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Emotional Self-Regulation and Management of Disruptive Behaviors in Schools

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Emotional Self-Regulation and Management of Disruptive Behaviors in Schools

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Dedication

To my mom, Colleen Hopkins, who loved with her whole heart and spread joy everywhere she went. Her dedication to caring for others led to my entrance into this field and serves as my guide every day. Completing this degree would not have been possible without her love and support.

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Abstract

This study investigated the relationship between teachers' emotional regulation skills and their management of students' disruptive behaviors. Teaching is an emotionally demanding job made significantly more stressful by the time and resources required to handle dysregulated and non-compliant students in the classroom. Unfortunately, the current disciplinary practices in many schools fail to support teachers in more effectively managing problematic behaviors. While some teachers appear to be skilled at diffusing an escalating classroom conflict, little is known about what distinguishes them from their more overwhelmed peers. This study sought to determine if there was a relationship between the teacher's own capacity for emotional regulation and one indicator of escalating classroom conflict: disciplinary referrals. If teachers who have better emotional regulation are more effective in managing disruptive behaviors, then interventions supporting teachers might help them—and enable these struggling students to remain in the classroom. Eight school principals completed brief surveys to provide background information on their schools. Forty-three teachers completed a questionnaire that included: (a) demographic questions, (b) the number of office-discipline referrals made, and (c) a self-report survey on their emotional self-regulation skills. A linear regression was conducted with teachers' scores on the emotional regulation survey as the predictor variable and office-discipline referral rates as the outcome variable. Higher scores on the emotional regulation survey predicted higher office-discipline referral rates. As teachers' difficulty in emotional regulation increased, their office-discipline referral rate increased. However, these results were not maintained after removing two outliers with high office-discipline referral rates. A hierarchical linear regression was also completed to determine if emotional regulation scores provided a significant increase in

disciplinary referrals after controlling for differences in school practices. Emotional regulation scores did provide a significant increase in prediction when the two outliers with high office-discipline referral rates were included, but this result was not maintained after the removal of outliers. The implications of these results were discussed with a focus on providing better training and support to teachers and improving school responses to students whose challenging behavior may be associated with early childhood adversity and trauma.

Keywords: teachers, emotional self-regulation, school discipline

Emotional Self-Regulation and Management of Disruptive Behaviors in Schools

Emotional self-regulation is a critical skill for both teachers and students (Graziano, Reavis, Keane, & Calkins, 2007; Sutton, 2004). Teaching is an emotionally demanding job and the management of disruptive behaviors is reported to be a major stressor (Ingersoll & Smith, 2003; Sutton 2004). For traumatized students in particular, emotional self-regulation can be particularly difficult and consequently these students may be disruptive in the classroom, which can be stressful for teachers (Cole et al., 2005). Unfortunately, frequently these students' needs are overlooked in an increasingly punitive system that is not only ineffective in decreasing disruptive behavior, but has negative long-term effects on all students (APA, 2008; Perry & Morris, 2014). We need more information on how to help teachers more effectively minimize disruptive behavior and facilitate students' development of emotional self-regulation skills. This study sought to understand the relationship between teachers' own emotional self-regulation skills and their management of students' disruptive behaviors.

In this section, the context of current disciplinary practices in schools is explored, followed by a discussion of how these practices affect many traumatized students. Additionally, the theory of emotional self-regulation is examined and applied to both students and teachers.

Problem Identification

The school-to-prison pipeline. Over the past 30 years, there has been a shift in US public schools' approach to addressing students' problematic behaviors (Mallett, 2016). Specifically, the education system has moved to a more punitive perspective, which includes the incorporation of a criminal justice orientation into schools (Mallett, 2016). These changes have been identified as part of a larger problem called the School-to-Prison Pipeline (STPP), which the American Civil Liberties Union (ACLU) defines as, "the policies and practices that push our

nation's schoolchildren, especially our most at-risk children, out of classrooms and into the juvenile and criminal justice systems" (ACLU, n.d.). Policies and practices of the STPP include a rapid increase in the use of exclusionary discipline, use of zero-tolerance policies, the increased presence of school-resource officers (police) who may engage in school-based arrests, and the use of metal detectors and surveillance cameras (Advancement Project, 2013).

The history of the development of the school-to-prison pipeline can be traced back to the 1980s, which ushered in an era of "tough on crime" for both adults and juveniles (Mallet, 2016). More juveniles began to be tried as adults and were inaccurately perceived as more dangerous than in previous decades. During this time period there were rising concerns about "superpredator" juveniles who were out of control. Concerns were disproportionate to the actual incidents of youth violence. News outlets in the 1980s and 90s generated public anxiety by publishing exaggerated and even false claims about the frequency and severity of juvenile crime (Welch, Price, & Yankey, 2002). Additionally, alongside President Reagan's initiative on the war on drugs was the Drug Free Schools Act, which incorporated zero-tolerance policies for possession of drugs or alcohol on school campuses. Zero-tolerance policies mandated severe consequences, like lengthy suspensions and expulsions, for what were deemed unsafe or unacceptable behaviors. The Gun Free Schools Act in 1994 further expanded zero-tolerance policies (Mallet, 2016).

While zero tolerance for guns is appropriate, unfortunately, schools do not always apply appropriate discretion and have begun to apply zero tolerance to more minor misbehavior. Students have been suspended for bringing a knife to school to cut birthday brownies and having a knife in their lunch bag to cut up an apple. Additionally, schools use these policies for insubordination and disruption (Dunbar& Villarruel, 2004). The Safe Schools Act of 1994 and

1998 offered schools funding for placing local police officers in schools as school-resource officers (SROs; Mallet, 2016). The presence of SROs has increased dramatically. In 1975, 1% of the nation's schools had an SRO, but by 2007 this number had increased to 40% (Na & Gottfredson, 2013). While originally intended to create school safety, SROs have been utilized for addressing more common discipline issues (Mallet, 2016). For example, during the 2011-2012 school year, 260,000 students nationwide were referred to law enforcement and 92,000 were arrested in school (U.S. Department of Education Office for Civil Rights, 2014).

The pipeline has continued to expand since the 1980s and 1990s and headlines about inappropriate responses to student misbehavior are frequently in the news. One recent story involved a 10-year-old boy with autism being arrested by a school-resource officer for kicking and scratching a paraprofessional at his school. As a result of this altercation, a warrant for battery on a school-board employee, which is a third-degree felony, was issued for the child. The boy was handcuffed, arrested, and spent a night in juvenile detention (Bever, 2017). Nationwide, students with disabilities, students of color, and non-heterosexual students are more at-risk for being funneled into the pipeline. Students with disabilities are more than twice as likely as students without disabilities to receive an out-of-school suspension; they represent a quarter of the population arrested even though they comprise only 12% of all students. Black students are suspended and expelled at a rate three times greater than white students (U.S. Department of Education Office for Civil Rights, 2014). While the Office for Civil Rights does not collect data for non-heterosexual students currently, a longitudinal study found that female students who reported same-sex attraction had significantly greater odds of being expelled from school compared to their non-heterosexual peers (Himmelstein & Bruckner, 2011).

The concept of the school-to-prison pipeline is widely used among advocates, researchers, and policymakers as a metaphor for funneling students out of schools and into the juvenile justice system, but Skiba, Arredondo, and Williams (2014) found that it is very real and empirically supported and has devastating consequences for the involved children. In a comprehensive review of the literature, these researchers concluded that the use of exclusionary discipline (out-of-school suspension and expulsions) was associated with a number of negative short-term and long-term outcomes including juvenile justice involvement. In terms of short-term negative outcomes, exclusionary discipline has been shown to be associated with a negative perception of the school climate and disengagement, lower achievement, and further misbehavior in the future.

For long-term negative outcomes, exclusionary discipline has been associated with later school dropout and juvenile justice involvement. Skiba and colleagues cited both multivariate analyses with numerous control variables (as many as 83 in one cited study) and/or longitudinal studies in every step of their review of the literature on exclusionary discipline demonstrating a consistently strong association between exclusionary discipline and negative outcomes down the pipeline (Skiba et al., 2014).

Perry & Morris (2014) propose that punitive school environments breed anxiety in all students and “erode a school’s moral authority, producing alienation and resistance” (p. 1071). Both zero-tolerance policies and the use of exclusionary discipline contribute to the creation of these punitive environments. Zero-tolerance policies frequently mandate the use of exclusionary discipline. However, in an evidentiary review on the effectiveness of zero-tolerance policies, the American Psychological Association (2008) reported that the use of suspension does not appear to have the intended deterrent effect on future misbehavior. Additionally, exclusionary discipline

appears to negatively affect not only those students who are suspended or expelled, but also non-suspended students. A three-year longitudinal study with multiple control variables suggested that high levels of out-of school suspension significantly lowered non-suspended students' standardized test scores in reading and math over time in a population of close to 17,000 students within one school district (Perry & Morris, 2014).

Students at risk. In a large-scale study done by the Centers for Disease Control and Prevention and Kaiser Permanente from 1995-1997, researchers found that 63.9% of youth (ages 0-18) had experienced at least one adverse childhood experience (ACE) which included abuse, neglect, and household dysfunction. Household dysfunction included: (a) living with a household member with a mental illness, (b) living in a domestic violent household, (c) having an incarcerated household member, (d) having substance abuse in the household, and (e) having divorced parents. The study found that 37.9% of youth had experienced at least two or more ACEs (Centers for Disease Control and Prevention, 2016). A study in 2011 found that for students with an ACEs score of 0, just 3% displayed learning or behavioral difficulties in school. In contrast, 51% of students with an ACEs score of 4 or more displayed learning or behavioral issues (Burke, Hellman, Scott, Weems, & Carrion, 2011).

A related study conducted by Bethel and colleagues, measured adversity more broadly to include all of the household dysfunction experiences from the original ACEs study as well as experiencing extreme economic hardship, witnessing or being the victim of neighborhood violence, being treated or judged unfairly due to race/ethnicity, and experiencing the death of a parent. This study did not include abuse or neglect as an ACE. These researchers found that students with a score of at least 1 ACE accounted for 85% of behavioral problems in schools. Additionally students with two or more ACEs were eight times more likely to demonstrate

behavioral problems than children with no ACEs (Bethel, Newacheck, Hawes, & Halfon, 2014). The data suggest that traumatic stress may underpin many of the behavioral difficulties children evince in school. However, in our current system, many of these children face harsh disciplinary measures that not only fail to address the traumatic root of the problem but compound it with punishment and retraumatization.

Youth contending with early adverse experiences comprise a significant proportion of the population of "at-risk children" who are particularly vulnerable to being pushed out of school and into the juvenile justice system. For example, in Chicago public high schools, 30% of students with a history of abuse or neglect received an out-of-school suspension compared to 12% of their peers who did not have a confirmed history of abuse or neglect (Sartain et al., 2015). Similarly, Abram et al. (2004) found that 92% of justice-involved youth had experienced at least one trauma and that multiple traumas were normative. Once in the juvenile justice system, these children are less likely to be screened for trauma and are further traumatized by incarceration and other punitive measures (Adams, 2010).

Once returned to school following incarceration, they are unlikely to pick up where they left off. They may feel alienated from the school community, disconnected from teachers and peers, and academically at sea. The lack of a sense of belonging reduces their resilience and compounds their traumatic experience (Advancement Project, 2010; Resnick et al., 1997).

Children with trauma histories have a right to an education in public schools that support them by responding to their behaviors in a nurturing, nonpunitive manner. Indeed, in recent years, some schools have begun instituting more compassionate approaches to the disrupted and dysregulated behaviors commonly seen in children with developmental trauma. Initiatives including trauma-sensitive schools (e.g., Cole et al., 2005) and Healthy Environments and

Response to Trauma in Schools (HEARTS; Dorado, Martinez, McArthur, & Leibovitz, 2016) have demonstrated efficacy in improving school climate for all students while reducing behavior problems and suspensions.

In a similar vein, restorative justice approaches also offer a promising alternative framework for addressing school discipline issues. Restorative practices include proactively building healthy relationships and a sense of community within schools. When harm is done, students are asked to take responsibility by "understanding how the behavior affected others, acknowledging that the behavior was harmful to others, taking action to repair the harm, and making changes necessary to avoid such behavior in the future" (Advancement Project, American Federation of Teachers, National Education Association, & National Opportunity to Learn Campaign, 2014, p. 2). Like other more compassionate approaches, restorative justice embraces the idea that struggling students benefit from relationships and community; they become better regulated by being included than when they are excluded.

Theoretical Framework: Emotional Self-Regulation

Emotional regulation includes the, "behaviors, skills, and strategies, whether conscious or unconscious, automatic or effortful, that serve to modulate, inhibit, and enhance emotional experiences and expressions" (Calkins & Hill, 2007, p. 229). Gratz & Roemer (2004) conceptualize emotional regulation as including the awareness, understanding, acceptance, and modulation of emotion, as well as the ability to behave in a desirable way regardless of one's emotional state. As infants' and children's nervous systems are in the beginning stages of development, they learn a lot from caregivers about how to regulate their emotions (Wallin, 2007, p. 99). Some researchers suggest that healthy development of emotional regulation progresses from an infant's complete reliance on a caregiver for regulation (co-regulation) to

independent regulation (e.g., Calkins & Hill, 2007). Contemporary attachment theory further suggests, however, that throughout our lives, our capacity to self-soothe is vastly improved if we have close and secure relationships that continue to offer us proximity and co-regulation in times of greater stress (e.g., Lewis, Amini, & Lannon, 2000; Siegel, 2003).

Bowlby's (1983) theory of developmental attachment describes infants' proximity-seeking behaviors to their primary caregiver as innate responses to the need for physiological regulation. Ainsworth, Blehar, Waters, and Wall (1978) similarly discuss the way that early attachment experiences enable the infant and young child to learn how to regulate emotions and behavior through the support of predictable, nurturing relationships. Attachment theory suggests that children develop attachment relationships in order to develop a safe haven from distress and a secure base from which they can feel confident to explore their world.

Expanding on these ideas, Schore (2000) states that the attachment relationship is a regulatory relationship as caregivers help their children modulate their levels of arousal. In a healthy attachment relationship, caregivers read and respond to an infant's signals and seek to reduce distress and facilitate positive interactions (Calkins & Hill, 2007). As caregivers engage in this way, infants integrate these strategies into their behavioral repertoire over time. For example, if an infant becomes distressed and the caregiver successfully reassures and redirects the infant's attention, the infant begins to internalize this comfort over time, and in times of mild and moderate stress is then better able to similarly self-soothe without the caregiver's help (Calkins & Hill, 2007). As children mature, they begin to develop attachment relationships with peers and with adults other than their primary caregiver(s), including teachers (Hamre & Pianta, 2001). In the best of circumstances, securely attached children are capable of forming and sustaining a range of positive relationships, willing to seeking support when they are distressed,

and sturdy enough to handle the typical challenges and disappointments of a school day without losing control of themselves.

Emotional regulation skills, stemming from the experience of safe, nurturing attachment relationships with caregivers, are thought to be critical to success in school from the start. For example, in a survey of kindergarten teachers' ratings of essential or very important school readiness characteristics, 60% of teachers identified the importance of regulatory skills like being able to follow directions and not be disruptive of class, whereas only 10% suggest that knowing several letters of the alphabet was an essential or very important characteristic (Lewitt & Baker, 1995).

Further studies have found that kindergarten students' emotional regulation skills predict the strength of student-teacher relationships and both teacher-rated and standardized-tested academic skills and productivity (Graziano et al., 2007). Masten and Coatsworth (1998) also discuss the need for children to have self-regulation skills in order to develop social competence in school. Additionally, the literature in affective neuroscience, as summarized in Blair (2002), has found that difficulty with emotional regulation hampers one's ability to engage in higher order cognition, which is obviously critical for learning in school. Emotional regulation skills serve as an important foundation for being successful in the various key aspects of school including building strong relationships with teachers and peers, academic achievement, and higher order cognition.

It is well documented that developmentally traumatized children are dysregulated across systems—neurologically, emotionally, behaviorally, cognitively, and socially (Cook et al., 2005). Experiences of early childhood adversity disrupt the caregiving attachment relationship that is so essential for the development of this capacity to self-regulate. Traumatized children

thus come to school in survival mode, frequently lacking the requisite developmental capacity to manage the demands and challenges of a typical day. For these children, emotional dysregulation can include both hyperarousal and hypoarousal. Hyperarousal includes the re-experiencing of trauma memories and hypervigilance while hypoarousal includes avoidance and dissociation (Frewen & Lanius, 2006). Lacking the early opportunity to learn to self-regulate within the caregiving relationship, traumatized children do not know how to do it. Thus, when they struggle with emotional regulation, they require the support of a regulated adult to help them engage in co-regulation (Bath, 2010).

When traumatized students become dysregulated, they become either hyper-or hypoaroused and engage in a range of challenging behaviors in the classroom. Traumatized students can become verbally and/or physically aggressive toward peers and teachers, due to a hypersensitivity to danger and/or misperception of danger in combination with difficulties in solving interpersonal problems. Traumatized children frequently feel powerless and live in a state of unremitting low-level fear and can consequently become disruptive or feel so terrified and overwhelmed that they shut down completely (Cole et al., 2005).

Traumatized students will invariably require more assistance with regulation from an adult, like a teacher, than those students without a trauma history. Unfortunately, the way many school systems operate, these children are much more likely to be subjected to exclusionary discipline instead of being helped with the development of self-regulation skills. Adding to the problem, these children may interpret being sent out of the classroom as yet another example of an attachment figure rejecting them. The context of the STPP, including the widespread use of zero-tolerance policies, and the increasing demands on teachers with the advent of high-stakes standardized testing likely further contribute to punishing these students instead of helping them

(Mallett, 2015).

Negative relationships with teachers and the school system may start early and potentially have a cascading effect. The interaction between kindergarten teachers' ratings of problem behaviors of students and relational negativity has been shown to be consistently and significantly predictive of students' behavioral outcomes (work-habit ratings, number of discipline infractions, and chance of suspension) in kindergarten through eighth grade (Hamre & Pianta, 2001). In this study, students who were rated as high on problematic behaviors and had a negative relationship with their teacher were more likely to have negative behavioral outcomes both in kindergarten and through future years. Relational Negativity was measured by asking kindergarten teachers to rate each of their students on the Student-Teacher Relationship Scale (STRS; Pianta, 1992), which consists of the Conflict, Dependency, and Closeness scales. The Conflict and Dependency scores were combined to form the Relational Negativity score. These two scales measure levels of antagonistic, disharmonious interactions and over dependence on the teachers respectively. Similarly, in a related study, researchers found that in their sample of low-income preschool children, those students who developed close relationships with their teacher had higher levels of emotional regulation by the end of the year (Shields et al., 2001).

Because relationships with regulated adults are the only way that young children can learn what it feels like to be regulated, this experience of close connection to teachers might be an essential ingredient. Thus, in order to help traumatized children become more emotionally regulated, it would be useful to better understand the context in which many of them are sent out of the classroom for discipline issues. Given the importance of co-regulation for supporting these distressed children, the teachers' own capacity for emotional regulation becomes an important element to explore.

Teachers' emotional regulation. Teaching is an emotionally involved job. In one study, teachers report value in engaging in emotional regulation as they believe it helps them achieve their daily teaching and classroom management goals as well as develop good relationships with their students (Sutton, 2004). Additionally, Sutton found that in this semi-structured interview of 30 teachers, most reported engaging in emotional regulation "daily" or "every second" using both preventive and responsive emotional regulation strategies. Preventive strategies were used both before school and during stressful experiences and included modifying situations, attention deployment, and cognitive change (like reappraisal). Responsive strategies included behavioral (like deep breathing) and cognitive strategies that teachers used both during stressful experiences and after school. Twenty-one teachers reported using two or more strategies and four teachers reported using only one strategy. Notably, five of the 30 teachers reported that their strategy was: "Just do it," and "Hold it in" (Sutton, 2004).

The demands on teachers for emotional regulation are quite high. Teachers are expected to enjoy teaching, like all their students, and avoid displaying negative emotions (Winograd, 2003). These high expectations can be conceptualized as engaging in emotional labor, which is the "effort, planning, and control needed to express organizationally desired emotion during interpersonal transactions" (Morris & Feldman, 1996, p. 987). Emotional labor, particularly, the management of emotional dissonance, can negatively affect one's well-being. Emotional dissonance is the discrepancy between one's felt emotions and the expected display of emotions (Morris & Feldman, 1996). A meta-analysis found that emotional dissonance significantly contributes to emotional exhaustion, depersonalization, psychological strain, psychosomatic complaints, and feeling less of a sense of personal accomplishment (Hulsheger & Schewe, 2011). Emotional exhaustion, depersonalization, and a sense of lack of accomplishment are the

components of burnout (Maslach, Schaufeli, & Leiter, 2001) and undermine a teacher's capacity to feel emotionally regulated.

Managing students' disruptive behaviors is a major stressor for teachers. Difficulties with classroom management have been cited as the most prominent reason for teachers' stress and burnout (Schottle & Peltier, 1996). Close to 35% of dissatisfied beginning teachers who left the profession indicated student discipline problems as a contributing factor to their dissatisfaction (Ingersoll & Smith, 2003). Despite teachers' significant concerns with discipline, one study found that over a 10-year period fewer than 1% of peer-reviewed articles in elementary education journals included information on effective discipline (Hardman & Smith, 2003). In a study with preschool teachers, teachers with lower levels of confidence in their ability to manage disruptive behavior attended more trainings on this subject than teachers with higher levels of confidence, which suggests a desire and willingness to receive help (Li Grinning et al., 2010).

Teacher burnout. The ways in which teachers attend to their emotions can contribute to burnout. Emotional suppression is conceptualized as the need to hide emotions and is considered a less adaptive approach to emotional regulation as it has little effect on lessening the impact of negative emotions and impairs memory (Gross, 2002). In a hierarchical regression analysis performed on data collected from Dutch secondary school math teachers, emotional suppression significantly predicted depersonalization (a component of burnout; Naring, Briet, & Brouwers, 2006). Depersonalization is conceptualized as developing negative and cynical attitudes toward service recipients in order to distance oneself from them (Maslach et al., 2001). One study with American teachers found that emotional suppression positively correlated with emotional exhaustion, which is another component of burnout (Tsouloupas, Carson, Matthews, Grawitch, & Barber, 2010). A separate study with American teachers found that emotional suppression

positively correlated with both depersonalization and emotional exhaustion and negatively correlated with a sense of personal accomplishment (Chang, 2013). In contrast, in a study with Syrian teachers, teachers' ability to appraise and understand both their own and others' emotions was negatively correlated with burnout (Nizielski, Hallum, Schutz, & Lopes, 2013).

Teachers' emotional experiences of student misbehavior and the level of misbehavior also contribute to burnout. In one study, the intensity of emotions teachers reported experiencing during a single incident of disruptive behavior positively correlated with burnout (Chang, 2013). Another study found that teachers' perceptions of worse student misbehavior (both intensity of emotions experienced and frequency of incidents) were positively correlated with emotional exhaustion (Tsouloupas et al., 2010). Additionally, Dutch students' ratings on the level of misbehavior in their classroom predicted their ratings of their teachers on depersonalization and emotional exhaustion. Higher levels of misbehavior predicted higher levels of teachers' depersonalization and emotional exhaustion (Evers, Tomic, & Brouwers, 2004). The intensity of emotions teachers experience related to students' misbehavior as well as the frequency of misbehavior contribute to teacher burnout.

Teachers' feeling of competency in handling student misbehavior affects their level of burnout as well. For example, in one study conducted in the Netherlands, Evers et al. (2004) found that Dutch teachers' lower ratings on self-perception of competency to manage students' disruptive behavior predicted higher levels of depersonalization and lower levels of personal accomplishment. Additionally, the students' ratings of their teacher's competency in classroom management predicted their ratings of their teacher on all three components of burnout. In a related study with American teachers, the teachers' self-rated efficacy in handling misbehavior mediated the relationship between their perception of the emotional intensity and frequency of

the behavior and their own emotional exhaustion (Tsouloupas et al., 2010). These studies suggest that teachers who feel less competent in managing students' disruptive behavior are more likely to experience burnout.

The ways in which teachers think about and cope with student misbehavior also impacts their burnout level. Teachers' use of cognitive reappraisal, changing one's thoughts about a situation, negatively correlated with emotional exhaustion in one study (Tsouloupas et al., 2010). External attributions to student misbehavior—for example, believing that a student is misbehaving because the student is tired or having a tough day—negatively correlated with depersonalization in a study with Greek elementary school teachers (Bibou-Nakou, Stogiannido, & Kiosseoglou, 1999). In a similar vein, Chang (2013) found that problem-focused coping (seeking instrumental support) mediated the effect between the intensity of emotions regarding an incident of student misbehavior and burnout. Further, such proactive coping (taking initiative to problem-solve) negatively correlated with burnout for both American and Syrian teachers (Chang, 2013; Nizielski et al., 2013). It appears that, over a number of studies in the US and abroad, the relationship between coping skills, like cognitive reappraisal and seeking support, and burnout has been well established: teachers who have stronger coping skills are much less likely to experience burnout.

Teacher burnout affects classroom management style and the desire to continue teaching. For example, in a study with Greek teachers, higher depersonalization scores were negatively correlated with utilizing social-integrative coping strategies, which could include, for example, prompting a struggling student to ask their peer group for help instead of punishing them (Bibou-Nakou et al., 1999). Additionally, lower scores on personal accomplishment were positively correlated with punitive responses to student misbehavior. Emotional exhaustion is

also positively correlated with American teacher attrition (Tsouloupas et al., 2010). Teachers who experience burnout are more likely to respond punitively to students' disruptive behavior and are more likely to leave the field.

Benefits of emotional regulation. Not surprisingly, while difficulties with emotional regulation can contribute to burnout, the presence of emotional regulation fosters teachers' well-being. For example, in a study with secondary teachers in England, researchers found that emotional regulation skills were associated positively with positive affect, support from one's principal, job satisfaction, and personal accomplishment (Brackett, Palomera, Mojsa-Kaja, Reyes, & Salovey, 2010). The link between emotional regulation skills and both personal accomplishment and job satisfaction was mediated by positive affect and by principal support. In other words, teachers with better emotional regulation skills are more likely to experience positive feelings, garner support from their principal, and feel satisfied and accomplished in their work.

In this study, Brackett and colleagues (2010) measured emotional regulation skills by administering a performance test in which respondents were asked to rate the effectiveness of emotional regulation strategies in hypothetical emotionally challenging intrapersonal and interpersonal situations. Respondents' scores were measured against experts' ratings of the effectiveness of each strategy.

While this is an interesting study, it is limited by its use of vignettes—as opposed to actual first-hand experiences, leading to a task that requires thoughts about feelings rather than the feelings themselves. One may be able to choose an effective strategy in an abstract and impersonal vignette but have considerably more difficulty doing so when emotionally activated by a defiant student. It is notable, too that this study found that teachers with fewer emotional

regulation skills were less likely to perceive receiving support from their principal. It appears that teachers who are more regulated, or at least can choose the most effective regulation strategies, have more positive feelings, gain greater support, and feel more accomplished and satisfied with their job.

Not only do teachers benefit in myriad ways from having greater emotional regulation skills, but their regulation also helps their student. In an exploration of the impact of teacher emotional regulation on young children, preservice preschool teachers in the United States were observed during their practicum in a laboratory school. Teachers who scored themselves higher on the use of positive reappraisal strategies when emotionally upset demonstrated more supportive responses and fewer nonsupportive responses to children's negative emotions in the classroom. Supportive responses included, for example, matching affect, physical affection, problem solving, labeling emotion, and verbal support. Nonsupportive responses included discouraging the child or not responding to them. Teachers who scored higher on their ability to take someone else's perspective and had lower levels of emotional suppression also demonstrated more supportive and fewer nonsupportive responses to children's negative emotions. Both perspective taking and low levels of emotional suppression had to be endorsed to see the effect on teachers' level of supportive responses to dysregulated students. Finally, teachers who scored higher on use of reappraisal strategies expressed a greater acceptance of children's negative emotions also were more supportive of children's negative emotions. Again, the combination of reappraisal and acceptance of emotions had to be present (Swartz & McElwain, 2012). At least for early career teachers, it appears that greater emotional regulation skills contribute to more supportive responses to students who are dysregulated.

This review of the research literature suggests a likely relationship between a teacher's

emotional dysregulation and punitive responses to student misbehavior, including perhaps, a greater reliance on referring the student to an administrator for help with disciplinary action. The body of existing research, culled from studies around the world, suggests that teachers who have more difficulty attending to and regulating their emotions are more susceptible to burnout; they are reactive to student misbehavior and, perhaps as a consequence of their own distress, more likely to respond less supportively to dysregulated and challenging students.

Research Objectives

Building on the existing literature, this study sought to expand on this body of research to explore teachers' emotional regulation capacities by using a comprehensive self-report measure of emotional regulation. This study explored the degree to which emotional dysregulation would predict student office-discipline referrals. I hypothesized that more dysregulated teachers would have a higher rate of office referrals when compared to their more regulated colleagues.

Understanding the relationship between teachers' emotional regulation capacities and out of classroom discipline referrals may help us begin to identify potential roadblocks to building more trauma-informed schools. It is also possible that teachers who refer students for disciplinary help are asking for some help themselves; they may well be escalating the conflict as they struggle at once to manage both their own overwhelming emotions and the disruptive student. If so, much can be done to give them more support in their emotionally demanding jobs.

Methods

Research Design and Hypotheses

I used a pre-experimental, correlational design to explore the relationship between teachers' emotional regulation skills and number of office referrals given to students for discipline issues (Campbell & Stanley, 1963). A linear regression was conducted with teachers'

scores on an emotional regulation scale as the predictor (independent) variable and office-discipline referral rates as the outcome (dependent) variable. Given that previous studies have found differences in percentages of office referrals across elementary schools in the same school district and between elementary and middle schools, a hierarchical linear regression was also conducted to explore if teachers' emotional regulation scores provided a statistically significant prediction of office-discipline referral rates after controlling for school characteristics (Sugai, Sprague, Horner, & Walker, 2000; Wright & Dusek, 1998). I hypothesized that teachers' emotional regulation scores would predict office-discipline referral rates both before and after controlling for school characteristics.

Participants

Participants were kindergarten through eighth grade public school teachers in the Northeastern United States. This range of grades were chosen because, while the research suggests that the precursors for students' entries into the pipeline begin at an early age, the number of office referrals is likely to be low until upper elementary school (5th and 6th grades; Putnam, Luiselli, Handler, & Jefferson, 2003). An a priori power analysis was conducted prior to beginning the study. The analysis suggested that for a medium effect size for a hierarchical linear regression with 2 predictors, using an alpha of 0.05 and a power of 0.80, the desired sample size was 67 participants.

Recruitment. Data were collected from January to May 2018. I originally reached out to 20 school principals via email to assess interest and potential participation. The recruitment letter can be found in Appendix C. Only schools where office-discipline referrals were collected systematically and reliably were asked to participate. Teachers also needed to have access to a count of their own office-discipline referrals from the previous academic year in order for a

school to participate. Schools in bigger cities, near my location, and/or with whom I had a connection were initially contacted. The response rate was zero. Of the 20 principals to whom I originally wrote, no one replied to the email. I followed up with a phone call, but it proved nearly impossible to speak directly with the principals; I mainly left voicemails or messages with administrative assistants.

At that point, I started to expand my reach and began emailing principals at other schools. I also contacted several school psychologists associated with my graduate program to assess their schools' potential ability to participate. I added a step of mailing letters to the original group of principals who had not responded to my email or phone call. The letter notified them that I would be resending my original email. By the end of this recruitment process, I had contacted 86 school principals. Of the 86 principals contacted, nine principals ultimately consented. However, one of these principals went on leave and was never able to coordinate with her interim principal to get to the next step and have teachers complete the survey.

The remaining eight principals were asked to complete a principal survey online and then email their teachers the recruitment letter (Appendix A). Two principals did not complete the survey but did email their teachers. I emailed these principals reminders but did not receive their completed surveys. I received a total of six completed principal surveys but included teacher data from all eight schools from which teachers participated.

From the eight participating schools, a total of 67 teachers consented to participate; of these, 49 ultimately completed the online survey. Six respondents' answers were excluded from analysis due to conflicting answers or not meeting the selection criteria. For example, two respondents reported making only one referral, but referred two different students. One teacher who responded taught pre-kindergarten. One first-grade teacher reported an average class size of

46, which seemed unlikely, so this teacher's answers were also excluded. Several other teachers seemed to report total number of students instead of the average as well. However, these teachers did not make any discipline referrals, so their class size did not affect their referral rate. As such, their responses were still included since no other answers within their survey appeared conflicting or incorrect.

While I did not reach the desired sample size determined by the power analysis, recruitment was discontinued after 49 responses as the school year was ending and it seemed unlikely I would be able to get responses from many more teachers. Since my sample size was smaller than suggested by the power analysis, this study was exploratory; results needed to be interpreted cautiously. Notably, however, preliminary analyses at that time suggested interesting findings despite the smaller sample size. In the end of the five-month recruitment period, six principal surveys and 49 teacher surveys were completed in full. Of these responses, six principal surveys and 43 teacher surveys met criteria to be included in the data analysis.

Measures

The following measures were used to collect data. Additionally, demographic questionnaires were given to both principals (Appendix F) and teachers (Appendix D) to describe the sample.

Emotional self-regulation. The Difficulties in Emotional Regulation Scale (DERS) is a self-report questionnaire that measures multiple aspects of emotional regulation (Gratz & Roemer, 2004). The scale has 36-questions and yields an overall score as well as scores on six subscales. Subscales include Nonacceptance, Goals, Impulse, Awareness, Strategies, and Clarity. The Nonacceptance subscale measures one's nonacceptance of emotional responses and has items including, "When I am upset, I become angry at myself for feeling that way." The Goals

subscale measures one's difficulties engaging in goal directed behavior when emotionally upset. Items include, for example, "When I am upset, I have difficulty getting work done." The Impulse subscale measures impulse control difficulties: "I experience my emotions as overwhelming and out of control." The Awareness subscale measures one's awareness of their emotions: "I pay attention to how I feel" (reverse coded). The Strategies subscale measures limited access to emotion regulation strategies: "When I am upset, I believe that I will remain that way for a long time." The Clarity subscale measures one's clarity of their emotions: "I have no idea how I am feeling." Respondents rate items on a Likert scale from 1 (almost never, 0-10%) to 5 (almost always, 91-100%). A higher score reflects greater difficulty with emotional regulation.

The DERS has high internal consistency with a Cronbach's alpha of 0.93 on the overall score and alphas of 0.85 on Nonacceptance, 0.89 on Goals, 0.86 on Impulse, 0.80 on Awareness, 0.88 on Strategies, and 0.84 on Clarity. Good test-retest reliability was reported on the overall DERS score, and adequate reliability was reported on the DERS subscales during a period ranging from 4-8 weeks ($p < .01$). The DERS also has good construct validity with significant correlations between DERS scores and other common measures of emotional regulation (Negative Mood Regulation Scale-NMR, Acceptance and Action Questionnaire-AAQ, and Emotional Expressivity Scale-EES). Furthermore, the DERS adds to the existing literature by accounting for additional variance in the constructs measured beyond the NMR, AAQ, and EES. A copy of the measure can be found in Appendix E.

Office-discipline referrals. Each teacher was asked to report the number of office-discipline referrals (ODR) they made for students in their class over the course of the past academic year. Schools commonly collect data on office referrals for discipline issues, but not all

do so in a systematic way. I only asked schools that have a systematic and reliable way of collecting this data to participate. I depended on a principal's report that their school reliably used a system for data collection. Teachers were asked to refer to the school's system for tracking discipline referrals when reporting their count of their own ODRs. Discipline referrals have been used in previous research to measure the effects of the implementation of a class-wide behavior management intervention plan delivered by teachers (e.g., Putnam et al., 2003). Putnam and colleagues found that while 70% of teachers delivered 1-5 referrals in the course of the school year, 6% of teachers delivered more than 25, which suggests that there may be a specific subset of teachers who are more likely to use exclusionary discipline more frequently than the average.

Procedure

I contacted school principals to request their help with my study both by answering questions about their school and its policies and by forwarding the link to the study to their teachers. Principals who were interested were first directed to an online survey where they were asked to read over and agree to an informed consent (Appendix G) before completing a brief survey about their school (Appendix F). I also requested that they email me a copy of the school's discipline policy and forward the recruitment letter and survey link to their teachers. I informed principals that teachers' participation or withdrawal and individual survey results would not be shared with them. However, I did offer to share the overall results of the study with them. Teachers were also offered the opportunity to receive results of the study.

Principals emailed teachers the recruitment letter (Appendix A), and teachers who clicked on the survey link in the letter were directed to the online survey. Teachers were asked to read over and agree to an informed consent (Appendix B) before beginning the survey. Once teachers

consented to the study, they were asked some basic demographic information like what grade/subject(s) they taught last year as well as how many students were in their classes (Appendix D). If the teacher taught multiple classes a day, they were asked to estimate the average number of students in their classes.

Teachers were then asked to refer to the school's system of tracking office-discipline referrals and report the number of ODRs they personally made over the course of the previous academic year. Finally, teachers completed the DERS. When I received less than a 15% response rate from teachers at participating schools, I asked principals to send out a single reminder email to teachers. The links to the surveys were active for five months during which seven principal surveys and 49 teacher surveys were collected. Of these responses, six principal surveys and 43 teacher surveys met criteria to be included in the data analysis. To fill in gaps in reported school demographics and number of suspensions and expulsions, I also retrieved relevant data from state's Department of Education websites and the U.S. Department of Education's Office for Civil Rights (OCR). Data from the OCR reflects their most recent survey, which was conducted in 2015-2016. The statistics from the principal surveys and states' Departments of Education are from the 2016-2017 school year.

Antioch University New England's Institutional Review Board approved this study. As participants in this study, all participants' privacy, rights, and confidentiality were protected. Teachers completed the surveys anonymously on surveymonkey.com, which is a secure, password-protected website. Individual teacher responses were kept confidential and not shared with any principals or other school personnel. The potential for minimal psychological harm existed because the study asked participants to answer questions about their emotional regulation skills; this reflection and disclosure could have caused distress for some participants. Participants

were instructed to take a break or terminate their participation if at any point they were uncomfortable or were experiencing distress during any part of the process. Teachers who were interested in receiving the overall findings of the study and/or wanted to be entered into a raffle to win one of four $25 Amazon gift cards were notified that they could provide their contact information in a separate email. I also provided my contact information to any potential participants in the recruitment letter in the event they had any questions.

Data analysis. The data analysis began with calculating each teacher's overall score on the DERS. Data were exported from surveymonkey.com into excel spreadsheets. An overall additive index score for each teacher was calculated by reverse coding 11 items and then adding all 36 answers. Possible scores ranged from 36 to 180. A higher score reflects greater difficulty with emotional regulation. Teacher ODR rates were calculated by dividing each teacher's number of referrals by the number of students in their class. Teachers with more than one class were asked to provide an average number to use in this calculation. School ODR rates were also calculated and restricted to only the classrooms for which teacher data were gathered. This rate was computed by averaging all of the teacher ODR rates for the given school. Descriptive statistics were performed on basic school information gathered from principals, demographic information gathered from teachers, overall DERS scores, teacher ODR rates, and school ODR rates.

Next, the research questions were explored via four separate simple and hierarchical linear regressions. Regression analyses were utilized because of their ability to predict outcomes in the dependent variable while controlling for potential confounders.

Prior to regression analyses, basic assumptions of linear regression were explored using SPSS analytical software. Linearity was indicated by visual inspection of a scatterplot of ODR

rates against DERS scores. Two participants were found to be outliers with high office-discipline referral rates. Additionally, residuals were not normally distributed as assessed by visual inspection of a histogram and normal probability plot. Further analyses revealed positive skewness and kurtosis. A plot of standardized residuals versus standardized predicted values showed a random scatter—yet a slightly greater spread of points was seen for higher predicted values and the two outliers were visually evident. These equivocal results raised doubts about whether or not the assumption of homoscedasticity was met.

Due to the non-normal distribution and the debate of homoscedasticity, several data transformations were attempted, including logarithmic, square root, and cubic root transformations. None of these transformations significantly improved the normality of the variable distributions. Nonparametric analyses were also considered but converting the interval data into ordinal data would have resulted in the loss of analytical nuance. It was particularly notable that there were 13 scores of 0 for ODR rate which would have to be tied in ranking if converted into ordinal data.

These concerns were addressed. The statistical software company, Minitab, found that when the sample size is greater than 15, the normality assumption is not a concern in simple linear regression (Minitab, 2014). Additionally, Schmidt and Finan (2018) found that when the number of observations per variable is >10, violations of normality do not noticeably impact results. Given these considerations, a decision was made to run the linear and hierarchical linear regressions without variable transformation. My data were congruent with a previous study on ODRs in which many teachers made only a few referrals and a small subset made numerous referrals (Putnam et al., 2003). Considering that the outliers with high office-discipline referral rates might reflect the actual situation in schools, could have a strong effect on the analyses, and

were the main contributors to concerns about homoscedasticity, a decision was made to run both analyses with and without the outliers. Notably, removing the outliers did not significantly improve normality, but did significantly affect the analyses. After removing the outliers, results were no longer statistically significant at the $p<.05$ level, but still suggested a positive leaning that might have been significant if the target sample size had been reached.

Analytic strategy. In order to investigate the central hypothesis of this dissertation, an ordinary least squares regression was conducted with DERS scores as the predictor variable and ODR rates as the outcome variable. To control for differences across schools, a second regression was run where ODR rates were the outcome variable and schools were assigned an arbitrary number and entered into Model 1 of the hierarchical linear regression. No specific school characteristics, like student demographics, were factored into this regression. Rather, a basic attempt was made to factor out the influence of school on the relationship between DERS scores and ODR rates by using school as a nominal variable in Model 1. Many potential school characteristics could be subsumed under the nominal coding of school, but these characteristics were not pieced apart. DERS scores were included in Model 2. During this regression, three responses were excluded from the analysis. Three teachers were new to the school or district and were reporting numbers from their last year at a previous school. Since the objective of the analysis was to explore if and how much school characteristics contribute to referral rates, using referral rates from teachers that had been in a different school in the previous year did not make sense.

Results

This section presents the findings from questionnaires completed by six public school principals and 43 teachers of Kindergarten through 8th grade. Teachers were asked to complete

both a general questionnaire, including the number of office-discipline referrals they made (Appendix D), as well as the Difficulties in Emotional Regulation Scale (Appendix E). Analyses were completed to answer the questions: (a) Do DERS scores predict ODR rates? and (b) Do DERS scores provide a statistically significant increment prediction of ODR rate when school attributes are taken into account? I proposed the following hypotheses:

Hypothesis 1: The overall DERS score will predict the rates of ODRs. An increase in DERS scores will positively correlate with ODR rate.

Hypothesis 2: The overall DERS score will provide a statistically significant increment in prediction of ODR rates when all aspects of the school are taken into account. An increase in DERS scores will positively correlate with ODR rate.

Descriptive Statistics

School demographics and discipline. Demographics of the eight participating schools, including location, grades, enrollment, percentage of students on Individualized Education Plans (IEPs), percentage of students on 504 Accommodation Plans, and percentage of students who qualify for free or reduced-price lunch, can be found in Table 1. For all schools, the percentage of students on IEPs hovered close to the national average of 13% (National Center for Education Statistics, 2018). Schools had a wide range of percentage of students who qualified for free or reduced-price lunch. According to the National Center for Education Statistics (2017), two schools met the high-poverty category, one school met the mid-high poverty category, one school met the mid-low poverty category, and three schools met the low poverty category. The percentage of students by racial and ethnic group in each school can be found in Table 2. Four schools had a higher representation of white students than the national average of 50% (National Center for Education Statistics, 2017).

Table 3 lists nine of the most possible consequences by school for when a student receives a discipline referral. School D further reported counseling, mediation, apology notes, and loss of privileges as other possible consequences. Number of suspensions, expulsions, and school office-discipline referral rates can be found in Table 4. As previously noted, two principals (schools B and F) did not complete the principal survey and not all principals provided answers to every question. As much as possible, therefore, data were also retrieved from state's Department of Education websites and the U.S. Department of Education's Office for Civil Rights (OCR). Data from the OCR reflects their most recent survey, which was conducted in 2015-2016. The statistics from the principal surveys and states' Departments of Education are from the 2016-2017 school year. For schools B and F, possible consequences were gathered from each school's code of conduct published online. Neither school mentioned missing recess as a possible consequence in their code of conduct and school F did not mention the presence of school resource officers. Both of these consequences could be possible but are not reflected in the code of conduct.

Teacher demographics. The number of teachers who completed the survey by school is reported in Table 5. The grades and subjects taught by teachers can be found in Table 6 and 7, respectively. The number of years teaching ranged from two to 32 and the average was 15.16 (SD=8.31). Average class size ranged from six to 35 and the average was 23.13 (SD=5.09). Three teachers appeared to be reporting total number of students instead of average number of students, and these responses were excluded from this descriptive statistic.

Office-discipline referral rate (ODR). Office-discipline referral rates were calculated by dividing the number of students a teacher referred by their average class size. The number of referrals ranged from 0 to 27 and the mean number of referrals was 1.77 (SD=1.72). Thirteen

teachers made zero referrals, 17 teachers referred the same student multiple times, and 13 teachers referred different students for every referral they made. Referral rates ranged from 0 to 1.08 and the mean referral rate was 0.14 (SD=0.21).

Difficulties in emotional regulation scale (DERS). The 36 DERS items were scored on a 5-point Likert scale ranging from 1 (almost never, 0-10%) to 5 (almost always, 91-100%). Eleven items (1, 2, 6, 7, 8, 10, 17, 20, 22, 24, and 34) were reverse coded. Possible scores ranged from 36 to 180. Higher scores indicate a higher level of difficulty with regulating one's emotions. Of the 43 teachers who participated, scores ranged from 37 to 107 with a mean of 66.40 (SD=17.01). Notably, one of the two teachers who scored a 37 commented, "In my 25 years of teaching I have only referred maybe 3-4 students for disciplinary actions."

Regression Analyses

In order to assess whether emotional regulation is a significant predictor of office-discipline referral rates, a linear regression was performed using the office-discipline referral rate as the dependent variable. Additionally, a hierarchical linear regression was performed with school as a covariate in order to assess if emotional regulation provides a significant increment in prediction once school characteristics are taken into account. In these analyses, the overall score on the Difficulties in Emotional Regulation Scale (DERS) was used to measure teachers' emotional regulation. Higher scores reflect more difficulty with regulating one's emotions.

A linear regression established that an increase in scores on the Difficulties in Emotional Regulation Scale (DERS) statistically significantly predicted an increase in rate of office-discipline referrals (ODR), $F(1, 41) = 5.59$, $p = .023$. DERS scores accounted for 12% of the variation in ODR rate (adjusted R2 = .098), a medium effect size according to Cohen (1992).

The results for this analysis are in Table 8. The regression equation was: predicted ODR rate = -.145 + (.004 x DERS score). An increase of one point on the overall DERS score leads to a .004 (95% CI, .001 to .008) increase in ODR rate. For classrooms with the number of students in the 20s, this roughly translated to an increase of one referral for every increase of nine to 12.5 points on the overall DERS score. As predicted, as teachers' difficulty in emotional regulation increased, their office-discipline referral rate increased.

A linear regression was conducted after removing the two high referral rate outliers. The results for this analysis are in Table 9. The two outliers had referral rates of 0.83 and 1.08. After removing the outliers, scores on the DERS did not significantly predict ODR rate, $F(1, 39) = 2.31$, $p = .137$. DERS scores accounted for 5.6% of the variation in ODR rate (adjusted R2 = .032), a small effect size according to Cohen (1992). While not statistically significant at the p value of .05, Tukey (1991) proposed that p values less than .15 suggest a leaning in a positive direction. Particularly given that I did not reach my original target sample size, this finding seems, at very least, suggestive.

Next, a hierarchical linear regression was conducted to control for variation across schools. The results for this analysis are presented in Table 10. Various aspects of a school, like student demographics and discipline policies, could account for variation in teachers' referral rates. In order to explore this possibility, each school was given an arbitrary identification number and entered into Block 1 of the regression analysis. The many potential school characteristics were not pieced apart and analyzed individually, but they were considered to be roughly included within the nominal category of school. School characteristics did not explain variation in teacher ODR rate (adjusted R2= -.015, $p = .516$). Results from Model 2 show that DERS scores provided a statistically significant increment in prediction of ODR rates when

variations in school characteristics were controlled. DERS scores explained an additional 9.8% of the variation in ODR rate, $p = .030$.

The hierarchical linear regression was run without the two outliers that were previously removed in the simple linear regression as well. Results for this analysis can be found in Table 11. In this analysis, school characteristics still did not explain teacher variation in ODR rate (adjusted R2=.016, p=.216). Additionally, DERS scores no longer provided a statistically significant increment in prediction of ODR rates (adjusted R2=.011, p=.368).

Summary

Results of the above analyses indicate that teachers' scores on the DERS provided a statistically significant prediction of ODR rates. An increase in teachers' scores on the DERS positively correlated with an increase in ODR rate. However, this result was not maintained after the removal of two outliers. Teachers' DERS scores provided a statistically significant prediction of ODR rates after controlling for school characteristics. However, this result was not maintained after again removing the two outliers.

Discussion

The purpose of this study was to explore if teachers' emotional regulation skills predict their rate of office-discipline referrals and if these skills remain significantly predictive after taking into account differences among schools. Teachers frequently list managing disruptive behavior in the classroom as a major stressor and reason for leaving the field (Ingersoll & Smith, 2003). Additionally, unfortunately, the increasingly punitive disciplinary practices in schools fail to effectively decrease misbehavior and have negative long-term effects on all students (APA, 2008; Perry & Morris, 2014). The goal of this study was to explore if teachers' emotional dysregulation may be a potential source of increased referral rates and thus a promising avenue

for intervention. The following major outcomes were discovered:

1. Teachers' emotional regulation skills significantly predict their office-discipline referral rates when referral rates at the higher end of the distribution are included.
2. Teachers' emotional regulation skills significantly predict their office-discipline referral rates across a diverse range of schools; school characteristics do not appear to influence these findings. However, as in the simple regression, this effect is only seen when teachers with much higher referral rates are included in the analysis.

In this next section, I review the findings within the context of related research, discuss the limitations of my study, and offer suggestions for future research and clinical implications.

Findings

Of the 86 principals I contacted, only nine consented, and the majority only consented after multiple outreach attempts. Schools are overwhelmed by their workload. Several principals told me that they did not feel comfortable asking their teachers to consider doing more work. In order to investigate an overburdened system, I had to ask principals and teachers to engage in even more work. At the same time, 11 teachers requested a copy of the findings and several wrote notes thanking me for doing this research. I believe many principals and teachers are aware of the problems but are too overworked. The low response rate is likely reflective of the extent of the workload in schools—perhaps ironically, teachers are too stressed out to make time to talk about it. I imagine also that most schools do not have a culture of engaging in research; this request for participation may have been quite far out of the ordinary day-to-day operations—it certainly surprised me to have such a low response rate even from schools where I had contacts.

Hypothesis 1 was supported when a couple of extreme referral rates were included in the analysis. Two teachers, statistical outliers, had high referral rates of 1.08 and 0.83. The beleaguered teacher with a referral rate of 1.08 reported a kindergarten class size of 25 and made 27 referrals for seven different students. Notably, this teacher also had the highest DERS score of 107. The teacher with a referral rate of 0.83 reported an 8th grade special education class size of 12 and made 10 referrals for six different students. This teacher's DERS score of 62 came very close to the average score of 66. I might wonder if there is a very clear-cut referral policy for this particular classroom. For example, some special education programs have strict behavioral consequences that are meted out uniformly. In these circumstances, a teacher might automatically refer students out of the room for particular behaviors without needing to engage much emotionally. In such schools, too, the principal would have to be supportive of the disciplinary plan, so the teacher would be further fortified in following through with a referral. This is pure speculation, however. It is not possible to interpret this finding within my small data set and without knowing a great deal more about this situation. Future research might endeavor to explore whether there is a difference in teacher strategies and regulation in highly-structured special education classrooms that distinguishes these specialists in special programs from other teachers with more students and fewer adults in the room.

While these two teachers' referral rates were outliers, such a skewed finding is consistent with previous research. For example, in one study of 70 teachers in an urban kindergarten through 6th grade school, researchers found that 6% of the teachers made more than 25 referrals (Putnam et al., 2003). My percentage was lower (out of 43 teachers, this study had just one teacher (2.3% of the sample) who made more than 25 referrals. Still, the point is comparable: a few teachers make many referrals, while the vast majority do not.

Notably, too, the school studied by Putnam and colleagues had a higher percentage of students of color (62%) than the schools with outliers that I studied. It is important to consider that students of color are more likely to be disciplined (U.S. Department of Education Office for Civil Rights, 2014); thus, Putnam et al.'s higher referral rates may also reflect demographic differences between our two studies. However, even taking demographic factors into account, it still seems likely from the available research—including the present exploration—that there are generally a small percentage of teachers who are making disciplinary referrals at a significantly higher rate than most of their peers.

Although statistical outliers are therefore likely to show up in studies such as this one, I also ran the linear regression without the outliers. Hypothesis 1 was no longer supported at the $p<.05$ level once the two high referral rates were removed. It is evident, therefore, that these two outliers had a strong effect on the regression. Despite no longer reaching statistical significance, the results still showed a small effect size. A leaning in a positive direction, according to Tukey's (1991) standards, is particularly notable given the smaller size than originally targeted.

Though beyond the scope of my study, it is interesting to look more closely at the teachers who reported the highest levels of emotional regulation in my sample. Of the 13 teachers who made zero referrals, two teachers had the lowest score of 37 on the DERS and 10 teachers had DERS scores within one standard deviation above the mean or were below the mean. Unlike ODR rates, the DERS scores were normally distributed. It seems, on the face of it, that the most regulated teachers are referring the fewest students. It would be interesting to find out more about what they are doing differently to manage disruptive behavior. Perhaps they even have strategies that they might share with their colleagues. It is also possible that teachers who have good regulation skills, but fewer discipline strategies could become emotionally

dysregulated over time and then make more referrals. These results are tantalizing and suggest reason for further research with a larger sample size as well as more qualitative analyses.

Hypothesis 2 was also supported when the extreme referral rates were included. A teacher's school did not significantly predict ODR rates, but DERS scores did provide a significant prediction of ODR even after controlling for school. While this was an initial analysis, not specifying which variables might distinguish among schools, findings suggest that teachers' emotional regulation skills predict ODR rates independent of the school's environment. In other words, referral rates appear to have more to do with individual teacher regulation than with the differences in demographics and disciplinary strategies among the schools.

However, once again, these results no longer attained statistical significance after removing the two outliers. However, unlike the simple linear regression performed without the outliers, this analysis did not show any positive leanings after removing the outliers. One possible explanation for this non-finding is that this hierarchical linear regression included an even smaller sample size; three responses could not be included due to teachers reporting numbers from their work at a previous school. As hierarchical regressions require a larger sample size than simple linear regressions, the even smaller sample size may have adversely affected the statistical strength for these analyses.

Demographics. The demographics of the schools varied in the degree to which they matched national averages. All schools came close to the national average of percentage of students on IEPs. There was a wide range in percentage of students on free or reduced price lunch among the schools, but the two schools with the most teacher responses fell in the low-poverty category. Four of the schools sampled had a higher percentage of white students than the national average; notably the two schools with the greatest teacher participation fell

within this category. About half of the teacher responses came from low-poverty, predominately white schools, which is neither representative of schools in the nation nor of the population most vulnerable to the school-to-prison pipeline. Given that completing the survey required time and energy, schools that were more resourced were probably more likely to have teachers willing and able to respond; my sample seems to be skewed toward less burdened communities.

Limitations

The original power analysis recommended a sample size of 67 participants. However, after much outreach, I could only muster 43 respondents. While statistically significant results were obtained on analyses when outliers were included, these results were not maintained after the removal of the outliers. A positive trend was still exhibited in the simple regression; however, the small sample may simply have lacked the power necessary to analyze these data under more rigorous statistical conditions.

My recruitment was limited by the condition I set to include in the study only schools with systematic tracking of disciplinary referrals. This resulted in a sample that consisted primarily of larger urban schools despite a broad recruitment strategy that also included smaller, rural elementary schools. While there is no way to know if there are differences in referral rates among schools that have such systems in place and schools that do not, my findings do not generalize to schools that do not record disciplinary actions. It could be that schools that have tracking systems in place have a greater commitment to improving school discipline; as a consequence, perhaps teachers in these schools actually make fewer referrals despite their size and location. Alternatively, the smaller, more rural elementary schools may not see a need for rigorous reporting because they have fewer challenging students or have a more intimate relationship with the community they serve.

It stands to reason that the disciplinary challenges faced by larger urban schools might be different for multiple reasons, including, for example, simply the additional stress faced by teachers with larger class sizes. Future research comparing teacher regulation in schools of different sizes and locations would help address the limiting conditions created by my recruitment strategy.

Office-discipline referral rates were calculated using average class size when a teacher taught more than one class. However, in the attempt to provide a more standardized measurement, nuance may have been lost. The referral rates of teachers with the same students all day may not be equivalent to the referral rates of teachers with different students throughout the day. It is possible that having the same students all day could lead to closer relationships and consequently a lower referral rate. However, it is also possible that teachers may be able to better manage a challenging student if they only need to teach them for a short period of the day, which would result in a lower referral rate.

Only one year of office-discipline referral rates was collected. Teachers' referral rates have the potential to change based on the students in their class in any given year. In one year, a teacher may have one particularly challenging student, multiple challenging students, or the dynamics between students could be difficult, and as a result the teacher could have a higher referral rate in that year. Calculating an average referral rate across several years could improve this research.

Clinical Implications

Clinical psychologists have a role in helping schools to support all students, particularly the most vulnerable, traumatized youth. In particular, this study provides some evidence that teacher regulation is an important variable for its connection to disciplinary action. Since we now

know that traumatized, dysregulated students pose particular challenges in a classroom—and that classrooms, in turn, are particularly challenging for them—we might do well to focus our attention on preventing these vulnerable children from being inappropriately funneled into the juvenile justice system where they fall behind in school, disengage from the community, and are likely to be further traumatized.

The National Childhood Traumatic Stress Network states that creating safe communities for traumatized children is one of the six core components of treatment (Cook et al., 2007). Schools are the central community for most children (Cole et al., 2005). For those children suffering from traumatic stress, but not in therapy, this could be a context in which they begin to heal. It is also within this context that children who are in therapy might learn to apply and generalize attitudes and skills learned in treatment, and expand their circle of trusting adults to include teachers and other school personnel. The school is a place where traumatized children can form strong, caring relationships with trustworthy adults and be a part of a safe and predictable community (Cole et al., 2005). These relationships with adults are a major factor that can protect or ameliorate the effects of trauma (Cole et al., 2005).

A rising tide floats all boats. Preventative initiatives that are instituted schoolwide have the additional benefit of not only helping whole classrooms of children and reducing disciplinary referrals but also supporting the teachers in developing skills and their own regulatory strategies. There are many such programs being piloted and instituted in schools across the country; clinical psychology has, and can have, a role in all aspects of implementation from needs assessment and training, to ongoing support of the school community, and outcome evaluation.

Public Counsel (2017), a pro-bono law firm, has published a comprehensive review of the research-based alternatives to traditional school discipline. These alternatives include, for

example, School-Wide Positive Behavior Interventions and Supports (SWPBIS), restorative justice and practices, social-emotional learning curricula, trauma-sensitive schools, and programs addressing racial bias.

SWPBIS is school-wide system that works to actively teach and acknowledge positive behavior. Restorative justice focuses on building community by creating positive relationships among students and educators and developing a set of core values for the school. When harm is done, students are asked to acknowledge responsibility and attempt to repair the relationship(s). Social-emotional learning usually involves a curriculum taught, modeled, practiced, and reinforced in the classroom. Competencies include self-awareness, social awareness, responsible decision-making, self-management, and relationship skills.

Trauma-sensitive schools typically follow a three-tiered system of support. Tier 1 is universal support such as training staff on the impact of trauma. Tier 2 is prevention/intervention such as providing groups for at-risk students and offering wellness groups for staff to mitigate vicarious traumatization. Tier 3 is intensive intervention for traumatized students that includes, for example, wraparound services and coordination with outside providers. Finally, Public Counsel suggests addressing racial bias by having school administrators lead conversations with staff about racism, examining school discipline data by race, and employing pedagogical approaches like Culturally Responsive Classroom Management (Public Counsel, 2017).

This study explored the potential for another avenue of intervention to help both students and frequently under-resourced and burned-out teachers. As previously discussed, teachers have reported that managing students' disruptive behavior is a major stressor in their job. The results of this study suggest that teachers who have more difficulties in regulating their emotions are more likely to make office-discipline referrals for students. Several promising interventions exist

for facilitating teachers' further development of emotional regulation skills.

One promising area of intervention is mindfulness for teachers. A systematic review of 16 studies of mindfulness programs for teachers documented outcomes of reduced stress and burnout for teachers (Hwang, Barlett, Greben, & Hand, 2017). One specific mindfulness program, Cultivating Awareness and Resilience in Education (CARE), has undergone multiple pilot studies and was most recently assessed using a randomized trial design engaging 224 teachers in 36 urban elementary schools (Jennings et al., 2017). CARE is a 30-hour training over five in-person days typically spaced out over several months with coaching calls in between sessions. The program includes emotion skills instruction to support teachers in recognizing and regulating their emotions, mindfulness/stress reduction practices, and caring and listening practices focused on nonjudgmental and compassionate listening.

Compared with teachers in the control group, teachers who received CARE training showed a 14% improvement in adaptive emotion regulation, an 11% increase in overall mindfulness, reductions of 7% in psychological distress, and of 8% in sense of time urgency. Jennings and colleagues limited their measure of emotional regulation to include just two factors: cognitive reappraisal and emotional suppression but their findings are compelling even within this narrow measure.

For the experimental group, improvement in emotional regulation meant an increase in cognitive reappraisal and a decrease in emotional suppression. Teachers also experienced a 10% reduction in sleep disturbances and a 9% reduction in emotional exhaustion (a component of burnout). Teachers' classrooms were also observed and rated on an assessment system (CLASS) that measures interactions between teachers and students on emotional support, classroom organization, and instructional support. Teachers who received CARE improved by an average

of 9% on the emotional support domain.

Teacher regulation also improves when they are trained specifically in developing social-emotional learning (SEL) informed classrooms. SEL programs target improvement in the quality of classroom interactions through professional development and a classroom curriculum. For example, the RULER approach includes the skills of, “Recognizing emotions in oneself and others, Understanding the causes and consequences of emotions, Labeling emotions with an accurate and diverse vocabulary, and Expressing and Regulating emotions in socially appropriate ways” (Hagelskamp, Brackett, Rivers, & Salovey, 2013, p. 531). Hagelskamp and colleagues conducted a two-year study of RULER in 62 urban schools (5th and 6th grade English language arts classrooms). Teachers attended a two-day training at the beginning of the school year and met with a coach five times during the year as they implemented a Feelings Words Curriculum into their English class. Three optional booster training days were offered during the course of the school year. A similar approach was used during year two as well. Classrooms were observed and rated using the CLASS assessment system.

In comparison to control schools, RULER classrooms exhibited greater emotional support at the end of year one. Additionally, by the end of year two, RULER classrooms exhibited greater classroom organization and instructional support, which was partially mediated by the increase in emotional support at the end of year one. Most related to my study, the classroom organization domain includes a behavior management scale. This study suggests that as teachers gain skills in creating more emotionally supportive classrooms, their behavior management improves as well (Hagelskamp et al., 2013).

The clinical implications of this research point also to interventions that are not necessarily targeted to whole schools or to develop SEL-informed classrooms, but to help and

support the teachers themselves. Indeed, it is important to consider the mighty burden placed on teachers; it is perhaps a testimony to their dedication and fortitude that so many are able to be emotionally regulated in the face of multiple concurrent expectations to teach, manage, nurture, arbitrate, entertain, mediate, and discipline. Previous research suggests some possible avenues where psychologists might contribute to their well-being.

For example, Brackett and colleagues (2010) established a connection between emotional dysregulation in teachers and their perception that their principals were unsupportive (Brackett et al., 2010). As a corollary, other researchers have found that higher levels of emotional support for teachers predict lower levels of burnout (Naring et al., 2006) and mediate the relationship between the intensity of emotions related to an incident of student misbehavior and burnout (Chang, 2013).

These studies point to the importance of providing support to teachers; more importantly, they highlight a concern that those who may need the most support may suffer especially from feeling they have to deal with overwhelming problems on their own. In such instances, they may see little recourse to get a break from wrangling with a tough student besides sending the student to the office—getting help in the only way that may be available. Psychologists can consult with principals about supporting teachers; psychologists in schools can also directly offer such support by rolling up their sleeves and going into the classroom. Indeed, finding ways for administrators, including school psychologists, to potentially come into classrooms during these escalating incidents as a nonthreatening support—and additional adult presence—might be containing for both the teacher and student. There is evidence, too, that teachers benefit emotionally and instrumentally from participation in supportive groups and the opportunity to consult with school psychologists (e.g., Orpinas, Horne, & Mulitsite Violence Prevention

Project, 2004; Smith & Ingersoll, 2004).

Finally, we should continue to advocate for eliminating zero-tolerance policies and mandated consequences. One teacher in this study reported that all five of the referrals they made were procedural and used the example of students who did not show for detention. This teacher stated that no students caused any severe disruptions. In an evidentiary review on zero-tolerance policies, the American Psychological Association (APA; 2008) stated that the provision of mandated consequences, like an automatic office-discipline referral for not showing to detention, has not been shown to have the intended effect of improving the consistency of school discipline or reducing problematic behavior.

Indeed, the APA (2008) reported that zero-tolerance policies and specifically the use of suspensions and expulsions are actually ineffective interventions that do not deter student misbehavior. Additionally, these policies are developmentally inappropriate and applied disproportionately to students of color and students with disabilities. As adolescents' brains develop and mature, they require adult scaffolding to strengthen their impulse control and consider the consequences of their behavior. The harsh punishments associated with zero-tolerance policies are a mismatch with the typical lapses in judgment seen during adolescent development. Further, zero-tolerance policies and practices have been shown to negatively affect school climate and are negatively related to school-wide academic achievement.

The APA (2008) recommends that psychologists advocate for the use of alternative approaches to school discipline, like Positive Behavior Interventions and Supports and restorative justice. Zero-tolerance policies should be reserved for the most severe behavior that places other students and staff at physical harm. However, as the APA suggests, even if a student needs to be removed from the general education population, the student should still be engaged

in a learning environment so that school relationships and educational opportunities continue and re-entry remains a viable possibility.

Directions for Future Research

This study serves as an initial exploration into the relevance of addressing teachers' emotional regulation skills for reducing punitive and traumatizing school disciplinary practices. These preliminary findings suggest several promising directions for future research. First, it would be helpful to replicate this study with a larger, more diverse sample. It would be most helpful to include teachers from diverse schools that are more representative of the nation's schools as a whole, with representation of sufficient numbers of students from more marginalized backgrounds (students of color, students with disabilities, non-heterosexual students)—the very students who are more likely to be disciplined. While the current study made a basic attempt to explore the effect of school characteristics on the relationship between DERS and ODR rate, it could be helpful to investigate the effect of specific demographic variables (e.g., percentage of students with disabilities, ethnicity and race of students, class size, number of adults in the classroom, school engagement with parents, and poverty levels) on referrals that might suggest ways in which school climate and population may mediate this relationship.

The way discipline was measured in this study could be improved in future research. The calculation of ODR rate by using average class size for teachers with more than one class potentially led to a loss of nuance. It could be helpful to investigate potential differences between referral rates of teachers with the same students all day and teachers with different students throughout the day. The use of only one measure for discipline was also limiting. A more comprehensive measurement could incorporate observations of a teacher's classroom management style and include tracking of many disciplinary strategies, like positive

reinforcement and consequences delivered in class.

A qualitative study using interviews with teachers on their perception of how their emotional regulation skills may or may not affect their discipline style could also provide helpful information. Several teachers made optional comments about the referrals they made. Comments included notes about the impact of class size, students with Attention-Deficit Hyperactivity Disorder, and mandated discipline procedures. One teacher also vented about their perception that students' behavior has been declining every year. The content, style, and organization of teachers' narratives may provide insight into the interaction between their emotional regulation skills and disciplinary strategies.

The epidemiological data on ACEs suggests that many teachers, too, are likely to be living with their own histories of adversity. Given the robust relationship between problems of regulation and traumatic exposure, it would be important to determine the ways in which contending with traumatized and disruptive students might actually be triggering for such teachers. Perhaps future research could explore further the underlying cause of teacher dysregulation. If it is attendant to their own trauma, then interventions to support them need to go beyond developing better regulation strategies and disciplinary policies.

Finally, in the current climate of mass school shootings and increasing inequitable access to resources, many more teachers are likely to be experiencing traumatization, retraumatization, and vicarious traumatization in the course of their work. As teachers work to support students with trauma histories, their own trauma histories may be activated or they could experience vicarious traumatization. Teachers with good emotional regulation skills could become dysregulated by interacting with traumatized students over time. At the same time, both non-traumatized and traumatized students could potentially be dysregulated by a teacher or

teachers who struggle with self-regulation. Thus, future research into trauma-informed schools and how to best support teachers and administrators, would do well to consider the role of early adversity in their lives, too.

Concluding Remarks

This exploratory study investigated the relationship between teachers' emotional regulation skills and office-discipline referral rate. I hypothesized that teachers' scores on an emotional regulation scale would predict their ODR rate. My hypothesis was supported when referral rates at the higher end of the distribution were included in the analysis. Results were no longer statistically significant after removing the higher referral rates, but a positive leaning was still seen. Given the lower statistical power, this finding suggests the potential fruitfulness of further study of teacher emotional regulation with a larger sample size and greater awareness of the many factors that both support and impede teacher efficacy managing disruptive behavior.

Teachers have a challenging and emotionally demanding job. As I work with and advocate for traumatized youth, I am also aware of the impossible expectations placed on teachers to help these children all day every day, usually in the context of minimal emotional support, a growing threat of violence, diminishing resources, greater numbers of students coming to school with high ACEs and attendant learning and behavior problems, and the stress of their lives beyond the walls of the school.

Our cultural imagination holds the ideal of a nurturing teacher: she or he remains calm and regulated, conveying clear and safe limits along with measurable instructional content. They somehow maintain the respectful attention of their students and refocus the wanderers to the task at hand. Our imagination does not usually encompass the level of crisis intervention required nor the degree to which some traumatized students arrive at school utterly unprepared to function in

that environment.

I engaged in this study initially focused on slowing the school to prison pipeline. At the end, however, I now understand my child advocacy role more broadly. Advocacy for traumatized youth must also involve advocacy for the adults and systems in a child's life—including teachers. Lasting change comes from building caring communities. Teachers, as much as students, will be better regulated when they feel supported and connected to their school community in spite of overwhelming challenges.

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Appendix A. Recruitment Letter for Teachers.

Hello,

My name is Erin Hopkins. I am a clinical psychology doctoral student working on my dissertation in Antioch University New England in Keene, NH.

I am doing a study about teachers' emotions and their management of disruptive behaviors. I am seeking to learn from teachers. Participation is simple. You will fill see a link at the bottom of this page that will take you to a fuller description of the study, and request your Informed Consent. Then you will be asked a few questions about your job (like number of students you teach, grades you teach, and number of times you have had to refer students for disciplinary action). You will also be asked to fill out one brief survey. Participation should take under 10 minutes to complete. If you choose, you may enter into a raffle to win one of four $25 Amazon gift cards as a thank you for contributing to this study.

In order to participate, you must have taught any grade from kindergarten through 8th grade during the last academic year. Additionally, you must work in a school that has a reliable and systematic way of collecting office-discipline referrals, and you have access to a record of the number of referrals you made in the academic year 2016-2017.

Your decision to become a teacher may have been inspired by your love for children and a desire to help them learn. However, you may find yourself in an emotionally demanding job with expectations that sometimes feel unrealistic. Teachers also report that managing students' disruptive behaviors is one of the biggest stressors in the job. I am seeking to learn from teachers about their emotions and management of disruptive behaviors.

I would greatly appreciate your help. With your consent, you can help add to our understanding of some of the possible unmet needs of teachers. Would you please take a short survey that explores emotional self-regulation?

Thank you!
Erin

Erin Hopkins, B.A., M.S.
Doctoral Student, Department of Clinical Psychology
Antioch University New England
(redacted)

If you are interested in learning more and helping with this study, please click here:

Appendix B. Informed Consent for Teachers

Consent to Participate in Research

Emotional Self-Regulation and Management of Disruptive Behaviors in Schools

I volunteer to participate in a research project by Erin Hopkins, B.A., M.S. from Antioch University New England. I understand that the project will look into teachers' emotions and management of disruptive behaviors.

1. I am freely participating in this study. I will not be paid and I can stop at any time without anything bad happening. At the end of the survey, I can enter into a raffle for the chance to win one of four $25 Amazon gift cards. I can also request to receive the overall findings from the study. Whether I choose to participate or to start and stop, no one at my work will know about it.

2. When I click the link below, I will be filling out some information about my job including, for example, the grade I teach, the number of students I have in my classes, and the number of times I have made an office-discipline referral for a student over the previous academic year. I will also be filling out one short survey. It should take under 10 minutes to complete the questionnaire and survey.

3. I will be asked to think about how I handle getting upset. Thinking about being upset might be a little uncomfortable. If I feel too much discomfort at any time, I can stop and take a break, or just not complete the survey.

4. I understand that I can skip any question on the survey and can withdraw from the study at any time without any penalty.

5. No one from my job will know that I am participating in this research study. No one from my job will have access to my information. I will not be asked to report any personally identifying data. Demographic data will only be reported in aggregate form, so no one can identify respondents. There are no possible penalties from agreeing to participate, from not agreeing to participate, or to stopping if I change my mind.

6. I have read this form and understand what the researcher has communicated to me. I have had all my questions answered and I willingly agree to participate in this study.

If you have any questions about this study, contact:
Erin Hopkins
Email: (redacted)

If you have any questions about your rights as a research participant, contact:
Kevin Lyness, Chair of Antioch University New England IRB
Telephone: 603-283-2149

Email: klyness@antioch.edu

Barbara Andrews, Ph.D., Interim Provost
Telephone: 1-800-553-8920
Email: bandrews@antioch.edu

By clicking on the link below that takes you to the questionnaire and survey, you are agreeing to participate in this study.

Appendix C. Recruitment Letter for Principals

Dear :

My name is Erin Hopkins. I am a doctoral student working on my dissertation in Antioch University New England's Clinical Psychology program in Keene, NH. My study is about teachers' emotions and their management of disruptive behaviors. I am seeking to learn from schools and teachers with the goal of reducing the number of referrals for disciplinary action.

As you probably know, teachers report that managing students' disruptive behaviors is one of the greatest stressors in the job and is a big reason for teacher burnout and attrition. In one study I read, close to 35% of beginning teachers who left the profession listed student discipline problems as a major factor in their early departure. With your help, I would like to learn more about these classroom challenges.

I hope very much you will consider participating in my study and encouraging your staff to help out, too. In order to participate, here's what I'll need from you and your staff:

1. Your participation involves completing a brief survey about your school, emailing me a copy of your school's discipline policy, and forwarding a letter to teachers that includes a description of the study and a link to a survey for them to complete if they consent.
2. Your school must enroll students in any grades from Kindergarten through 8th grade.
3. Your school must also have a systematic and reliable way of collecting numbers of office-discipline referrals. I will be asking for numbers from last year (2016-2017).
4. Participating teachers need to have access to this referral system in order to report the total number of office-discipline referrals they made over the course of the academic year 2016-2017.

Teachers who agree to participate will answer a few questions about their responsibilities including the number of students they teach and a count of the number of office-discipline referrals they made last year. They will also take a survey about their emotional self-regulation. Their survey results will be linked in my study with the number of office-discipline referrals they made in the past academic year. I am trying to see if there is a connection between how upset teachers get and the frequency of disciplinary referrals they make. I will not have their names on the survey, and I will be the only one to see the information they provide. I will present the overall numerical findings in the dissertation. I will also not mention your school by name or location. While I can't share teachers' answers with you, I would be happy to send you (and any teachers who request this information) a copy of my collective findings when I'm all done with the dissertation.

I hope you are willing to send the attached description of the study to all of your teachers. If you agree to participate and I do not receive a response from at least 15% of your teachers at the end of 10 days, I hope it's ok if I send you a follow-up email requesting that you re-send the email about the survey to teachers for a single reminder.

I would greatly appreciate your help. If I do not hear from you, I will follow-up this letter with a phone call to see if you have any questions. However, please feel free to contact me sooner if you would like to do so.

Thank you!
Erin

Erin Hopkins, B.A., M.S.
Doctoral Student, Department of Clinical Psychology
Antioch University New England
(redacted)

Appendix D. Questionnaire for Teachers.

1. What is the name of the school where you teach?

2. What grade level did you teach in school year 2016-2017?

3. What subject(s) do you teach?

4. How many students were in your class in 2016-2017? If you taught more than one class, please give an average number of students.

5. Including this year, how many years have you been teaching?

6. In the previous school year (2016-2017), how many times did you refer a student to an administrator for disciplinary action? Please refer to your school's discipline database to report this total number of students you reported in the whole year.

7. How many different students did you refer for disciplinary action?

Comments (optional):

Appendix E. Difficulties in Emotional Regulation Scale (DERS)

Please indicate how often the following statements apply to you by writing the appropriate number from the scale below on the line beside each item.

1	2	3	4	5
almost never (0-10%)	sometimes (11-35%)	about half the time (36-65%)	most of the time (66-90%)	almost always (91-100%)

_____ 1) I am clear about my feelings.

_____ 2) I pay attention to how I feel.

_____ 3) I experience my emotions as overwhelming and out of control.

_____ 4) I have no idea how I am feeling.

_____ 5) I have difficulty making sense out of my feelings.

_____ 6) I am attentive to my feelings.

_____ 7) I know exactly how I am feeling.

_____ 8) I care about what I am feeling.

_____ 9) I am confused about how I feel.

_____ 10) When I'm upset, I acknowledge my emotions.

_____ 11) When I'm upset, I become angry with myself for feeling that way.

_____ 12) When I'm upset, I become embarrassed for feeling that way.

_____ 13) When I'm upset, I have difficulty getting work done.

_____ 14) When I'm upset, I become out of control.

_____ 15) When I'm upset, I believe that I will remain that way for a long time.

_____ 16) When I'm upset, I believe that I will end up feeling very depressed.

_____ 17) When I'm upset, I believe that my feelings are valid and important.

_____ 18) When I'm upset, I have difficulty focusing on other things.

_____ 19) When I'm upset, I feel out of control.

1	2	3	4	5
almost never (0-10%)	sometimes (11-35%)	about half the time (36-65%)	most of the time (66-90%)	almost always (91-100%)

_____ 20) When I'm upset, I can still get things done.

_____ 21) When I'm upset, I feel ashamed at myself for feeling that way.

_____ 22) When I'm upset, I know that I can find a way to eventually feel better.

_____ 23) When I'm upset, I feel like I am weak.

_____ 24) When I'm upset, I feel like I can remain in control of my behaviors.

_____ 25) When I'm upset, I feel guilty for feeling that way.

_____ 26) When I'm upset, I have difficulty concentrating.

_____ 27) When I'm upset, I have difficulty controlling my behaviors.

_____ 28) When I'm upset, I believe there is nothing I can do to make myself feel better.

_____ 29) When I'm upset, I become irritated at myself for feeling that way.

_____ 30) When I'm upset, I start to feel very bad about myself.

_____ 31) When I'm upset, I believe that wallowing in it is all I can do.

_____ 32) When I'm upset, I lose control over my behavior.

_____ 33) When I'm upset, I have difficulty thinking about anything else.

_____ 34) When I'm upset I take time to figure out what I'm really feeling.

_____ 35) When I'm upset, it takes me a long time to feel better.

_____ 36) When I'm upset, my emotions feel overwhelming.

REFERENCE:

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Appendix F. Questionnaire for Principals

1. What is your school's name?

2. How many students were in your school in 2016-2017?

3. Grades x to y?

4. What percentage of your students are on individualized education plans (IEPs)?

5. What percentage of your students are on 504s?

6. What percentage of your students are
   Black/African American/Black American?
   Hispanic?
   Asian/Asian American?
   American Indian/Alaska Native?
   White/White American?
   Two or more races?

7. What percentage of your students receive free or reduced price lunch?

8. What are the possible responses/consequences for students when they receive a discipline referral?
   Check and all that apply.
   __Warning
   __Detention
   __Miss recess
   __In-school suspension
   __Contact home
   __Conference with parent/caregiver
   __Out-of-school suspension
   __Expulsion
   __Referral to school resource officer (law-enforcement)
   __Other (Specify:_____)

9. How many students received the following disciplinary action in the last academic year (2016-2017)?
   a. An In-school suspension _____
   b. Out-of-school suspension _____
   c. Expulsion _____

Appendix G. Informed Consent for Principals

Consent to Participate in Research

Emotional Self-Regulation and Management of Disruptive Behaviors in Schools

I volunteer to take part in a research project by Erin Hopkins, B.A., M.S. from Antioch University New England. I understand that the project will look into teachers' emotions and management of disruptive behaviors.

1. I am freely participating in this study. I will not be paid and I can stop at any time without anything bad happening. I can request to receive the overall findings of the study.

2. When I click the link below, I will be filling out some basic demographic information about students at my school and my school's discipline policies, for example, number of students at my school, percentage of students on IEPs, and number of students expelled last year. It should take about 15 minutes to complete the questionnaire. After filling out the brief questionnaire, I will be asked to forward a letter to teachers that includes a description of the study and a link to a survey for them to complete if they consent. I will also be asked to email a copy of my school's discipline policy to the researcher.

3. No personally identifying data will be collected in either the questionnaire I complete or in the questionnaire and survey teachers complete. I will be asked my school's name in order to link the demographic data I provide with teachers' responses, but my school's name will not be reported in the study. Demographic data will only be reported in aggregate form, so no one can identify respondents.

4. I understand that I can skip any question on the survey and can withdraw from the study at any time without penalty. There are no possible penalties from agreeing to participate, from not agreeing to participate, or to stopping if I change my mind.

5. I have read this form and understand what the researcher has communicated to me. I have had all my questions answered and I willingly agree to take part in this study.

If you have any questions about this study, contact:
Erin Hopkins
Email: (redacted)

If you have any questions about your rights as a research participant, contact:
Kevin Lyness, Chair of Antioch University New England IRB
Telephone: 603-283-2149
Email: klyness@antioch.edu

Barbara Andrews, Ph.D., Interim Provost
Telephone: 1-800-553-8920

Email: bandrews@antioch.edu

By clicking on the link below that takes you to the questionnaire, you are agreeing to participate in this study.

Table 1

School Demographics

School	Location	Grades	Enrollment	% on IEPs	% 504 Plans	% Lunch
A	City	K-6	325	10	10	43
B	Hamlet	5-7	611a	14a	3.9b	11
C	Town	5-8	722	14.5	8	0
D	Town	6-8	691	15	4	2
E	City	6	575	N/R	N/R	N/R
F	City	K-5	648a	14a	1.6b	56
G	City	PreK-5	485	10	5	79.5
H	City	K-5	447	12	0.8b	88

a Data retrieved from New York State Department of Education
b Data retrieved from U.S. Department of Education's Office for Civil Rights 2015-2016 survey

Table 2

Race and Ethnicity

School	African American	Hispanic	Asian American	American Indian	White	Multiracial
A	5	3	1	1	90	0
Ba	1	13	5	0	81	0
Cb	2.8	12.6	4.4	0.4	77.7	1.8
D	1	8	16	0	70	5
E	N/R	N/R	N/R	N/R	N/R	N/R
Fa	13	60	3	0	21	3
G	20	49	13	1	16.9	0
H	4	86	0	0	10	0

a Data retrieved from New York State Department of Education
b Data retrieved from New Jersey Department of Education School Performance Report

Table 3

Consequences by School

	A	B	C	D	E	F	G	H
Warning	X	X	X	X	X	X	X	
Detention	X	X	X	X	X	X		
Miss Recess	X		X	X	X			X
In-School Suspension	X	X	X	X	X	X	X	
Out-of- School Suspension	X	X	X	X	X	X	X	
Contact Home	X	X	X	X	X	X	X	X
Conference with Parent/Caregiver	X	X	X	X	X	X	X	
Expulsion		X			X	X		
Referral to School Resource Officer	X	X		X	X			

Table 4

Suspensions, Expulsions, and Referral Rates

School	# In-School Susp.	#Out-of-School Susp.	# Expulsions	School ODR
A	45	12	0	0.21a
B	23b	11b	0b	0.13
C	10	6	0	0.07
D	31	8	0	0.21
E	N/R	N/R	N/R	0.11
F	4b	0b	0b	0.05
G	20	50	0	0.41
H	18b	15b	0b	0.08

a Rate based on teacher response
bData retrieved from Department of Education's Office of Civil Rights 2015-2016 survey

Table 5

Number of Teacher Responses

School	Number of Responses
A	1
B	2
C	10
D	10
E	8
F	7
G	3
H	2

Table 6

Grades Taught

Grade	Number of Teachers
Kindergarten	2
Second	1
Third	2
Fourth	3
Fifth	5
Sixth	10
Seventh	7
Eighth	5
Multiple	7
N/R	1

Table 7

Subjects Taught

Subject	Number of Teachers
Music	1
Technology	2
Math	4
Spanish	2
Physical Education	2
Special Education	5
Science	4
Social Studies	2
English	8
Art	1
Multiple Subjects	12

Table 8

Linear Regression on Effects of Emotional Regulation on Office-discipline Referral Rate with Outliers

B	95% CI	SE B	β
.004	.001, .008	.002	.346

R2=.120, (p<.05)

Table 9

Linear Regression on Effects of Emotional Regulation on Office-discipline Referral Rate without Outliers

B	95% CI	SE B	β
.001	.000, .003	.001	.236

R2=.056

Table 10

Hierarchical Linear Regression on Effects of School and Emotional Regulation on Office-discipline Referral Rate with Outliers

Variable	B	SE B	β	R2	Adj. R2	*F* Change
School	.014	.022	.106	.011	-.015	.430
DERS	.004	.002	.348	.130	.083	5.062*

*p<.05

Table 11

Hierarchical Linear Regression on Effects of School and Emotional Regulation on Office-discipline Referral Rate without Outliers

Variable	B	SE B	β	R2	Adj. R2	*F* Change
School	-.013	.010	-.206	.042	.016	1.589
DERS	.001	.001	.153	.064	.011	.831