Teacher-Child Relationships and Children's Success in the First Years of School

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Abstract. This work examines associations between closeness and conflict in teacher-child relationships and children's social and academic skills in first grade in a sample of 490 children. Assessments of teacher-child relationships were obtained in preschool, kindergarten, and first grade. Results demonstrate moderate correlations among teachers' ratings of conflict and slightly lower correlations among teachers' ratings of closeness across years. Hierarchical regression analyses predicted children's skills in first grade from teacher-child relationship quality. Child gender, socioeconomic status, and preschool estimates of outcomes of interest were controlled statistically. Although preschool assessments of social and academic skills were closely associated with individual skill differences at first grade, teacher-child relationship quality also was associated with changes in skill levels. Findings generally confirm that teacher-child relationships play a role in children's ability to acquire the skills necessary for success in school.

Concerns about children lacking the skills necessary for success in early elementary school classrooms have moved to the fore in recent years, as the number of children encountering difficulties in this setting has increased (National Education Goals Panel, 1997). Several major research initiatives have explored how to facilitate school success; many have concluded that key components include the development of strong pre-academic, social, and behavioral skills early in children's school careers (Lyon, 2002; NICHD ECCRN, 2002a; National Center for Educational Statistics [NCES], 1999; Ramey, Ramey, & Phillips, 1996). Emerging from this research is the impression that early and subsequent school functioning hinges on two related sets of competencies: those pertaining to early literacy and language development and those associated with relationships and self-regulation (Entwisle & Alexander, 1999; Ladd, Birch, & Buhs, 1999; Ladd & Burgess, 1999). Both of these competencies show great variation in national studies (NCES, 1999). The present study focuses on the extent to which the quality of children's relationships with three different early school teachers represents a unique source of variation in their early school adjustment, and predicts their social and academic functioning at first grade.

The quality of children's relationships with their early school teachers is increasingly recognized as a contributor to school adaptation (Birch & Ladd, 1997, 1998; Howes, Hamilton, & Matheson, 1994; Howes & Matheson, 1992; Pianta, Steinberg, & Rollins, 1995). Similar to parent-child relationships, teacher-child relationships appear to serve a regulatory function with regard to children's social and emotional development (Greenberg,
Speltz, & Deklyen, 1993; Pianta, 1999) and therefore have the potential to exert a positive or negative influence on children’s ability to succeed in school. In fact, the development of children’s early competencies in several domains has been linked to (and is perhaps facilitated by) the quality of the teacher-child relationship. Specifically, kindergarten children who have highly negative relationships with their teachers have been found to demonstrate higher levels of behavior problems and lower levels of behavioral competencies 2 years later as compared to their peers who have highly positive relationships with kindergarten teachers (Pianta et al., 1995). The quality of teacher-child relationships also has predicted changes in children’s behavioral orientation across kindergarten through first grade: Conflict with the kindergarten teacher predicted declining prosocial behavior and slightly increasing aggressive behavior with peers (Birch & Ladd, 1998). “Secure” and “improved” teacher-child relationships in kindergarten are associated with competent behavior in that classroom and fewer problems in first grade classrooms, and dependent teacher-child relationships are associated with children’s lack of competence (Pianta & Nemetz, 1991). Extant studies also have found that children with chronic conflict in relationships with teachers in kindergarten and first grade demonstrate less cooperative participation in school and lower levels of school liking as compared to children with high levels of teacher-child closeness (Ladd & Burgess, 2001).

Given the associations between teacher-child relationships and children’s school liking and behavioral adjustment, it is not surprising that children who have more conflict in relationships with teachers also are less engaged in the classroom (Ladd, Birch, & Buhs, 1999) and are at increased risk for poor academic achievement (Ladd & Burgess, 2001). Conversely, close and supportive relationships with teachers have demonstrated the potential to mitigate the risk of negative outcomes for students who might otherwise have difficulty succeeding in school (Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002; Lynch & Cicchetti, 1992; Pianta et al., 1995). For example, Burchinal and colleagues found that teacher-reported closeness with students was positively related to growth in children’s receptive vocabulary and reading abilities from preschool to second grade, specifically for children of color and children whose parents reported more authoritarian attitudes, respectively.

One potential criticism of examining teacher-child relationships is that teachers’ perceptions of the relationships they share with children is often synonymous with their perception of children’s behavioral orientation. However, kindergarten teachers’ perceptions of their relationships with children have been linked to those students’ subsequent academic and social functioning independent of the kindergarten teachers’ reports of overall adjustment and uniquely predict both academic and behavioral skills in students through eighth grade (Hamre & Pianta, 2001). Negativity described by teachers in their relationships with children, particularly boys and children who had early behavior problems, was an especially robust predictor of those children’s long-term adjustment to school (Hamre & Pianta, 2001). These results signify the salience of relational processes in the early school years, and highlight the fact that indicators of teacher-child relationships may better forecast subsequent adaptation in the classroom setting than more general indicators of social competence or behavior problems (Hamre & Pianta, 2001).

An additional area of interest that has yet to be thoroughly studied concerns the stability of the teacher-child relationship across years, and how timing influences the association between this relationship and child outcomes. Extant studies have found that teachers’ perceptions of conflict in their relationship with a given student is marked by moderate consistency across the preschool to kindergarten transition (Howes, Phillipsen, & Peisner-Feinberg, 1999) as well as across kindergarten through second grade (Pianta et al., 1995). In contrast, teachers’ ratings of relational closeness appear more variable across 3 years in early elementary school (Pianta et al., 1995). Furthermore, despite moderate continuity across teachers’ ratings of conflict in their relationship with a
given child, associations between relationship quality and children’s outcomes may change over time. Evidence indicating that earlier relationships are more closely associated with children’s language and social development has accumulated in recent years. For example, Burchinal et al. (2002) found that the association between teacher-child closeness and children’s development is stronger when children are in preschool than when they are in early elementary school. Teacher-child closeness was significantly associated with concurrent receptive vocabulary scores among preschool-aged children (e.g., 51 months and 61 months of age), but not among kindergarten through second grade students.

Thus, past research has built a credible case for the salience of interpersonal processes, particularly the teacher-child relationship, in children’s early school experiences. Teacher-child relationships appear to be both contributors to and indicators of children’s school adjustment. The present study expands previous work by examining the extent to which preschool, kindergarten, and first grade teachers’ perceptions of their relationship with students (in terms of both conflict and closeness) are associated with those students’ social and behavioral outcomes. Because demographic variables have been associated with both teacher-child relationship quality and child outcomes (i.e., Ladd, Birch, & Buhs, 1999), these associations are adjusted for child gender and socioeconomic status. Furthermore, to evaluate the unique associations between teacher-child relationship quality and children’s social and academic skill development above and beyond the skills that children have already acquired prior to school entry, analyses also are adjusted for preschool social and academic skills. Finally, this study incorporates ratings of children’s skills from multiple sources. Both teachers’ and mothers’ reports of children’s behavior problems are used to determine the association between teacher-child relationships and behavior problems both in and out of the school setting. In addition, children’s academic skills were tested and their social skills in the classroom were observed and rated by neutral observers. The stability of repeated assessments of student-teacher relationships from preschool through first grade also was descriptively assessed in terms of both overall mean levels of conflict and closeness reported and correlations between different teachers’ ratings of relationships with a given child.

Method

Participants

The 490 children and their families and teachers who were participants in the present study were a small subset of the National Institute of Child Health and Human Development’s Study of Early Child Care. Children and their parents and teachers were observed in preschool, kindergarten, and first grade, and parents and teachers reported on children’s social and academic development at these times. Furthermore, children’s academic skill/cognitive development was tested by trained data collectors in preschool and first grade. Mothers of the study children had an average of 14.81 years of education (SD = 2.40), and 16% of the families were below the poverty threshold when the children were 1 month old. Fifty-one percent of the children were male and 14% were nonwhite. Teachers of these children had, on average, 14.66 (SD = 9.5 years) years of teaching experience and ranged from first year teachers to those with 40 years of experience. Ninety-five percent of teachers were Caucasian, 2.2% were African American, 1.1% were Asian, and the remainder classified themselves as “other.” Ninety-six percent were female. The preschool contexts were predominantly child care centers (74%), but children in other care settings were included as well (19% were in home-based care facilities and 7% were cared for by a nonmaternal relative).

The children who were participants in the present study were all those with full sets of the data under consideration (i.e., mother and teacher reports at preschool, kindergarten, and first grade; observations in preschool and first grade classrooms; academic test results at all assessment occasions; and parent reported income). Thus, only about one-third of the entire NICHD–SECC sample was used as a re-
sult of the majority of participants having at least 1 missing data point at any of the time periods utilized for analyses. To determine whether the current analytic subsample was comparable to the sample of all 1,364 participants, the two groups were evaluated for equivalence on all covariate, predictor, and outcomes variables utilized in the present study. Out of these 23 comparisons, only four statistically significant differences were found: The present subsample had a slightly higher level of maternal education (average of 14.23 years for the whole sample vs. 14.81 years in this sample; \( t = 5.36, p < .001 \)), less likelihood of poverty (34% below poverty vs. 16%; \( t = -10.95, p < .001 \)), closer teacher-child relationships in kindergarten (mean rating of 34.22 vs. 34.68; \( t = 2.01, p = .045 \)), and higher child vocabulary scores in preschool (mean score of 101.03 vs. 103.32; \( t = 3.45, p = .001 \)). Descriptive statistics for all predictor variables used in this study are presented in Table 1; those for outcomes are presented in Table 2.

**Measures**

**Child academic achievement—rated.**

In the Spring of first grade, teachers completed a mock report card created for the NICHD Study of Early Child Care that contained 19 items regarding children’s school performance in three domains: academic performance, work habits, and social and emotional development. All items were rated in a 5-point Likert-type scale with higher scores indicating better developed skills (1 = child is performing below grade level; 5 = child is performing beyond grade level). Teachers rated children’s achievement in six content areas and these ratings were averaged to form the Current School Performance composite. Although limited psychometric data are available for this measure, the items are straightforward queries regarding academic performance, and the raw items that comprised the composite had high internal reliability (Cronbach’s alpha = .93), suggesting that the construct assessed was cohesive. Ratings of children’s academic skills were not obtained in preschool; rather, children’s obtained scores on tests of vocabulary development (as described below) were used to provide an estimate of their achievement in preschool.

**Children’s vocabulary skills—tested.**

Children’s vocabulary development in preschool and first grade was assessed using the Picture Vocabulary subtest of the Woodcock Johnson Psycho-Educational Battery-Revised Tests Cognitive Ability and Tests of Achievement (WJ-R; Woodcock & Johnson, 1990). The WJ-R is a nationally normed assessment instrument that has widely demonstrated reliability and validity. The Picture Vocabulary subtest measures children’s ability to recognize or name pictured objects and is designed to tap children’s verbal comprehension and crystallized intelligence (Woodcock & Johnson, 1990). Split-half reliability of the Picture Vocabulary subtest is .815 at age 4 and .773 at age 6 (Woodcock & Mather, 1989). Children’s raw score on the Vocabulary subscale was converted into a standard scores \( X = 100, SD = 15 \) based on the age of the child and this standard score was used in the data analysis.

**Children’s behavior problems—rated.**

Children’s mothers and preschool and first grade teachers rated children’s behavior problems by completing the Child Behavior Checklist (CBCL; Achenbach, 1991) or the Teacher Report Form (TRF; Achenbach, 1991), respectively. The CBCL is a 118-item measure of a wide range of behavioral problems in school-aged children. The CBCL has demonstrated sound psychometric properties: Estimates of test-retest and interrater reliability are above .90 in normative samples (Achenbach, 1991). The TRF is a parallel measure to the CBCL and is one of the most widely used measures of children’s classroom behavior (Wilson & Reschly, 1996). Its validity as a measure of behavior problems has been demonstrated repeatedly (Kamphaus & Frick, 2002) and its reliability has also been well documented: The average internal consistency estimate (coefficient alpha) for the TRF scales is .87, and the average test re-test reliability coefficient is .92 (Kamphaus & Frick, 2002). Standard T-scores for rated Internalizing and Externalizing problems from both mothers’ and teachers’ reports were used in the present study.
Table 1  
Descriptive Statistics for Predictor Variables (N = 490)

<table>
<thead>
<tr>
<th>Predictor Variables</th>
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<td>.36**</td>
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<td>.18**</td>
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<td>-.001</td>
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<td>-.001</td>
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<td>.01</td>
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<td>.12**</td>
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<td>-.23**</td>
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*Variables are 54-month assessments unless otherwise indicated.  
* p < .05, ** p < .01.
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<td>-.15**</td>
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* *p < .05, ** *p < .01.
Children's social competence–rated. At preschool age, teachers rated children’s social competence using the California Preschool Social Competency Scale (Levine, Elzey, & Lewis, 1970). The original California Preschool Social Competency Scale contains 30 items assessing a broad range of preschool-aged children's social competencies. In the present study, four new items also were added to tap children's cooperative play, rule following, empathy, and aggression. All 34 items were rated by preschool teachers on a 4-point scale with higher scores indicating greater levels of social competency. Scores ranged from 46 to 135 ($M = 105, SD = 14$). This scale has been demonstrated to provide a valid assessment of social functioning in preschool children (NICHD ECCRN, 2002b), and the 34 items have high internal reliability (Cronbach's alpha = .88).

In first grade, teachers completed the school versions of the Social Skills Questionnaire (SSQ) from the Social Skills Rating System (SSRS; Gresham & Elliott, 1990). This instrument consists of 38 items indexing four skill areas: cooperation (e.g., keeps room neat and clean without being reminded), assertion (e.g., makes friends easily), responsibility (e.g., asks permission before using a family member's property), and self-control (e.g., controls temper when arguing with other children). Teachers indicated on a 3-point scale how often the child exhibited each behavior. The total score is the sum of all 38 items, with higher scores reflecting higher levels of perceived competence. The SSRS was normed on a diverse, national sample of children in the 3–5-year age range and shows high levels of internal consistency (median = .90) and test-retest reliability (.75 to .88).

Children's social competence–observed. Interactions between teachers and children were observed in the classroom at preschool using the Observational Record of the Caregiving Environment (ORCE; NICHD Early Child Care Research Network, 1996) and at first grade using an upward extension of the ORCE, the Classroom Observation System–First Grade (COS-1; NICHD-ECCRN, 2002a). Trained research assistants observed children in classrooms for 2–3 hours and then made qualitative ratings on 4-point scales ranging from 1 = not at all characteristic to 4 = highly characteristic in preschool and on 7-point scales that utilized equivalent endpoints but spread the scale across a wider range in first grade. The qualitative ratings of children's self-reliance, positive affect, and attention to objects or activities were averaged to form the “Child Social Competence” composite in preschool. The qualitative ratings of child self-reliance and positive affect were averaged to form this composite in first grade (as the child attention variable was no longer coded in the first grade observation). Complete descriptions are available in the NICHD-SECC data collection manuals (NICHD Early Child Care Research Network, 1993). Pearson correlations among these child-level qualitative ratings ranged from .74 to .94.

Teacher-child relationship–rated. Preschool, kindergarten, and first grade teachers rated their perceptions of their relationships with the study children using the short form of the Student-Teacher Relationship Scale (STRS; Pianta, 2001). The short form of the STRS is a self-report instrument composed of 15 items rated on 5-point Likert-type scales that assesses a teacher's perception of her relationship with a particular student. The STRS item ratings can be summed into two groups of items that are referred to as the conflict and closeness subscales (Pianta, 2001). The conflict subscale assesses the degree to which a teacher feels that her relationship with a particular student is characterized by negativity. The closeness scale measures the extent to which a teacher feels that her relationship with the student being assessed is characterized by warmth, affection, and open communication. In terms of reliability, statistically significant test-retest correlations over a 4-week interval and high internal consistency for both conflict and closeness subscales have been demonstrated (Pianta, 2001). The predictive and concurrent validity of the STRS also has been demonstrated repeatedly: The STRS is correlated with both current and future academic skills (Hamre & Pianta, 2001), behavioral adjustment (Birch & Ladd, 1998), risk of retention (Pianta et al.,
1995), disciplinary infractions (Hamre & Pianta, 2001), and peer relations (Birth & Ladd, 1998). Furthermore, findings from Hamre and Pianta (2001) demonstrate the discriminant validity of closeness and conflict scores and suggest that use of both scales to assess positive and negative aspects of student-teacher relationships is indicated.

**Data Analysis**

Bivariate correlations were conducted to evaluate the stability of teachers’ relationship ratings across the preschool to first grade time frame. Additionally, a descriptive examination of mean levels of conflict and closeness reported over time was conducted using two repeated measures analysis (one for conflict and one for closeness). Regression analyses evaluating the extent to which teacher-child relationships predicted first grade skills above and beyond preschool skills and demographic characteristics also were conducted. These analyses began with a model predicting child competencies or problems in first grade from demographic factors and earlier assessments of analogous competencies or problems, and then determined how much additional variance in outcomes could be explained by teachers’ perceptions of their relationships with students. As teacher-child relationships were assessed repeatedly from preschool through Grade 1, examination of the contributions of current and previous relationships with teachers was possible by adding these indicators in temporal sequence. Finally, interactions between time-averaged STRS conflict and closeness scores and earlier competencies or problems, gender, and poverty status in predicting developmental outcomes in first grade were examined. These last analyses examined whether, in general, children’s relational competencies with teachers moderated the association between demographic risk factors and success in first grade.

**Results**

Two broad questions were addressed in this study. The first question concerned the stability of teacher-child relationships across the preschool to first grade interval. Pearson bivariate correlations were utilized to examine the stability of different teachers’ perceptions of both conflict and closeness in their relationships with the same student over time. Results can be found in Table 1. Overall, teachers’ ratings of the level of conflict they perceived in their relationships with a student were moderately correlated across time/teacher (range \( r = .32 \) between preschool and kindergarten to \( r = .40 \) between preschool and first grade). Teachers’ ratings of the closeness they felt in relationships with students were somewhat less stable between preschool and first grade (range \( r = .21 \) from preschool to first grade to \( r = .31 \) between kindergarten and first grade), but otherwise estimates of the stability of closeness were moderate and similar to estimates of the stability of conflict. Furthermore, the overall levels of teacher-reported conflict and closeness over time were evaluated using repeated measures analysis. Results indicate that overall mean levels of both conflict and closeness changed very slightly but were statistically significantly over time (for conflict Greenhouse-Geisser = .990, \( p < .01 \) and for closeness Greenhouse-Geisser = .998, \( p < .01 \)). The general trend indicated decreasing levels of both conflict and closeness reported by teachers over time (see Table 1 for means).

Hierarchical regression analyses were used to address the second question of the value added by teacher-child relationships to predictions of children’s skill levels in first grade above and beyond assessments of those skills in preschool. In each regression, predictor variables were entered in a series of six steps. In the first step, demographic covariates were entered as a block (gender and poverty status). In the second step, the 54-month version of the outcome being predicted was entered. The STRS conflict and closeness scores at 54 months, kindergarten, and first grade were entered as blocks in the third, fourth, and fifth steps, respectively. Finally, interactions between the three covariates and an average of the 54-month through first grade conflict and closeness scores were entered in a sixth block. However, because only 1 interaction term of the 48 interactions that were entered into analyses (6 in each of the 8 regressions) was statis-
tically significant, it was ascertained that overall, interactions did not add meaningful information to prediction analyses. Thus, the interaction blocks are not reported. Results of hierarchical regression analyses can be found in Table 3 and are summarized below.

Overall, the demographic covariate block, which included poverty status and gender, accounted for significant variance in the following child outcomes: teachers’ ratings of children’s achievement, externalizing behavior, and social competence, and tested vocabulary development. Similarly, the second covariate block, which included the 54-month assessment of child outcomes, accounted for significant variance in child outcomes at the time that it was entered in all analyses except when observed social competence was the outcome under consideration. When all variables were included, the 54-month assessments of child outcomes were significant predictors for teacher-rated achievement, tested vocabulary development, mother-rated internalizing behavior, teacher- and mother-rated externalizing behavior, and teacher-rated social competence in the expected directions (i.e., higher levels of each construct at 54 months was associated with higher levels of that construct in first grade). Results for variance attributable to relational conflict and closeness at 54 months, kindergarten, and first grade, adjusted for the two covariate blocks, are summarized below for each outcome examined.

**Academic Performance**

When predicting teacher ratings of achievement, both conflict and closeness in first grade were significant predictors. First grade teachers rated children’s achievement more highly for those children with whom they reported sharing a closer relationship, and assigned lower achievement ratings to those children with whom they felt more conflict. No other indicators of the teacher-child relationship were statistically significant in predicting rated achievement.1 Regarding tested vocabulary development in first grade, preschool through first grade teachers’ perceptions of their relationships with students did not demonstrate significant prediction.

**Behavior Problems**

Both mothers’ and teachers’ ratings of internalizing and externalizing problems were investigated to provide a more complete picture of how teacher-child relationships were associated with children’s behavioral development inside and outside of the school setting. Mother-rated child internalizing behavior at first grade was predicted by preschool and first grade teachers reports of closeness. Specifically, less closeness reported by the preschool or first grade teacher was linked to higher levels of mothers’ reports of internalizing behavior.

In terms of externalizing behavior rated by mothers, more teacher-rated relational conflict at first grade was significantly related to mother’s reports of children’s externalizing behavior. Previous teachers’ ratings of closeness and conflict were not associated with mothers’ ratings of child externalizing in first grade.

With regard to first grade teachers’ ratings of child problem behavior, their concurrent perceptions of closeness and conflict in their relationships with students predicted their perception of the child’s internalizing problems: More conflict and less closeness were associated with higher levels of perceived child internalizing problems. No associations with prior teacher-child conflict or closeness were found for teacher-rated internalizing at first grade. Regarding externalizing problems, teacher-reported relational conflict with children in both kindergarten and first grade were associated with first grade teachers’ ratings of externalizing in the expected directions.

**Social Competence**

Both teachers’ and trained observers’ ratings of children’s social competence were investigated. Kindergarten and first grade teacher’s reports of conflict in their relationships with children were inversely related to the first grade teachers’ reports of children’s social competence: Higher conflict was associated with lower social competence. In addition, as first grade teachers reported more closeness in their relationship with a given child, they also reported higher levels of so-
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* Cell values are standardized β coefficients derived from the final model.
*p < .05, **p < .01.
ocial competence in that child. Furthermore, when entered as a block, preschool teachers’ reports of their relationship with children accounted for significant variance in first grade teachers’ ratings of children’s social competence, but when subsequent predictors were included in the final model, neither of the kindergarten relationship indicators demonstrated a significant association with ratings of social competence in first grade. Finally, variance in trained observers’ ratings of children’s social competence in the first grade classroom was predicted by first grade teachers’ perceptions of closeness in their relationship with a child in the expected directions. Although at entry kindergarten teacher-child closeness was predictive of first grade observed social competence (AR² for the block = .02, p = .03), when all predictors were entered in the full model, this link was no longer significant.

Discussion

The overall pattern of results in the present study provides preliminary guidance for future investigations of how teacher-child relationship quality is related to children’s social and academic development in the early school years. Preliminary descriptive findings indicate that different teachers’ perceptions of their relationships with a given child are moderately stable from preschool through first grade. In addition, there was a small but statistically significant trend towards teachers reporting decreasing levels of both conflict and closeness from preschool through first grade. With regard to associations between teacher-child relationships and child outcomes, after adjusting for gender, socioeconomic status, and children’s prior skill levels, several indicators of teacher-child relationships made small to moderate contributions to prediction of social and teacher-rated academic skills in first grade. Although the associations between teacher-child relationships and children’s outcomes tended to be greatest when the outcomes and relationships were rated by the same person (i.e., the teacher), not all of the findings can be attributed solely to rater effects. In fact, small but significant associations were found between teachers’ ratings of relationships and both mothers’ and neutral observers’ ratings of children.

Regarding the descriptive examination of stability in different teachers’ perceptions of conflict and closeness in their relationships with a given child, findings indicated moderate stability in conflict and slightly less in closeness across the 54-month to first grade time period. This finding is consistent with previous studies of the stability of teacher-child relationships from kindergarten to first grade (Pianta et al., 1995) and from preschool to kindergarten (Howes et al., 2000). Previous and present findings suggest that relational conflict with a given child is more stable across teachers (perhaps related to stable child characteristics such as temperament), whereas relational closeness may depend in greater part on the goodness-of-fit between the interpersonal styles of teachers and children.

The second set of descriptive findings pertained to consistency in the mean levels of teacher-reported conflict and closeness from preschool through first grade. Results suggest a slight trend towards teachers reporting less intense relationships with children in both negative and positive dimensions with increasing child age. This finding may reflect a decreasing emphasis on teacher-child relationships in the classroom from preschool to early elementary school. Previous studies have suggested a similar dynamic across this time period (Johnson, Gallagher, Cook, & Wong, 1995; Rusher, McGreven, & Lambiotte, 1992; Spodek, 1988; Vartuli, 1999).

With regard to associations between teacher-child relationships and first grade competencies, estimates of prior social and academic skills were consistently significant correlates of first grade assessments of those outcomes, with the exception of observed social competence. In several cases (tested vocabulary development, externalizing behavior, and rated social competence), demographic variables also accounted for significant variance in first grade skills. However, above and beyond the effects of these factors, teachers’ perceptions of the student-teacher relationship on at least one occasion between preschool and first grade had small but significant relations
to all child outcomes except tested vocabulary development. Although many assessments of teacher-child relationships were not significantly associated with child outcomes, these preliminary findings add to our understanding of how teacher-child relationships are associated with changes in individual differences in children’s social and academic competence over time. Previously, work by Birch and Ladd (1998) demonstrated that kindergarten teachers’ perceptions of conflict in their relationship with students accounted for significant variance in children’s prosocial behavior in first grade. The current study extended that finding by expanding the time interval in which children’s behavioral development was studied and by using repeated assessments of the teacher-child relationship.

An additional pattern in the findings that merits discussion is the association between teacher-child relationships and mother- and teacher-rated behavior problems. Regardless of rater and controlling for prior problem behaviors, demographic variables, and prior teacher-child conflict and closeness, contemporaneous conflict (or lack of closeness) between teachers and children is linked to children’s externalizing (or internalizing) problems in first grade. The fact that changes in mothers’ reports of child behavior problems is associated with quality of the teacher-child relationship suggests some degree of crossover between home and school contexts. This is consistent with previous findings linking observed quality of classroom processes to changes in mothers’ perceptions of their children’s internalizing behavior from preschool through first grade (NICHD ECCRN, 2003).

As this study incorporated three assessments of the teacher-child relationship over time, issues pertaining to the timing of this relationship were available for consideration. Earlier work has suggested that teacher-child relationships may have the greatest effect on children’s competency in that specific classroom, particularly among high-risk children (i.e., that teacher-child relationships have primarily concurrent effects; see Pianta, Nimetz, & Bennett, 1997). Conversely, others have found that preschool or childcare teacher-child relationship quality is more closely associated with children’s development over time than quality of relationships with elementary school teachers (Burchinal et al., 2002). The present findings indicate that although preschool and kindergarten teacher-child relationships demonstrate small associations with some first grade skills (rated achievement, teacher-reported externalizing behavior, mother-reported internalizing behavior, and rated social competence), both the number of significant effects and the magnitude of those effects is greater for concurrent teachers’ ratings of relational quality. First grade teachers’ ratings of relational quality were significantly related to all first grade outcomes except tested vocabulary development, and in all cases accounted for a greater proportion of variance in those outcomes than earlier teachers’ reports of relationships, even though those first grade relationship indicators were entered into the analytic model last.

Several important limitations to this work also merit review. First, this work clearly focuses on the contributions of the teacher-child relationships to predicting child outcomes. In adopting such a focus, consideration of other aspects of the teachers’ presence in the classroom and/or other aspects of her or his interactions with children is omitted. As a result, it cannot be stated conclusively that teacher’s perceptions of relationship quality is uniquely predictive, as this could be highly collinear with other aspects of the teachers’ behavior in the classroom (including but not limited to her or his teaching style, classroom management style, or the overall emotional tone of the classroom). To conclude that it is this aspect of the teacher’s presence and not others that contributes to changes in individual differences in children’s competencies, future work may include other classroom process variables in addition to teachers’ perceptions of their relationships with children so that the overlap between these constructs can be further explored. Furthermore, the possibility exists that the teacher’s perception of the teacher-child relationship is more of a marker of the
child's overall competence than an independent construct. A fruitful area for future research would experimentally test whether improvements in the teacher-child relationship result in changes in children's patterns of behavior and success in school.

Despite these limitations, this work demonstrates that the interpersonal aspects of children's experience make a difference in their ability to develop competencies in the early years of school. Further work may include not only the teacher-child relationship, but also other aspects of the social environment that children are exposed to as well to get a richer picture of the interpersonal context of early elementary school and how that context functions as a medium in which children develop. Examples of such initiatives include Ladd and colleagues' (1999) work, which utilized assessments of peer acceptance, children's best friendships, and teacher-child relationship quality within the kindergarten year and found that social dynamics with both peers and teachers were important aspects of a model predicting children's academic achievement. Clearly, additional work is needed in this area to develop a clear picture of the effect of relational processes in the classroom. Continued work in this direction will provide teachers, school psychologists, and other school personnel with a better understanding of how to facilitate positive outcomes for all children in school.

In sum, although the associations between teacher-child relationships and children's development tended to be small and were not significant in all cases, these results do suggest a salient relational component to children's early school competence. Despite children's general tendencies towards certain relational styles with teachers inferred from the moderate stability across different teachers' reports of their relationships with a given child across the preschool to first grade time period, each new relationship may represent an opportunity to introduce unique variance in the development of social and academic skills. Research findings such as these suggest the possible advantages of adding an assessment of the teacher-child relationship to the standard test batteries used by school psychologists. Adding this dyadic component to evaluations of children with school problems could potentially contribute valuable information not contained in traditional child-centered behavior checklists. These results also have implications for early intervention efforts and school policy in that they suggest a focus on relational processes between teachers and students as a mechanism for enhancing opportunities for success in school.

Footnotes

'Of note, the 1 interaction term (out of 36) that accounted for statistically significant variance in a child outcome was in predicting teacher-rated academic skills in first grade. In that case, the 54-month closeness x 54-month vocabulary skills interaction term explained significant variance in teachers ratings of academic skills in first grade. Exploration of this interaction revealed that there was a stronger association between closeness and rated achievement in first grade among children whose academic achievement was above the mean at 54 months.

References


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