, data is explained through descriptive statistics to provide an overview of the findings including the demographics associated with the sample of participants used in the study. Last, a review of the findings from statistical analysis using Pearson's Correlation is presented as it relates to each of the three null hypotheses.

### **Research Questions**

**RQ1:** Is there a relationship between job stress scores and teacher self-efficacy scores of middle school teachers?

**RQ2:** Is there a relationship between the self-efficacy scores and emotional exhaustion scores of middle school teachers?

**RQ3:** Is there a relationship between job stress and emotional exhaustion scores of middle school teachers?

### **Null Hypotheses**

**H<sub>0</sub>1:** There is no significant relationship between job stress scores, as measured by the single-item stress survey, and teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, of middle school teachers in the Southeast U.S.

**H<sub>0</sub>2:** There is no significant relationship between teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale, of middle school teachers in the Southeast U.S.

**H<sub>03</sub>:** There is no significant relationship between job stress scores, as measured by the single-item stress survey, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale, of middle school teachers in the Southeast U.S.

### **Descriptive Statistics**

The purpose of the following section is to discuss the descriptive statistics associated with data set. Each of the variables of (1) emotional exhaustion, (2) teacher self-efficacy, and (3) stress are discussed in terms of the scores participants relayed based on the instruments used. For each instrument data set the measures of central tendency, standard deviation, maximum score, minimum score, and frequency distributions are discussed.

### **Study Variables**

The variables selected for this study were emotional exhaustion, teacher self-efficacy, and stress to understand the relationship between each of the variables. To begin with, each variable was examined individually using descriptive statistics after data were collected using the instrument for each one. For each variable the measures of central tendency are discussed along with the standard deviation, maximum score, minimum score, and frequency distributions (n = 75).

The first variable, emotional exhaustion, was measured using the emotional exhaustion subscale of the Maslach Burnout Inventory – Educators Survey (Maslach et al., 2018). The subscale consisted of nine questions (items 1, 2, 3, 6, 8, 13, 14, 16, 20) discussing feelings of emotional exhaustion rated on a 7-point scale from 0 (never) to 6 (every day). The lowest possible score to receive on the instrument is zero, while the maximum score is 54 indicating that

the survey taker is emotionally exhausted. The minimum score from the data set ( $n = 75$ ) was 40 while the maximum score indicated was 52. The higher the score, the more feelings of emotional exhaustion the participant is experiencing. The standard deviation for this variable is 14.15 with a mean of 22.20, median of 20, and a mode of 12. A mean of 22.20 indicates that the sample taken falls in the moderate range of feeling emotional exhausted.

The second variable, teacher self-efficacy, was measured using the Teacher Sense of Efficacy Scale which is formerly known as the Ohio State Teacher Efficacy Scale (Tschannen-Moran & Hoy, 2001). This scale measures an individual's perception of their own ability to effect change in the classroom through 12 items that are assessed on a 9-point Likert scale. This scale ranges from 1 (nothing) to 9 (a great deal). The items utilized on the instrument are categorized by questions involving instructional strategies, classroom management and student engagement. The highest possible score that can be obtained is 108, meaning the individual has a high sense of self-efficacy, and the lowest score possible is a 9, meaning no self-efficacy. Within the data set ( $n = 75$ ), the lowest score reported was 40 with the highest being 96. The standard deviation calculated for this variable was 11.82. The measures of central tendency indicated a mean of 75.11, a median of 75, and a mode of 73. The frequency chart indicated that scores had a wide range of variability across the scale. A median of 75.11 indicates moderate to high feelings of self-efficacy among participants.

The third and final variable used in this study was that of stress in a general sense through the use of a single-item survey. This item measures stress in a general manner by simply asking the individuals level of stress. An 11-point scale is used that ranges from 0 (not stressful) to 10 (very stressful). The scores from the data set for this variable ( $n = 75$ ) ranged from the minimum of 0 to the maximum of 10. The standard deviation for the set was 3.07 with a mean of 6.15,

median of 7 and a mode of 8. The frequency chart indicated that the bulk of the scores were clustered between the scores of 7 and 10, which indicates that participants are experiencing moderate to high levels of stress within each of their respective jobs. Table 2 provides a summary of data presented regarding descriptive statistics.

**Table 2**  
*Descriptive Statistics*

	Emotional Exhaustion	Stress	Self-Efficacy
Mean	22	6.15	75.11
Median	20	7	75
Mode	12	8	73
Standard Deviation	14.15	3.07	11.82
Minimum	0	0	40
Maximum	52	10	96
<i>n</i>	75	75	75

## Results

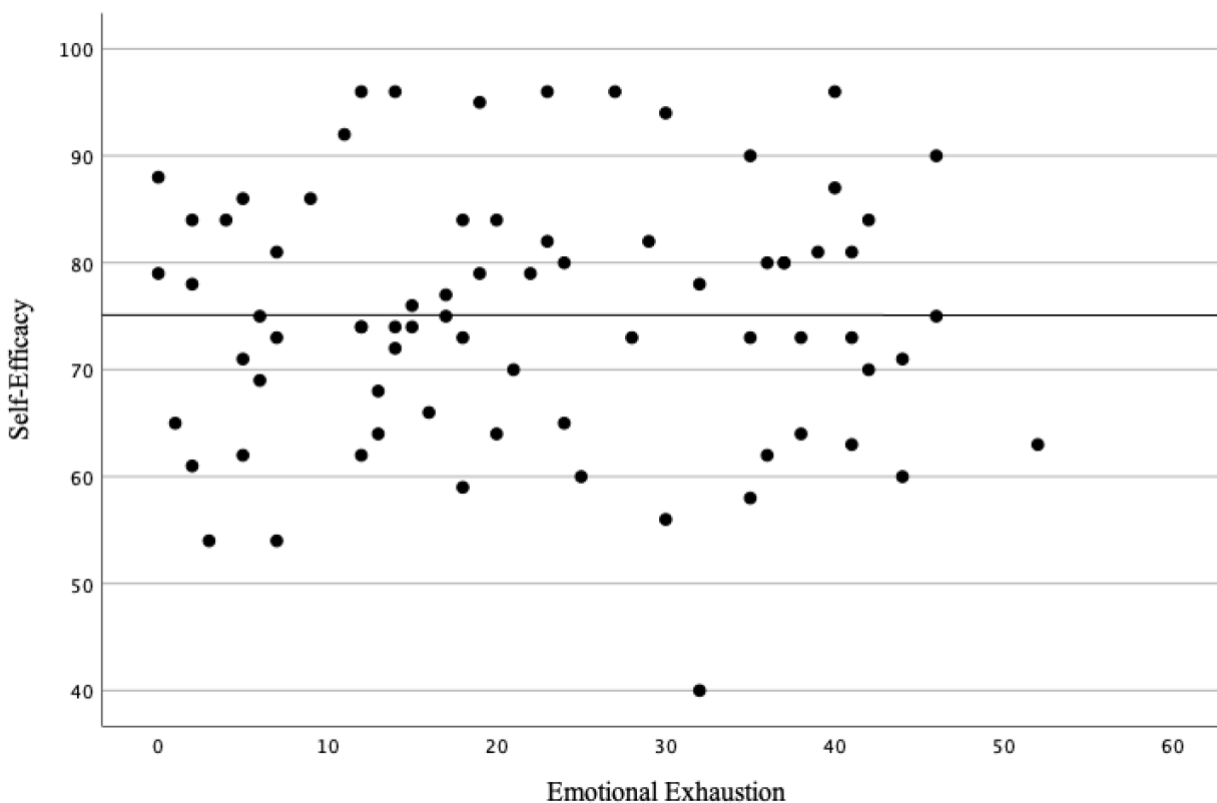
### Assumptions Testing

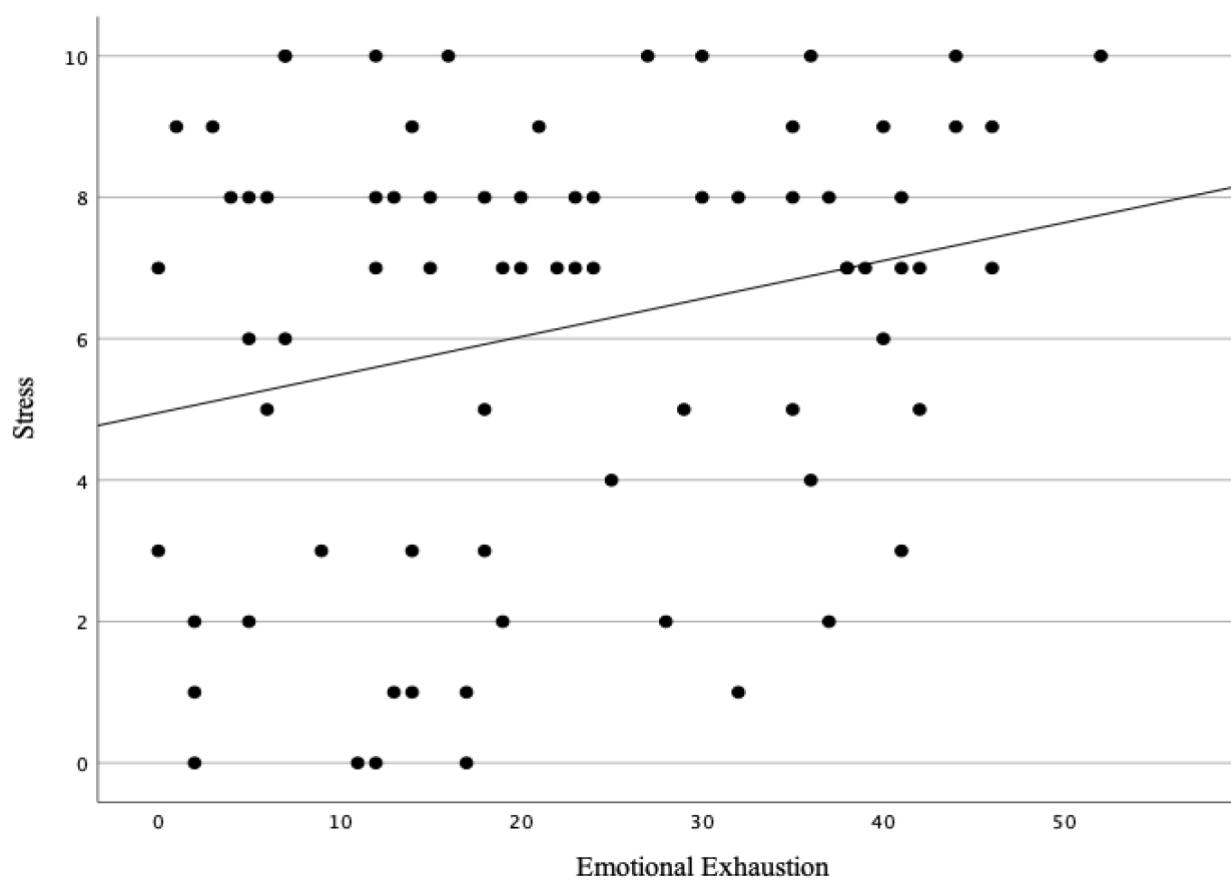
Three assumptions tests were used for this particular study. Since all of the statistical analyses ran for the study used Pearson's correlation, all of the assumptions tests were the same and results are discussed here in this section through the use of scatterplots (Figures 1, 2, 3). Before running analyses or assumptions testing, data were first screened ( $n = 78$ ). Three survey responses were removed due to incorrect answering of demographics questions where participants indicated their location of where they were born instead of the year they were born. The remaining data in the set ( $n = 75$ ) was observed to have correct values without any extreme

outliers. The first assumptions test conducted was assumption of bivariate outliers. This was conducted for all three variable relationships of emotional exhaustion to self-efficacy, emotional exhaustion to stress, and self-efficacy to stress. A scatter plot was used for all three variable pairs and indicated no extreme outliers in the data set or outliers due to errors in the data itself. The second test, assumption of linearity also utilized a scatter plot for each of the variable pairs. The scatter plots for each pair of variables indicated linearity of the data and no curvature

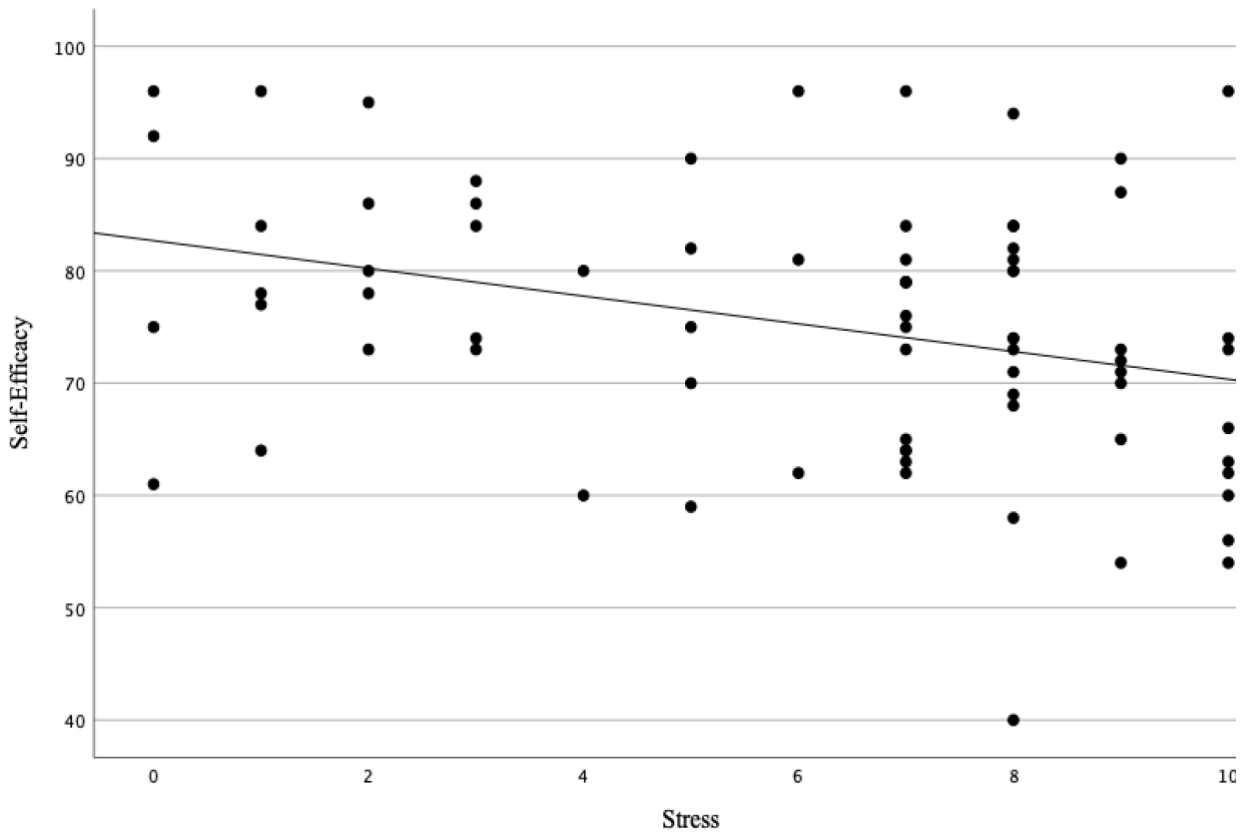
**Figure 1**

*Emotional Exhaustion vs. Self-Efficacy Scatterplot*

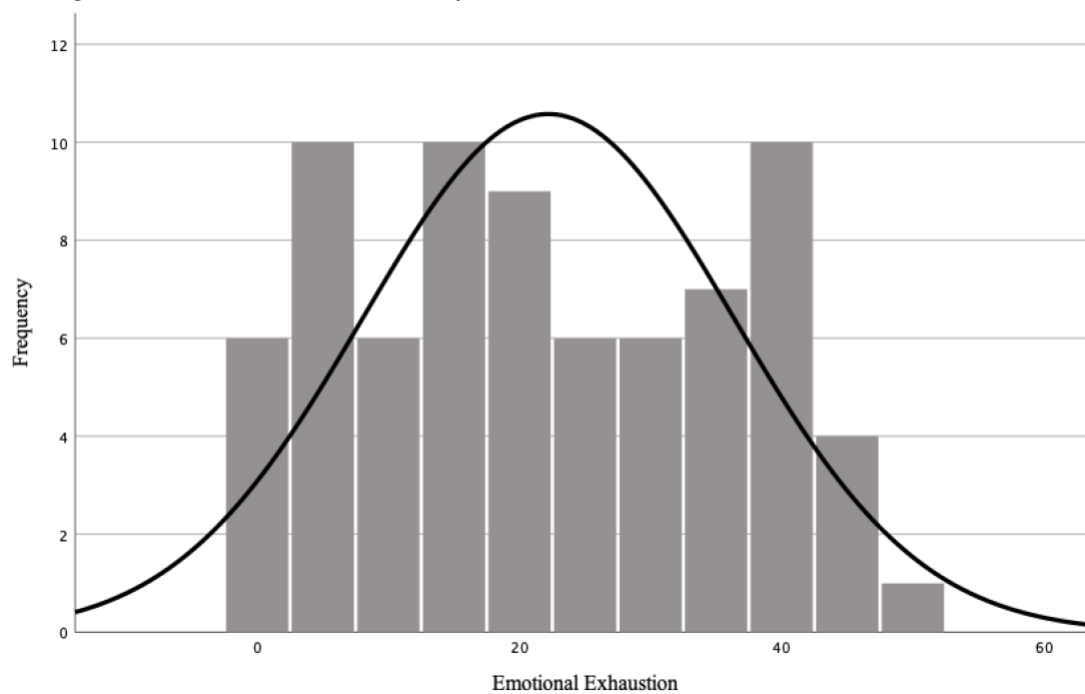
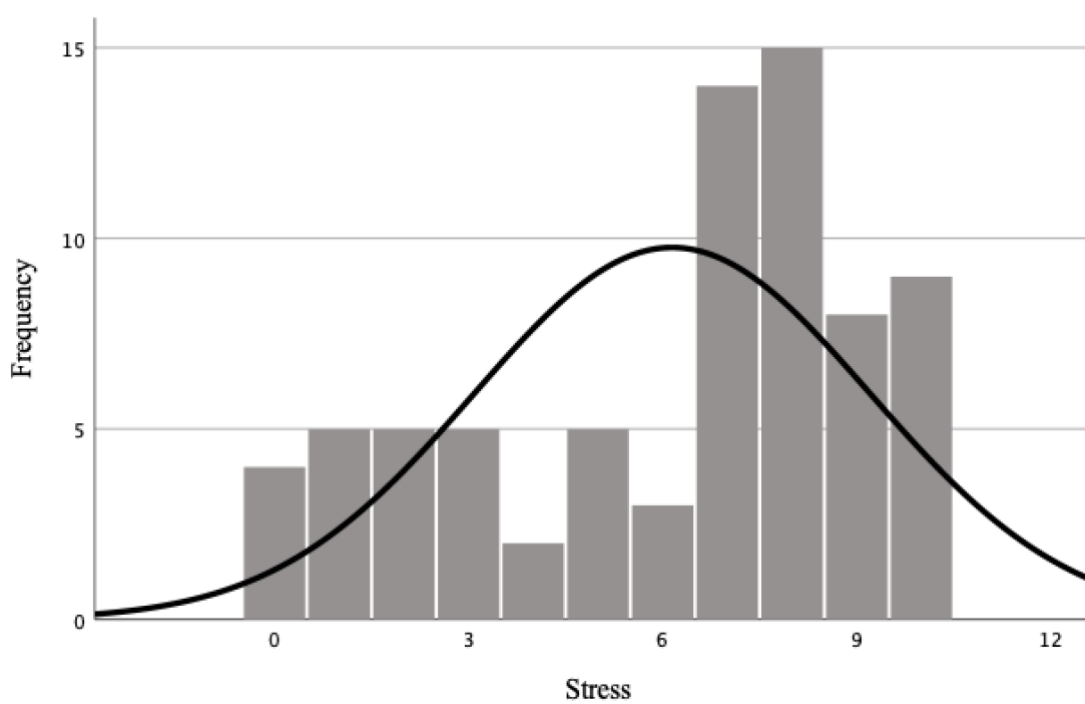


**Figure 2***Emotional Exhaustion vs. Stress Scatterplot*

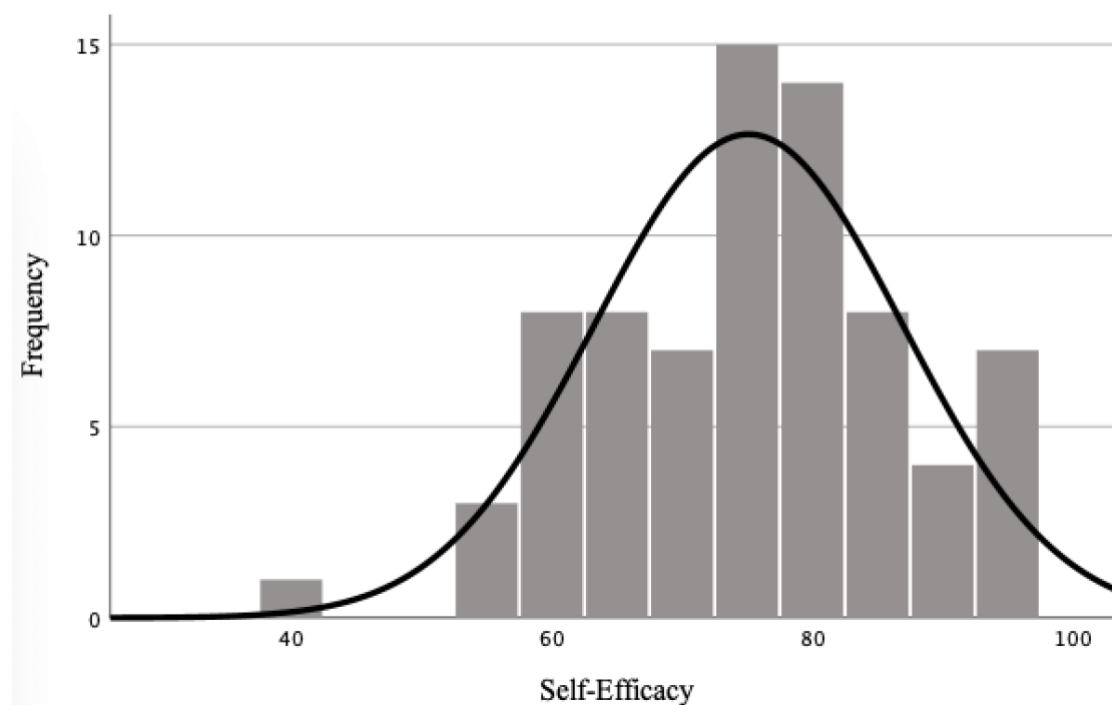
**Figure 3**  
*Stress vs. Self-Efficacy Scatterplot*



was present. The third assumptions test used for each set of variables was assumption of normal distribution. Scatterplots were used along with histograms for extra caution. The histograms (Figures 4, 5, 6) for each data set indicated a nearly normal distribution by way of a distribution curve in the shape of a bell, as can be seen in the chart. The assumption of normality is tenable for all data sets.

**Figure 4***Histogram with Distribution Curve for Emotional Exhaustion Variable***Figure 5***Histogram with Distribution Curve for Self-Efficacy Variable*

**Figure 6**  
*Histogram with Distribution Curve for Stress Variable*



### Hypothesis 1

The first null hypothesis is that there is no significant relationship between job stress scores, as measured by the single-item stress survey, and teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, of middle school teachers in the Southeast U.S. To analyze this hypothesis Pearson's product-moment correlation was used to understand the relationship between stress and teacher self-efficacy. A bivariate correlation was conducted using an SPSS software package by IBM between the variables of stress and teacher self-efficacy. The analysis yielded a result  $r(75) = -0.32, p = .005$  (see Table 2) at a 2-tailed significance level. Results indicate a significant but weak negative relationship between job stress and teacher self-efficacy. To accommodate the use of three tests in the study, a regular

alpha value was not used, requiring a Bonferroni correction of  $p < .017$  ( $PC\alpha = EW\alpha / k$ ;  $.05/3 = .0167$ ) for all three hypotheses tests ran in this study. Effect size was calculated using coefficient of determination which resulted in a score of  $r^2 = 0.1$ . Based on the significance of the results, the null hypothesis of there being no significant relationship between job stress scores, as measured by the single-item stress survey, and teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, of middle school teachers was rejected.

### **Hypothesis 2**

The second null hypothesis is that there is no significant relationship between teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale, of middle school teachers in the Southeast U.S. To analyze this hypothesis Pearson’s product-moment correlation was used to understand the relationship between stress and teacher self-efficacy. This hypothesis was also tested using bivariate correlation in SPSS to understand the relationship between teacher self-efficacy and emotional exhaustion through Pearson’s correlation. The correlation produced a coefficient  $r(75) = .000$ ,  $p = .998$  (see Table 2) at a 2-tailed significance level. With a coefficient of .00 the effect size is also zero, meaning no effect at all. Since the coefficient was 0.00 with a significance level of 0.998 the null hypothesis that there is no significant relationship between teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale cannot be rejected.

### **Hypothesis 3**

The third null hypothesis is that there is no significant relationship between job stress scores, as measured by the single-item stress survey, and emotional exhaustion scores, as

measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale, of middle school teachers in the Southeast U.S. To analyze this hypothesis Pearson’s correlation was also used to understand the relationship between stress and emotional exhaustion ( $n = 75$ ). Bivariate correlation in SPSS yielded  $r(75) = 0.25$ ,  $p = .032$  (see Table 2) with a 2-tailed significance level of 0.032 ( $p < 0.017$ ). The effect size using the coefficient of determination resulted in a score of  $r^2 = 0.06$  which indicates a small effect size. A correlation of 0.25 indicates a low positive relationship between stress and emotional exhaustion. A significance level of 0.032 is not significant using a Bonferroni correction of  $p < 0.017$ ; therefore, the null hypothesis stating there is no significant relationship between job stress scores, as measured by the single-item stress survey, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale cannot be rejected.

**Table 3**  
*Pearson’s Correlations*

	<i>r</i>	<i>p</i>	<i>R</i> <sup>2</sup>	<i>n</i>
<b>Hypothesis 1</b>				
Stress vs. Self-efficacy	-0.32*	0.005	0.01	75
<b>Hypothesis 2</b>				
Self-efficacy vs. Emotional Exhaustion	0.00	0.998	0.00	75
<b>Hypothesis 3</b>				
Stress vs. Emotional Exhaustion	0.25	0.032	0.06	75

\*Correlation is significant at the 0.017 level (2-tailed)

### Summary

The total sample taken consisted of 75 participants who returned the surveys with all questions and responses answered appropriately. The demographics revealed the majority of participants were female, and were split relatively even across sixth, seventh, and eighth grades. Most were Caucasian and African Americans who were middle aged with more than ten years of teaching experience. Nearly all of the participants were teaching face to face, with slightly more than half teaching both face to face and virtually. The majority of participants indicated moderate feelings of emotional exhaustion, moderately high levels of self-efficacy, and moderate to high stress levels at the time of the surveys. Assumption of bivariate outliers, assumption of linearity, and assumption of normal distribution were all met as indicated through the use of scatter plots and histograms for each of the three variables. Correlations for the first hypothesis (stress vs. self-efficacy) yielded significant results ( $r(75) = -0.32, p = .005$ ) which allowed for the rejecting of the null hypothesis. The second hypothesis (self-efficacy vs. emotional exhaustion) yielded insignificant results and no correlation ( $r(75) = 0.00, p = .998$ ), which did not allow for the null hypothesis to be rejected. Lastly, the third hypothesis (stress vs. emotional exhaustion) yielded results that indicated a slight correlation ( $r(75) = 0.25, p = .032$ ); however, the data indicated lack of significance which did not allow for the null hypothesis to be rejected.

## **CHAPTER FIVE: CONCLUSIONS**

### **Overview**

The following chapter provides a summary of the research findings by beginning with the purpose of the study. Following the purpose of the study, each of the three research questions are discussed in terms of how they fit with current literature and how the results may or may not support the literature or theory. After comparison of the study's results to previous studies, the implications of the study are explained as they pertain to teachers and schools. Study limitations are considered, particularly in regards to internal and external validity. This chapter concludes by discussing recommendations for future studies that involve teacher burnout in terms of emotional exhaustion, job stress, and teacher self-efficacy.

### **Discussion**

The purpose of this study was to explore the relationship between teacher self-efficacy, job stress, and emotional exhaustion as they relate to feelings of teacher burnout at the middle school level. Three research questions were used to explore the relationships between variables by comparing two variables at a time. The first job stress scores, as measured by the single-item stress survey, and teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale. The second set of variables was teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale. The third research question compared job stress scores, as measured by the single-item stress survey, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale. Therefore, the study revealed that as teacher stress increased, self-efficacy

increased indicating some level of teacher resiliency to stress and the teachers' ability to rise to the occasion.

### **Hypothesis 1**

The first research hypothesis stated there would not be a significant relationship between job stress scores, as measured by the single-item stress survey, and teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, of middle school teachers in the Southeast U.S. This hypothesis was the only one that held any significance following the correlation that was ran. The null hypothesis was rejected, indicating that there was a significant negative relationship between the two. The relationship was a low to moderate correlation ( $r(75) = -0.32$ ,  $p = .005$ ) between the two variables. This relationship indicates that data shows a trend in which the higher self-efficacy is, the lower stress levels, as well as the alternative of higher stress levels indicating a slight trend of lower self-efficacy.

The study's foundation was based on Bandura's theories revolving around social cognitive theory and efficacy, stating that personal efficacy is derived from performance accomplishments and experiences (Bandura, 1977). Social cognitive theory was later described as the interactions between an individual, behavior and the environment, all of which facilitate learning through social situations (Lacks & Watson, 2018). The results for the first hypothesis are on track with this theory as stressful situations that are happening to teachers have indicated that it impacts self-efficacy. Bandura believed that self-efficacy is a product of prior experiences, whether they may be positive or negative, allowing for the assumption that high stress situations in teaching would negatively impact efficacy (Skaalvik & Skaalvik, 2017). According to Bandura's prior research and social cognitive theory, once self-efficacy has been lowered after failing an experience, avoidance of the task is likely to occur, making it difficult to

build that efficacy back up (Tschannen et al., 1998). According to Tschannen et al. (1998), a review of prior research regarding efficacy indicated that efficacy can be built through professional development; however, it is an arduous process that requires a teacher to truly implement the new skills learned from professional development, and most results were not seen until the spring.

The second theory this study is grounded in is that of Julian Rotter's locus of control theory. This theory focuses on outcomes and actions, similar to what Bandura proposed in his theories with mastery experiences and self-efficacy. Rotter believed in internal and external locus of control, meaning those with internal control believe that their self-efficacy is in their control, while external control indicates the individual feels efficacy is controlled by external factors that are out of their hands (Rotter, 1966). Rotter (1996) did develop a locus of control scale to accompany his work to measure general beliefs on how behaviors determine outcomes in one's life. The scale provides participants with two answer choices on each item in which one relates to an internal locus of control and the other to an external one. By adding these scores, a range is determined to indicate if the individual is more apt to have an internal or external locus of control based on those answers. Successes and failures are attributed to either the individual in question or the environment, such as experiences that shape efficacy; further, it is these instances in which having an internal locus of control can mitigate the influence of stress (Lacks & Watson, 2018). This theory is also supported by the first research question. It can be concluded that the slight correlation observed between stress and efficacy can be attributed to individuals succumbing to stress due to an external locus of control; the alternative would also be that those who had higher efficacy regardless of stress level would have an internal locus of control because the stress didn't influence their ability to teach. This would mean that they feel

the stress noted in the survey is out of their control and subsequently has impacted their self-efficacy. Alternatively, teachers who indicated they had high levels of self-efficacy have an internal locus of control because despite stress in the workplace, it has not impacted their view of self-efficacy, meaning they are in control of their efficacy regardless of external factors. Khani and Mirzaee (2015) found that self-efficacy of teachers has the ability to mediate teacher burnout through the control of stress coping. It is essential for teachers to have high self-efficacy in addition to the ability to cope during stressful times in order to manage stress in a way that does not induce burnout (Herman et al., 2018). Results from this current study could indicate that teachers have both high self-efficacy and coping ability which shows resilience towards stress.

The results largely follow the same trend found in past quantitative studies that have observed teacher stress and self-efficacy among middle school teachers. Herman et al. (2020) analyzed 102 teacher profiles using latent profile analysis for stress and coping finding that teachers fell into categories that were characterized by high stress and high coping, or high stress and low coping. The high stress and low coping profile indicated higher levels of burnout with lower levels of self-efficacy (Herman et al., 2020). Von der Embse and Mankin (2021) conducted a correlational study (Spearman rank-order) of 158 middle school teachers and indicated that when stress levels within a school increased, self-efficacy and school connected decreased the same percentage, which highlights a direct correlation between the two constructs; however, though the article was published in 2021 the actual study took place in 2016, leaving no connection to COVID-19 related stress. Similarly, von der Embse (2016) also found that multiple facets of self-efficacy have a significant relationship with stress and job satisfaction during a study of 1,242 middle school teachers using structural equation modeling. Putwain and von der Embse (2019) found that self-efficacy was negatively related to perceived stress with

high self-efficacy relating to low stress levels along with low pressure from imposed curriculum changes from administration. According to confirmatory factor analysis and latent bivariate correlations, stronger levels of self-efficacy were associated with lower levels of stress on from the 839 participants who took surveys (Putwain & von der Embse, 2019). Sass et al. (2010) determined that stress free environments were integral to having a strong sense of self-efficacy to promote student engagement using a study of 479 teachers along with structural equation modeling to understand predictability factors. Delving deeper, Putwain and von der Embse (2019) also had results that indicated stronger self-efficacy among teachers was present when there were higher levels of social support from colleagues and administrators; however, it was found that student generated stress impacted the relationship between teacher self-efficacy of engagement during the day and feelings of job dissatisfaction.

## **Hypothesis 2**

The second hypothesis stated that there would be no significant relationship between teacher self-efficacy scores, as measured by the Teacher Sense of Efficacy Scale, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale, of middle school teachers in the Southeast U.S. The results from this hypothesis were not of any significance. Since the correlation was not statistically significance, the null hypothesis for the variables of self-efficacy and emotional exhaustion could not be rejected. Correlation results ( $r(75) = 0.000$ ,  $p = 0.998$ ) indicated that there was not any evidence of a correlation between self-efficacy and emotional exhaustion and the  $p$  value was far from being significant. The data analysis conducted with a correlation of zero suggests that regardless of how high or low a teacher's self-efficacy is, emotional exhaustion did not have an effect on self-efficacy scores.

Though there is no correlation present between self-efficacy and emotional exhaustion, the results are still applicable to Bandura's social cognitive theory and Rotter's theory of locus of control. Bandura's theory posits that successes with various mastery experiences are what increase or build self-efficacy (Skaalvik & Skaalvik, 2017). Teachers may have experienced emotional exhaustion as indicated by survey results; however, they were able to employ the appropriate coping mechanisms and create a positive outcome. Therefore, as a result, the participants did not experience a drastic decrease in self-efficacy as levels of emotional exhaustion increased. Berryhill et al. (2009) discussed in their study of 100 teachers using interviews, and factor analyses that a positive association between self-efficacy and job satisfaction was present and that Bandura believed individuals seek out and enjoy activities in which they have a high mastery experience in. This could be applicable to the results of this study in that even though teachers may experience some emotional exhaustion, their self-efficacy remained higher. This pushes them to continue to persevere and come to work to seek out mastery experiences that built their self-efficacy in the first place. Rotter's theory is applicable to the result of no correlation because self-efficacy was unchanged regardless of emotional exhaustion. This result suggests that participants in the study are likely to have an internal locus of control, meaning that they have ownership of their choices and they do not let external forces impact their self-efficacy.

The second hypothesis sought to address the relationship between self-efficacy scores and emotional exhaustion scores of middle school teachers with results revealing zero correlation between the two variables. A multitude of studies contradict this finding and instead found a correlation between self-efficacy and emotional exhaustion, stating that generally as emotional exhaustion increases, self-efficacy decreases. Berryhill et al. (2009) found that conflict with

policy issues was associated with increased emotional exhaustion through mediators of role conflict and low levels of self-efficacy. Aloe et al. (2014) studied self-efficacy using multivariate meta-analysis and found it to be related to emotional exhaustion and suggested that higher self-efficacy would mean lower levels of emotional exhaustion. Similarly, Maslach et al. (2018) discussed emotional exhaustion through the lens of misbehavior in the classroom. Findings revealed that specific instances of recurring misbehavior in the classroom led to teachers feeling increased levels of emotional exhaustion and lower levels of self-efficacy. Most recently Kim and Buric (2020) found that teacher self-efficacy levels and burnout were related, but that constructs of burnout, the main part of which is emotional exhaustion, predict future levels of self-efficacy rather than self-efficacy having an impact on levels of burnout. Their study consisted of approximately 3,000 teachers across all grade levels using teacher self-efficacy and burnout scores to conduct an autoregressive cross-lagged panel design. All of the similar studies that were reviewed indicated a relationship between the variables of self-efficacy and emotional exhaustion, making this study a paradox among others due to its lack of any relationship between the two variables. The majority of study participants indicated mid-range levels of emotional exhaustion; alternatively, participants mainly scored in the mid-range to the upper portion of self-efficacy scores, which indicates that most participants had relatively high self-efficacy, contrary to the other studies discussed above.

### **Hypothesis 3**

The third and final hypothesis stated that there would be no significant relationship between job stress scores, as measured by the single-item stress survey, and emotional exhaustion scores, as measured by the Maslach Burnout Inventory – Educator Survey emotional exhaustion subscale, of middle school teachers in the Southeast U.S. The correlation between

job stress scores and emotional exhaustion scores was very low ( $r(75) = 0.25, p = 0.032$ ).

Although there was a very small positive correlation, significance testing indicated that the results were not significant based on the Bonferroni correction of 0.017, though it was very close. The low correlation indicates that stress and emotional exhaustion have a weak relationship with one another as the other increases and vice versa. Regardless of there being the presence of a weak correlation, the lack of statistical significance does not allow for the rejection of the null hypothesis.

The results for the third hypothesis can also be explained by Bandura's theories that were used as part of the foundation of this study. Bandura (1971) believed that human functions are reliant on the processes of anticipating consequences through stimulus control, cognitive ability, and reinforcement control; however, individuals may react differently depending on whether or not the reinforcements are positive or negative. Given Bandura's thoughts on positive and negative reinforcement, it could be deduced that as teachers experience more negative interactions by ways of stress in the work place, then they would experience higher levels of emotional exhaustion. Emotional exhaustion itself is characterized by repeated exposure to stress and having expended the resources available to appropriately cope with the stress (Taxer et al., 2019). Efficacy expectations of the individual could have impacted the feelings of emotional exhaustion due to prior experiences of personal accomplishment (Guskey & Passaro, 1994), which in turn could have given the participants more confidence in lieu of feeling so stressed it resulted in high levels of emotional exhaustion. Guskey and Passaro (1994) utilized 342 teachers in a sample and used factor analytic procedures to understand variance between scale scores. Rotter's theory of locus of control would indicate a much better explanation for the lack of impact that stress and emotional exhaustion had on one another in this study. The majority of

individuals that participated in the study could have had internal loci of control. This would indicate that even though surveys revealed mid to higher ranges of stress, the individuals were able to deal with the stress more appropriately and not let it increase to the level of emotional exhaustion. Had results been a stronger correlation between higher stress and higher emotional exhaustion scores, it could have been suggested that participants had external loci of control. This would mean that they felt as if they had no control over situations and could do nothing to change it.

The results from the third correlation ran between stress and emotional exhaustion were contradictory to prior research that has explored the two variables. The majority of research indicated relationships, whether direct or acting as a mediator, between emotional exhaustion, burnout, and stress. Khani and Mirzaee (2015) found that the variables of stress can directly and indirectly cause burnout ultimately by way of emotional exhaustion during their study of 216 teachers using structural equation modeling. Bottiani et al. (2019) specifically studied the stress of student behaviors at low-income school districts, resulting in the discovery of a positive relationship between student disruptive behaviors and burnout. Similarly, Maslach et al. (2018) also found that student misbehavior had a moderate association with emotional exhaustion. In 2019, Eddy et al. studied the relationship between emotional exhaustion and stress and found that the two were correlated through the use of the emotional exhaustion subscale of the Maslach Burnout Inventory for educators. Corbin et al. (2019) also found that the higher conflict and job stress scores were, the more that levels of emotional exhaustion increased during their study of over 2,000 teachers using regression analysis. In one study, teachers indicated that a specific cause of stress in the classroom was forming relationships with students. Results indicated that levels of emotional exhaustion decreased the more that teachers expressed having better

relationships with students as there were less instances of anger and tension in the classroom (Taxer et al., 2018).

### **Implications**

One of the most salient implications of this study is that of the resiliency of teachers. This study took place in the first academic year following the shutdown of schools due to COVID-19. Schools are dealing with COVID-19 cases among staff and students along with having to navigate new health related policies to ensure the safety of everyone inside of the schools, all of which are completely new. Teaching in the face of a pandemic has brought about a myriad of complicated issues, some foreseen while others have arisen as the school year has progressed. The large majority of teachers in this study are having to teach students both face to face and virtually. Through such a tumultuous time for not only schools, but the entire country, teachers who participated in this study have remained very strong as can be seen in the results. Though some reported high stress levels and moderate ranges of emotional exhaustion, the levels of self-efficacy reported have been remarkably high. While not all of the results came back statistically significant or as predicted by prior research, they still paint a picture that shows how teachers have been coping with the onslaught of changes and challenges brought forth by COVID-19. The RAND Corporation conducted a study on teachers who were experiencing burnout and were making the choice to leave the profession for either a completely new job, or a new teaching position. Results from the thousand participants surveyed indicated that they were extremely stressed before COVID-19 and that the pandemic only exacerbated the stress, with most stating that they needed more flexibility within the job to alleviate some of the stress (Diliberti et al., 2021). Upon studying school calendars for both the county and city school districts, it was observed that the school districts allotted more than double the amount of

preplanning work days for teachers at the start of the 2020 school year as compared to the 2019 school year. This extra time to prepare and plan for upcoming school year before students attended could have provided teachers with an opportunity to feel confidently prepared which would have the likelihood of increasing a teacher's self-efficacy. School districts have the opportunity to see these results and think about ways to implement more professional development that teachers feel they would benefit from. Asking teachers where they feel less confident and what would help boost their efficacy would be an efficient way to target areas of need, thus leading to the potential to continue to build the resiliency to stress by giving teachers tools that will help them feel able to deal with the stress. Aside from additional time at the beginning of the school year, administrators and districts could also take this information and extend it to more time for teachers to plan throughout the school year by protecting planning periods, or finding ways to extend the planning time teachers have. Lastly, if districts are seeing low efficacy among teachers, one avenue to mitigate stress would be to observe any stress invoking policies or assessing current duties of teachers and condense those down to the most essential ones. This would alleviate that time constraints that many teachers indicate is a direct connection to the stress they feel. Streamlining the teaching process and allowing teachers the ability to teach rather than stress more about paperwork and scores would have the potential to increase efficacy among educators.

The first research question pertaining to whether or not there was a relationship between job stress and teacher self-efficacy contributed to the growing body of research surrounding burnout when self-efficacy is studied. Results indicated that job stress and self-efficacy were correlated at a low to moderate level and that participants with higher efficacy felt lower levels of stress, while those with higher levels of stress indicated lower levels of efficacy. This is

significant along with other research that has recently studied stress and efficacy (Herman et al., 2020; von der Embse & Mankin, 2021). The results from this study and those like it indicates the need to understand how to alleviate stress and help boost efficacy, as Putwain and von der Embse (2019) found that higher levels of social support from colleagues and administrators helped strengthen efficacy levels among teachers. The other research questions did not follow in the footsteps of previous studies as the results were insignificant and the null hypotheses could not be rejected. The second question focused on the relationship between self-efficacy and emotional exhaustion in which there was no correlation present at all. The third question focused on the relationship between job stress and emotional exhaustion finding a weak correlation that was not statistically significant. Though the correlation was weak and insignificant, a slight correlation does follow the appropriate direction of other studies. Previous studies mostly focused on student behaviors that may cause stress and eventually emotional exhaustion (Corbin et al., 2019; Maslach et al., 2018; Bottiani et al., 2019). The weak results in this study could be due to smaller class sizes and mask mandates alleviating some of the triggers for student behaviors, causing less stress in the classroom for that aspect, ultimately leading to lower emotional exhaustion.

The theoretical implications of the study for the most part furthered both of the theories used in this study. Bandura's theories on efficacy, such as the social cognitive theory, were in line with the results of the first hypothesis that indicated a negative significant relationship between job stress and self-efficacy. Even more so than Bandura's theories, Julian Rotter's (1966) theory of locus of control was extremely applicable to each of the research questions. During trying times, it is evident whether or not an individual has an internal or external locus of control by how they cope with that experience. Each of the research questions can be explained

through the lens of the locus of control theory. Based on the results, individuals in this study seem to overwhelmingly have an internal locus of control. Regardless of the stress the current education environment has imposed and feelings of emotional exhaustion, self-efficacy has remained high. This indicates that teachers in the sample feel as though they still have the ability to control their efficacy and overall teaching apart from any mitigating factors such as stress. These results are important to consider as school districts look back on this school year and assess how the schools and all of the personnel have performed and hopefully ensure in the future that teachers have what they need to feel confident and maintain high efficacy in the face of adversity.

### **Limitations**

This study has some threats to consider for both external and internal validity. One of the first external validity threats to be considered is that the study is not generalizable to an entire population. The sample taken was only 75 participants from two school districts right next to one another in the southern part of Georgia. The small sample size and the fact that participants all came from the same city and county in Georgia does not allow for the results to be generalized on a broader scale to encompass the population of teachers in the United States. A larger sample size taken from more school districts could have promoted stronger results and correlations, as well as collected a better picture of how teachers are able to cope with stress, efficacy, and emotional exhaustion. Furthermore, the study only focused on middle grades teachers of core subject areas, which leaves out other grades as well as teachers who teach elective subjects such as physical education, art, or foreign languages. An additional factor to consider is that teachers used their planning time to take part in the survey and surveys took place approximately one month before state testing ensued. These facts could have prompted

teachers to hurry through the survey items without considering their true response to the question, as well as rushing to be finished with the survey though it was not extremely lengthy.

The most obvious threat to the internal validity of the study is the fact that the study took place during a time in which the COVID-19 pandemic has altered the dynamics of education. Reforms were put in place to combat the spread of the virus including some schools remaining virtual, some transitioning into face-to-face settings, and some students still being virtual while school was physically in session. These factors could have skewed results when compared to results that came from a normal school year without a pandemic wreaking havoc on the educational system. Another external factor is that of the time in which the study took place. Had the surveys been taken at another point in the school year, results may have been different as feelings of stress may fluctuate depending on demands in place at that time of year, particularly as testing approaches in the latter half of the spring semester. The day and time the participants completed the survey could also impact scores that were submitted such as if their plan time was in the early morning or late afternoon. The day of the week could impact scoring just as much as time as the beginning of a week may be less stressful or more hectic than the middle or end part of the week.

Limitations arise from the use of a correlational design as well. Due to study being nonexperimental, claims of causal relationships between variables used in the study cannot be made. Correlational research can only observe the relationship between variables and cannot determine what variable may influence another nor how the variables interact with one another. Additionally, extraneous variables have the potential to interfere with the result.

### **Recommendations for Future Research**

While only one research question indicated significant results, the results pertaining to the other two questions cannot be discounted. Based on the limitations discussed above, it is important to continue researching aspects of teacher burnout as it applies to job stress, emotional exhaustion, and self-efficacy. In the future, studies should consider performing the research on a larger scale, particularly when surveys can be sent out electronically rather than incurring the cost of printing and mailing them. Extending the chance to participate in a similar survey, especially during the COVID-19 pandemic, it is important to see how teachers are coping with any added stress across larger portions of the United States. It would be fruitful to study the impact of COVID-19 on the teaching profession directly, particularly any changes made to professional development and preplanning time. There are little to no studies, especially in the United States, that have focused on educators and COVID-19 since the pandemic started. It is important to understand if any additional resources have been provided and if that could potentially be a reason for the increase in self-efficacy amid moderate levels of stress. One aspect that should be explored is the fact that both school districts had at least double the amount of teacher pre-planning work days at the start of this school year in comparison to previous years. Further studies should be conducted to see if this was a factor that bolstered self-efficacy scores. For the school districts in this study specifically, the upcoming school year calendar has returned to the previous amount of time for pre-planning instead of the extra week given this past year as COVID-19 influenced the school year heavily. Future studies could include the longer version of the Teacher Sense of Efficacy Scale to gain a deeper understanding of which area of self-efficacy teachers are excelling in, or lacking. This would provide a means to target efficacy issues in the hopes of strengthening it. Additionally, it may be practical to employ all three

subscales of the Maslach Burnout Inventory for educators to understand how each subscale may be impacted by efficacy and stress respectively.

In addition to broadening the sample, it would be prudent for research to continue to observe all teachers regardless of grade level, to understand any differences and similarities that may be present between elementary, middle, and high school teachers. In the future, a study in which regression analysis is used to understand the impacts of stress or emotional exhaustion on self-efficacy may reveal a better understanding on how they are interrelated and in turn, provide avenues to help alleviate negative impacts on efficacy that could lead to burnout. Lastly, future studies would benefit from placing a stronger focus on Julian Rotter's theory of locus of control, particularly during a time in which the United States is facing challenges stemming from the pandemic. Using a survey in conjunction with the other instruments used that could gain an understanding as to whether or not the participant has an internal or external locus of control and comparing that with results could provide extremely beneficial information to researchers and administrators to determine means to help teachers strengthen their self-efficacy and lessen the burden of stress and emotional exhaustion. Causal comparative research designs or quasi-experimental methods would be very beneficial to establish any causal links between the variables utilized in this research, especially given that relationships between some of the variables were observed in this study. It is important to continue to study these variables in different perspectives so that a clearer picture can be seen as to why teachers reach the level of burnout that pushes them to leave the teaching profession all together.

### **Summary**

Results from this study indicated that only the first research question was significant, allowing for the null hypothesis to be rejected. This means that the data revealed as teacher

stress increased, self-efficacy decreased, and as stress decreased, self-efficacy increased. The correlation between the two variables was moderate to low. Interestingly, even though stress levels were moderately high across participants, self-efficacy levels still remained in the moderate to high zone of scoring. This fact indicates that potential for teacher resiliency during an abnormally stressful school year for some. Most studies follow similar results with high stress resulting in low efficacy. These results coincide with the theories of Bandura and Rotter that the study is situated in, as experiences facilitate learning outcomes in social cognitive theory (Bandura, 1977); additionally, Rotter (1966) would find the participants' outcomes could be explained by them having an internal locus of control, meaning external situations did not impact the teacher's ability to teach. The second hypothesis could not be rejected and indicated that there was no correlation at all between the variables of self-efficacy and emotional exhaustion. Bandura and Rotter's theories are still applicable in light of the lack of correlation, as it can be deduced that this lack of correlation is a result of high coping abilities from past experiences and the possession of an internal locus of control. This result is contradictory of prior studies which found that there was a relationship between the variables of self-efficacy and emotional exhaustion. The third hypothesis also could not be rejected; however, there was a low correlation between stress and emotional exhaustion scores even though results were insignificant. Had the correlation been stronger, Bandura's theory would indicate negative experiences with an inability to cope with the stress leading to emotional exhaustion feelings. Similarly, Rotter's theory would indicate an external locus of control in regards to dealing with stress and being unable to reign in the stress to a reasonable level. The results to the correlation between these variables are contradictory to prior research as data in the past revealed stronger relationships between the two variables.

Major implications to the study revolve around COVID and teacher resiliency due to the timing of the study. Added stress of navigating a post-COVID educational system has not seemed to impact overall teacher self-efficacy. The only major change in professional development or school year preparation was that teachers were given at minimum, double the time of teacher pre-planning time. This could have impacted efficacy in that teachers felt more prepared than usual given the extra time to prepare for school. Though Bandura's theories were the main foundation for the study, it has become clear after results were obtained that Rotter's theory of Locus of Control may be the largest factor involved in the high levels of teacher efficacy amid stress. The study is limited by the sample size taken, the specific geographic area, and the specific grade level making it unable to be generalized to a larger population. Another limitation was that it took place during the pandemic which could have skewed results compared to if the study took place during normal conditions. Future research should continue to study the variables of stress, self-efficacy and emotional exhaustion on a broader scale with a larger sample size. Given the lack of studies pertaining directly to the effects of COVID on efficacy, stress, or emotional exhaustion, it is important to study the impacts it has had to begin laying a foundation on the topic. Studies should implement other avenues of analysis to determine more causal effects of the variables on one another and particularly study whether or not the extra time to plan at the beginning of the school year was a factor in boosting self-efficacy among the stress present among participants.

## REFERENCES

- Abel, M. H., & Sewell, J. (1999). Stress and burnout in rural and urban secondary school teachers. *Journal of Educational Research*, 92(5), 287-293.  
<https://doi.org/10.1080/00220679909597608>
- Aloe, A. M., Amo, L. C., & Shanahan, M. E. (2014). Classroom management self-efficacy and burnout: A multivariate meta-analysis. *Educational Psychology Review*, 26, 101-126.  
<https://doi.org/10.1007/s10648-01309244-0>
- Arens, A. K. & Morin, A. J. S. (2016). Relations between teachers' emotional exhaustion and students' educational outcomes. *Journal of Educational Psychology*, 6, 800-813.
- Bandura, A. (1971). *Social Learning Theory*. General Learning Press: New York, NY.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. <https://doi.org/10.1037//0033-295X.84.2.191>
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117-148. [https://doi.org/10.1207/s15326985ep2802\\_3](https://doi.org/10.1207/s15326985ep2802_3)
- Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, 38(1), 9-44. <https://doi.org/10.1177/0149206311410606>
- Berryhill, J., Linney, J. A., & Fromewick, J. (2009). The effects of education accountability on teachers: Are policies too stress provoking for their own good? *International Journal of Education Policy and Leadership*, 4(5), 1-14. <http://www.ijepl.org>
- Bottiani, J. H., Duran, C. A. K, Pas, E. T., & Bradshaw, C. P. (2019). Teacher stress and burnout in urban middle schools: Associations with job demands, resources, and effective classroom practices. *Journal of School Psychology*, 77, 36-51.  
<https://doi.org/10.1016/j.jsp.2019.10.002>

- Bray-Clark, N., & Bates, R. (2003). Self-efficacy beliefs and teacher effectiveness: Implications for professional development. *The Professional Educator*, 26(1), 13-22.  
<https://files.eric.ed.gov/fulltext/EJ842387.pdf>
- Byrne, B. M. (1993). The Maslach Burnout Inventory: Testing for factorial validity and invariance across elementary, intermediate, and secondary teachers. *Journal of Occupational and Organizational Psychology*, 66, 197-212.  
<https://doi.org/10.1111/j.2044-8325.1993.tb00532.x>
- Chang, M. (2013). Toward a theoretical model to understand teacher emotions and teacher burnout in the context of student misbehavior: Appraisal, regulation, and coping. *Motivation and Emotion*, 37, 799-817.
- Corbin, C. M., Alamos, P., Lowenstein, A. E., Downer, J. T., & Brown, J. L. (2019). The role of teacher-student relationships in predicting teachers' personal accomplishment and emotional exhaustion. *Journal of School Psychology*, 77, 1-12.  
<https://doi.org/10.1016/j.jsp.2019.10.001>
- Crothers, L. M., Kanyongo, G. Y., Kolbert, J. B., Lipinski, J., Kachmar, S. P., & Koch, G. D. (2010). Job stress and locus of control in teachers: Comparisons between samples from the United States and Zimbabwe. *International Review of Education*, 56(5), 651-669.  
<https://doi.org/10.1007/s11159-010-9176-6>
- Diliberti, M. K., Schwartz, H. L., & Grant, D. (2021). Stress topped the reasons why public school teachers quit, even before COVID-19. *RAND Corporation*, 1-38.  
<https://doi.org/10.7249/RRA1121-2>
- Duong, M. T., Pullmann, M. D., Buntain-Ricklefs, J., Lee, K., Benjamin, K. S., Nguyen, L., & Cook, C. R. (2019). Brief teacher training improves student behavior and student-teacher

- relationships in middle school. *School Psychology*, 34(2), 212-221.  
<http://dx.doi.org/10.1037/spq0000296>
- Eddy, C. L., Herman, K. C., & Reinke, W. M. (2019). Single-item teacher stress and coping measures: Concurrent and predictive validity and sensitivity to change. *Journal of School Psychology*, 76, 17-32. <https://doi.org/10.1016/j.jsp.2019.05.001>
- Fives, H., Hamman, D., & Olivarez, A. (2007). Does burnout begin with student-teaching? Analyzing efficacy, burnout, and support during the student-teaching semester. *Teaching and Teacher Education*, 23, 916-934. <https://doi.org/10.1016/j.tate.2006.03.013>
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (8th ed.). New York, NY: Allyn & Bacon.
- Gilpin, A. R. (1993). Table for conversion of Kendall's Tau to Spearman's Rho within the context of measures of magnitude of effect for meta-analysis. *Educational and Psychological Measurement*, 53(1), 87-92.  
<https://doi.org/10.1177/0013164493053001007>
- Gonzalez, A., Peters, M. L., Orange, A., & Grigsby, B. (2017). The influence of high-stakes testing on teacher self-efficacy and job-related stress. *Cambridge Journal of Education*, 47(4), 513-531. <https://doi.org/10.1080/0305764X2016.1214237>
- Grayson, J. L. & Alvarez, H. K. (2008). School climate factors relating to teacher burnout: A mediator model. *Teaching and Teacher Education*, 24
- Guskey, T. R., & Passaro, P. D. (1994). Teacher efficacy: A study of construct dimensions. *American Educational Research Journal*, 31(3), 627-643.  
<https://www.jstor.org/stable/1163230>

- Herman, K. C., Hickmon-Rosa, J., & Reinke, W. M. (2018). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Empirical Research*, 20(2), 90-100. <https://doi.org/10.1177/1098300717732066>
- Herman, K. C., Prewett, S. L., Eddy, C. L., Savala, A., & Reinke, W. M. (2020). Profiles of middle school teacher stress and coping: Concurrent and prospective correlates. *Journal of School Psychology*, 78, 54-68. <https://doi.org/10.1016/j.jsp.2019.11.003>
- Hoglund, W. L. G., Klinge, K. E., & Hosan, N. E. (2015). Classroom risks and resources: Teacher burnout, classroom quality, and children's adjustment in high needs elementary schools. *Journal of School Psychology*, 53(3), 337-357. <http://doi.org/10.1016/j.jsp.2015.06.002>
- Honkonen, T., Ahola, K., Pertovaara, M., Isometa, E., Kalimo, R., Nykyri, E., & Lonnqvist, J. (2006). The association between burnout and physical illness in the general population- results from the Finnish Health 2000 Study. *Journal of Psychosomatic Research*, 61(1), 59-66. <https://doi.org/10.1016/j.jpsychores.2005.10.002>
- Ilies, R., Huth, M., Ryan, A. M., & Dimotakis, N. (2015). Explaining the links between workload, distress, and work-family conflict among school employees: Physical, cognitive, and emotional fatigue. *Journal of Educational Psychology*, 107(4), 1136-1149. <http://dx.doi.org/10.1037/edu0000029>
- Iwanicki, E. F. & Schwab, R. L. (1981). A cross validation study of the Maslach Burnout Inventory. *Educational Psychological Measurement*, 41, 1167-1174. <https://doi.org/10.1177/001316448104100425>

- Khani, R., & Mirzaee, A. (2015). How do self-efficacy, contextual variables and stressors affect teacher burnout in an EFL context? *Journal of Educational Psychology*, 35(1), 93-109.  
<https://doi.org/10.1080/01443410.2014.981510>
- Kim, L. E., & Burić, I. (2020). "Teacher self-efficacy and burnout: Determining the directions of prediction through an autoregressive cross-lagged panel model": Correction to Kim and Burić (2019). *Journal of Educational Psychology*, 112(8), 1676. <https://doi.org/10.1037/edu0000642>
- Kim, H., Ji, J., & Kao, D., (2011). Burnout and physical health among social workers: A three-year longitudinal study. *Social Work*, 56(3), 258-268. <https://doi.org/10.1093/sw/56.3.258>
- Klassen, R. M., Bong, M., Usher, E. L., Chong, W. H., Huan, V. S., Wong, I., & Georgiou, T. (2009). Exploring the validity of a teachers' self-efficacy scale in five countries. *Contemporary Educational Psychology*, 34, 67-76.  
<https://doi.org/10.1016/j.cedpsych.2008.08.001>
- Klassen, R. M. & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741-756. <https://doi.org/10.1037/a0019237>
- Klein, A. (2015). No child left behind: An overview. *Education Week*.  
<https://www.edweek.org/ew/section/multimedia/no-child-lef-behind-overview-definition-summary.html>
- Klein, A. (2016). Every Student Succeeds Act: An ESSA overview. *Education Weekly*.  
<https://www.edweek.org/ew/issues/every-student-succeeds-act/index.html>

- Kunsting, J., Neuber, V., & Lipowsky, F. (2016). Teacher self-efficacy as a long-term predictor of instructional quality in the classroom. *European Journal of Psychology of Education*, 31, 299-322. <https://doi.org/10.1007/s10212-015-0272-7>
- Lacks, P., & Watson, S. B. (2018). The relationship between school climate and teacher self-efficacy in a rural Virginia school system. *School Leadership Review*, 13(1), 48-58. <https://scholarworks.sfasu.edu/slr/vol13/iss1/5>
- Martin, N. K., & Sass, D. A. (2010). Construct validation of the Behavior and Instruction Management Scale. *Teaching and Teacher Education*, 26, 1124-1135. <https://doi.org/10.1016/j.tate.2009.12.001>
- Masko, A. L. (2018). Keep it real and love'em up: Student-teacher relationships in an urban middle school. *Curriculum and Teaching Dialogue*, 20(1), 35-51. <http://ezproxy.liberty.edu/login?url=https://search-proquest.com.ezproxy.liberty.edu/docview/2097606235?accountid=12085>
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, 99-113. [https://doi.org/0142-2774/81/020099-15\\$01.00](https://doi.org/0142-2774/81/020099-15$01.00)
- Maslach, C., Jackson, S. E., & Leiter, M. P. (2018). *The Maslach Burnout Inventory* (4<sup>th</sup> ed.). Palo Alto, CA: Consulting Psychologists Press.
- McCarthy, C. J., Lambert, R. G., Lineback, S., Fitchett, P., & Baddouh, P. G. (2016). Assessing teacher appraisals and stress in the classroom: Review of the classroom appraisal of resources and demands. *Educational Psychology Review*, 28(3), 577-603. <https://doi.org/10.1007/s10648-015-9322-6>

- Morris, D. B., Usher, E. L., & Chen, J. A. (2017). Reconceptualizing the sources of teaching self-efficacy: A critical review of emerging literature. *Educational Psychology Review*, 29, 795-833. <https://doi.org/10.1007/s10648-016-9378-y>
- Oakes, W. P., Lane, K. L., Jenkins, A., & Booker, B. B. (2013). Three-tiered models of prevention: Teacher efficacy and burnout. *Education and Treatment of Children*, 36(4), 95-126. <https://doi.org/10.1353/etc.2013.0037>
- Office of Adolescent Health. (2019). Adolescent Development Explained. <https://www.hhs.gov/ash/oah/adolescent-development/explained/index.html>
- Pajares, Frank. (2004). Albert Bandura. <https://albertbandura.com/bandura-bio-pajares/albertbandura-bio-sketch.html>
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1-28. <https://doi.org/10.1037/h0092976>
- Rotter, J. B. (1990). Internal versus external control of reinforcement: A case history of a variable. *American Psychologist*, 45(4), 489-493. <https://doi.org/10.1037/0003-066X.45.4.489>
- Ryan, A. M., Kuusinen, C. M., & Bedoya-Skoog, A. (2015). Managing peer relations: A dimension of teacher self-efficacy that varies between elementary and middle school teachers and is associated with observed classroom quality. *Contemporary Educational Psychology*, 41, 147-156. <http://dx.doi.org/10.1016/j.cedpsych.2015.01.002>
- Sass, D. A., Seal, A. K., & Martin, N. K. (2010). Predicting teacher retention using stress and support variables. *Journal of Educational Administration*, 49(2), 200-215. <https://doi.org/10.1108/05978231111116734>

- Scales, P. C., Pekel, K., Sethi, J., Chamberlain, R., & Van Boekel, M. (2020). Academic year changes in student-teacher developmental relationships and their linkage to middle and high school students' motivation: A mixed methods study. *Journal of Early Adolescence*, 40(4), 499-536. <https://doi.org/10.1177/0272431619858414>
- Schonfeld, I. S., & Bianchi, R. (2015). Burnout and depression: Two entities or one? *Journal of Clinical Psychology*, 72(1), 22-37. <https://doi.org/10.1002/jclp.22229>
- Skaalvik, E. M., & Skaalvik, S. (2017). Motivated for teaching? Associations with school goal structure, teacher self-efficacy, job satisfaction and emotional exhaustion. *Teaching and Teacher Education*, 67, 152-160. <http://dx.doi.org/10.1016/j.tate.2017.06.006>
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2019). Understanding teacher shortages: An analysis of teacher supply and demand in the United States. *Education Policy Analysis Archives*, 27(35). <http://dx.doi.org/10.14507/epaa.27.3696>
- Taxer, J. L., Becker-Kurz, B., & Frenzel, A. C. (2018). Do quality teacher-student relationships protect teachers from emotional exhaustion? The mediating role of enjoyment and anger. *Social Psychology of Education*, 22, 209-226. <https://doi.org/10.1007/s11218-018-9468-4>
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805. [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *American Educational Research Association*, 68(2), 202-248. <https://doi.org/10.3102/00346543068002202>

- Von der Embse, N. & Mankin, A. (2021). Changes in teacher stress and wellbeing throughout the academic year. *Journal of Applied School Psychology, 37*(2), 165-184.  
<https://doi.org/10.108/15377903.2020.1804031>
- Von der Embse, N., Sandilos, L. E., Pendergast, L., & Mankin, A. (2016). Teacher stress, teaching-efficacy, and job satisfaction in response to test-based educational accountability policies. *Learning and Individual Differences, 50*, 308-317.  
<http://dx.doi.org/10.1016/j.lindif.2016.08.001>
- Wang, M., & Holcombe, R. (2010). Adolescents' perceptions of school environment, engagement, and academic achievement in middle school. *American Educational Research Journal, 47*(3), 633-662. <https://doi.org/10.3102/0002831209361209>
- Worley, J. A., Vassar, M., Wheeler, D. L., & Barnes, L. B. (2008). Factor structures of scores from the Maslach Burnout Inventory: A review and meta-analysis of 45 exploratory and confirmatory factor-analytic studies. *Educational and Psychological Measurement, 68*(5), 797-823. <https://doi.org/10.1177/001364408315268>
- Yu, X., Wang, P, Zhai, X, Dai, H., & Yang, Q. (2014). The effect of work stress on job burnout among teachers: The mediating role of self-efficacy. *Social Indicators Research, 122*, 701-708. <https://doi.org/10.1007/s11205-014-0716-5>
- Zee, M., & Koomen, H. M. Y. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research, 86*(4), 981-1015.  
<https://doi.org/10.3102/0034654315626801>

## APPENDICES

### Appendix A: IRB Approval

Subject: IRB-FY20-21-518 - Initial: Initial - Exempt

Date: March 15, 2021 at 4:35 PM

To: i

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# LIBERTY UNIVERSITY

## INSTITUTIONAL REVIEW BOARD

March 15, 2021

Katie Blevins  
D Mattson

Re: IRB Exemption - IRB-FY20-21-518 Alleviating teacher burnout: The relationship between job stress, teacher efficacy and emotional exhaustion among middle school teachers

Dear Katie Blevins, D Mattson:

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

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

101(b):

Category 2.(i). Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording).

The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects.

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

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

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

Sincerely,

**G. Michele Baker, MA, CIP**

*Administrative Chair of Institutional Research*

**Research Ethics Office**

## Appendix B: Maslach Burnout Inventory – Educators Survey

For use by Katie Blevins only. Received from Mind Garden, Inc. on June 2, 2020



[www.mindgarden.com](http://www.mindgarden.com)

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

**Instrument:** XXXXX

The few sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

**Citation of the instrument must include the applicable copyright statement listed below.**

**Sample Items:**

XXXXX

**Copyright:** XXXXX

Sincerely,

For use by Katie Blevins only. Received from Mind Garden, Inc. on June 2, 2020

## Appendix 3: Review Copy: MBI for Educators Survey

### MBI for Educators Survey

Christina Maslach, Susan E. Jackson & Richard L. Schwab

*The purpose of this survey is to discover how educators view their job  
and the people with whom they work closely.*

**Instructions:** On the following pages are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way about *your* job. If you have *never* had this feeling, write the number "0" (zero) in the space before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

How often:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

#### Example:

How often 0-6	Statement:
1.	I feel depressed at work.

If you never feel depressed at work, you would write the number "0" (zero) under the heading "How often." If you rarely feel depressed at work (a few times a year or less), you would write the number "1." If your feelings of depression are fairly frequent (a few times a week but not daily), you would write the number "5."

For use by Katie Blevins only. Received from Mind Garden, Inc. on June 2, 2020

## Review Copy: MBI for Educators Survey

How often:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

How often 0-6	Statements:
1. _____	I feel emotionally drained from my work.
2. _____	I feel used up at the end of the workday.
3. _____	I feel fatigued when I get up in the morning and have to face another day on the job.
4. _____	I can easily understand how my students feel about things.
5. _____	I feel I treat some students as if they were impersonal objects.
6. _____	Working with people all day is really a strain for me.
7. _____	I deal very effectively with the problems of my students.
8. _____	I feel burned out from my work.
9. _____	I feel I'm positively influencing other people's lives through my work.
10. _____	I've become more callous toward people since I took this job.
11. _____	I worry that this job is hardening me emotionally.
12. _____	I feel very energetic.
13. _____	I feel frustrated by my job.
14. _____	I feel I'm working too hard on my job.
15. _____	I don't really care what happens to some students.
16. _____	Working with people directly puts too much stress on me.
17. _____	I can easily create a relaxed atmosphere with my students.
18. _____	I feel exhilarated after working closely with my students.
19. _____	I have accomplished many worthwhile things in this job.
20. _____	I feel like I'm at the end of my rope.
21. _____	In my work, I deal with emotional problems very calmly.
22. _____	I feel students blame me for some of their problems.

(Administrative use only)

EE Total score: \_\_\_\_\_ DP Total score: \_\_\_\_\_ PA Total score: \_\_\_\_\_  
 EE Average score: \_\_\_\_\_ DP Average score: \_\_\_\_\_ PA Average score: \_\_\_\_\_

## Appendix C: Single-Item Stress Survey

**From:** Eddy, Colleen (MU-Student)  
**Subject:** Re: [External] Single-Item Stress Question  
**Date:** June 12, 2020 at 5:40 PM  
**To:** Blevins, Katie Jo |

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[ EXTERNAL EMAIL: Do not click any links or open attachments unless you know the sender and trust the content. ]

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Hi Katie,

Thank you for contacting me! Excited to hear that you're working on a dissertation with the focused on teacher stress, efficacy and burnout. You're absolutely welcome to use the stress and coping single items. There isn't a copyright or anything. All the best with your research!!

Colleen

---

**From:** Blevins, Katie Jo  
**Sent:** Friday, June 12, 2020 3:06 PM  
**To:** Eddy, Colleen (MU-Student) <  
**Subject:** Single-Item Stress Question

Ms. Eddy,

I am currently pursuing an Ed.D. and am in the process of writing my dissertation. I intend on examining the relationship between job stress and teacher efficacy among middle school teachers as they relate to burnout and I am interested in using the single-item stress question used in one of your studies. I am inquiring as to whether or not there are any permissions that need to be acquired in order to use the question in a survey?

I look forward to your guidance.

Very Respectfully,

Katie Blevins

**Single-Item Stress Survey**

1. How stressful is your job?

Not stressful   0   1   2   3   4   5   6   7   8   9   10   Very stressful

## Appendix D: Ohio State Teacher Efficacy Survey



**ANITA WOOLFOLK HOY, PH.D.**

**PROFESSOR**  
PSYCHOLOGICAL STUDIES IN EDUCATION

Dear

You have my permission to use the *Teachers' Sense of Efficacy Scale* in your research. A copy the scoring instructions can be found at:

<http://u.osu.edu/hoy.17/research/instruments/>

Best wishes in your work,

Anita Woolfolk Hoy, Ph.D.  
Professor Emeritus

### Teachers' Sense of Efficacy Scale<sup>1</sup> (short form)

Teacher Beliefs		How much can you do?								
Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.		Nothing	Very Little	Some Influence	Quite A Bit	A Great Deal				
1.	How much can you do to control disruptive behavior in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2.	How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3.	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)
4.	How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5.	To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6.	How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7.	How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8.	How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9.	How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10.	To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11.	How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12.	How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

### **Appendix E: School Permission Letter**

Dear (principal):

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The title of my research project is Alleviating Teacher Burnout: The Relationship Between Job Stress, Teacher Efficacy and Emotional Exhaustion Among Middle School Teachers. The purpose of my research is to better understand if there is a relationship between job stress, perceived teacher efficacy and emotional exhaustion in regards to how all three variables relate to signs of teacher burnout at the middle school level.

I am writing to request your permission to conduct my research at (name) Middle School by contacting members of your staff to invite them to participate in my research through the use of surveys. The information gathered through this study is extremely pertinent to today's climate, particularly with new demands placed on the educational system due to COVID. This research can also help you better understand how your staff and educators in South Georgia in general are coping with the current stress going on and how that is impacting them as educators specifically. Participants will be asked to follow a link that will be emailed to them and complete the corresponding consent forms and surveys, all of which are anonymous and require little time to complete (10-20 minutes). If you wish to know the results of the study or have the results emailed to you, I am more than willing to provide it.

Thank you for considering my request. If you choose to grant permission for the research to be conducted at (name) Middle, please provide a signed statement on official letterhead indicating your approval or respond in a similar fashion by email to . A consent form is attached for your convenience.

Very Respectfully,

Katie Blevins  
Ed.D. Candidate  
Liberty University

## **Appendix F: Recruitment Letter**

Dear Educator:

As a graduate student at the School of Education at Liberty University, I am conducting research as part of the requirements for a doctoral degree. The purpose of my research is to shed light on the type of relationships between middle school teacher job stress, emotional exhaustion and teacher self-efficacy as it relates to feelings of burnout. I am writing to invite eligible participants to join my study.

Participants must be current middle school teachers in sixth, seventh, or eight grade and can teach any subject. Participants, if willing, will be asked to complete three surveys anonymously. It should take no more than 10 to 20 minutes to complete all three surveys. Participation will be completely anonymous and no personally identifying information will be collected.

In order to participate, please select the following link (HYPER LINK WILL BE INSERTED HERE) to complete the surveys. The survey will be automatically sent to the appropriate destination once you have selected submit. All three of the surveys are combined into the same document at the link provided. Once you complete the questions found at the link, you are finished with the survey process.

A consent document will be provided at the first screen of the survey. All you will have to do is select 'yes' if you agree to participate in the research and complete the surveys. The consent document contains additional information about my research. Once you have selected yes to confirm participation, simply continue on to the next screen to reach the survey

Sincerely,

Katie Jo Blevins  
Ed.D. Candidate  
Liberty University

## **Appendix G: Participant Consent Letter**

**Title of the Project:** Dissertation Research

**Principal Investigator:** Katie Jo Blevins, Ed.D. Candidate, Liberty University

### **Invitation to be Part of a Research Study**

You are invited to participate in a research study. In order to participate, you must be a teacher at the middle school level teaching any subject in sixth, seventh, or eighth grade. Taking part in this research project is voluntary. Please take time to read this entire form and ask questions if need be before deciding whether to take part in this research project.

### **What is the study about and why is it being done?**

The purpose of the study is to explore the relationship between job stress, teacher-efficacy and emotional exhaustion as they relate to teacher burnout at the middle school level. Specifically, the research seeks to understand the strength and type of relationship between job stress and teacher-efficacy, job stress and emotional exhaustion, and teacher-efficacy and emotional exhaustion.

### **What will happen if you take part in this study?**

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

1. Complete questions pertaining to your age, race/ethnicity, gender, number of years teaching, grade level, virtual or face to face, and subject area.
2. Complete a 9-item survey pertaining to feelings of emotional exhaustion.
3. Complete a 12-item survey pertaining to teacher self-efficacy.
4. Complete a single-item survey to rate the level of stress you are experiencing in your current position.

### **How could you or others benefit from this study?**

The direct benefits participants should expect to receive from taking part in this study are results that will contribute to a greater body of research that has far-reaching effects on the lives of educators. Data collected from the surveys has the potential to help you understand yourself at a deeper level and reflect on experiences that you may not have realized are impacting you in your current position. On a broader scale, this research could shed light on the relationship, or lack thereof, between job stress, teacher self-efficacy, and burnout rates, which could guide future research to better understand the profession and bring to light the needs of educators at the middle school level. Understanding what type of connection there is between stress, efficacy, and emotional exhaustion has the potential to help future studies pinpoint issues that may contribute to teacher burnout and lead to the discovery of ways to slow burnout rates, increase teacher efficacy, and alleviate some of the stress the teaching profession brings.

### **What risks might you experience from being in this study?**

The risks involved in this study are extremely minimal, and are not any different than risks you might experience during a normal day at work. It is safe for you to accept or decline participation in this study.

### **How will personal information be protected?**

The records of this study will be kept private. No personally identifying information such as your name will be submitted through this study. Once submitted, there will be no way to identify who submitted the surveys.

- Your response to the surveys will be anonymous and at no point will you have to enter your name.
- Data from completed surveys will be sent to a spreadsheet that can only be accessed from one account and on a password protected computer. Data will be retained for three years, after which the data will be deleted.

### **Is study participation voluntary?**

Participation in this study is voluntary. Your decision whether to participate will not affect your current or future relations with Liberty University or your current place of employment. If you choose to participate you are free to not answer any question or withdraw from the research at any time prior to submitting the survey, also without affecting those relationships.

### **What should you do if you decide to withdraw from the study?**

If you choose to withdraw from the study, please exit the survey and close your internet browser. your responses will not be recorded or included in the study.

### **Whom do you contact if you have questions or concerns about the study?**

The researcher conducting this study is Katie Jo Blevins. You may ask any questions you have now or if you have questions later, you are encouraged to contact her at \_\_\_\_\_ or \_\_\_\_\_

### **Whom do you contact if you have questions about your rights as a research participant?**

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

### **Your Consent**

By selecting yes, you are giving your consent and agreeing to be in this study. Make sure you understand what the study is about before you give your consent by selecting yes and completing the survey. If you choose not to participate in the research, simply close the screen and internet browser. The researcher will keep a copy of this form with the study records. If you have any questions about the study after you complete this document you can contact the study team using the information provided above.

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

☐ **Yes**

## Appendix H: Participant Demographics

**Table 1**

*Sample Demographics (n = 75)*

	<i>n</i>	<i>Percent</i>
<b>Gender</b>		
Male	16	21.3%
Female	59	78.7%
<b>Race/Ethnicity</b>		
Caucasian	52	69.3%
African American	19	25.3%
Native American	1	1.3%
Hispanic	1	1.3%
Afro Caribbean	1	1.3%
Multiracial	1	1.3%
<b>Age</b>		
20-30 years old	16	21.3%
31-40 years old	25	33.3%
41-50 years old	15	20%
51-60 years old	17	22.7%
61-70 years old	2	2.7%
<b>Years of Teaching Experience</b>		
0-2 years	9	12%
3-5 years	9	12%
6-10 years	20	26.7%
11 years or more	37	49.3%
<b>Grades Taught</b>		
6 <sup>th</sup> grade	24	32%
7 <sup>th</sup> grade	30	40%
8 <sup>th</sup> grade	21	28%
<b>Subjects Taught</b>		
Mathematics	16	21.3%
Science	12	16%
English Language Arts	18	24%
Social Studies	14	18.7%
More than one	15	20%
<b>Mode of Instruction</b>		
Face to Face	33	44%
Virtual	2	2.7%
Both	40	53.3%