

The Early Teacher-Child Relationship and Middle School Functioning:  
A Longitudinal Study of Urban, Low-Income Youth

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**Background.** The quality of the early teacher-child relationship is associated with youth's later social-emotional and behavioral outcomes (McCormick & O'Connor, 2015; Sabol & Pianta, 2012). Teacher-child relationships that are high in closeness are related to positive peer relations and emotional and behavioral functioning, while conflictual relationships contribute to the development of internalizing and externalizing behavior problems (Buyse, Verschueren, Verachtert, & Damme, 2009; Collins, O'Connor, Supplee, & Shaw, 2017). The teacher-child relationship may be particularly important for student adjustment during periods of developmental change (Rimm-Kaufman & Pianta, 2000). Middle school is an especially important period of change for youth, as academic expectations become greater, social relationships become more complex, and puberty occurs.

Prior studies have demonstrated that children from low-SES backgrounds have a heightened probability of having early disruptive behavior problems (Duncan & Magnuson, 2011; Yoshikawa, Aber, & Beardsley, 2012). Early disruptive behaviors place children at risk of concurrent and long-term challenges, including low classroom engagement, poor self-efficacy, dropping out of school, criminal behavior, and mental health problems (Collins et al., 2017; Evans & Cassells, 2014; Jones, Greenberg, & Crowley, 2015; Raver et al., 2008). Negative interactions with teachers may further exacerbate the risks associated with early disruptive behavior problems. In contrast, a positive teacher-child relationship has the potential to act as a protective factor against negative behavioral patterns and school difficulties (Baker, 2006; O'Connor, Dearing, & Collins, 2011). To date, there is a dearth of research on teacher-child relationships among urban youth, despite the detrimental outcomes associated with poverty and behavior problems.

**Objective.** The current study examines the first grade teacher-child relationship as it relates to emotional and behavioral functioning in middle school. In addition, the study explores heterogeneity of effects by level of behavior problems at the start of formal schooling.

**Setting and Research Design.** Between 2008 and 2012, 22 elementary schools serving primarily low-income, racial/ethnic minority students in three New York City school districts were randomly assigned to participate in the *INSIGHTS* program or a control condition. *INSIGHTS* is a comprehensive school-based preventive social-emotional learning intervention that helps teachers and parents recognize a child's temperament and respond with warmth and discipline strategies that support adaptive social-emotional and behavioral outcomes. The current study controls for intervention effects.

**Participants.** The total sample from the original efficacy study was  $N = 435$  students. Of these students, 194 (45%) remained in the sample throughout middle school, while 55% are missing outcome data for the follow-up study because they could not be re-contacted or left the school district before middle school. Approximately 80% of youth were black, non-Hispanic; 13% were white, Hispanic; 4% were white; and the remaining youth were biracial. Four percent of the

students were immigrants to the U.S., and 5% were classified as dual language learners (DLLs). Fifty-two percent of the participants were in INSIGHTS during the initial efficacy trial, while 48% were in the control condition.

**Data.** Data for this study come from an efficacy study of the *INSIGHTS* intervention (O'Connor et al., 2014) and a middle-school follow-up study (2016-2019; PI, O'Connor). Children enrolled in the original study in kindergarten, at which time teachers completed the Sutter-Eyberg Student Behavior Inventory (SESBI), which captures student conduct problems. Teachers also completed the Student-Teacher Relationship Scale (STRS) at five time points during the study, including at the end of first grade. Parents provided information about additional demographic characteristics, such as child gender, race/ethnicity, eligibility for free and reduced priced lunch, age, dual language learner status, and whether they were in special education in kindergarten. For the follow-up study, families who participated in the original efficacy study were re-contacted and middle school students completed the Strengths and Difficulties Questionnaire, which assesses emotional and behavioral functioning.

**Analysis.** A categorical variable was created for baseline disruptive behavior problems, indicating high, moderate, and low behavior problems at kindergarten entry. Multi-level regressions, with students nested within schools, were used to analyze the data. Four sets of regressions were run, separately predicting internalizing and externalizing behaviors, from closeness and conflict within the first grade teacher-child relationship, controlling for baseline level of behavior problems and demographic covariates. Next, an interaction term between closeness or conflict and baseline behavior problems was added to each of the models. Treatment was included as a control covariate in all models.

**Findings.** Results from preliminary multi-level regression analyses revealed significant main effects of first grade teacher-child closeness,  $t(121) = -0.99$ ,  $SE = 0.45$ ,  $p = 0.03$  (see Table 1), and conflict,  $t(121) = 1.05$ ,  $SE = 0.36$ ,  $p < 0.01$ , on externalizing behaviors in middle school. A statistically significant interaction between baseline level of behavior problems and first grade teacher-child closeness was also found, predicting middle school externalizing behaviors,  $t(121) = -1.57$ ,  $SE = 0.77$ ,  $p < 0.05$  (see Figure 1). This interaction suggests that, for students with high behavior problems, a close teacher-child relationship can protect against continued conduct problems later in development. Conversely, for these at-risk students, a teacher-child relationship that is low in closeness can contribute to greater conduct problems in middle school. A similar interaction was not found for behavior problems and teacher-child conflict. In addition, a main effect of first grade teacher-child closeness on later internalizing behaviors was demonstrated,  $t(121) = -0.84$ ,  $SE = 0.39$ ,  $p < 0.05$ . However, there were no other statistically significant effects in the internalizing behavior models.

**Conclusions.** Findings suggest that early elementary teacher-child relationships can have lasting effects on emotional and behavioral functioning. More specifically, an early teacher-child relationship characterized by closeness may disrupt the cycle of disruptive behaviors, whereby early disruptive behaviors are perpetuated by negative interactions with adults (Granic & Patterson, 2006). These results have implications for the role of teachers' interactions with students who exhibit disruptive behaviors and may help to identify students who could benefit from additional supports from teachers or interventions that target the teacher-child relationship.

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Table 1

*Regression results for prediction of academic achievement in middle school by teacher-child closeness in first grade and baseline behavior problems*

Variables	Model 1			Model 2		
	$\beta$	<i>SE</i>	<i>t</i>	$\beta$	<i>SE</i>	<i>t</i>
Teacher-child closeness in first grade x behavior problems				-1.57	0.78	-2.03 *
Teacher-child closeness in first grade	-0.99	0.45	-2.20 *	1.21	1.17	1.03
Baseline behavior problems	0.65	0.50	1.31	7.28	3.30	0.03 *
Child female	0.06	0.67	0.09	0.05	0.66	0.08
Child age	-0.30	0.56	-0.53	-0.33	0.55	-0.60
Child black	-2.06	1.65	-1.25	-2.30	1.63	-1.41
Child Hispanic	-1.74	1.81	-0.96	-1.96	1.79	-1.09
Eligibility for free or reduced lunch	-0.06	0.98	-0.07	0.09	0.97	0.09
Dual language learner	-0.55	3.57	-0.15	-0.29	3.53	-0.08
Treatment	-0.50	0.65	-0.78	-0.16	0.66	-0.24

*Note:* \*  $p < 0.05$

Figure 1

*Interaction between first grade teacher-child closeness and baseline behavior problems, predicting externalizing behaviors in middle school*

