

THE RELATIONSHIP BETWEEN TEACHER CLASSROOM MANAGEMENT PROFILES  
AND RELATED TEACHER STRESS: A LATENT PROFILE ANALYSIS

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A Dissertation Presented to  
the Faculty of the Graduate School  
University of Missouri-Columbia

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In Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy

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by

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JULY 2022

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THE RELATIONSHIP BETWEEN TEACHER CLASSROOM MANAGEMENT PROFILES  
AND RELATED TEACHER STRESS: A LATENT PROFILE ANALYSIS

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## **DEDICATION**

This dissertation is dedicated to my late grandpa, Bill Baker. Unfortunately, he passed during my time in graduate school. If he were here today, I know that he would be immensely proud of me. Through him, I learned that there is always time to laugh and that you should never be afraid of hard work. His lessons have served me well through my graduate experience. I love you, grandpa!

## ACKNOWLEDGEMENTS

I would like to thank Dr. Keith Herman for his tireless support throughout this dissertation process. I would also like to thank my committee members, Drs. Wendy Reinke, Sarah Owens, and Aaron Thompson, for their feedback and guidance. Thank you for pushing me and showing flexibility when things didn't go quite as planned!

I would like to extend a special thanks to my fiancé, Conner Hrabal, for his unwavering support and unconditional love. I will always appreciate the way you picked up my slack so I could focus on school and loved me even when I was being irrational. You are truly the best.

Finally, I would like to thank my parents. Your love and support have brought me to this point. You have modeled strength, integrity, and most importantly how to love boundlessly. You were never afraid to push me and kept me from giving up on countless occasions. I am all that I am because of you. I love you mom and dad.

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### **Abstract**

The study was a latent profile analysis of teacher classroom management styles. The data used were derived from a randomized control trial that examined the efficacy of the CHAMPS behavior management program on middle school teachers. There were 187 teachers in this study recruited from Midwestern schools. A latent profile analysis was conducted and revealed a four-class solution. The first class was indicative of the “typical” teacher with moderate ratings of emotional support, classroom structure, and teaching expectations. Additionally, they had low rates of praise, opportunities to respond, and reprimands. The second class was the “ineffective” profile. Teachers in this profile exhibited moderate ratings of emotional support and classroom structure. However, they exhibited low rates of praise, high rates of reprimands, low rates of opportunities to respond, and low ratings of teaching classroom expectations. The third profile was categorized as “proficient.” Teachers in the proficient profile earned high ratings of emotional support, moderate ratings of classroom structure, and high ratings of teaching classroom expectations. They also exhibited moderate rates of praise and opportunities to respond as well as a low rate of reprimands. The fourth class was categorized as “superior.” Teachers in this profile had high ratings of emotional support, classroom structure, and teaching expectations. They also had high rates of praise, low rates of reprimands, and very high rates of opportunities to respond. Linear regressions were conducted to determine if certain factors influenced profile membership. Results revealed that lower stress and higher coping ratings were associated with membership in the proficient profile. Additionally, low teacher emotional exhaustion was associated with membership in the superior profile. Classroom atmosphere ratings were associated with the ineffective profile when atmosphere ratings were negative as well as the proficient and superior profiles when classroom atmosphere ratings were more positive

## CHAPTER I: INTRODUCTION

### Background

Teachers play a vital role in student development. Students spend over one-third of their waking hours in school and school is often the first major system students interact with outside of the home, which gives teachers the opportunity to greatly impact their overall development (Bronfenbrenner & Morris, 2006; Rimm-Kaufman & Pianta, 2000). Teacher-student interactions have been found to impact the social, behavioral, and academic development of children over time (Hamre & Pianta, 2001; Meehan, Hughes, & Cavell, 2003; O'Connor, Dearing, & Collins, 2011). For instance, researchers have suggested that children form a social model through their interactions with teachers, which influences how they interact with others across their lifetime (O'Connor, Dearing, & Collins, 2011). Teachers also wield a large degree of control over the daily environments of students (McIntosh, Filter, Bennett, Ryan, & Sugai, 2010). These environments can influence the way students perceive themselves, others, and the world around them (Henricsson & Rydell, 2004). Additionally, they play a large role in the development of behavior patterns.

As teachers have many responsibilities, they also possess a large number of stressors related to working with students, such as managing classroom behaviors, adapting instruction to meet the needs of each student, motivating students, and having a small window of time to accomplish pertinent tasks (Herman & Reinke, 2015). In addition to stressors within the classroom, teachers also face external stressors, such as low pay and limited funding (Turner, Lombardo, & Logan, 2018). Teachers actually report some of the highest levels of stress among any profession (Hakanen, Bakker, & Schaufeli, 2006). Additionally, teachers report above



average levels of physical and emotional concerns (Johnson et al., 2005), which is not surprising given the high levels of stress they experience on a daily basis. Further, teacher stress is associated with student behavior (Clunies-Ross et al., 2008; Hastings & Bham, 2003). Student behavior can serve as a stressor for teachers and teacher stress can impact the way teachers manage student behavior, which subsequently influences future student behavior. Due to the reciprocal nature of teacher stress and student behaviors, teachers can become locked in a negative cycle designed to increase teacher stress and produce negative outcomes for students.

### **Statement of the Problem**

Teachers can promote a positive classroom climate through the use of effective classroom management strategies and classroom management interventions (e.g., Epstein et al., 2008; Ialongo, Poduska, Werthamer, & Kellam, 2001). However, teacher stress and coping can influence the overall success of the intervention as well as a teacher's ability to implement classroom and individual student interventions with fidelity (Guskey, 1988; Herman, Hickmon-Rosa, & Reinke, 2018; Jennings & Greenberg, 2009). Additionally, teachers with high levels of stress are less likely to adopt new strategies (Fuchs, Fuchs & Bishop, 1992) and are more likely to utilize harsh and punitive disciplinary practices (Jennings & Greenberg, 2009). Punitive disciplinary practices have been associated with an increase in challenging behaviors in the classroom as well as negative student outcomes (Barriga et al., 2002). As student behaviors have been associated with teacher stress, students and teachers become locked in a coercive cycle (Hastings & Bham, 2003; O'Brennan, Pas, & Bradshaw, 2017).

Teachers with increased stress levels also develop a lower threshold for disruptive behavior and experience reduced teacher efficacy (Grayson & Alvarez, 2008; Kokkinos, Panayiotou, & Davazoglou, 2005; Leiter, 1992). These teachers are more likely to refer students

to special education for behavioral concerns (Egyed & Short, 2006). This practice can be problematic for several reasons. First, in order to qualify for special education it is required that there is evidence that the student has been provided with a quality learning environment. If a teacher is over-stressed or burned out, it may be difficult to provide a high-quality learning environment. Second, the practices only address one student at a time. As teachers have contact with many students across their career, it is much more effective to implement class-wide management strategies that reduce the likelihood of students exhibiting challenging behaviors in the future (Reinke, Lewis-Palmer, & Merrell, 2008).

### **Purpose of the Current Study**

The purpose of the current study is to determine profiles of classroom management strategies and explore their relationship to teacher stress, teacher efficacy, and student behavioral outcomes. Although the research on the relationship between teacher classroom management strategies and student behavior is expansive, it is often limited to individual student functioning and to elementary schools. The current study aims to add to the research base in regard to whole classroom functioning and teacher well-being in middle schools. `

### **Research Questions and Hypotheses**

1. How many and what type of teacher classroom management profiles will emerge?

It was hypothesized that three profiles would emerge. The first profile would be the most optimal profile with high ratings of structure, teaching expectations, and emotional support as well as high rates of praise and opportunities to respond. It was expected that this profile would also have a low rate of reprimands. The second profile would be typical with moderate ratings of structure, teaching expectations, and emotional

support. They would also be expected to have moderate rates of praise, reprimands, and opportunities to respond. The final profile would be ineffective. Teachers in this profile were expected to have lower ratings of classroom structure, teaching expectations, and emotional support. They were also expected to have lower rates of praise and opportunities to respond, but have a higher rate of reprimands than the other two profiles.

2. Is there a relationship between classroom management profiles and teacher stress ratings?

It was hypothesized that teacher ratings of stress would be associated with profile membership. In that, teachers with more optimal classroom management profiles would have lower stress levels and teachers with more ineffective classroom management profiles would have higher stress levels.

3. Is there a relationship between classroom management profiles and teacher coping?

It was hypothesized that teacher ratings of coping would be associated with their profile membership. Teachers that reported higher levels of coping would be associated with membership in more optimal classroom management and teachers reporting lower levels of coping would exhibit more ineffective classroom management profiles.

4. Is there a relationship between classroom management profiles and teacher confidence in managing classroom behaviors?

It was hypothesized that teacher ratings of confidence in managing classroom behaviors would be associated with their profile membership. Higher ratings of confidence were expected to be associated with membership in more optimal classroom management profiles whereas lower ratings were expected to be associated with less optimal profiles.

5. Is there a relationship between classroom management profiles and teacher efficacy ratings?

It was hypothesized that teacher ratings of efficacy would be associated with profile membership. In that, high ratings of efficacy would be associated with more optimal profiles while lower ratings would be associated with more ineffective profiles.

6. Is there a relationship between classroom management profiles and teacher emotional exhaustion?

It was hypothesized that ratings of emotional exhaustion would be associated with profile membership. It was expected that high ratings of emotional exhaustion would be associated with less optimal profiles whereas lower ratings would be associated with more optimal profiles.

7. Is there a relationship between classroom management profiles and student perceptions of classroom environment?

It was hypothesized that student perceptions of the classroom environment would be associated with class membership. It was predicted that more positive student ratings would be associated with more optimal classroom management profiles and less positive ratings would be associated with ineffective profile membership.

8. Is there a relationship between classroom management profiles and classroom atmosphere?

It was hypothesized that classroom atmosphere would be associated with class membership. It was expected that more positive classroom atmosphere ratings would be associated with more optimal classroom management profiles and more negative ratings would be associated with less optimal profiles.

## CHAPTER II: LITERATURE REVIEW

This section will review relevant research related to teacher stress and burnout. Key concepts related to teacher stress and burnout, coping, and teacher efficacy as well as related theories and outcomes will be discussed. Additionally, key components and outcomes related to classroom management will be explored. This section will also cover the relationship between classroom management and teacher stress. Finally, areas for future development related to teacher stress and classroom management will be explored and used to provide a rationale for the present study.

### **Teacher Stress and Burnout**

#### *Overview and Prevalence of Teacher Stress and Burnout*

Occupational stress is a common phenomenon that refers to psychological discomfort resulting from general working conditions (Warr & Wall, 1975). Similarly, teacher stress can be defined as negative emotions that cause psychological discomfort resulting from tasks that are involved in teaching (Kyriacou & Sutcliffe, 1978). Teacher stress is of particular importance as teachers report the highest work-related stress of any profession (Hakanen, Bakker, & Schaufeli, 2006). In a recent study, researchers found that 93% of their teacher sample were experiencing high levels of stress (Herman, Hickmon-Rosa, & Reinke, 2018). Further, nearly 30% of teachers are reporting clinically significant, or impairing, levels of stress (von der Embse et al., 2015). It is important to note that it is difficult to report a singular prevalence rate for teacher stress as levels may vary widely between countries, cities, states, and schools. However, it is clear that teacher stress is a ubiquitous concern.

There are many practical concerns for teachers operating under high levels of stress. One concern is the possible development of teacher burnout. Prolonged exposure to chronic stressors

in the workplace can lead to burnout, which causes emotional exhaustion, depersonalization, and reduced personal accomplishment in the workplace (Maslach, Schaufeli, & Leiter, 2001). The key symptom of burnout is emotional exhaustion (Klusmann, Richter, & Lüdtkke, 2016).

Emotional exhaustion is a state in which an individual feels emotionally overextended and depleted of their emotional resources (Brouwers & Tomic, 2000). As emotional exhaustion is the key symptom of burnout, it is the most well-researched and will be the state of burnout most often referred to in this study.

### ***Causes of Teacher Stress and Burnout***

As teacher stress and burnout appear to be common concerns, it is important to identify factors that increase the likelihood of a teacher experiencing high levels of stress. In the United States, recent policies implemented at federal and state levels have increased demands on teachers and contributed to higher levels of teacher stress (von der Embse, Sandalos, Pendergast, & Mankin, 2016). For instance, teachers in many states have been required to adopt a standardized curriculum. Teachers are now evaluated by their students' test scores related to these standards and they may face several consequences for poor student performance, such as decreased merit pay and difficulty obtaining tenure (von der Embse, Ryan, Gibbs, & Mankin, 2019). These new evaluation procedures and standards have been linked to increased teacher stress (von der Embse et al., 2017). Additionally, teachers are experiencing increased stress due to dissatisfaction with working conditions, such as low pay, decreased funding, and an overall lack of trained and certified teachers (Turner, Lombardo, & Logan, 2018). This level of dissatisfaction has led teachers to lead protests and walk-outs in several states.

In addition to system-level stressors, teachers also experience stressors within the classroom. In one study, 63% of teachers reported that challenging student behaviors were their

greatest stressor (Kuzsman & Schnall, 1987). Additionally, teacher efficacy, or “the extent to which a teacher believes he or she has the capacity to affect student performance” (Bergman et al., 1977, p.137), also impacts teacher stress. In that, teachers with higher levels of self-efficacy have lower overall stress levels than teachers with lower levels of self-efficacy (Shoji et al., 2016). In fact, Leiter (1992) stated that burnout is a “crisis in self-efficacy.”

### ***Theories of Teacher Stress and Burnout***

There have been several theories that address the teacher stress model. The basis for many of these theories is the transactional theory of stress proposed by Lazarus and Folkman (1984). The model highlights an individual’s perception of a threat or demand and their appraisal of their ability to cope with those demands through individual and environmental resources. According to Lazarus and Folkman (1984), the cognitive appraisal process is comprised of two main components. The first is primary appraisal in which an individual determines whether the event is a threat, challenge, or benign. After determining the threat level, the individual engages in secondary appraisal. Secondary appraisal is the act of evaluating one’s resources and abilities to cope with the event. The transactional theory highlights that primary appraisals directly impact secondary appraisals. These appraisals, in turn, impact the coping strategies selected and utilized. For instance, a teacher may be presented with a student exhibiting disruptive behaviors. They may decide that the situation is simply challenging and not physically threatening. After making that determination, they may evaluate their resources to address the problem. As the student is not being dangerous, it would not be appropriate to send them home or to call the office. The teacher may then elect to ignore the student’s disruptive behavior. However, if the student behavior had been deemed dangerous, they teacher may have considered and selected more extreme coping strategies, such as exclusionary discipline practices.

The Coping-Competence-Context Model of Teacher Stress, or 3C Model, proposed by Herman, Reinke, and Eddy (2020) builds on the transactional theory of stress. The model identifies coping, competence, and context as three key leverage points for teacher stress and overall teacher well-being. The coping pathway includes individual characteristics, mindset, interpersonal qualities, coping skills, and perceived coping skills. Within the coping pathway, the model distinguishes between problem-focused coping, such as problem-solving, and metacognitive aspects, such as mindfulness and stress mindset. The model proports that the metacognitive aspects of coping occur prior to stress and can partially determine later stress levels. Additionally, the coping pathway is said to directly influence individual perceptions of stress.

The second pathway is competence pathway. The competence pathway focuses on the association between stress and classroom practices with a focus on classroom management. The pathway indicates that stress impacts teacher practices, which impact teacher interactions with students. These interactions, such as rates of praise and reprimands, influence student behavior. This pattern is cyclical in nature as student behaviors also influence teacher stress. This pathway is based heavily on the burnout cascade proposed by Jennings and Greenberg (2009). The burnout cascade illustrates the ways in which high levels of teacher stress can lead to harsh or punitive discipline practices. These practices can illicit disruptive behaviors from students, which further increases teacher stress. The teachers and students can become locked in this pattern, which can ultimately lead to teacher burnout and attrition from the field in addition to a host of negative student outcomes.

The final pathway of the 3C model is context. The context pathway captures external factors that influence teacher job satisfaction and overall levels of stress. External factors include



school level practices, administrative support, and state/federal level policies. These factors may prove more difficult for teachers to cope with as they possess less direct influence. Previous research has also shown that these factors impact teacher stress, burnout, and attrition (Ryan et al., 2017). In addition to the three main pathways, the 3C model highlights the effect that each pathway can have on teacher and student outcomes. As the 3C model is comprehensive and based in other relevant teacher stress theories, the theory of this study will rely heavily on the proposed model.

## **Effects of Teacher Stress and Burnout**

### ***Impact on Teachers***

Teacher stress and burnout have costly effects on the emotional and physical health of teachers. Chronic stress causes the body to release high levels of stress hormones that can impact the primary bodily functions, such as immune health, metabolism, sleep cycles, and reproduction (Bellingrath, Weigl, & Kudielka, 2009; Chrousos, 2009). Additionally, high levels of teacher stress are associated with increased anxiety (Steinhardt, Smith Jaggars, Faulk, & Gloria, 2011). Further, the increased level of teacher stress can lead to teacher burnout, which is predictive of depressive symptoms (Shin et al., 2013). Given the emotional impact of teacher stress, it is not surprising that teacher stress and burnout are also associated with higher rates of risky behaviors and lowered rates of healthy or proactive behaviors (Ahola et al., 2012).

In addition to ramifications of teacher stress on emotional and physical health, teacher stress plays a large role in teacher behavior. Teachers experiencing high levels of stress and burnout are more likely to change instructional practices, such as teaching students to the test rather than making sure they fully grasp broader concepts (Putwain & Roberts, 2009). They are also more likely to use punitive and reactive forms of classroom management (Hastings, &

Bham, 2003), which lead to worsened student outcomes. Further, teacher stress and burnout have been associated with lower quality teacher-student interactions (Spilt, Koomen, & Thijs, 2011), such as being more critical and generally less encouraging.

### ***Impact on the School***

Teacher stress also has a large impact on the school system as a whole. Nearly half of teachers leave the teaching profession within their first five years, citing stress as the main causes (Ingersoll, 2002). Additionally, burnout and teacher stress can lead to higher levels of absenteeism (Betoret, 2006; Darling-Hammond, 2000; Sass, Seal, & Martin, 2011). Attrition and absenteeism may lead schools to be chronically understaffed, which can increase the stress levels of remaining staff as well as impact the quality of instruction students receive (Ryan et al., 2017). The quality of instruction has a large impact on the school as a whole due to current methods for school funding. Schools that are found to be underperforming on standardized tests may lose access to sources of funding sources, such as Title I, or have their school managed by the federal or state government. Further, teacher attrition has been associated with a direct cost. It has been estimated that teacher attrition can cost schools as much as \$17,862 per teacher (Barnes, Crowe, & Schaefer, 2007). In addition to direct costs, teacher stress and burnout impact the cognitive load of all the staff in the building. For instance, teachers with higher levels of stress are more likely to use office discipline referrals (Hastings, & Bham, 2003), which can result in the student being removed from the classroom. When a student is removed from the classroom, they become the responsibility of another adult, whether an administrator, front desk staff, or another teacher. The school staff then become responsible for managing the child's behavior in addition to their typical daily tasks, which can increase their own stress levels.

### ***Impact on Students***

Teacher stress and burnout can have a large impact on students as students spend a large portion of their time in school. Herman and colleagues (2018) found that teachers with high levels of stress and reduced coping were more likely to have students with disruptive behaviors, fewer prosocial behaviors, and lowered academic achievement. Punitive and reactive actions by teachers can elicit negative student behaviors, including bullying, cruelty, making fun of other classmates, and harming school property (Geving, 2007; Kokkinos, 2007). As previously mentioned, teacher stress can also lead to an increased use of office discipline referrals. Office discipline referrals are of particular interest as they affect students disproportionately based on race/ethnicity, socioeconomic status, gender, and special education status (Eddy, et al., 2020; U.S. Department of Education Office for Civil Rights, 2016). Further, these exclusionary discipline practices, such as office discipline referrals, impact student outcomes. They may lead to academic failure (Rausch & Skiba, 2004), dropping out (Costenbader & Markson, 1998), involvement with the juvenile justice system (Harvard Civil Rights Project, 2000), grade retention (Safer, 1986), and illegal substance use (Swartz & Wirtz, 1990).

### **Coping**

#### ***Overview of Coping***

Coping describes cognitive and behavioral efforts of an individual to manage demands or stress (Lazarus & Folkman, 1984). It is important to note that although stress and coping are often discussed together, they are not always inversely related. It is possible for individuals to experience high levels of stress and high levels of coping simultaneously (Brenner & Bartell, 1984). Although stress can be mediated through different coping mechanisms (Chan, 1998),

some coping strategies are not adaptive. Strategies, such as avoidance, may exacerbate the situation or problem in the long run.

In addition to adaptive and maladaptive strategies, there are two types of coping behaviors. The first is problem-focused coping, which refers to problem-solving behaviors that are directed at modifying or managing the problem (Montgomery & Rupp, 2005). The second type of coping behavior is emotion-focused. Emotion-focused coping behavior is the positive reappraisal of a situation as well as defensive strategies, such as avoidance and minimization (Montgomery & Rupp, 2005). Individuals will use different coping strategies depending on the situation. For instance, an individual is more likely to use emotion-focused coping if they believe the problem is difficult or impossible to change (Folkman & Lazarus, 1980). Common problem-focused strategies utilized by teachers are changing classroom management techniques or seeking help to solve a classroom problem. Emotion-focused strategies may include taking deep breaths or avoiding coming to work. Coping is an important factor to target as it is malleable and can affect teachers' perceptions and management of stress as well as student outcomes.

## **Teacher Efficacy**

### ***Overview of Teacher Efficacy***

Teacher efficacy is a teacher's appraisal of their own capabilities in affecting student performance (Bergman et al., 1977, p.137). Although teacher efficacy seems like a straightforward construct, it is multidimensional and includes beliefs related to providing instruction, managing classroom behaviors, differentiating academics, increasing motivation, and working with parents and coworkers (Tschannen-Moran & Woolfolk, 2001). Teacher efficacy is an important factor to explore when discussing teacher stress as it is malleable and can have an

impact on teacher stress (Shoji et al., 2016). Further, teacher efficacy can serve as a protective factor against teacher burnout and high levels of stress (Friedman, 2000). In a recent study conducted with over 900 teachers in the UK, researchers found that professional mastery was a critical factor in teacher job retention and job satisfaction (Chiong et al., 2017). As student behavior is cited as one of the greatest stressors for teachers, these findings highlight the need to increase teacher efficacy in classroom management to increase job satisfaction and reduce teacher levels of stress.

### ***Theory of Teacher Efficacy***

Although the 3C model outlines the impact of teacher competence on teacher stress, teacher competency can also be considered outside of a teacher stress model. Tschannen-Moran, Hoy, & Hoy (1998) proposed an integrated model of teacher efficacy. The researchers outline a cyclical model in which teachers are provided with sources of efficacy information, such as verbal persuasion, vicarious experience, physiological arousal, and mastery experience. The teacher then uses cognitive processes to appraise their teaching competence in a given task. This process results in the teacher's overall feelings of efficacy in a particular context. The model also highlights the consequences of teacher efficacy, such as persistence, effort, and goal-setting. These consequences then impact overall performance and influence the efficacy information teachers apply in the future. The model also highlights the importance of context. The authors note that it is important to consider the teaching task and context in which it is required to make a judgment on teacher efficacy (Tschannen-Moran, Hoy, & Hoy, 1998). For instance, a successful and efficacious elementary reading teacher may lack self-efficacy if asked to teach a math class. The same teacher may also lack self-efficacy in a setting in which they are expected to teach high school or middle school students. The model reinforces the idea that context and

teacher appraisal of their abilities in that context have an impact on their overall teaching performance.

## **Effects of Teacher Efficacy**

### ***Impact of Teacher Efficacy on Teachers***

Teacher efficacy impacts many factors in the classroom for both teachers and students. Teacher efficacy is negatively associated with emotional exhaustion, the key factor of burnout (Shoji et al., 2016; Shwarzer & Hallum, 2008). In that, teachers with high levels of efficacy are less likely to experience emotional exhaustion and other effects of burnout. The reduction of burnout is particularly useful as burnout predicts student misbehaviors, one of the largest sources of stress for teachers (Aloe, Shisler, Norris, Nickerson, & Rinker, 2014). Additionally, teacher efficacy is related to teachers' flexibility and innovation (Fuchs, Fuchs & Bishop, 1992) as well as the success of program implementation (Guskey, 1988), such as School-wide Positive Behavioral Interventions and Supports. Lower teacher efficacy is also associated with teacher attrition, which has massive fiscal ramifications for school districts (Glickman & Tamashiro, 1982).

### ***Impact of Teacher Efficacy on Students***

As teacher efficacy impacts important factors, such as quality of teacher instruction and innovation, it also has a large impact on students. Teachers with high levels of self-efficacy are more likely to have positive student outcomes in regard to academic achievement and motivation (Klassen & Tze, 2014; Ashton & Webb, 1986). Conversely, teachers with low self-efficacy use less effective teaching strategies, which ultimately reduces student achievement (Skaalvik & Skaalvik, 2007). Additionally, teacher efficacy has also been associated with disciplinary

practices. Teachers with higher levels of self-efficacy are more likely to use adaptive disciplinary practices and are less likely to be harsh or punitive (Aloe, Amo, & Shanahan, 2014). Teachers with low self-efficacy are more likely to struggle with disruptive behaviors in the classroom and are more likely to refer students to special education for disruptive behaviors (Egyed & Short, 2006). Unnecessary referrals to special education are problematic as the evaluation process is lengthy and costly.

## **Classroom Management**

### ***Overview of Classroom Management***

Classroom management has an array of definitions. For the purposes of this study, classroom management will be defined as practices utilized by teachers to create a classroom environment that promotes academic and social-emotional learning (Evertson & Weinstein, 2006, p.4). Classroom management is primarily comprised of the management of challenging or disruptive externalizing student behaviors and the promotion of desirable or appropriate student behaviors. In 2006, a nationwide survey found that teachers, regardless of grade level, were overwhelmingly interested in additional support and training for classroom management strategies (Coalition for Psychology in Schools and Education, 2006). Classroom management is key to the education system as it is likely to reduce student behavioral and academic concerns as well as prevent the development of behavioral and academic concerns on a whole-class scale (Reinke, Lewis-Palmer, & Merrell, 2008).

Many studies have been conducted to identify the key factors in effective classroom management. Repeatedly, studies have found that clear expectations, consistent responses to behavior, effective praise for positive behaviors, adequate opportunities to respond, and

classroom layout are integral to effective classroom management room (e.g., Armendariz & Umbreit, 1999; Colvin, Flannery, Sugai, & Monegan, 2009; Ialongo et al., 2001; Partin, Robertson, Maggin, Oliver, & Wehby, 2010). Due to these findings, classroom management strategies in this study will focus on clear expectations, structure, engagement strategies, positive interactions, and brief corrections.

### ***Overview and Impact of Externalizing Behaviors***

When educators discuss classroom management, they are often referring to the direct management of externalizing or challenging behaviors in the classroom. Externalizing behaviors are characterized by aggression, impulsivity, and defiance (Snider et al., 2002). These behaviors can range from disruptive (e.g., blurting out) to aggressive (e.g., throwing objects) and are very common in classrooms. Approximately one quarter of children exhibit externalizing behaviors in the classroom (Snider et al., 2002), making this a prevalent problem for teachers and schools.

Externalizing behaviors are associated with a host of negative outcomes for students. They have been associated with lower academic achievement, decreased academic engagement, increased risk of later conduct related concerns, and social difficulty (Barriga et al., 2002). Externalizing behaviors have also been associated with negative student self-perception, conflicts with teachers, and negative perceptions of the teacher-student relationship (Henricsson & Rydell, 2004). Further, these behaviors tend to persist over time (Huffman, Mehlinger, & Kerivan, 2001) and become increasingly resistant to change (Webster-Stratton, Reid, & Hammond, 2001).

In addition to ill effects for individual students, externalizing behaviors have been associated with negative outcomes for teachers and the classroom as a whole. For instance,



teachers report that externalizing behaviors greatly impact levels of stress and burnout (Beltman, Mansfield, & Price, 2011; Brouwers & Tomic, 2000; Collie, Shapka, & Perry, 2012; Kokkinos, 2007). Additionally, externalizing behaviors lead to a significant loss of instructional time. In a study across 23 countries, researchers found that on average teachers dedicated 13% of lesson time to maintain classroom control (OECD, 2009). Further, 25% of these teachers reported that they lost at least 30% of instructional time due to managing classroom disruptions. As evidenced by these findings, the management of classroom behaviors is necessary to improve the social-emotional and academic learning of students.

### ***Impact of Classroom Management Strategies on Students***

Classroom management strategies, for better or for worse, have a large impact on student behavior and overall student outcomes. For instance, exclusionary discipline practices are commonplace in school settings. Despite their common use, they have been associated with negative student outcomes (Noltemeyer et al., 2015) and have not been shown to effectively reduce challenging behaviors (Lamont et al., 2013). These practices have been associated with lower reading achievement (Arcia, 2006), increased rates of dropout and grade retention (Marchbanks et al., 2014), and increased likelihood of continued disruptive behaviors (Pas, Bradshaw, & Mitchell, 2011). Further, exclusionary discipline practices can promote the achievement gap. Students of color are more likely to be referred for office discipline referrals, out of school suspension, and in school suspension (U.S. Department of Education Office for Civil Rights, 2016), which increases the probability that they will experience the negative impact of these practices. Additionally, teachers that struggle with classroom management are more likely to have higher rates of student aggression and peer rejection in their classroom (Kellam et al., 2008). Fortunately, many of the effects outlined in this section can be positively impacted by

strong classroom management strategies. Teachers with strong classroom management skills are more likely to have better social and academic student outcomes (Webster-Stratton, Reid, & Stoolmiller, 2008). Research has also shown that teachers may even be able to reverse the burnout cascade with the improvement of classroom management (Jennings & Greenberg, 2009). Due to the breadth of outcomes impacted, classroom management is an important malleable factor that must be considered to improve overall student and teacher well-being.

### ***The Association Between Classroom Management and Teacher Stress***

Emotionally exhausted and stressed teachers are more likely to fall prey to the burnout cascade, in which the student and teacher become locked in a coercive cycle (Jennings & Greenberg, 2009). Teachers experiencing burnout are more likely to use harsh and punitive practices, which increase student disruptive behavior. Subsequently, the disruptive behaviors increase teacher stress. The burnout cascade occurs as teachers that are stressed and emotionally exhausted have a lower threshold for disruptive and challenging classroom behaviors, which can make them more likely to use exclusionary discipline practices (Grayson & Alvarez, 2008). Exclusionary discipline strategies are practices that remove the child from the classroom. In the school, these may be office discipline referrals, in school suspension, out of school suspension, or break rooms. These practices are more likely to be used by stressed teachers as they can be reinforcing for the teacher. Once the child is no longer in the classroom, the teacher does not have to attempt to manage the behavior, which can provide a temporary sense of relief (Maag, 2001). These findings indicate that teacher stress directly impacts teacher management of classroom behaviors.

## **The Present Study**

Despite the wealth of literature on teacher stress, classroom management, and student outcomes, very little research was conducted with middle school and high school teachers. Additionally, research has previously focused on individual student functioning rather than the functioning of the classroom as a whole. The current study aims to create teacher profiles based on classroom management strategies as these strategies can be successful in preventing future externalizing behaviors from escalating and reduce the need for exclusionary discipline (Mitchell & Bradshaw, 2013). The profiles will then be compared to teacher stress, coping and efficacy ratings as well as student perceptions of the classroom environment. A study of this nature could allow school administration to more easily identify teachers that may need more support in schools to improve their well-being as well as the well-being of their students.

## **CHAPTER III: METHODS**

Data were derived from a dataset obtained during the CHAMPS: Middle School Classroom Management study. CHAMPS is a modular training and coaching series designed to assist teachers in developing an effective classroom management plan (Sprick, Garrison, & Howard, 2009). The current dataset was derived from a large-scale randomized control trial, determining the impact of the CHAMPS program on effective classroom management in middle school teachers (Herman, Reinke, Dong, & Bradshaw, 2020). For the purposes of this study, intervention effects will be controlled for in all outcome measures.

### **Participants**

Participants were 187 teachers from two urban Midwestern school districts. Teachers were recruited as part of a group randomized control trial for the CHAMPS behavior

management and coaching program. In order to be eligible, teachers had to teach 6-8<sup>th</sup> grade English or Math and consent to participate. Teachers predominantly identified as female (78.1%) and White (77.0%, 18.2% Black, and 4.8% Other). Teachers had 1-38 years of experience ( $M = 12.0$ ,  $SD = 8.0$ ) and ranged in age from 22-65 years ( $M = 37.7$ ,  $SD = 9.9$ ). Student data will be reported in aggregate and only reflect classroom behavior as a whole, such as the rate of opportunities to respond observed during the observation period.

## **Measures**

### ***Direct Classroom Observations***

**Direct classroom observations.** Direct observations of student behaviors were conducted using the Brief Classroom Interaction Observation – Revised code (BICO-R; Reinke & Newcomer, 2010). The BICO-R simultaneously records the duration and frequency of student and teacher behaviors, such as disruptions, praise, on-task behavior, and reprimands. Observers used handheld devices with the Multi-Option Observation System for Experimental Studies (MOOSSES; Tapp, 2004) interface to collect the data in real-time. Observers were full-time research staff and graduate students trained using videos and practice sessions until they were able to meet 85% reliability with the master coder. Inter-observer agreement was also measured during 30% of all observations in order to ensure continued adherence to the code and to identify any instances of observer drift. The mean percentage of agreement across time points was 92.3% and ranged from 90-95%. Agreement was defined as both observers selecting the same code within five seconds of one another. The observations conducted with BICO-R will serve as the observed teacher classroom management strategies (i.e., praise, reprimands, and opportunities to respond). Observer frequency counts of praise, reprimands, and opportunities to respond will be used to create the teacher profiles.

**STOIC Rating Form** (Sprick, 2013). The STOIC rating form was designed to provide global ratings of the five key domains of CHAMPS: Structure classroom, Teach Expectations, Observe and supervise, Interact positively, Correct fluently. Trained observers provided ratings in each of these five domains from 0 (*not observed*) to 4 (*extensive evidence/in place*). Inter-observer agreement was measured during 30% of all observations. For the current study, only the Structure and Teach subscales were utilized as a part of teacher profiles. The alpha reliability estimates for these subscales ranged from .71 - .99.

**Secondary Classroom Assessment Scoring System (CLASS-S;** (Pianta, Hamre, & Mintz, 2012). The CLASS is a scoring system used to assess teacher-student interactions. Trained observers provided ratings from 1 to 7. Inter-observer agreement was measured during 30% of all observations. The CLASS-S Emotional Support subscale was used as part of teacher profiles. For the current study, the CLASS has alpha reliability estimates that ranged from .80-.95.

**Classroom Atmosphere Rating Scale (CARS;** Conduct Problems Prevention Research Group, 1999). The CARS is a 6-item rating scale designed to capture the overall classroom environment. Trained observers provided ratings of 1 (*very high*) to 5 (*very low*). Sample items include “Students consistently follow rules appropriate to settings” and “Classroom is focused and on-task.” Inter-observer agreement was measured during 30% of all observations. For the current study, the CARS has alpha reliability estimates that ranged from .86-.93. The CARS was used to compare teacher profiles to overall ratings of classroom atmosphere.

### ***Self-Report Measures***

**Maslach Burnout Inventory – Emotional Exhaustion Scale (MBI;** Maslach et al., 1986). The Maslach Burnout Inventory was designed to measure symptoms of teacher burnout.

The scale consists of three subscales, including emotional exhaustion, depersonalization, and personal accomplishment. The MBI Emotional Exhaustion subscale was selected as the scale of focus as emotional exhaustion is considered the key symptom of burnout (Klusmann, Richter, & Lüdtke, 2016). The subscale consists of four items with a 7-point Likert scale, ranging from 0 (*Never*) to 6 (*Every day*). Sample items include “I feel burned out from work” and “I feel like I’m at the end of my rope.” The subscales have demonstrated alpha estimates of .76-.9 (Maslach et al., 1986). The MBI was used to compare teacher profiles to emotional exhaustion.

**Stress and Coping Items** (Herman & Reinke, 2012). The stress and coping items are single-item scales that rely on self-report to measure the occupational stress level and coping practices of an individual over the last week. The stress item asks, “How stressful is your job?” Respondents are to answer on an 11-point Likert scale, ranging from 0 (*not stressful*) to 10 (*very stressful*). The coping item asks, “How well are you coping with the stress of your job right now?” Respondents are also provided with an 11-point Likert scale for this item that ranges from 0 (*not well*) to 10 (*very well*). As the scales are single-item, alpha reliability measures cannot be used; however, these items have been shown to have concurrent and predictive validity as well as sensitivity to change (Eddy, Herman, & Reinke, 2017). The stress and coping items were utilized to compare teacher profiles to ratings of stress and coping.

**Teacher Sense of Self-Efficacy Scale** (TSES; Tschannen-Moran & Hoy, 2001). The TSES- Short Form is a 12-item scale that measures teacher sense of self-efficacy. The scale is comprised of three subscales that examine teacher sense of self-efficacy for instructional strategies, classroom management, and student engagement. The Classroom Management subscale will be used for this study. The subscale includes a 9-point Likert scale, ranging from 1 (*None at all*) to 9 (*A great deal*). Sample items include “To what extent can you use a variety of

assessment strategies?” and “How much can you do to control disruptive behavior in the classroom?” The subscales have demonstrated alpha estimates of .81-.90. The TSES items were utilized to compare teacher profiles to ratings of teacher efficacy.

**MI Rulers for Classroom Management** (Reinke, Herman, & Sprick, 2011). The MI Rulers for Classroom Management is a 3-item self-report scale designed to assess teacher feelings of confidence in managing classroom behaviors. The scale includes a 10-point Likert scale, ranging from 1 (*Not Confident/Not Important*) to 10 (*Very Confident/Very Important*). Sample items include “How confident are you in managing current behavior problems in your classroom?” and “How confident are you in managing future behavior problems in your classroom?” The scale has demonstrated alpha estimates of .92 - .98 for the current study. The MI Rulers for Classroom Management were used to compare teacher profiles to ratings of confidence managing classroom behaviors.

### ***Student-Report Measures***

**Classroom Rules** (Bradshaw, Waasdrop, Debnam, & Johnson, 2014). The Classroom Rules scale is an 8-item scale completed by students to assess their perceptions of the classroom environment and classroom expectations. The scale includes a 4-point Likert scale, ranging from 1 (*Strongly Disagree*) to 4 (*Strongly Agree*). Sample items include “Students disobey the rules” and “The teacher can handle students who disrupt class.” For the current study, the scale demonstrated alpha estimates of .64 - .71. The Classroom Rules measures was used to compare teacher profiles to student perceptions of the classroom environment.

## **Procedures**

### *Design*

Teachers and students were recruited at the beginning of the academic year. Data were collected at four time points: the beginning of the school year, prior to intervention, at the end of the school year, and post-intervention. All preintervention assessments, including self-report measures and observation data, were collected from mid-September to mid-October. For the purposes of this study, only intervention effects were controlled for in all outcome data to prevent intervention effects from impacting outcomes and to maximize the number of participants.

### **Analyses**

Descriptive statistics were calculated for self-report measures and observation measures at time point six. A latent profile analysis (LPA; Hagenaars & McCutcheon, 2002) was conducted in R using the tidyLPA and mclust packages. Latent profile analysis is a categorical approach to latent variables that identifies subpopulations within a population based on certain variables (Spurk, et al., 2020). For this study, LPA was used to create latent profiles of teacher classroom management behaviors based on observer ratings of classroom structure, teaching of classroom expectations, emotional support, rate of praise, rate of reprimands, and rate of opportunities to respond. To determine the best number of profiles, the Bayesian Information Criteria (BIC) and Bootstrap Likelihood Ratio Tests (BLRT) were used. BIC and BLRT were selected as they have been shown to be the best indicators for the number of profiles (Nylund, Asparouhov, & Muthén, 2007). First, the BIC was plotted and the Integrated Completed Likelihood (ICL) criterion was applied. Next, a Bootstrap Likelihood Ratio Tests (BLRT) was performed to determine if an



increase in profiles increased overall fit. Once the LPA model was completed, linear regressions were used to determine if teacher ratings of stress, coping, confidence managing classroom behaviors and efficacy as well as student perceptions of the classroom environment and observer ratings of the classroom atmosphere were predictive of profile membership. Linear regressions were run in R with the nnet package (Venables & Ripley, 2002).

## **CHAPTER IV: RESULTS**

### **Research Questions**

#### ***Question 1: How many teacher classroom management profiles will emerge?***

Models with up to six latent classes were fit using teacher rate of praise, teacher rate of reprimands, and teacher rate of opportunities to respond as well as the STOIC Structure Subscale, the STOIC Teach Subscale, and the Secondary Class Emotional Support Subscale as indicators. The best fit for the latent profile analysis of teacher classroom management profiles resulted in four classroom management profiles (BLRT  $p < .01$ , entropy = .97). See Table 1 for fit statistics and Figure 1 for a graphical representation of the model. The smallest profile accounted for 3.76% of the total sample and the largest profile accounted for 43.01%. The four profiles are: typical (43.01%), ineffective (19.89%), proficient (33.33%), and superior (3.76%). See Table 2 for profile demographics.

#### ***Question 1.2: What type of classroom management profiles will emerge?***

The typical profile represented 43.01% of the total sample. The profile was characterized by moderate ratings of emotional support, moderate ratings of classroom structure, moderate ratings of teaching expectations as well as low rates of praise, reprimands, and moderate rates of opportunities to respond. Teachers in this category predominantly identified as female (75%) and

White (80%, 13.75% Black, 6.25% Other). Typical profile teachers had an average age of 38.29 years and an average of 12.79 years of teaching experience.

The ineffective profile represents 19.89% of the total sample. It is characterized by moderate ratings of emotional support, moderate ratings of classroom structure, low ratings of teaching expectations as well as low rates of praise, higher rates of reprimands, and low rates of opportunities to respond. Teachers in this category predominantly identified as female (72.97%) and White (78.38%, 16.22% Black, 5.4% Other). Ineffective profile teachers had an average age of 35.84 years and an average of 9.49 years of teaching experience.

The proficient profile represents 33.33% of the total sample. It is characterized by high ratings of emotional support, moderate ratings of classroom structure, and high ratings of teaching expectations as well as moderate rates of praise, very low rates of reprimands, and moderate rates of opportunities to respond. Teachers in the proficient profile predominantly identified as female (82.26%) and White (74.19%, 22.58% Black, 3.23% Other). These teachers had an average age of 37.71 years and an average of 12.06 years of teaching experience.

The superior profile represented 3.76% of the total sample. It is characterized by high ratings of emotional support, classroom structure, and teaching expectations as well as high rates of praise, low rates of reprimands, and very high rates of opportunities to respond. Teachers in the superior profile predominantly identified as female (100%) and White (57.14%, 42.86% Black, 0% Other). These teachers had an average age of 38.28 years and an average of 11.71 years of teaching experience.

***Question 2: Is there a relationship between classroom management profiles and teacher stress ratings?***

Using regression, teacher reported levels of stress on the Stress and Coping Items (Herman & Reinke, 2012) were regressed on teacher profiles as compared to the typical profile. Lower stress scores were associated with membership in the proficient profile,  $\beta = -0.21$ ,  $M = 7.10$ ,  $SD = 1.61$ ,  $p < .05$ , while controlling for teacher gender, race, age, and intervention effects. Teacher stress level did not predict membership in other profiles (Ineffective,  $M = 7.76$ ,  $SD = 1.61$ ,  $p = .70$ ; Superior,  $M = 7.29$ ,  $SD = 3.86$ ,  $p = .25$ ). See Table 3.

***Question 3: Is there a relationship between classroom management profiles and teacher coping?***

Using regression, teachers' reported levels of coping on the Stress and Coping Items (Herman & Reinke, 2012) were regressed on teacher profiles as compared to the typical profile. Higher coping scores were associated with membership in the proficient profile,  $\beta = 0.17$ ,  $M = 7.61$ ,  $SD = 2.04$ ,  $p < .05$ , while controlling for teacher gender, race, age, and intervention effects. Teacher coping did not predict membership in other profiles (Ineffective,  $M = 6.68$ ,  $SD = 2.22$ ,  $p = .70$ ; Superior,  $M = 8.00$ ,  $SD = 2.31$ ,  $p = .38$ ). See Table 3.

***Question 4: Is there a relationship between classroom management profiles and teacher confidence in managing classroom behaviors?***

Using regression, teachers' reported levels of confidence managing behavioral challenges in their classrooms on the Motivational Interviewing Rulers for Classroom Management (Reinke, Herman, & Sprick, 2011) were regressed on teacher profiles as compared to the typical profile. Lower levels of confidence were associated with membership in the ineffective profile,  $\beta = -$

0.36,  $M = 7.54$ ,  $SD = 1.71$ ,  $p < .05$ , while controlling for teacher gender, race, age, and intervention effects. Teacher confidence in behavior management did not predict membership in other profiles (Proficient,  $M = 8.52$ ,  $SD = 1.22$ ,  $p = .35$ ; Superior,  $M = 8.57$ ,  $SD = 1.99$ ,  $p = .82$ ). See Table 3.

***Question 5: Is there a relationship between classroom management profiles and teacher efficacy ratings?***

Using regression, teachers' reported levels of efficacy on the TSES (Tschannen-Moran & Hoy, 2001) were regressed on teacher profiles as compared to the typical profile, while controlling for teacher gender, race, age, and intervention effects. Teacher efficacy did not predict membership in any of the profiles (Ineffective,  $M = 7.34$ ,  $SD = 1.11$ ,  $p = .86$ ; Proficient,  $M = 7.73$ ,  $SD = 0.83$ ,  $p = .06$ ; Superior,  $M = 7.91$ ,  $SD = 1.10$ ,  $p = .34$ ). See Table 3.

***Question 6: Is there a relationship between classroom management profiles and teacher burnout?***

Using regression, teachers' reported levels of confidence managing behavioral challenges in their classrooms on MBI Emotional Exhaustion Scale (Maslach et al., 1986) were regressed on teacher profiles as compared to the typical profile. Lower levels of emotional exhaustion were associated with membership in the superior profile,  $\beta = 0.41$ ,  $M = 1.64$ ,  $SD = 0.86$ ,  $p < .05$ , while controlling for teacher gender, race, age, and intervention effects. Emotional exhaustion did not predict membership in other profiles (Ineffective,  $M = 3.20$ ,  $SD = 1.52$ ,  $p = .85$ ; Proficient,  $M = 2.90$ ,  $SD = 1.59$ ,  $p = .21$ ). See Table 3.

***Question 7: Is there a relationship between classroom management profiles and student perceptions of classroom environment?***

Using regression, students' reported perceptions of the classroom environment from the Classroom Rules (Bradshaw, Waasdrop, Debnam, & Johnson, 2014) were regressed on teacher profiles as compared to the typical profile, while controlling for teacher gender, race, age, and intervention effects. Student perceptions of the classroom environment did not predict profile membership (Ineffective,  $M = 2.79$ ,  $SD = 0.31$ ,  $p = .54$ ; Proficient,  $M = 2.92$ ,  $SD = 0.27$ ,  $p = .06$ ; Superior,  $M = 2.96$ ,  $SD = 0.24$ ,  $p = .29$ ). See Table 3.

***Question 8: Is there a relationship between classroom management profiles and classroom atmosphere?***

Using regression, observers' ratings of the classroom atmosphere with the CARS (Conduct Problems Prevention Research Group, 1999) were regressed on teacher profiles as compared to the typical profile. Effects from teacher gender, race, age, and intervention effects were controlled. More negative classroom environments were associated with membership in the ineffective,  $\beta = -3.66$ ,  $M = 2.01$ ,  $SD = 0.66$ ,  $p < .01$ . Positive classroom atmosphere was associated with membership in the proficient,  $\beta = 2.47$ ,  $M = 3.79$ ,  $SD = 0.50$ ,  $p < .01$ , and superior profiles,  $\beta = 6.50$ ,  $M = 4.53$ ,  $SD = 0.31$ ,  $p < .01$ . See Table 3.

## **CHAPTER V: DISCUSSION**

The purpose of the current study is to identify teacher classroom management profiles to aid in identifying teachers that may need additional support to increase their overall well-being. Teachers must navigate providing effective instruction and social emotional content with the large number of stressors related to working with students and within the constraints of a school

system. Teaching has been reported to have one of the highest levels of stress among any profession (Hakanen, Bakker, & Schaufeli, 2006). However, schools have a predominant focus on serving children and do not often assess for teacher stress, burnout, and coping. Teacher stress has financial, emotional, behavioral, and academic consequences for schools and students. As such, it is important to find ways to quickly assess for need and intervene. The results of the current study suggest that teacher classroom management profiles may predict different factors of teacher well-being. The detailed findings, implications, limitations, and recommendations for future studies are reviewed below.

### **Profiles**

The best model for teacher classroom management resulted in four profiles. The first profile was categorized as “typical.” Teachers in this profile provided moderate emotional support, structure, and teaching of classroom expectations. These teachers provided low rates of praise and reprimands at nearly a 1:1 ratio. Additionally, they provided slightly less than 1 opportunity to respond per minute. The second profile was categorized as “ineffective.” Teachers in the ineffective profile received the lowest ratings of emotional support, low ratings of classroom structure, and low ratings of teaching classroom expectations. These teachers exhibited the lowest rates of praise and the highest rate of reprimands with teachers providing 3.5 times more reprimands than praise. Teachers in the ineffective profile also exhibited the lowest rate of opportunities to respond. The third profile was categorized as “proficient.” Teachers in this profile provided high levels of emotional support, received moderate ratings of classroom structure, and taught classroom expectations effectively. These teachers also exhibited low rates of reprimands and moderate rates of praise. Teachers in this profile provided 1.5 times as many praise statements as reprimands. Additionally, they provided a moderate number of opportunities

to respond. The fourth profile was categorized as “superior.” Teachers in this profile had high levels of emotional support, high ratings of classroom structure, and high observer ratings of teaching behavioral expectations. Teachers in the superior profile also exhibited high rates of praise and very low rates of reprimands with nearly a 12:1 ratio of positive to negative statements. Teachers in this category also provided a high rate of opportunities to respond.

Despite being in one of the most stressful professions, the majority of teachers were still able to provide at least a moderate amount of emotional support to students. However, some gaps in effective behavioral management and instructional practices can be noted across profiles. It is typically recommended that teachers provide at least 3 praise statements to every 1 reprimand (Sprick, Boohrt, & Garrison, 2009). By providing positive attention to expected behaviors it increases the likelihood that the behavior will be repeated and it conveys the importance of the expectation to students. Despite the importance of this ratio, only teachers in the superior profile were meeting this benchmark. Additionally, the optimal number of opportunities to respond for teachers covering new material is a minimum of 3/minute (Council for Exceptional Children, 1987). For previously learned material, a minimum of 8/minute should be provided (Council for Exceptional Children, 1987). The superior profile was the only profile to meet these criteria. Further, it was the only profile to provide more than one opportunity to respond per minute.

### **Stress, Coping, and Burnout**

Teacher stress and coping levels significantly predicted membership in the proficient profile. Teachers in this category were more likely to have lower levels of stress and higher rates of coping. This finding aligns with prior research as teachers in the proficient profile have lower rates of reprimands, higher quality teacher-student interactions, and moderate levels of praise. When teachers have higher stress levels, they are more likely to employ the use of reprimands

rather than praise (Hastings, & Bham, 2003) and typically exhibit lower quality teacher-student interactions (Spilt, Koomen, & Thijs, 2011). However, it is unexpected that the same predictors were not associated with teachers in the ineffective profile having higher rates of stress.

Differences may be the result of teachers in the ineffective group still reporting moderate levels of coping, despite high stress levels.

Additionally, low rates of emotional exhaustion predicted membership in the superior profile. No other profiles were predicted by emotional exhaustion. Although the superior and proficient profiles are similar in many ways, they differ rather widely on the use of praise and reprimands. Teachers in the superior profile are providing praise at a rate of nearly 1/minute, which is approximately 3 times more than teachers in the proficient profile. The focus of teachers in the superior profile on praise versus behavior correction and reprimands may serve as a type of cognitive restructuring. Interventions with a focus on cognitive-behavioral practices have been shown to reduce anxiety, depression, and stress (Lo et al., 2018), which can all impact feelings of emotional exhaustion (Shin et al., 2013).

### **Teacher Confidence in Managing Behaviors and Efficacy**

Teachers in the ineffective profile were more likely to have low confidence in managing classroom behaviors. These results support previous research highlighting classroom structure, teaching of classroom expectations, use of praise, and use of reprimands as important indicators of effective classroom management. However, the inverse was not seen in the proficient and superior profiles. These findings may be due to the willingness of teachers with lower stress levels to adopt new strategies (Fuchs, Fuchs & Bishop, 1992). In this way, they may lean towards a growth mindset by always leaving room for improvement.



Surprisingly, teacher efficacy was not predictive of teacher class membership. These findings may be due to the negligible difference between mean scores by profile on the TSES Classroom Management Subscales. In this sample, it seems that the use of evidence-based classroom management strategies did not impact teacher feelings of efficacy.

### **Classroom Environment**

Student perception of the classroom environment was not predictive of profile membership. These findings may be due to individual student factors, teacher-student relationship factors, and the difference between teacher and student perceptions of classroom events. However, observer ratings of classroom atmosphere were highly predictive of profile membership. Teachers in the ineffective profile were significantly more likely to have a more negative rating of classroom atmosphere. Teachers in the proficient and superior profiles were much more likely to have positive ratings of classroom atmosphere. These findings align with previous literature suggesting that effective classroom management improves the overall classroom environment (Reinke, Herman, & Sprick, 2011).

### **Practical Implications**

The current study identified a 4-profile model of teacher classroom management. These profiles are based on classroom management strategies that are evidence-based and easily observed in the classroom. Membership in these profiles can predict factors that are not as easily observed, such as stress, coping, burnout, and confidence in managing student behaviors. Schools very rarely assess for these factors, despite their impact on teacher well-being, student well-being, academic outcomes, and school finances. Administration could apply these profiles to identify teachers that may need additional resources and support. Based on the findings of this

study, teachers with high rates of reprimands or those that are not teaching classroom expectations may be in greatest need of extra support. Interventions to support these teachers who struggle with classroom management would not only benefit teachers by alleviating stress and burnout, but also their students by providing more effective and positive learning environments.

### **Limitations**

The current study had several limitations that are worth noting when interpreting the results. The sample was limited to teachers in a Midwestern state. Ideally, the sample would be expanded to multiple states with both urban and rural locations. Additionally, the study was cross-sectional, which prevents the use of causal inferences. The teachers in the study were also exposed to an intervention prior to observations. Although it is unlikely that the intervention impacted the types of profiles that emerged, intervention effects could impact the likelihood of class membership. However, intervention effects were controlled for in the model. It would be beneficial to replicate this study without the need to artificially control for possible intervention effects. Finally, the size of the superior profile was small. The stability of this class will need to be replicated with a larger sample.

### **Future Directions**

Despite the limitations, profiles of this nature have important clinical applications. Future studies should aim to expand the sample in diversity, location, and size. In addition to simple replication and expansion, it would be prudent to determine how well administration is able to utilize profiles to identify teachers in need of additional resources as well as how effective their current interventions are in addressing teacher needs.

## **Conclusion and Summary**

Teachers have an unparalleled ability to impact the students in their classrooms. However, they are often plagued by high levels of stress, inadequate resources, and limited training in managing student behavioral concerns. Due to the global pandemic, teachers are experiencing more stressors than ever, and schools are less equipped to address their needs. It is important to provide a way to easily identify struggling teachers and provide them with the resources they need. This study examined teacher/classroom factors such as, stress, coping, confidence in managing behavior, teacher efficacy, burnout, student perceptions of the classroom environment, and the classroom atmosphere in relationship to teacher classroom management profiles. Several of these factors (i.e., teacher stress, teacher coping, confidence managing classroom behaviors, burnout, and classroom environment) were shown to predict teacher profile membership. These results suggest that observable factors may be helpful in identifying teachers in need of further support.

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## **Appendices**

Appendix A. Tables

Appendix B. Figures

## Appendix A.

### Tables

Table 1

*LPA Fit Statistics*

Model	Class	AIC	BIC	Entropy	BLRT <i>p</i>
1	2	1721.56	1782.85	.80	.01
1	3	1157.41	1655.28	.98	.01
<b>1</b>	<b>4</b>	<b>1535.47</b>	<b>1641.91</b>	<b>.97</b>	<b>.01</b>
1	5	1514.52	1643.55	.98	.001
1	6	1516.26	1667.87	.97	.31
1	7	1468.62	1642.81	.97	.01

Note. Bold indicates optimal class solution.

Table 2

*Profile Demographics*

	Typical			Ineffective			Proficient			Superior		
	%	<i>M</i>	SD	%	<i>M</i>	SD	%	<i>M</i>	SD	%	<i>M</i>	SD
Sample	43.0			19.9			33.3			3.8		
Gender												
Female	75			73			82.3			100		
Male	25			27			17.7			0		
Race												
White	80			78.4			74.2			57.1		
Black	13.8			16.2			22.6			42.9		
Other	6.3			5.4			3.2			0		
Age		38.3	10.6		35.8	10.4		37.7	8.3		38.3	9.7
Experience (Years)		12.8	7.6		9.5	7.8		12.1	7.7		11.7	7.5

Table 3

*Linear Regression Statistics*

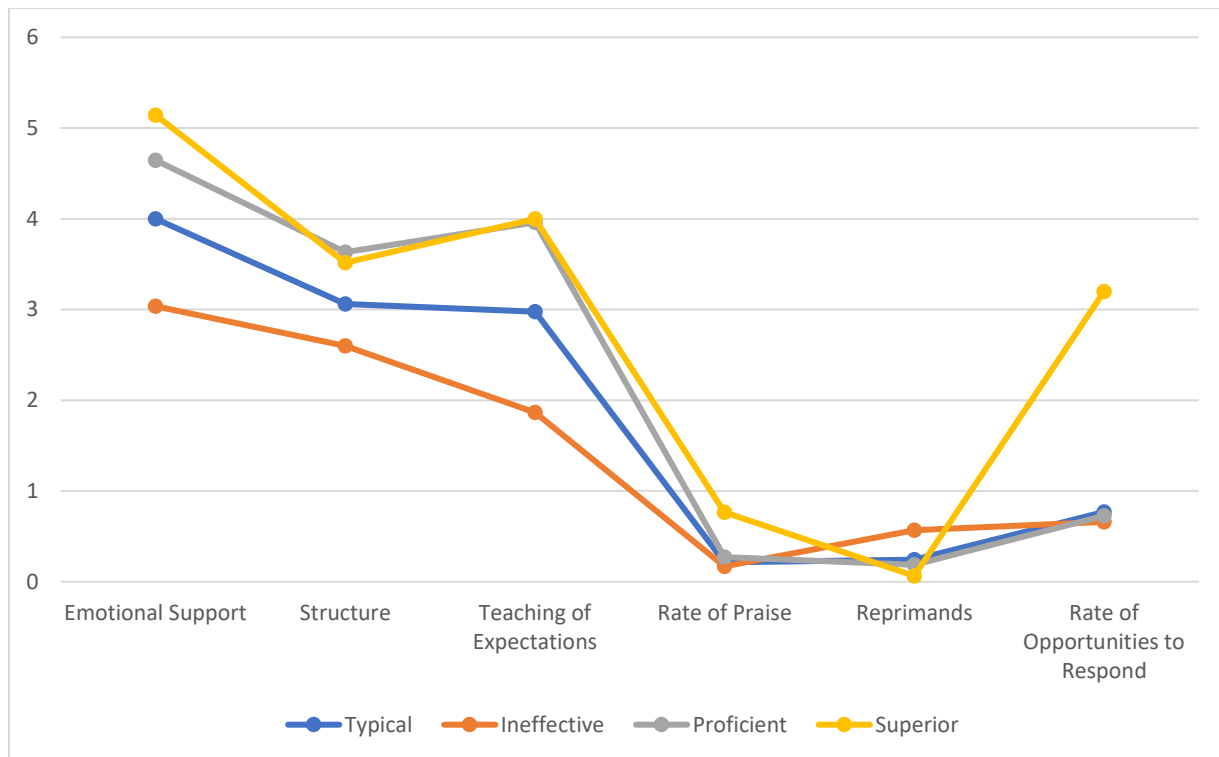
	Inefficient			Proficient			Superior		
	$\beta$	SE	$p$	$\beta$	SE	$p$	$\beta$	SE	$p$
Stress	.05	.12	.70	-.21	.10	.02*	-.17	.19	.38
Coping	-.03	.09	.70	.17	.09	.04*	.03	.23	.24
Confidence in Managing Behaviors	-.36	.14	.01**	.13	.13	.35	.07	.30	.82
Teacher Efficacy	-.04	.20	.86	.34	.18	.06	.44	.46	.34
Emotional Exhaustion	.03	.14	.85	-.15	.12	.21	-.98	.41	.02*
Student Perception of Classroom Environment	-.42	.69	.54	1.16	.62	.06	1.41	1.34	.29
Classroom Atmosphere	-3.66	.73	***	2.47	.47	***	6.50	1.54	***

\* $p < .05$ \*\* $p < .01$ \*\*\*  $p < .001$

## Appendix B.

## Figures

Figure 1. Four-Profile LPA



## VITA

Kirsten M. Baker is a 5<sup>th</sup> year doctoral candidate in School Psychology at the University of Missouri. She was a graduate research assistant with the Missouri Prevention Science Institute for 4 years. She has both school-based and outpatient clinical experiences. Her clinical experiences include school-level consultation, classroom-level consultation, teacher consultation, and psychological assessment as well as the treatment of internalizing and externalizing concerns. She recently completed pre-doctoral internship with Munroe-Meyer Institute in Omaha, NE from July 2021-June 2022. She will begin her post-doctoral fellowship at Cornerstone Behavioral Health in Oklahoma City, OK in August 2022.