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Does Teacher Emotional Exhaustion and Efficacy Predict Student Discipline Sanctions?

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ABSTRACT

Teacher emotional factors influence the classroom environment. The purpose of the study was to examine the association of teacher emotional exhaustion and teacher efficacy with student office discipline referrals (ODRs), in-school suspensions (ISSs), and out-of-school suspensions (OSSs) using multilevel logistic regression models. The sample included 105 teachers and 1,663 students from nine elementary schools in the United States. Higher teacher emotional exhaustion was associated with increased use of ODR and ISS but not OSS. For students with teachers experiencing burnout, the odds of receiving an ISS increased by a factor of 1.74 ($d = .31$). Greater teacher efficacy was also associated with lower use of OSS but not ODR or ISS. The results suggest that improving teacher efficacy and reducing teacher emotional exhaustion may support the reduced use of exclusionary discipline practices.

Exclusionary discipline practices such as office discipline referrals and in-school and out-of-school suspension are particularly important targets for research and prevention efforts because these practices are associated with an increased likelihood of negative student outcomes (Noltemeyer, Ward, & Mcloughlin, 2015). Further, these discipline practices disproportionately affect students based on student demographic factors, including race/ethnicity, socioeconomic status (SES), special education status, and gender (Leone, Mayer, Malmgren, & Meisel, 2000; Morris & Perry, 2016; Skiba, Michael, Nardo, & Peterson, 2002; U.S. Department of Education, 2016). Understanding malleable factors to reduce the use of these discipline practices is critical to improving learning environments for all students. Teacher factors, such as emotional exhaustion and efficacy, are good candidates for potential leverage points in reducing the use of adverse discipline practices because emotional exhaustion and efficacy may influence the classroom environment and student motivation, behaviors, and learning (Aloe, Shisler, Norris, Nickerson, & Rinker, 2014; Herman, Hickmon-Rosa, & Reinke, 2018; Jennings & Greenberg, 2009; Klusmann, Kunter, Trautwein, Lüdtke, & Baumert, 2008; Schonert-Reichl, 2017). This study aims to further investigate the relations between teacher emotional exhaustion and efficacy with disciplinary sanctions given to students.

Office Discipline Referrals and Suspensions

Office discipline referrals (ODRs) and suspensions are widespread discipline practices, yet these methods are associated with negative student outcomes (Tobin & Sugai, 1999; Noltemeyer et al., 2015) and do not seem to be associated with the reduction of problem behaviors (Lamont et al., 2013). *Exclusionary discipline* refers to consequences that result in the removal of a student from the classroom or learning environment through in-school suspension (ISS) or out-of-school suspension (OSS). ODRs may also be considered another form of exclusionary discipline and occur when a teacher refers a student to the principal or other school administrator as a consequence of his or her action, which may or may not result in further disciplinary sanctions (Sugai, Sprague, Horner, & Walker, 2000). OSS is associated with negative outcomes, including lower reading achievement (Arcia, 2006), increased probability of dropout and retention (Marchbanks et al., 2014), and less school connectedness (McNeely, Nonnemaker, & Blum, 2002). A small number of studies have looked at the consequences of ISS, when students remain in school but

are removed from their typical learning environments, and this discipline practice appears to be associated with similar negative outcomes, including lower achievement and dropout (Noltemeyer et al., 2015) as well as a higher probability for grade retention (Marchbanks et al., 2014). ODRs are associated with outcomes similar to those of suspensions, including lower achievement and increased likelihood of subsequent disruptive behaviors (Pas, Bradshaw, & Mitchell, 2011; Tobin & Sugai, 1999).

Student Predictors of Disciplinary Sanctions

Student characteristics are predictive of the use of these practices, and many of these factors are related to student demographics. Student behaviors and aggressive attitudes predict suspensions and office referrals but do not fully account for differences based on student race and ethnicity (Huang & Cornell, 2017). Students of color are more likely to receive an OSS, with Black students being 3.8 times more likely to receive one or more suspensions (U.S. Department of Education Office for Civil Rights, 2016). Lower student SES is also associated with a higher risk of suspension but does not fully account for the differences in discipline based on student race (Skiba et al., 2002). Gender and special education status may also be related to suspension (Leone et al., 2000; Skiba et al., 2002); however, a recent study by Morgan et al. (2019) showed contrary findings that special education status was not associated with an increased rate of suspension while controlling for student race and SES. Importantly, students are not more likely to receive exclusionary discipline because of their demographic characteristics in isolation; rather, differences in exclusionary discipline practices may be based in interpersonal and structural racism and classism, which perpetuates disparities for youth with marginalized identities (Carter, Skiba, Arrendondo, & Pollock, 2017). Subjective decision making by teachers and administrators can be unfairly influenced by implicit bias, stereotype activation, and prejudiced thinking (Moskowitz, 2010), resulting in students from marginalized backgrounds experiencing harsher discipline for similar behaviors (Skiba et al., 2011). All of these student factors are important to consider in the context of school discipline, but reducing exclusionary discipline will require the specification of modifiable ways to improve the discipline structure in schools for creating learning environments that are beneficial for all students.

Teacher Factors Related to Behavior Management

In contrast to student demographic characteristics, which predict exposure to punishment, teacher factors are associated with discipline and behavior management and are modifiable through intervention, which makes teacher factors a key target for the reduction of harmful disciplinary practices. Although administrators ultimately make the decisions and enforce the discipline sanction, particularly for suspensions, teachers are key intermediaries influencing both student behavior and administrator decision making. Within the classroom, the behavior for suspension occurs under the teacher's supervision. Ideally, effective classroom management practices are successful in preventing disruptive behaviors from escalating, reducing the need for exclusionary discipline (Mitchell & Bradshaw, 2013); however, ineffective behavioral strategies can make behaviors worse and increase the likelihood of a student receiving a suspension. Following a behavioral infraction, teachers decide whether or not to refer a behavior for further sanctions, and this decision can vary from teacher to teacher (Skiba & Knesting, 2002). Teachers are also the primary reporters of the incidents that result in suspensions, and their perceptions that contribute to the record of the incident may be biased by a variety of factors, including their emotional state. Ultimately, resulting interventions to improve student behaviors typically require teachers to make changes to their classroom management in order to affect student outcomes (Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008). Teacher burnout and efficacy are malleable constructs relevant to this process of student discipline and are often studied in the context of classroom management, because a teacher's emotional functioning influences the classroom environment and his or her abilities to consistently apply effective behavioral practices (Jennings & Greenberg, 2009).

Teacher Emotional Exhaustion

Teacher burnout, specifically emotional exhaustion, is of particular importance to discipline practices because emotional exhaustion has a moderate positive association with student disruptive behaviors (Aloe et al., 2014). Teachers can develop burnout when they experience a great deal of emotional stress and strain and are not effectively coping over a period of time (Maslach & Goldberg, 1998). Burnout is experienced by workers in helping professions, like teaching, and is comprised of three components: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach & Jackson, 1981). Emotional exhaustion is the primary experience of burnout and is the feeling of being overextended or overstressed (Klusmann et al., 2008). Further, emotional exhaustion is the dimension of burnout most strongly associated with negative outcomes for teachers (Burke & Greenglass, 1995). Due to the strong predictive nature of emotional

exhaustion as well as its connection with teacher and student outcomes, the present study focused on emotional exhaustion as the main experience of burnout.

The increased risk of emotional exhaustion in the teaching profession is particularly concerning because burnout is associated with negative outcomes for teachers as well as students (Chan, 2006; Evers, Tomic, & Brouwers, 2004). For instance, teachers have consistently ranked high levels of emotional stress as the primary reason for leaving the profession (Darling-Hammond, 2001; Montgomery & Rupp, 2005). Teacher attrition has been shown to increase costs for school districts and has been linked to lower student performance (Barnes, Crowe, & Schaefer, 2007; Ronfeldt, Loeb, & Wycoff, 2013). In addition to teacher attrition, teacher burnout has been associated with reduced quality in teacher–student interactions (Spilt, Koomen, & Thijs, 2011), decreased teacher motivation (Schaufeli & Salanove, 2007), and reduced job satisfaction (Skaalvik & Skaalvik, 2010). High levels of emotional exhaustion have also been associated with a reduction in student perception of teacher support and school satisfaction (Arens & Morin, 2016). Additionally, Klusmann, Richter, and Lüdtke (2016) found that teacher emotional exhaustion was negatively correlated with student achievement tests scores, suggesting that teachers with high levels of emotional exhaustion might lack the necessary resources to use effective teaching strategies and provide high-quality instruction (Chang, 2009).

A meta-analysis demonstrated a moderate association between student disruptive behaviors and teacher burnout, with the strongest relations between emotional exhaustion and student misbehaviors ($r = .44$), in comparison to the other dimensions of teacher burnout (Aloe et al., 2014). Moreover, high levels of emotional exhaustion are related to the increased likelihood of maladaptive classroom management, such as reactive and punitive strategies (Evers et al., 2004; Jennings & Greenberg, 2009; Reinke, Herman, & Stormont, 2013).

When applied to teachers, coercion theory helps explain this phenomenon (Patterson, 2002). Teachers and students begin to shape one another's maladaptive behaviors through inadvertent operant conditioning. Teachers can become locked in a negative reinforcement cycle through this process, known as the "punishment trap" (Kazdin, 2013, p. 66). After using exclusionary discipline tactics, the teacher can become negatively reinforced by the cessation of aversive student behaviors, increasing the likelihood that the teacher will use these strategies in the future. An exhausted teacher's threshold for problem behavior is likely to be lower, and the risk of using exclusionary strategies, which result in immediate relief when the student is removed from the classroom, may be higher

(Grayson & Alvarez, 2008; Kokkinos, Panayiotou, & Davazoglou, 2005).

The association between teacher exhaustion and student disruptive behaviors is likely to be bidirectional, such that challenging disruptive behaviors can contribute to teacher stress (Hastings & Bham, 2003; O'Brennan, Pas, & Bradshaw, 2017). Student behaviors are commonly cited as a main source of teacher stress (Griffith, Steptoe, & Cropley, 1999; Herman & Reinke, 2015), and interventions in classroom management have been associated with reductions in teacher stress, which eventually contributes to lower teacher burnout (Dicke, Elling, Schmeck, & Leutner, 2015). From a theoretical perspective, this bidirectional association is described by Jennings and Greenberg (2009, p. 492) as a "burnout cascade" in which increasing student misbehaviors and teacher frustration escalate in a cycle, leading to worsening student disruptive behaviors and increasingly reactive and punitive teacher responses. Although the relationship involves the interactions between teacher and student, this article focuses on the direction of teacher to student behaviors for a few reasons: (a) the teacher sets the tone for the classroom environment and is the model of prosocial behaviors including emotional regulation (Jennings & Greenberg, 2009), (b) it may be easier to address malleable teacher factors than it is to address behaviors of students, (c) further interventions to address student behaviors often start with and/or include modifying teacher's responses to behavior, and, finally, (d) teachers who experience burnout may be less effective in providing effective classroom management (Domitrovich et al., 2008; Wehby, Maggin, Partin, & Robertson, 2012).

Teacher Efficacy

Teacher efficacy may be a malleable protective factor against burnout for teachers, because emotional exhaustion is negatively associated with efficacy and efficacy lessens the probability that job strain will escalate to job burnout (Shoji et al., 2016; Shwarzer & Hallum, 2008). Teacher efficacy is conceptualized as a teacher's beliefs about his or her effectiveness in motivating and promoting student learning (Armor et al., 1976). Efficacy in teaching has been found to increase in the first years of teaching and decrease toward the end of a teacher's career (Klassen & Chiu, 2010). Teacher efficacy is a multidimensional construct with different types of beliefs, such as in providing instruction, managing classroom behaviors, differentiating academics, increasing student motivation, adapting to changes, as well as in working with other adults, like co-workers and parents (Tschannen-Moran & Woolfolk, 2001).

Teachers' overall sense of efficacy is positively associated with student outcomes like academic achievement (Caprara, Barbaranelli, Steca, & Malone, 2006; Klassen & Tze, 2014) and motivation (Ashton & Webb, 1986). Egyed and Short (2006) also found that the likelihood that teachers referred students for special education testing due to behavioral problems increased with low efficacy. Teacher efficacy has also been associated with disciplinary practices, because teachers' beliefs in their capabilities to manage classroom behaviors are an important aspect of overall classroom management (Aloe, Amo, & Shanahan, 2014). Effectively managing student behaviors is essential to classroom functioning, and classroom management efficacy has been found to be predictive of the development of burnout (Brouwers & Tomic, 2000). Following the study by Pas, Bradshaw, Hershfeldt, and Leaf (2010), this study focused on teaching efficacy specifically related to classroom management, because feeling confident and capable of managing student behaviors is most closely related to student outcomes of office referrals and suspensions. Although teacher emotional exhaustion may lead to a lower tolerance for disruptive behavior, teacher efficacy can lead to greater persistence at attempting strategies in the classroom (Tschannen-Moran & Woolfolk Hoy, 2001), which is critical for classroom management because behavioral skills often require consistency and persistence to have the intended effects.

Prior Research

An emerging body of research points to potential links among teacher burnout and efficacy and the use of ODRs and suspension, although some studies have yielded counterintuitive results and the directionality of associations between these factors has not been clearly delineated. Notably, a study by Pas et al. (2010) examined the relation between teacher emotional exhaustion and efficacy. The researchers hypothesized based on previous research (Skaalvik & Skaalvik, 2007) that low efficacy and high emotional exhaustion would be associated with greater use of exclusionary discipline practices of ISS, OSS, and ODRs (sending students to the principal's office). The findings of the study did not align with the initial hypotheses, such that for a student who had a teacher with high burnout the odds of receiving an OSS decreased and for a student with a teacher low in efficacy the odds of receiving a referral to a student support team also decreased. The authors proposed that teachers who were exhausted may be more likely to disengage and withdraw from teaching and even experience learned helplessness, which could be related to a reduction in the use of discipline practices. The authors also suggested that teachers who are low in

efficacy may avoid or be reluctant to seek support. Recently, another study examined similar student and teacher factors and found that school-wide suspension rates were associated with teacher burnout, but the direction of the causal pathway was unclear due to the cross-sectional design (O'Brennan et al., 2017). Given the inconsistency in findings and considering that emotional exhaustion and efficacy may contribute to student outcomes, further investigation of the relations between these variables is warranted.

The Current Study

The purpose of this study is to extend and improve upon the study by Pas et al. (2010) to examine the relation of the emotional exhaustion dimension of teacher burnout and teacher efficacy with ODRs and suspensions. We improve on the prior studies in several important ways. First, we controlled for direct observations of student disruptive behaviors by trained independent observers as opposed to relying on teacher-reported behaviors, which could be biased and linked to their self-reported emotional exhaustion and efficacy levels. Student behavior and support for deviant attitudes are two of the strongest and most reliable predictors of disciplinary sanctioning (Huang, 2018; Huang & Cornell, 2017) and indicate that teacher issuances of sanctions are not arbitrary. Failure to account for student behavior, independent of teacher reports, may confound the results. For example, student behavior that disrupts the typical classroom environment, such as calling out or distracting classmates, is likely to influence both teachers' emotional exhaustion and their use of exclusionary discipline referrals. Further, teachers' reports of student behaviors may be influenced by their levels of emotional exhaustion, and slight misbehaviors may be perceived as severe if a teacher is feeling burnout, so independent observation of student behavior reduces this source of potential bias. Second, we included student academic ability as a covariate of discipline practices given that low- versus high-performing students are more likely to receive disciplinary sanctions (Gregory, Skiba, & Noguera, 2010; Huang, 2018). Third, because school-level factors may play a role in the issuances of sanctions (Skiba et al., 2014), we used a school fixed effect (FE) model that accounted for any and all variability at the school level (Huang, 2016; Murnane & Willett, 2011). Although other studies may attempt to account for this using multilevel models (MLMs), MLMs do not necessarily account for unobserved factors at the group level as the FE model does (Huang, 2016). School-level factors (e.g., level of disorder) may influence teacher efficacy and burnout (Pas et al., 2010), which we account for using the FE approach

together with MLM. Fourth, we used the full, continuous Emotional Exhaustion subscale. A dichotomized exhaustion scale restricts the amount of information available and may not capture the relation across the continuum of scores. More recent studies by the scale developers (Maslach & Leiter, 2016) do not advocate for the use of a dichotomous classification of burnout/emotional exhaustion using scale cutpoints because these have not been validated and suggest a presence or absence of a condition (e.g., emotionally exhausted or not), which may not be appropriate. For the current study, we asked the following research question: Do teacher-reported emotional exhaustion and teacher efficacy predict the likelihood of a student receiving a particular disciplinary resolution (i.e., ODR, ISS, OSS) while controlling for teacher-, student-, and school-level factors?

METHODS

Data from the current study were collected as part of a cluster randomized controlled trial evaluating the effects of a classroom management program in elementary schools. Three cohorts of elementary school teachers, randomized to a treatment and waitlist control group, took part in a 9-month-long program. The results of the intervention (Reinke, Herman, & Dong, 2018), with a focus on improving academic achievement, have been documented elsewhere, and the outcomes used in the current study were not the focus of the intervention.[1]

Participants

Participants were 105 teachers and 1,681 K–3 students from nine elementary schools in the same district in St. Louis, Missouri, who were present for the entire academic year. Teachers (97% female) ranged in years of experience from 1 to 43 years ($M = 11.06$, $SD = 8.08$). Teachers predominantly identified as White (75.2%), 21.9% of teachers identified as Black, and 3% of teachers identified in another way.

We excluded 16 children who were indicated to be in the class less than 80% of the day. We did not include these students in the analysis because they spend time with other teachers during the school day, and this may impact the relation between discipline practices and teacher factors of emotional exhaustion and efficacy. An additional two students were excluded (<0.2%) from the sample because they were missing scores on one covariate (i.e., reading ability). The final analytic sample included 1,663 students. There were an average of 16 students per classroom ($SD = 3.30$) and 12 teachers per school ($SD = 1.22$). In the student sample, 60.0% qualified for a free or

reduced-price lunch (FRPL), a commonly used proxy for SES. Most students in the sample (75%) identified as Black, 22.2% identified as White, 2.2% identified as Latino, and 0.6% identified as Asian/Pacific Islander (see Table 1). The students in the study had demographics similar to the overall school district, with 70.8% Black students and 25.8% White students during the years of the study (Missouri Department of Elementary and Secondary Education, 2018).

Measures

The three outcome measures were derived from the Teacher Observation of Classroom Adaptation–Checklist (TOCA-C; Koth, Bradshaw, & Leaf, 2009) related to the use of ODRs and suspensions (in and out of school). Teachers completed individual ratings, using an online survey system, for each student in their classroom who participated in the study. Teachers reported whether the student was sent to the principal's office (which we considered to be an ODR) or received an ISS or OSS. Response options included *never*, *one time*, or *two or more times*. For all three of the items we dichotomized responses so the never response was coded as 0, indicating that the student did not receive the type of disciplinary sanction, and the one time and two or more times responses were collapsed into the same category and coded as 1, indicating that the student did receive the type of disciplinary sanction.

Maslach Burnout Inventory–Educators Survey

The present study used the sum score of the nine-item emotional exhaustion subscale from the Maslach Burnout Inventory (Maslach, Jackson, & Leiter, 1996). The measure asks teachers to report on their symptoms of burnout (i.e., feeling fatigued, experiencing too much stress) by responding to items on a 7-point Likert scale ranging from 0 (*never experiencing these symptoms*) to 6 (*experiencing these symptoms every day*). Based on the analytic sample, the internal consistency reliability estimate for the emotional exhaustion subscale was $\alpha = .91$.

Teacher Sense of Self-Efficacy Scale–Classroom Management Subscale

The classroom management subscale from the Teacher Sense of Self-Efficacy Scale (Tschannen-Moran & Woolfolk, 2001) was used to measure dimensions of teacher-reported efficacy. The Teacher Sense of Self-Efficacy Scale has demonstrated concurrent and discriminant validity in samples of teachers in the United States (Tschannen-Moran & Woolfolk, 2001). The subscale had eight items (e.g., "How much can you do to get children to follow classroom rules?"), on a 9-point Likert scale

Table 1. Descriptive Statistics

	%	N	M	SD
Students (n = 1,663)[a]				
Received an office discipline referral	18.4	306		
Received in-school suspension	12.1	201		
Received out-of-school suspension	6.3	104		
Student race	75.0	1,248		
Black				
White	22.2	370		
Latino	2.2	36		
Asian/Pacific Islander	0.5	9		
Received special education services	8.1	138		
Student gender	51.0	848		
Boy				
Eligible for FRPL	60.0	997		
Grade level				
Kindergarten	28.3	471		
First grade	27.2	453		
Grade grade	24.5	407		
Third grade	20.0	332		
Observed disruptions[b]			0.38	0.67
Reading ability (WJ-III) scaled score			97.55	12.99
Teachers (n = 105)				
Teacher race	76.7	79		
White				
Black	21.0	23		
Other	2.2	3		
Teacher gender				
Male	3.0	3		
Female	97.0	102		
Teacher education	44.8	47		
Bachelor's degree				
Master's degree or higher	55.2	58		
Years of teaching experience			11.51	8.38
Teacher-reported emotional exhaustion[c]			20.22	12.25
Teacher efficacy[d]			61.76	7.71

Note. [a]The student sample included all participants who were in the study for the entire academic year and in their regular classrooms for at least 80% of the time. Two student cases were removed due to missing reading ability data. [b]The frequency of the observed disruptions during an average of two 5-min observation periods. [c]The sum score was calculated for the emotional exhaustion scale with a range of possible scores from 0 to 54. [d]The sum score was calculated for the efficacy measure with a range from 0 to 72.

ranging from 1 (*nothing*), 3 (*very little*), 5 (*some influence*), 7 (*quite a bit*), to 9 (*a great deal*) and asked about teachers' beliefs about their abilities to manage classroom behaviors. Internal consistency for the subscale in this sample was α = .92.

Covariates. Student demographic information on race (Black, White, other), gender, age, grade, special education status, and eligibility for FRPL were provided by the school districts in the study. Teachers self-identified their race through the online survey and reported their years of teaching experience and their highest educational degree (i.e., bachelor's or master's degree or higher).

We used dummy coding for the student variables, with White as the reference group for student race, third grade as the reference group for student grade, no special education status as the reference group for special education status, not eligible for FRPL as the reference group for student SES, and girls as the reference group for student gender. The teacher-level covariates in the model were teacher race, years of teaching experience, and highest degree, because teaching experience and degree have been

previously associated with teacher burnout and efficacy (Klassen & Chiu, 2010; Kokkinos, 2007). We used dummy-coded teacher variables with White as the reference group for teacher race and a bachelor's degree as the reference group for the highest educational attainment variable.

Brief Classroom Interaction Observation–Revised

The Brief Classroom Interaction Observation–Revised is a direct observation measure for independent observers to code the frequency of student and teacher behaviors in a classroom on electronic devices with the Multi-Option Observation System for Experimental Studies software (Tapp, 2004). Research assistants who conducted the observations received ongoing training and reliability checks and demonstrated interrater reliability of 80% or above. Individual observations were completed twice for each student in the study, once in the fall and once in the spring. The observations lasted for 5 min and measured the frequency of the behaviors of a target student and interactions with the teacher, as well as the interactions between the teacher and the rest of the students in the classroom. For this study, we focused on target student behavioral

observations of disruptions. Student disruptions were defined as behaviors that interrupted the instruction and often resulted in a behavioral reprimand from the teacher (i.e., shouting out in class, talking to a nearby peer). We computed an average for the number of disruptions observed during the fall and spring observations. Interobserver agreement for overall disruptions in the study for the fall and spring was 85.9%, which is above the recommended acceptable guideline of 80% (Tapp, 2004).

If students were missing observations at one time point, we included their data from the other observation time point. Twelve students who did not have observations in the fall, so we used their observation data from the spring, and an additional 37 students who did not have observation data in the spring, for whom we used their fall observation data.[2]

Woodcock Johnson III Standardized Assessment
The Woodcock Johnson III (WJ-III) is a well-established cognitive ability and achievement test that has strong validity evidence from representative samples of the United States population and reliability evidence (alphas values of .80 or higher; Woodcock et al., 2001). The assessment was administered to each student individually by trained data collectors. For this study we focused on the broad reading achievement score because the large majority of elementary students' time is focused on language arts and daily reading activities (Lanahan, Princiotta, & Enyeart, & National Center for Education Statistics, 2006). The achievement scores from baseline data collection during October of the study year were used for the analyses.

Intervention
The data from this study came from a randomized controlled study of the Incredible Years Teacher Classroom Management Program (Webster-Stratton, Reid, & Stoolmiller, 2008). The Incredible Years Teacher Classroom Management Program included professional development in classroom management strategies as well as individual consultation from the intervention coach. In order to control for the effects of the intervention, the intervention status was dichotomized (1 = received the intervention and 0 = did not receive the intervention) and was included as a control variable in all models.

Procedures
The cluster randomized controlled trial took place over 3 years with three cohorts of students and teachers. Teachers and students were recruited from schools in St. Louis, Missouri. Study procedures and measures received ongoing approval from the Institutional Review Board at the University of Missouri. All of the measures in this study including teacher self-reported measures, teacher ratings of student behaviors, and independent observations. Student achievement tests were completed in the fall and in the spring. Our study focused on the student discipline outcomes and teacher emotional exhaustion and efficacy reports at the same time point in the spring of the academic year. We focused on the spring time period because the frequencies of students receiving office referrals and suspensions were greater at the end of the academic year than at the beginning of the academic year when baseline measures were completed.

Analytic Strategy
We first performed exploratory data analysis by investigating the relation of both teacher emotional exhaustion and efficacy and mean rates of disciplinary sanctioning related to ODRs, ISS, and OSS. For each teacher, we computed the average percentage of students receiving a particular sanction. At the teacher level, we then plotted the relation between emotional exhaustion and efficacy with the disciplinary sanctions to visualize the relation between the two, as illustrated in Figure 1.

Although the scatterplots in Figure 1 may suggest an association between emotional exhaustion and efficacy with sanctioning, these do not account for the various factors that may be associated with the issuance of a particular disciplinary sanction. To model the relations between teacher emotional exhaustion and efficacy and the dichotomous student outcomes, we conducted multilevel logistic regression analyses using HLM software (Raudenbush, Bryk, & Congdon, 2011). All models included school fixed effects (Huang, 2016) to account for variability at the school level and used MLM to account for the students nested within teachers.[3] Robust standard errors were also used.

We created three models for each dichotomous outcome derived from the three TOCA items: student received an ODR, ISS, and/or OSS this year (1) or not (0). We regressed each discipline outcome on teacher-reported emotional exhaustion and teacher efficacy while controlling for teacher and student covariates. We examined a quadratic functional form of the variable by including a squared error term but found that this was not consistent across predictors (i.e., burnout and efficacy) and across outcomes and the effect was generally small. Missing data were examined in the student and teacher files. All of the teacher cases had complete data. We excluded two student cases that did not have data for one of the covariates. We examined the teacher- and student-level variables for

Figure 1. Relation of Teacher Emotional Exhaustion/Efficacy With Disciplinary Sanction
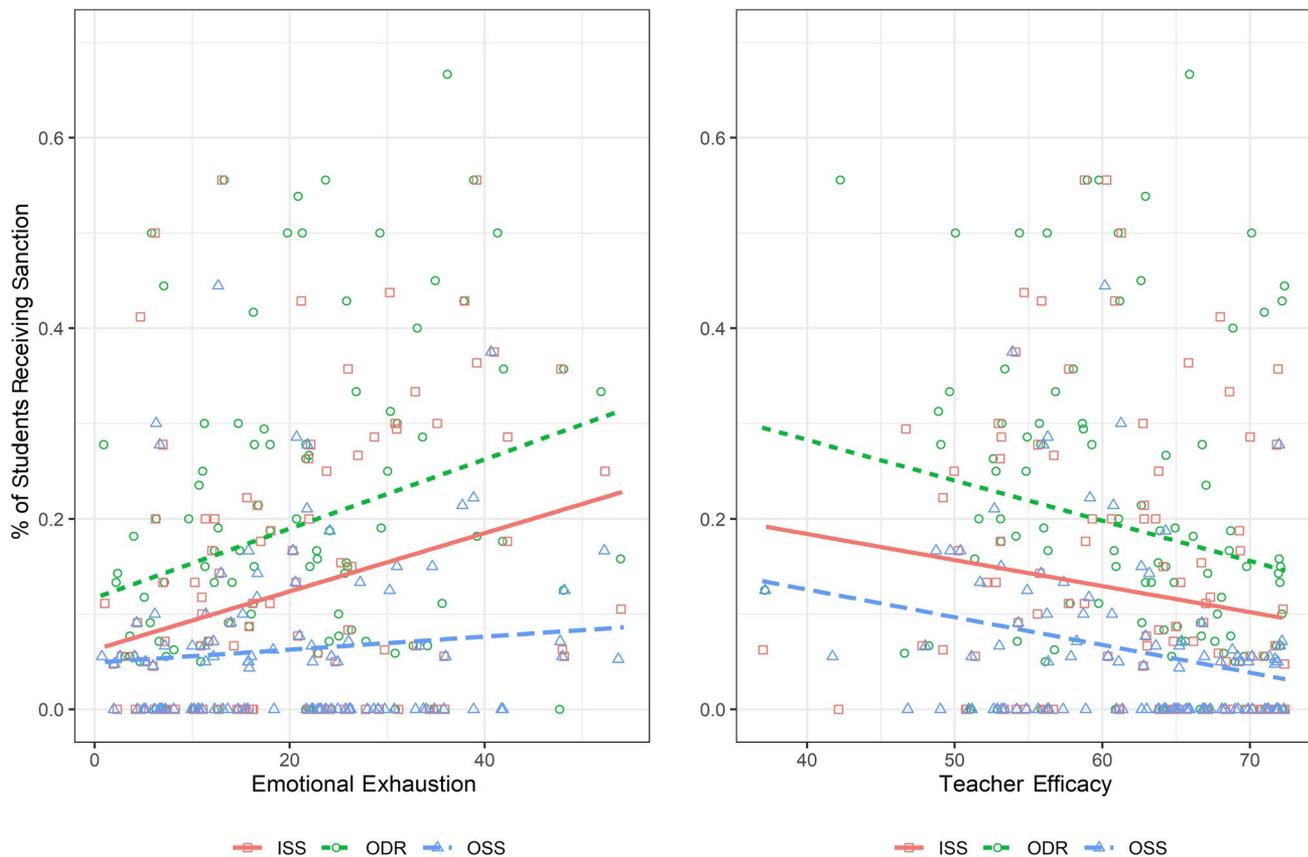
multivariate outliers using Mahalanobis distance and did not find any (Pituch & Stevens, 2016). Variance inflation factors were examined and all variance inflation factors were below 3, indicating that multicollinearity was not a concern (Lewis-Beck & Lewis-Beck, 2015).

The multilevel equations can be written as

$$\text{Level 1: Log}\left(\frac{Y_{ij}}{1 - Y_{ij}}\right)$$

$$= \beta_{0j} + \beta_{1j}FRPL + \beta_{2j}MALE + \beta_{3j}BLACK + \beta_{4j}SPED$$
$$+ \beta_{5j}ACH + \beta_{6j}K + \beta_{7j}G1 + \beta_{8j}G2 + \beta_{9j}DIS$$

$$\text{Level 2: } \beta_{0j} = (\alpha_{00} + \alpha_2 SCH2 + \ldots + \alpha_8 SCH8) + \gamma_{01}EXH$$
$$+ \gamma_{02}EFF + \gamma_{03}YEARS + \gamma_{04}MASTERS$$
$$+ \gamma_{05}BLACK + \gamma_{06}ORACE + \gamma_{07}TREAT + u_j$$

$$\beta_{1j} = \gamma_{10} \ldots \beta_{9j} = \gamma_{90}.$$

At level 1, Y_{ij} represented one of the three binary outcomes for student i with teacher j. The student-level covariates were eligibility for FRPL (FRPL), gender (MALE), race (BLACK), special education status (SPED), reading achievement (ACH), dummy-coded grade-level variables (i.e., K, G1, G2), and observational data on disruptive behaviors (DIS), because these characteristics have been found to be related to student discipline outcomes. To

account for variability at the school level, school fixed effects were included as represented by the alphas.[4]

Although there is no one generally agreed-upon measure of model fit for logistic regression models such as the R^2 in linear regression models, we used Tjur's (2009) R^2, also referred to as the coefficient of discrimination (D). The coefficient of discrimination is the mean difference of the predicted probabilities of the two groups (e.g., suspended vs. nonsuspended students) and has been favored by some methodologists (Allison, 2013) because it is intuitive and closely related to the R^2 definition in linear models.

RESULTS

For the disciplinary outcomes experienced at least once during the academ ic year, 18.4% of students received an ODR, 12.1% received an ISS, and 6.3% received an OSS. Visualizing the relations of the three sanctions with emotional exhaustion (see Figure 1) at the teacher level indicates a small, positive association of emotional exhaustion with receiving an ODR ($r = .28$, $p < .001$) and receiving an ISS ($r = .26$, $p < .01$). The relation of emotional exhaustion with OSS was negligible and not statistically significant ($r = .09$, $p = .33$). With regard to teacher efficacy, higher efficacy was associated with lower use of ODRs ($r = -.20$,

$p = .04$) and use of OSS ($r = -.25$, $p < .01$). The association between teacher efficacy and ISS was not statistically significant ($r = -.15$, $p = .14$). In general, the scatterplots suggest that teachers higher on the emotional exhaustion scale are more likely to use ODRs and ISS and teachers higher on teacher efficacy are less likely to use ODRs and OSS. Further, emotional exhaustion and teacher efficacy had a moderate negative correlation ($r = -.37$, $p < .01$).

Logistic Regression Models: Teacher Factors Predicting Student Discipline Outcomes

The intraclass correlations (ICCs) for each outcome at the teacher level (and controlling for school fixed effects) was .14 for office discipline referrals, .20 for in-school suspensions, and .15 for out-of-school suspensions. For hierarchical generalized linear models with binary outcomes and a logit link function, the equation for the ICC is $ICC = u_{0j} / (u_{oj} + \frac{\neq^2}{3})$. Three multilevel logistic regression models were run for the each disciplinary outcome. Results of the models are presented in Table 2.

Teacher Emotional Exhaustion

In the logistic regression models, higher emotional exhaustion was associated with an increased likelihood of an ODR (odds ratio [OR] = 1.02, $p = .02$) and an ISS (OR = 1.02, $p = .03$), controlling for all other variables. For OSS (OR = 1.00, $p = .97$), results were not statistically significant.

When emotional exhaustion is standardized, the OR for ISS = 1.35 ($p = .02$), indicating that for a one standard deviation increase in emotional exhaustion, the odds of a student receiving an ISS increase by a factor of 1.35, while controlling for all other variables in the model. To parallel the Pas et al. (2010) article that dichotomized the Emotional Exhaustion Scale, operationalized as taking those teachers in the top third on the Emotional Exhaustion Scale and categorizing them as experiencing burnout (i.e., scoring higher than 24), we find that burned-out teachers have an OR = 1.74 ($p = .03$), which can be considered a small to moderate effect size ($d = .31$) based on Cohen's (1992) guidelines.

Teacher Efficacy

In the logistic regression models, teacher efficacy was not a statistically significant predictor of students receiving ODRs ($p = .97$) or students receiving an ISS ($p = .66$). It was, however, a statistically significant predictor of students receiving OSS (OR = 0.95, $p < .01$), such that higher efficacy was associated with lower odds of students receiving an OSS. If teacher efficacy is standardized, a one standard deviation increase in efficacy is associated with a reduction in the use of OSS by a factor of 0.70 ($p < .01$).

Other Findings

Consistent with prior research on exclusionary discipline, student race and gender were associated with the likelihood of receiving an ODR, an ISS, and an OSS. Black students consistently had about three times greater odds of receiving all three types of discipline sanctions compared to White students. Boys also had about three times greater odds of receiving these types of discipline compared to

Table 2. Multilevel Logistic Regression Results Shown Using Odds Ratios (95% Confidence Intervals) Predicting Disciplinary Sanction ($n = 1,663$ Students and 105 Teachers)

	Office Discipline Referral		In-School Suspension		Out-of-School Suspension	
Student Variables						
FRPL eligibility	1.45*	(1.06, 1.98)	1.51*	(1.05, 2.16)	1.44[+]	(0.95, 2.20)
Boy	3.20***	(2.42, 4.25)	3.07***	(2.15, 4.38)	3.35***	(2.24, 5.02)
Black[a]	2.71***	(1.74, 4.21)	2.91***	(1.65, 5.14)	2.84**	(1.45, 5.54)
Eligibility for special ed	0.90	(0.57, 1.43)	1.10	(0.65, 1.86)	0.84	(0.47, 1.51)
WJ-III Reading	0.98**	(0.97, 0.99)	0.97***	(0.96, 0.99)	0.97***	(0.96, 0.99)
Grade level[b]						
Kindergarten	0.31***	(0.18, 0.53)	0.39*	(0.18, 0.86)	0.38**	(0.19, 0.76)
First	0.68[+]	(0.42, 1.10)	0.93	(0.54, 1.62)	0.97	(0.50, 1.89)
Second	0.68	(0.43, 1.09)	0.55[+]	(0.30, 1.00)	0.73	(0.41, 1.32)
Disruptive behaviors	1.74***	(1.47, 2.06)	1.89***	(1.51, 2.38)	1.52***	(1.23, 1.88)
Teacher Variables						
Emotional exhaustion	1.02*	(1.00, 1.04)	1.02*	(1.00, 1.04)	1.00	(0.98, 1.02)
Teacher efficacy	1.00	(0.97, 1.03)	0.99	(0.96, 1.03)	0.95**	(0.93, 0.98)
Tjur's R^2	.23		.26		.15	

Note. Robust standard errors were used. School fixed effects and intervention status were also included in all models (not shown). The models also controlled for teachers' educational attainment, years of teaching experience, and teacher race. [a]White/other were combined because in the sample no individual in the other race/ethnicity category received an ISS or OSS. [b]Grade 3 is the reference group.
[+]$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

girls. In addition, students with higher levels of reading ability had a lower likelihood of being disciplined.

For all models, a strong and consistent measure was the observed number of disruptive behaviors exhibited by the student. Of the students, 60% did not display any disruptive behaviors during the observation windows. Based on model results, for each disruptive behavior, the odds of receiving a particular sanction increased by a factor of 1.52 to 1.89, while controlling for all other variables. As a specification check, we reran the logistic regression models excluding the disruptive behavior variable and the coefficients for teacher emotional exhaustion increased (and became statistically significant for ODRs), indicating the importance of including the behavior variables in models predicting disciplinary sanctions.

DISCUSSION

Our findings generally align with our hypotheses that teacher emotional exhaustion and efficacy may have an association with exclusionary disciplinary practices; however, we did not find this association to be consistent across all of the forms of discipline. We found that teacher emotional exhaustion was associated with increased odds of students receiving an ODR and an ISS consistent with the hypothesis that a teacher who is emotionally exhausted may have a lower threshold for problem behaviors (Kokkonis, Panayiotou, & Davazoglou, 2005). Teachers may also find that removing disruptive students from the classroom environment is the most reinforcing solution because it provides immediate, albeit temporary, relief of problem behaviors (Maag, 2001); however, we did not find an association between teacher emotional exhaustion and OSS. The difference in findings in the relations of ODR and ISS in comparison to OSS could be related to the severity of these forms of discipline, with OSS being the most exclusionary. Administrators may buffer the relationship between the teacher factors and student discipline outcomes, because they make the decisions on the type of discipline enforced. Although teachers contribute to the discipline outcome by managing and reporting the behaviors, a principal or administrator may be less likely to use the harshest form of discipline (OSS) if he or she knows that a teacher is exhausted emotionally.

In contrast, we found that teacher efficacy was only associated with lower odds of receiving an OSS and not ODR or ISS. This finding aligns with previous research (Aloe et al., 2014) and theory indicating that efficacy related to classroom management is associated with a reliance on effective behavior management practices rather than disciplinary measures that remove the student from the classroom environment. This suggests that if a teacher feels capable of handling problem behavior, he or she will have the confidence to prevent problem behaviors from escalating and to manage the behaviors if they do increase without resorting to exclusionary practices. However, in our study, there was not an association of teacher efficacy with ODR and ISS, and this may be due to the difference between referrals and suspensions and administrative influence. ODRs may or may not result in consequences that remove the student from the classroom, whereas suspensions remove students from the classroom setting, which can be a form of negative reinforcement for the teacher. It may also be that if an administrator knows that a teacher is skilled and has confidence in classroom management and yet is still struggling with a student's behavior, the administrator may be more likely to enforce a more severe form of discipline. Investigation of the influence of administrators and negotiating discipline outcomes in relation to teacher emotional factors is an important area of further research.

This study was designed to enhance previous research evaluating the relation between teacher factors of emotional exhaustion and efficacy and the use of discipline practices of ODRs and suspensions (Pas et al., 2010). Our results differed from the previous findings in that Pas et al. (2010) did not find a relation between ISS and teacher emotional exhaustion. Further, Pas et al. (2010) found that higher emotional exhaustion was associated with lower odds of OSS. We did not find a relation between teacher emotional exhaustion and OSS but found that greater teacher efficacy was associated with lower odds of receiving an OSS.

There are various possible reasons for our differing results from Pas et al.'s (2010) article, and the differences could be a reflection of complex relations between teacher factors and student outcomes. Although teacher burnout may lead to increased use of exclusionary discipline practices, a teacher who is feeling exhausted may also be less likely to engage in any attempts to manage the behavior, which could even result in fewer discipline referrals (Pas et al., 2010). Further examination of the school-level and administrative factors that may buffer the associations between teacher factors and student discipline outcomes is recommended. For example, teachers' perceptions of administrative support and responsiveness may influence their decisions on whether or not to refer a student for a behavioral infraction and provide a recommendation on the form of discipline. Another explanation for the difference in findings could also be differences in our sample or our addition of covariates to control for observed student disruptions, student achievement, grade, special education status, and school-level variation. Importantly, despite the potential limitation of the brief 5-min observation as a

covariate for our study, observed student behavior was consistently a meaningful predictor of discipline outcomes, supporting the importance of accounting for student behaviors in the model. Given the differences in findings as well as the importance of understanding discipline practices that negatively impact students, further research is needed.

Implications for School Psychologists

Previous research suggests that the use of effective classroom management can prevent exclusionary discipline practices and reduce the inequalities caused by the inconsistent use of these practices (Fenning & Rose, 2007; Skiba & Peterson, 2000). Teachers who are equipped with strong classroom management skills can more effectively intervene with unwanted behaviors as well as proactively prevent the behaviors from occurring. If, as our results suggest, teacher well-being is associated with discipline practices, it is also likely that these teacher factors could be related to the quality and fidelity of teacher use of effective classroom management. Beyond providing teachers with behavioral strategies, it important for school psychologists and practitioners to consider the effect of teacher emotional exhaustion, burnout, and efficacy on effective implementation of evidence-based behavioral practices in the classroom (Domitrovich et al., 2008). Adopting new classroom practices requires teachers to invest time and effort because behavioral strategies require consistency and persistence to have the desired positive effect. Teachers who are experiencing emotional exhaustion and low efficacy may not be able to make effective changes in the classroom and may resort to ineffective and harmful practices like exclusionary discipline. Existing classroom management coaching models may be effective because they tap into building teacher efficacy and providing individualized support through one-on-one coaching, which is related to reductions in emotional exhaustion. Classroom management coaching models provide individual support for a teacher to implement behavioral strategies through a collaborative partnership (Reinke, Lewis-Palmer, & Merrell, 2008). This type of individual support has been found to increase the likelihood of implementation of effective classroom management (Reinke, Stormont, Herman, & Newcomer, 2014) and is also well suited to provide emotional support, which can be protective against teacher burnout.

In addition to individualized coaching, school-level changes can have a positive impact on student behaviors and the use of effective discipline practices as well as teacher well-being. A preventive framework for structuring school and classroom behavior management, such as Positive Behavioral Interventions and Supports, improves student achievement scores as well as teacher perceptions

of organizational health (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Carr et al., 2002).

Finally, our study identified disparities in the use of ODR, ISS, and OSS for youth based on race that are similar to the findings from the U.S. Department of Education Office for Civil Rights (2016). We found that Black students had a greater likelihood of receiving exclusionary discipline, while controlling for student factors of SES, gender, special education status, academic achievement, and observed disruptive behaviors. The continued existence of racial disparities in the application of exclusionary discipline represents a key contribution to the opportunity gap for students of color in U.S. public schools (Gregory et al., 2010). These disciplinary practices are critical barriers to educational opportunity because they serve to separate students with existing risk factors from the classroom, the primary context where learning occurs. Classroom time lost means less access to the knowledge and skills that are necessary for postsecondary success and less capacity to counteract the longstanding effects of structural racism (Bailey et al., 2017). As noted by Carter et al. (2017), it is critical to explicitly name and examine racial disparities in discipline and promote in-depth engagement in data-informed problem-solving processes that achieve meaningful gains for students affected by interpersonal and structural bias.

Limitations

Several limitations of this study warrant additional consideration in interpreting our findings. The first limitation in our study is that the sample came from only one school district, so further replication of the study findings in other settings would be needed in order to increase the generalizability of the results. The second limitation is, as in the article by Pas et al. (2010), the outcome variable was from teacher report, but the use of the referrals and suspensions was not independently verified through school or district report. Further, the response options of the TOCA-C were limited and did not provide actual counts of the referrals or suspensions. Students may also have received suspensions for behaviors that occurred outside of the classroom and were unrelated to teacher emotional factors. Related, we included independent observations of student behaviors in order to account for student disruptions aside from teacher report; however, these observations were infrequent and brief. Despite these limitations to this observational measure, we found that it was predictive of student discipline outcomes, so that if disruptive behaviors were observed during the brief observation, this was associated with a greater risk of discipline outcomes. The third limitation in the study is the direction of the relation between

teacher factors and student outcomes. The cross-sectional design of the study did not allow for us to examine the direction of the associations between teacher factors and student behaviors. The interactions between teachers and students are bidirectional, so it is possible, as supported by previous research that more student disruptions are associated with teachers experiencing lower efficacy and higher emotional exhaustion (O'Brennan et al., 2017). The reverse relation in our model is also possible, with students who receive exclusionary discipline contributing to teacher emotional factors. Despite the inability to draw causal conclusions or examine the directionality of the relation from this study, to prevent negative student outcomes it is important to consider the ways in which changeable teacher factors can contribute to harmful practices. A final limitation is that we did not explore the extent to which teacher burnout and efficacy may be related to disproportionate discipline practices. It is possible that when teachers are emotionally exhausted and feel less efficacious, they may be more likely to act based on negative stereotypes of their students (Moskowitz, 2010). Though we were unable to examine this question in the present study, we suggest this as an area for future research.

CONCLUSIONS

The results from this study suggest a relation between teacher emotional exhaustion and efficacy and discipline practices. We consider the results to be indicative of the need for further research into this question, given that the relations were not demonstrated consistently with all forms of discipline (e.g., teacher emotional exhaustion was associated with ODRS and ISS but not OSS). The results are consistent with our hypotheses about teacher factors and student discipline and prior research and theory. The results from this study also demonstrate similar disproportionate rates of discipline based on students' race and ethnicity. Interventions are needed to address these disparities, and preventing the use of these practices is likely to be especially beneficial to students who are at risk for receiving these forms of discipline. Overall our results support that in order for learning environments to be positive for students, they should be positive for teachers as well (Jennings & Greenberg, 2009; Schonert-Reichl, 2017).

NOTES

1. We control for intervention effects in all of the models used in the current study. For the current study, there were no statistically significant intervention effects for any of the outcomes (all $ps > .10$). We also ran the models for intervention and control samples; these results are included in the Appendix. However, based on half the sample, the study was relatively underpowered (power < .80) to detect effects.
2. As a robustness check, we checked the analysis by also removing the 49 students who had missing data at one time point and the results were similar.
3. As a specification check, we conducted the analysis in R (R Core Team, 2016) and results were consistent.
4. An option was to use a three-level model, but fixed effects models have the advantage of accounting for all variability coming from observed and unobserved variables (Huang, 2106; Murnane & Willett, 2011). Treatment (or intervention status) was also included in the model but was not of interest for the current article.

DISCLOSURE

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APPENDIX

Table A1. Logistic Regression Results Shown Using Odds Ratios (Confidence Intervals) Predicting Disciplinary Sanction for Teachers and Students in the Control Group ($n = 840$ Students and 53 Teachers)

	Office Discipline Referral	In-School Suspension	Out-of-School Suspension
Student Variables			
FRPL eligibility	1.23 (0.79, 1.92)	1.32 (0.81, 2.15)	1.48 (0.78, 2.81)
Boy	2.98*** (1.99, 4.48)	2.09** (1.40, 3.13)	3.36*** (1.95, 5.79)
Black[a]	2.51** (1.39, 4.54)	2.90*** (1.66, 5.08)	2.58* (1.02, 6.55)
Eligibility for special education	1.05 (0.54, 2.04)	1.34 (0.55, 3.27)	0.69 (0.23, 2.04)
WJ-III Reading	0.98* (0.97, 1.00)	0.98* (0.96, 1.00)	0.97* (0.95, 1.00)
Grade level[b]			
Kindergarten	0.29* (0.09, 1.00)	0.29* (0.10, 0.89)	0.16** (0.04, 0.61)
First	0.44 (0.16, 1.20)	1.20 (0.44, 3.32)	0.82 (0.35, 1.93)
Second	0.53 (0.19, 1.44)	0.43+ (0.17, 1.11)	0.67 (0.31, 1.44)
Disruptive behaviors	1.89*** (1.47, 2.45)	2.03*** (1.46, 2.82)	1.17 (0.82, 1.65)
Teacher variables			
Emotional exhaustion	1.02 (0.99, 1.05)	1.05** (1.02, 1.07)	0.99 (0.97, 1.02)
Teacher efficacy	0.98 (0.93, 1.03)	0.98 (0.94, 1.02)	0.97+ (0.93, 1.01)
Educational attainment[c]			
Master's	0.96 (0.38, 2.44)	0.74 (0.34, 1.63)	1.05 (0.46, 2.41)
Years of teaching	0.98 (0.93, 1.04)	1.00 (0.96, 1.05)	1.00 (0.95, 1.06)
Teacher race/ethnicity[d]			
Black	0.93 (0.39, 2.21)	0.37** (0.19, 0.73)	0.67 (0.37, 1.22)
Other[e]	—	—	—

Note. All models include school fixed effects and cluster robust standard errors. [a]White/other is the reference group. Data were combined because in the sample no individual in the other race/ethnicity category received an ISS or OSS. [b]Grade 3 is the reference group. [c]Bachelor's degree is the reference group. [d]White is the reference group. [e]Only two teachers identified as another identity in this sample, so the models did not include this as a dummy variable.
+$p < .10.$ *$p < .05.$ **$p < .01.$ ***$p < .001.$

Table A2. Logistic Regression Results Shown Using Odds Ratios (Confidence Intervals) Predicting Disciplinary Sanction With Teachers and Students in the Intervention ($n = 823$ Students and 52 Teachers)

	Office Discipline Referral	In-School Suspension	Out-of-School Suspension
Student variables			
FRPL eligibility	1.98** (1.27, 3.09)	2.03* (1.15, 3.61)	1.59 (0.83, 3.06)
Boy	3.82*** (2.38, 6.13)	4.84*** (2.62, 8.96)	3.62*** (1.96, 6.68)
Black[a]	3.17** (1.39, 7.26)	3.30* (1.28, 8.50)	3.13* (1.15, 8.58)
Eligibility for special education	0.74 (0.40, 1.38)	0.87 (0.49, 1.57)	0.83 (0.42, 1.63)
WJ-III Reading	0.98* (0.96, 1.00)	0.97*** (0.95, 0.98)	0.97** (0.95, 0.98)
Grade level[b]			
Kindergarten	0.30** (0.12, 0.71)	0.47 (0.16, 1.43)	0.82 (0.27, 2.53)
First	1.54 (0.80, 2.98)	1.60 (0.79, 3.25)	2.34 (0.82, 6.66)
Second	0.69 (0.37, 1.28)	0.58 (0.29, 1.17)	1.11 (0.51, 2.44)
Disruptive behaviors	1.63*** (1.27, 2.10)	1.81** (1.31, 2.50)	2.03*** (1.51, 2.72)
Teacher variables			
Emotional exhaustion	1.03* (1.01, 1.06)	1.01 (0.98, 1.04)	0.99 (0.96, 1.03)
Teacher efficacy	1.04* (1.00, 1.07)	0.99 (0.95, 1.03)	0.94** (0.91, 0.98)
Educational attainment[c]			
Master's	0.66 (0.39, 1.12)	0.59+ (0.33, 1.07)	0.75+ (0.36, 1.57)
Years of teaching	0.93*** (0.89, 0.96)	0.89*** (0.86, 0.93)	0.93** (0.90, 0.97)
Teacher race/ethnicity[d]			
Black	3.06** (1.52, 6.15)	5.22*** (2.44, 11.20)	3.82** (1.89, 7.71)
Other	0.43 (0.09, 2.02)	0.87 (0.14, 5.38)	0.66 (0.11, 3.85)

Note. All models include school fixed effects and cluster robust standard errors. [a]White/other is the reference group. Data were combined because in the sample, no individual in the other race/ethnicity category received an ISS or OSS. [b]Grade 3 is the reference group. [c]Bachelor's degree is the reference group. [d]White is the reference group. +$p < .10.$ *$p < .05.$ **$p < .01.$ ***$p < .001.$

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