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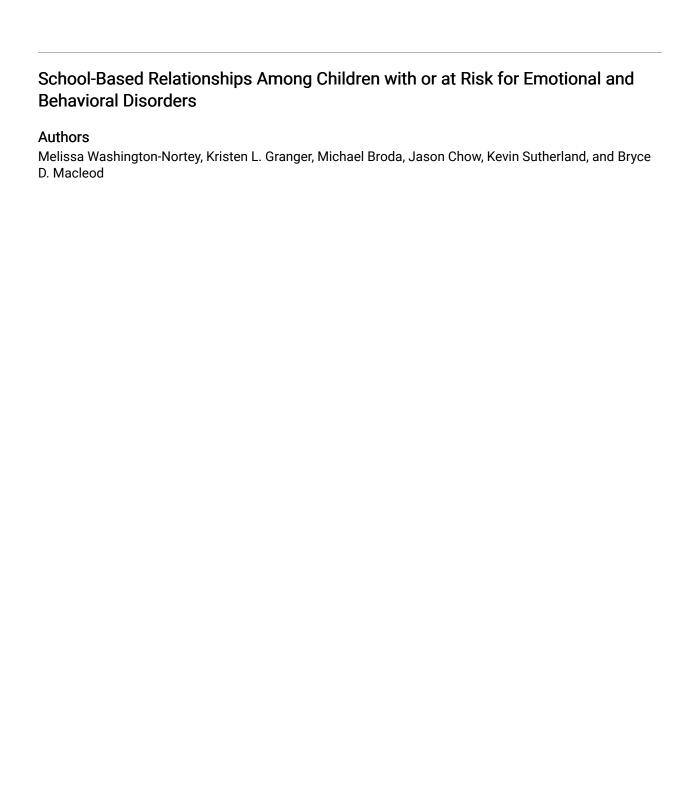
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School-Based Relationships Among Children with or at Risk for Emotional and Behavioral Disorders

Melissa Washington-Nortey, Kristen L. Granger, Michael Broda, Jason Chow, Kevin Sutherland, and Bryce D. MacLeod

Abstract

We investigated the influence of a teacher's perceived emotional state (e.g., feeling emotionally exhausted; feeling accomplished) on the association between parent-teacher relationships and teacher-child conflict among young children. We used pretest data from a pilot study examining the efficacy of a socio-emotional learning intervention for children with or at risk for emotional or behavioral disorders (EBD). Twenty-six teachers and 45 children (Mean age= 7.46 years; SD = 1.21) participated in the intervention. Teachers rated their relationships with children and their parents using the Parent-Teacher Relationship Scale and Student-Teacher Relationship Scale. Multilevel models showed that teachers with a higher sense of personal accomplishment evidenced a negative association between parent-teacher relationships and teacher-child conflict. However, for teachers who felt emotionally exhausted or those who had a lower sense of personal achievement, the association between parent-teacher relationships and teacher-child conflict either remained unchanged or was positive. We conclude by discussing findings in relation to the importance of increasing teacher efficacy, reducing teacher burnout, and strengthening parent-teacher relationships in schools to improve teacher-child relationships and children's psychosocial outcomes.

Keywords: parent-teacher relationships, teacher-child conflict, teacher-child relationships, emotional behavioral disorders.

A growing body of literature suggests that teacher-child relationships impact child academic and psychosocial outcomes. Whereas positive teacher-child relationships have been associated with small, significant findings in academic and social domains, negative teacher-child relationships appear to have more robust effects on psychosocial outcomes such as school adjustment, engagement, depression, and aggression (McGrath & Van Bergen, 2015; Roorda et al., 2011). Studies that have specifically examined age-related differences in impact also show that the effects of negative teacher-child relationships on psychosocial outcomes impact younger children more severely (Roorda et al., 2011). Unfortunately, conflictual relationships with teachers are more likely to occur for children who engage in disruptive behaviors (Sutherland et al., 2018; 2020), with potentially more devastating effects on psychosocial outcomes.

Strong parent-teacher partnerships can help foster better teacher-child relationships (Cheung, 2019; Jeon et al., 2020). However, the evidence shows that positive parent-teacher relationships are less common among parents of children who consistently engage in disruptive behaviors (Gwernan-Jones et al., 2015; Rautamies et al., 2019). Several factors, including a teacher's emotional state, can influence their ability to develop relationships with others and their perceptions of these relationships (Keltner & Haidt, 1999). However, few studies have examined these relations among indicated child samples, such as children with or at risk for emotional or behavioral disorders (EBD). Considering the high risk of poor academic and psychosocial outcomes faced by children with EBD, who make up 4-12% of the children in the United States (Ringeisen et al., 2017), an investigation into factors that could alter this negative trajectory is crucial. Consequently, we sought to address this gap in the literature by examining associations between parent-teacher relationships and teacher-child conflict among young children with or at risk for EBD. We also examined the moderating effect of teachers' emotional states on the link between parent-teacher relationships and teacher-child relationships.

Teacher-Child Relationships and Child Outcomes

Positive teacher-child relationships have been associated with positive adjustment outcomes (Demirtaş-Zorbaz & Ergene, 2019), academic achievement (Olsen & Huang, 2021), connectedness to and interest in schooling, and low levels of aggression among children (McGrath & Van Bergen, 2015). On the other hand, conflictual teacher-child relationships are associated with negative behaviors, such as high levels of aggression (Meehan et al., 2003), poor peer relationships (Hughes & Chen, 2011), poor school adjustment, poor academic outcomes (McGrath & Van Bergen, 2019), and even children's levels of stress. For instance, Ahnert and colleagues (2012) investigated the association between teacher-child relationships and elementary children's stress levels as indicated by their diurnal cortisol profiles. The results showed that, compared with children who had more positive relationships with their teachers, children with more conflictual teacher relationships had more significant difficulties with down-regulating their daily stress levels at the end of a school week.

Additionally, negative teacher-child relationships may have significant long-lasting effects on child outcomes by increasing the risk of engaging in risky problem behaviors, decreasing self-esteem, and increasing the possibility of poor academic outcomes (Rudasill et al., 2010). Unfortunately, children with or at risk of EBD are more likely to experience conflictual relationships with their teachers (Sutherland et al., 2018). These children are more likely to be impulsive, and their interactions with teachers are more frequently punitive and less supportive or nurturing (Maag, 2001). Other evidence suggests that when these children perceive their relationships with their teachers as conflictual, they become even more likely to engage in aggressive behaviors and less likely to engage in prosocial behaviors (Mercer & DeRosier, 2010). Yet, findings from review studies indicate that children at risk of negative relationships with their teachers benefit more significantly when these relationships shift toward the positive (McGrath & Van Bergen,

2015). Developing strong positive parent-teacher relationships is an essential strategy that can help prevent conflictual teacher-child relationships or strained relationships from becoming worse.

Parent-Teacher Relationships and Teacher-Child Conflict

Parent-teacher relationships represent partnerships between parents and teachers that can help streamline messages from the home and school contexts and equip teachers with additional resources and supports to nurture more positive relationships with children in their classrooms (Badri et al., 2014; Kraft & Dougherty, 2013). Although fewer studies have examined this in young children, findings from adolescent samples show that when teachers have strong collaborative relationships with parents at the beginning of the year, they are more likely to have positive relationships with the children of these parents later (Cheung, 2019).

Conversely, when teachers have negative perceptions of parents, they are more likely to experience conflictual relationships with the children of these parents. For example, Thijs and colleagues (2012) conducted a study with Dutch teachers and children. They found that native-Dutch teachers experienced higher levels of conflict with children from other racial/ethnic groups. Intrigued by these findings, the team investigated further through a follow-up study sampling 36 native-Dutch teachers and 230 third through sixth-grade children from ethnically diverse backgrounds (i.e., native-Dutch, Turkish-Dutch, and Moroccan-Dutch ethnic groups; Thijs & Eilbracht, 2012). Results indicated that teachers' perceptions of their relationships with parents explained the earlier findings. Specifically, teachers rated their relationships with Moroccan-Dutch parents as less positive than their relationships with Native-Dutch parents. In addition, this difference in the perceived quality of parent-teacher relationships was associated with higher rates of teacher-child conflict between Native-Dutch teachers and Moroccan-Dutch children. Analyses also revealed that conflictual relationships were intensified among children who exhibited inattentive and hyperactive

behaviors. This suggests that teachers may find it more difficult to establish positive relationships with the parents of children who exhibit challenging behaviors in the classroom. Findings from studies showing that positive relationships rarely exist between teachers and parents of children who exhibit challenging classroom behaviors attest to this (Gwernan-Jones et al., 2015; Rautamies et al., 2019).

It is also important to note that the teacher's perceptions of the parent-teacher relationship, as opposed to the parent's perception of this relationship, for instance, may be a more relevant perspective to consider when examining the associated impact on teacher-child relationships. In a recent study that sampled younger children (Average age= 2.4 years), Jeon and colleagues (2020) found that teachers with positive perceptions of parents had positive teacher-child relationships, which increased socio-emotional competence in children. However, there were no significant associations between parent-teacher relationships and teacher-child relationships when parent-teacher relationships were assessed from the parent's perspective.

Several factors may contribute to strained parent-teacher and teacher-child relationships. For instance, some teachers may disagree with parenting philosophies and approaches and may blame parents for children's behaviors (Gwernan-Jones et al., 2015; Rautamies et al., 2019; Thijs & Eilbracht, 2012). Alternatively, other factors such as teachers' emotional states may affect their relationships with parents and children alike.

Teacher's Emotional States, Parent-Teacher Relationships, and Teacher-Child Conflict

Research on teachers' work-related emotional states is extensive. It includes literature on teacher burnout as indexed by the extent to which, as a result of their job demands, teachers feel emotionally exhausted, accomplished in their roles as teachers, or removed from their responsibilities at school (Granger et al., 2021;

Maslach & Leiter, 1999; Rumschlag, 2017). These components of burnout are thought to occur sequentially, with the first stage of burnout being emotional exhaustion. Numerous studies show that teachers who feel emotionally exhausted or less accomplished have higher rates of depression (Capone & Petrillo, 2018), lower rates of general well-being (Shin et al., 2013), and are more likely to experience conflictual relationships with children in their classrooms (Yoon, 2002). These connections may be magnified in classrooms with high rates of challenging child behaviors. Mantzicopoulos (2005) found that having a larger proportion of children who exhibit problem behaviors in a classroom, which increases teacher stress and symptoms of burnout, was associated with higher levels of conflicts with children. This has implications for teachers working with children with or at risk for EBD. For example, an emotionally exhausted teacher may have difficulty establishing a high-quality relationship with the parent of a child whose disruptive behaviors make classroom management more difficult.

Moreover, where teachers blame parents for the problem behaviors exhibited by children, attempts to build high-quality relationships with parents may not yield success. Alternatively, a teacher with a stronger sense of accomplishment may be more inclined to foster a good relationship with the parent of a child who exhibits problem behaviors in their classroom as a means of connecting with and/or helping the child.

The Current Study

Although studies have examined parent-teacher relationships among parents of children who engage in disruptive behaviors separately from the impact of teachers' emotional state on teacher-child relationships, their combined impact on teacher-child relationships has not been examined. Our review of the literature demonstrates that in contrast to the effects of positive teacher-child relationships, negative teacher-child relationships impact children's psychosocial outcomes more significantly and that the effects are even more

detrimental to young children. Also, children with EBD are at greater risk of negative teacher-child relationships. Yet, frequently strained parent-teacher relationships between teachers and the parents of children with EBD deprive teachers of an important resource for developing more positive relationships with these children. The parent, child, and teacher benefits that can be derived from high-quality parent-teacher relationships with children at risk for EBD, are critical areas in need of investigation to inform school-based strategies to foster better psychosocial outcomes, especially among children at risk.

Therefore, in the current study, we sought to examine associations between parent-teacher relationships and teacher-child relationships among children with and at risk for EBD. We also examined the moderating influence of the teacher's emotional state on the teacher's perceptions of their relationship with the parent and their relationship with their child.

Research Questions

What are the associations between parent-teacher relationships, teacher-child relationships, and teacher-child conflict?

Does a teacher's emotional state moderate the association between parent-teacher relationships and teacher-child relationships?

Method

Participants

Teachers. Twenty-six female teachers (42.3% Black, 50.0% White, 7.7% other) participated in this study. Most teachers (42.3%) ranged between 26-35 years in age. Fifteen percent (15.2%) ranged between 18-25 years, 19.2% ranged between 36-55 years, and 3.8% of teachers were over 55 years old. The mean years of teaching experience was 6.2 years (range 0-27; SD = 7.3). Seventy-six percent of the teachers in our sample had between 0-10 years

of teaching experience. Educational attainment was split almost evenly between teachers with a bachelor's degree (53.8%) and teachers with a master's degree (46.2%). Additional demographic information is presented in Table 1.

Children. There were 45 children (91.1% Black, 2.2% White, 2.2% other) in our sample. Data on race/ethnicity were missing for two children. Thirty-seven children identified as male (82.2%), and eight were female (17.8%). The average child age was 7.46 years (SD = 1.21). The youngest child was 5.36 years, and the oldest child was 9.76 years.

Procedures and Sampling

For the present study, we used data from a pilot intervention study examining the efficacy of a socio-emotional learning intervention among elementary children at risk for EBD (see Sutherland et al., 2020). Teachers were recruited from three urban elementary schools in a mid-Atlantic state. Over 80% of the population was eligible for free or reduced lunch in each school, and children who identified as Black or African American made up over 90% of the student population. To be included in the intervention study, teachers needed to be responsible for a lower elementary class (i.e., kindergarten to third grade), have at least one child at risk for EBD enrolled in their class, and consent to participate in the study. After obtaining teacher consent, children in each class were screened to determine eligibility for the intervention study. If found eligible, parent consent was sought, and pretest data were collected approximately two months after the beginning of the school year to allow for teacher, parent, and child familiarization. Pretest measures used in this study included child demographic questionnaires. The respective university and school district Institutional Review Boards approved all study procedures.

 Table 1. Descriptive Statistics Table for Teacher and Child Data

			Frequency
Teachers			N (%)
	N		26
	Race/Ethnicity		
		Black/African American	11 (42.3%)
		White	13 (50.0%)
		Other	2 (7.7%)
		Missing	
	Gender	3	
		Male	
		Female	26 (100.0%%)
	Age range		,
		18-25	4 (15.5%)
		26-35	11 (42.3%)
		36-45	5 (19.2%)
		46-55	5 (19.2%)
		Over 55	1 (3.8%)
	Highest level of Education		(2,2,2,7)
	Eddedion	Bachelor's Degree	14 (53.8%)
		Master's Degree	12 (46.2%)
Children		Musici's Degree	12 (10.270)
Ciliaren	N		
	Race/Ethnicity		45
	nace/ Ethinerty	Black/African	41 (91.1%)
		American	11 (51.170)
		White	1 (2.2%)
		Other	1 (2.2.%)
		Missing	2 (4.4.%)
	Gender	J	(, , , ,
		Male	37 (82.2%)
		Female	8 (17.8%)
	Age at data collection	Mean (SD)	7.46 (1.21)
	STRS_ Conflict	· · · · · · · · · · · · · · · · · · ·	3.56 (.85)

Measures

Systematic Screening for Behavior Disorders (SSBD). We used the first two stages of the SSBD (Walker et al., 2014), which adopts a three-stage gating approach, to identify children with or at risk for EBD. First, teachers identified and ranked five children in their classrooms who exhibited the highest levels of externalizing behaviors and obtained consent from their parents. Next, teachers rated children's behaviors on four subscales: Critical Events Index, Aggressive Behavior Scale, Adaptive Behavior, and Maladaptive Behavior. A maximum of three children with the highest externalizing scores in each classroom participated in this study. The SSBD has been shown to possess adequate internal consistency (i.e., $\alpha = 0.82-.88$) (Walker et al., 2014).

Maslach Burnout Inventory (MBI). To index teachers' emotional states, we used two subscales of the MBI: *Emotional Exhaustion* and *Personal Accomplishment* (Maslach & Leiter, 1999). We excluded the third subscale—depersonalization—because its Cronbach's reliability index was inadequate (i.e., $\alpha = .54$). Teachers rated items on a 7-point scale ranging from "(0) never" to "(6) every day". The *Emotional Exhaustion* subscale includes statements related to feeling consistently tired, frustrated, and distressed about one's job. The *Personal Accomplishment* subscale contains statements related to feeling relaxed, excited, and confident in one's capacity to complete job-related tasks. The measure is widely used in education-based research, and Cronbach's reliability estimates at pretest were .88 for *Emotional Exhaustion* and .75 for *Personal Accomplishment*. Higher scores on both subscales are indicative of higher levels of *Emotional Exhaustion* and *Personal Accomplishment*.

Parent-Teacher Relationship Scale (PTRS). We used the PTRS (Vickers & Minke, 1995) to assess teachers' perceptions of their relationships with parents or caregivers. It is a 24-item questionnaire rated on a 5-point scale ranging from "(1) strongly disagree" to "(5) strongly agree" with two subscales: *Joining* and *Communication to Other. Joining* captured teachers' sense of affiliation, support,

cooperation, and mutual trust with a child's parent. *Communication to Other* captured teacher's perceptions of the degree to which they shared their emotions and information with a child's parent. Higher scores on both scales indicate higher perceptions of *Joining* and *Communication to Other*. At pretest, Cronbach's alpha reliability estimates were .88 and .79 for the *Joining* and *Communication to Other* subscales, respectively.

Student-Teacher Relationship Scale (STRS). We used the STRS-Short Form (Pianta, 2001) to measure teacher-child relationships. The STRS is a 15-item measure that assesses teachers' perceptions of their relationships with individual children in their classrooms. Items are rated on a 5-point scale ranging from "(1) definitely does not apply" to "(5) definitely applies" and are scored across two domains: Closeness and Conflict. Closeness scores reflect a teacher's perceived levels of affection, emotional connection, and the extent of positive openness in reciprocal communication. Conflict scores reflect a teacher's perceived level of disagreement or negative interactions with a specific child and its impact on their emotions and classroom management. Higher average scores on each subscale are indicative of greater levels of perceived Closeness or Conflict. We restricted our analysis to the Conflict subscale in this paper. Cronbach's alpha for the pretest Conflict scores was .83 for the sample.

Data Analytic Plan

Our analysis proceeded in two phases. First, we used Pearson product-moment correlations to assess associations between all measures used in this study. Subsequently, we used a multilevel modeling approach to examine the moderating effect of teachers' emotional state on the relationship between teacher-perceived relationships with parents and teacher-perceived conflict with children. Limitations in our sample size precluded us from examining these relationships across all subscales of the PTRS and STRS simultaneously. Therefore, we examined these relationships with a series of less complex moderation models that featured one PTRS

and one MBI subscale in each model. We used both subscales of the parent-teacher relationship measure. However, we restricted our outcome variable to the conflict subscale of the STRS because conflictual relationships are more common among our sample, and research shows that improving these conflictual relationships has a greater impact on indicated child samples (McGrath & Van Bergen, 2015). As such, we ran four sets of models. Following recommendations by Hox and colleagues (2010), models were estimated in a hierarchical fashion. First, a null/intercept only model was estimated. This yielded information about the baseline measure of fit and the intraclass correlation estimate. Together these estimates determine the appropriateness of using a multilevel modeling approach to analyze the data. Next, we included predictors and moderators to assess their impact on teacher perceptions of teacher-child conflict. The effect sizes of each of these models were assessed using the Multilevel R² coefficient recommended by Sniiders and Bosker (2012). We used Mplus version 8.4 for all analyses. Building models sequentially helps understand how relationships between variables and the outcome may change when in the presence of additional predictors. This is not possible when including only one final model. This approach is also more transparent and reproducible as it conveys the "final" model and the process by which the final model was derived.

Results

Preliminary Analysis

Results from the correlational analysis are shown in Table 2. It evidenced significant negative correlations between teacher perceived *Personal Accomplishment*, *Emotional Exhaustion*, and teacher-child *Conflict*. Similarly, teacher perceived *Personal Accomplishment* was negatively associated with teacher-child *Conflict* and teacher perceived *Joining* with parents was negatively correlated with teacher-child conflict. We identified significant positive correlations

between teacher perceived level of *Personal Accomplishment* and parent-teacher *Communication to Other*, and between parent-teacher *Joining* and *Communication to Other*. These findings suggest higher levels of *Personal Accomplishment* are related to more positive parent-teacher relationships and lower levels of teacher-child *Conflict*. However, the trend is reversed when teachers experience higher levels of stress indexed by emotional exhaustion.

Table 2. Descriptive Statistics and Correlation Statistics for Measures Used in the Main Analysis

	N	М	SD	MBI_ Emotional Exhaustion	MBI_ Personal Accomplishment	PTRS_ Communication to Other	PTRS_ Joining	STRS_ Conflict
MBI_ Emotional exhaustion	45	2.81	1.16					
MBI_ Personal	45	4.64	.72	44**				
Accomplishment								
PTRS_ Communication	45	4.10	.68	49**	.34*			
to Other	45	4.10	.68	49**	.34*			
PTRS_ Joining	45	3.75	.80	30*	.29	.59**		
STRS_ Conflict	45	3.56	.85	.12	35*	13	33*	

^{*}p<.05, **p<.0

Note. MBI stands for Maslach's Burnout Inventory, PTRS stands for Parent Teacher Relationship Scale, and STRS stands for Student Teacher Relationship Scale.

Null Model

First, we ran an unconditional model to assess the degree to which child scores across classrooms were correlated with each other. The intraclass correlation (ICC) estimate from this analysis was .34, suggesting that 34% of the variance in child scores occurred at the classroom level while 66% of the variance in child scores were at the child level. The ICC estimate was well above the recommended threshold (i.e., 0.05) for using a multilevel modeling approach (Raudenbush & Bryk, 2002). Therefore, we proceeded with our plan to use multilevel modeling approaches for our analyses.

Multilevel Models

Model A examined the moderating effect of teachers' sense of Personal Accomplishment on the association between teacher perceived Joining with the parent of a specific child and their perceived Conflict with that child. First, we examined a main effects model, which revealed that both teachers' sense of Personal Accomplishment (B= -.24, p= .089) and perceived *Joining* with the parent (B= -.33, p= .035) were negatively associated with teacher-child Conflict. However, only teachers' sense of Personal Accomplishment was significantly associated with teacher-child Conflict, at the alpha = .05 threshold for Type II error. Results from the full model which included the interaction variable indicated that-teacher perceived *Joining* with a child's parent (B=1.65, p= .013) and their self-reported sense of Personal Accomplishment (B=1.19, p=.021) were both positively associated with perceptions of a conflictual relationship with the child. Teacher-perceived sense of Joining with a child's parent interacted with the teacher's sense of Personal Accomplishment to produce significant effects at low (B= 1.94, p=.011), average (B= 1.65, p=.013), and high (B= 1.35, p=.015) levels of teachers self-reported sense of *Personal Accomplishment*.

At low levels of teacher-rated sense of *Personal Accomplishment* the association between teacher-perceived *Joining* with a child's parent and their self-rated *Conflict* with the child in question was largely stable (i.e., higher levels of perceived *Joining* were not associated with either an increase or decrease in teacher-child *Conflict*). However, at average and high levels of *Personal Accomplishment* the association between teacher-perceived *Joining* with the parent and teacher-child *Conflict* was negative. This indicates that for teachers with average or high perceptions of *Personal Accomplishment*, perceptions of higher parent-teacher *Joining* were associated with lower perceptions of teacher-child *Conflict*. The Multilevel *R*² estimate for this model was .74, indicating that the model accounted for 74% of the variance in teacher-child *Conflict*. Figure 1 demonstrates this interaction, following plotting rules recommended by Preacher and colleagues (2006).

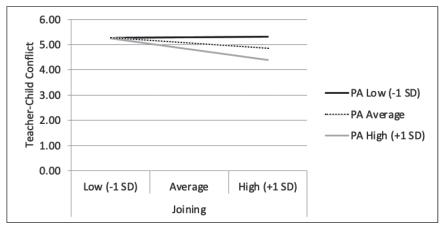


Figure 1. Moderating Effect of Personal Accomplishment on the Relationship between Teacher Perceived Parent-Teacher Joining and Teacher-Child Conflict

In Model B, we examined the association between teacher-perceived *Joining* with a child's parent, teacher-rated *Emotional Exhaustion*, and the *Conflict* level between the teacher and the child. In this model, no significant relationships were identified between any of the predictor variables (i.e., parent-teacher *Joining* (B = -.35, p = .268) and teacher's level of *Emotional Exhaustion* (B = -.07, p = .88), or the interaction variable (B = .02, p = .86), and the teacher-child *Conflict*, the outcome variable.

In Model C, we examined associations between teachers' perceptions of their level of *Communication* with a child's parents, their sense of *Personal Accomplishment*, and the amount of conflict experienced with the child. The main effects model indicated that teachers' sense of *Personal Accomplishment* (B= -.40, p<.008), but not teachers' perceptions of *Communication* with parents (B= -.00, p= .994), was significantly associated with teacher-child *Conflict*. In the full model, teacher-perceived level of *Communication* (B= 3.14, p<.001) and *Personal Accomplishment* (B= 2.30, p<.001) were both positively associated with teacher-rated *Conflict* with the child. The moderating effect of *Personal Accomplishment* on the relationship between teacher-perceived level of *Communication* and teacher-

child *Conflict* was also significant at low (B= 3.61, p<.001), average (B=3.14, p<.001), and high (B= 2.67, p<.001) levels of teacher-rated *Personal Accomplishment*.

As shown in Figure 2, the interaction effect showed that at low levels of *Personal Accomplishment*, a positive relationship between perceived level of Communication with the child's parents and Conflict with the child was evident. At average levels of Personal Accomplishment, the relationship between perceived level of Communication with a parent and teacher Conflict with the child was largely stable (i.e., higher levels of teacher perceived Communication with the parent were not associated with an increase or decrease in teacher-child Conflict). However, at high levels of *Personal Accomplishment*, there was a negative relationship between teacher perceived Communication with the parent and teacher-child Conflict. This suggests that higher levels of Personal Accomplishment helped reduce teacher-child conflicts associated with parent-teacher Communication. The Multilevel R² estimate for this model was .89, indicating that the model accounted for 89% of the variance in teacher-child Conflict.

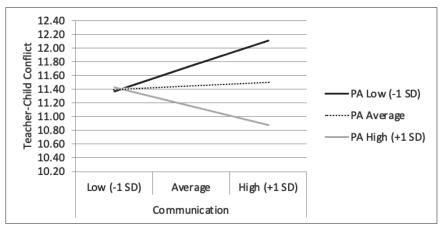


Figure 2. Moderating Effect of Personal Accomplishment on the Relationship between Teacher Perceived Parent-Teacher Communication and Teacher-Child Conflict

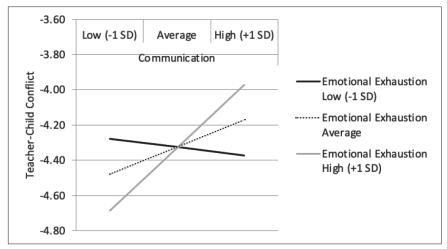


Figure 3. Moderating Effect of Emotional Exhaustion on the Relationship between Teacher Perceived Parent-Teacher Communication and Teacher-Child Conflict

In the last model, we examined the relationship between teachers' perceptions of their level of Communication with a child's parent, their level of Emotional Exhaustion, and their perceived degree of Conflict with the specific child. The main effects model was not significant. However, the full model, which included the interaction between parent-teacher Communication and Emotional Exhaustion, was significant. Parent-teacher Communication (B=-1.16, p<.002) and teacher level of Emotional Exhaustion (B=-1.52, p=.005) were both negatively associated with teacher-child Conflict, and the interaction effect was significant at low (B=-1.59, p=.002), average (B=-1.16 p<.002), and high (B=-.73, p=.005) levels of emotional exhaustion. As seen in Figure 3, at low levels of Emotional Exhaustion, there was a significant negative relationship between teacher-perceived parent-teacher level of Communication and teacher-child Conflict. However, at average and high levels of Emotional Exhaustion, there was a positive relationship between perceived parent-teacher level of Communication and teacher-child Conflict. Thus, for teachers experiencing average or high levels of Emotional Exhaustion, increased Communication with parents was associated with higher levels of Conflict with their children in the classroom and vice versa. The Multilevel R^2 estimate for this model was .88, indicating that the model accounted for 88% of the variance in teacher-child *Conflict*. Parameter estimates for the four models examined are presented in Table 3.

Table 3. Parameter Estimates for the Four Separate Models Examined

	In	Main Effects Model			Full Model					
	Fixed Effects	Coefficient	SE	Р	Coefficient	SE	Р	Coefficient	SE	Р
Model C										
Intercept Child-level predictor					.49	14	<.000	.46	.17	.001
	PTRS_ Communication to Other				.00	19	994	3.14	.63	<.001
Classroom-level predictor										
	MBI_ Personal Accomplishment	t			40	.15	.008	2.30	.62	<.001
Interaction	Communication t	l						66	.14	<.001
	Accomplishment R ²	I			.00	.00	.997	.89	.07	<.001
Model D										
Intercept Child-level predictor					.47	.13	<.001	.44	.15	.002
	PTRS_ Communication to Other				07	.20	.73	-1.16	.38	.002
Classroom-level predictor										
	MBI_ Emotional Exhaustion				.06	.17	.738	-1.52	.54	.005
Interaction	Communication t Other & Emotion Exhaustion							.37	.13	.004

Note. MBI stands for Maslach's Burnout Inventory, PTRS stands for Parent Teacher Relationship Scale, and STRS stands for Student Teacher Relationship Scale

Discussion

Children with or at risk for EBD are more likely to experience conflictual relationships with their teachers, increasing their risk of experiencing poor psychosocial outcomes in the future (Sutherland et al., 2018; 2020). This study examined associations between parent-teacher relationships and teacher-child Conflict and the contribution of teachers' emotional states to this association. Our results indicate that parent-teacher relationship quality was negatively associated with teacher-child Conflict and that teachers' emotional states significantly interacted with parent-teacher relationships to influence child Conflict. Specifically, for teachers with a higher sense of *Personal Accomplishment*, a negative association was present between parent-teacher relationships and teacher-child conflict. However, when teachers reported feeling emotionally exhausted or having a lower sense of accomplishment, the association between parent-teacher relationships and teacher-child conflict remained unchanged or positive.

The significant associations between parent-teacher relationships and teacher-child conflict in our study are consistent with previous studies showing that teachers' perceptions of poor relationships with parents may influence the perception of their relationships with specific children in their classrooms (Thijs & Eilbracht, 2012). Positive parent-teacher relationships with the parents of children who engage in disruptive behaviors in their classrooms may equip teachers with an added resource for behavior management (Kraft & Dougherty, 2013). Badri and colleagues (2014) found that frequent communication between parents of children with disruptive behaviors and their teachers was the most potent contributor to reductions in child disruptive behaviors. This effect differed from other parental involvement dimensions like parent-child reading, educational support provision, and even parent visits to the child's classroom, highlighting the unique value of positive relationships with parents.

Our results extend previous findings by showing the extent to which a teacher's emotional state can influence connections between the home and school contexts. Our findings suggest that for teachers experiencing high stress levels, perceptions of parent-teacher relationships are sometimes positively associated with more conflictual relationships with children. Parent contact is a typical and sometimes required response to challenging behaviors in the classroom. However, the teacher's emotional state and perceptions of these challenging behaviors may adversely affect these interactions with parents (Gwernan-Jones et al., 2015; McGrath & Van Bergen, 2019). Parents of children who engage in challenging behaviors may feel targeted and undervalued by teachers when they initiate contact almost exclusively after challenging behaviors occur. Consequently, they may be less inclined to engage with teachers, increasing teachers' frustrations and the potential for more conflictual relationships with the child. Alternatively, among teachers who are stressed, even when parent-teacher relationships are strong and characterized by attributes such as mutual collaboration, other stressors may overwhelm these teachers and consequently lead to more conflictual relationships with children (e.g., challenging classroom composition, additional job demands, low resources and/or support).

Implications for Schools

Several factors can influence teachers' emotional states, including factors that may be within the control of the school. Job-related demands such as the number of school-related meetings, school-related administrative work, the number and specific needs of children in the classroom, and the amount of time needed to prepare for lessons contribute to teachers' stress (Skaalvik & Skaalvik, 2018; Mantzicopoulas, 2005). Although resources like having a supportive work environment and collaborative staff can help reduce teaching-related stress, evidence suggests that efforts aimed at directly reducing these stressors may be more beneficial

for teachers (Skaalvik & Skaalvik, 2018). One way to directly reduce stress is by equipping teachers to proactively manage children's challenging behavior (Chow & Gilmour, 2016).

Challenging student behavior represents a key stressor for many teachers in general and special education classrooms in various settings (Collie et al., 2012). Yet few teachers receive specialized instruction to manage challenging student behaviors during preservice training (Flower et al., 2017). Among the programs providing basic training, many focus on retroactive behavior management strategies (Flower et al., 2017). Teachers also report that they rarely receive in-service training to manage challenging behaviors (Martinussen et al., 2011). Consequently, teachers' strategies may be ineffective at reducing these problematic behaviors or increasing more appropriate behaviors from their children. Given the limited opportunities available for behavior management training during the preservice years, schools may consider expanding access to more high-quality behavior management training opportunities to help them address the most prevalent forms of challenging behaviors in their schools (Chow & Wallace, 2019).

Another line of research shows that children with disabilities and children from minority racial/ethnic backgrounds are more likely to experience exclusionary disciplinary practices than their typically developing peers or peers from majority racial/ethnic backgrounds (Sullivan et al., 2014). Moreover, this practice is more common in situations where there is a mismatch between children and teachers on their racial/ethnic backgrounds, which is true of the present sample. Teachers may also benefit from receiving more explicit guidance on engaging the families of children who exhibit challenging behaviors in their classrooms. Studies showing that these conflictual relationships may be more pronounced between teachers and parents from different racial/ethnic groups (e.g., Thijs & Eilbracht, 2012) suggest that there may be other underlying factors or expectation differences that can influence these interactions. Schools may consider pairing teachers with family liaisons

from similar cultural backgrounds, to help facilitate more neutral conversations with these families and help enhance child outcomes. Schools may also provide teachers with explicit instruction on cultural sensitivity to increase teachers' sense of efficacy. This may help foster better parent-teacher interactions and even teacher-child relationships that can lead to improved overall outcomes.

Further, strategies to improve child outcomes must consider the children in question. Given the increased likelihood of conflictual teacher-child relationships among children at risk for EBD, it is essential to prioritize access to resources that will help mitigate child-level stressors and problem behaviors. Some school-based interventions have yielded success with samples from similar socioeconomic backgrounds as the children engaged in this study (Sullivan et al., 2021). School authorities may consider actively partnering with interventionists or researchers and fostering collaborative partnerships that can help reduce the associated costs of independently developing and implementing similar strategies.

Limitations and Future Directions

Although our findings extend the literature on the contributions of teachers' emotional states to school-based relationships, we must acknowledge several limitations. First, our small sample size limits the generalizability of our results. Sample size limitations also precluded our ability to examine more complex models, such as models examining these patterns across racial/ethnic groups and models examining reciprocal and dynamic interactions. For instance, other studies show that teacher-child relationships impact teachers' emotional states (Collie et al., 2012), and the association between parent-teacher relationships and teacher-child conflict may be reciprocal. Future work should examine these possibilities.

Additionally, parents often remain constant in parent-teacher relationships, while teachers are subject to change at the end of each school year. Nevertheless, prior experiences with specific teachers may influence later parent-teacher relationships, exacerbating

tensions and further compromising child outcomes. Examinations using more complex models such as autoregressive cross-lagged models and other longitudinal approaches will help elucidate these influence patterns.

Lastly, although using teacher report measures facilitated an examination of teacher perspectives, we could not ascertain whether these factors are objectively similarly linked to each other. Therefore, future studies may consider using alternative strategies like observational and physiological measures to assess teacher-child relationships and teacher stress objectively.

Conclusion

Children at risk for EBD experience higher levels of conflictual relationships with their teachers, placing them at a greater risk of poor psychosocial outcomes. This study examined the influence of parent-teacher relationships and teachers' emotional states on these relationships. We found that the parent-teacher relationships significantly influenced these conflictual relationships. A teacher's emotional state can also affect these conflictual relations by interacting with the teacher's perception of their relationship with the child's family. The findings reveal a need for more targeted efforts to increase teacher efficacy, reduce teacher stress, and facilitate better engagement with the families of children who exhibit challenging behaviors in schools.

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