

Introduction

The first five years of a child's life are critical for learning important social-emotional, regulatory, and early cognitive skills and competencies that provide the foundation for lifelong adaptation and functioning (Shonkoff & Phillips, 2000).

Social-emotional skills are foundational to and predictive of academic success, and are widely considered precursors to achievement (DiPerna & Elliot, 2002; Kwon et al., 2012)

Executive function abilities in early childhood are also strong predictors of school readiness skills, including language and literacy skills and social-emotional competencies (Bierman et al., 2008; Fitzpatrick et al., 2014)

When children are **academically successful** in kindergarten, they are more likely to remain academically successful throughout their educational trajectory (Rimm-Kaufman & Pianta, 2000)

- Positive parent-child relationships are associated with young children's development of these critical skills that influence school readiness and the transition to kindergarten (e.g., Parker et al., 1999).
- School psychologists need a valid and reliable tool to assess the parent-child relationship.
 - The Child Parent Relationship Scale (CPRS; Pianta, 1992) is a self-report instrument that assesses parents' perceptions of their relationship with their child.
 - Preliminary psychometric data suggest the CPRS may be reliable and valid for use with young children (Driscoll & Pianta, 2011).
- Better understanding dimensions of the parent-child relationship, and child behaviors and skills that relate to the quality of the relationship, can help inform early childhood practice to better support children as they enter school.

RESEARCH QUESTIONS:

- What is the factor structure of the Child Parent Relationship Scale (CPRS; Pianta, 1992)?
- What is the relationship between family demographic characteristics, child variables (i.e., social skills, executive functioning, academic achievement), and the quality of the parent-child relationship in early childhood?

Methods

PARTICIPANTS & SETTING

- 37 schools from 12 school districts and 2 communication action agencies in rural and urban communities in one Midwestern state
- The majority of schools were Title I, representing a low-income, at-risk sample

Table 1. Participant Demographic Characteristics

Child Demographics (N=251)		Parent Demographics (N=251)		Teacher Demographics (N=65)	
Age	5.00 years	Age	29.6 years	Gender	99% Female 1% Male
Race	White: 45% Hispanic/Latino: 28% African-American: 15% American Indian: 1% Asian: 1% Other: 10%	Race	53% White 25% Hispanic/Latino 16% African-American 1% African-American 2% Asian 3% Other	Race	89% White 5% Hispanic/Latino 1% African-American 5% Other
Home Language	English: 77% Spanish: 15% English & Spanish: 3% Other: 5%	Education Level	15% less than high school 28% HS diploma or GED 35% some training beyond HS 6% two year degree 4% four year degree+	Education Level	1.5% Associate's degree 57% Bachelor's degree 37% Master's degree 3% Specialist or professional diploma 1.5% other
Gender	Female: 53% Male: 47%	Marital Status	45% married 16% living with partner 10% separated or divorced 1% widowed 28% never married	Years of Experience	47% more than 10 years 28% 5-10 years 25% fewer than 5 years
Preschool Experience	31% had previous preschool experience	Income Assistance	67% receive some sort of income assistance	Years	80% have a degree in early childhood

MEASURES

Parent Demographics: Parent-report, 52 items

Child Parent Relationship Scale (CPRS; Pianta, 1992): Parent-report, 15 items, 5-point Likert scale

- Conflict:* degree to which a parent perceives his/her relationship with their child as negative & conflictual
- Closeness:* degree to which a parent experiences affection, warmth, & open communication with their child

Social Skills Improvement System (SSIS; Gresham & Elliott, 2008): Parent & Teacher-report, 76 items, 4-point Likert scale

- Social Skills:* assesses social-emotional skills such as communication, cooperation, empathy, and self-control
- Problem Behaviors:* behaviors that interfere with either the acquisition or performance of social skilled behaviors

Behavior Inventory of Executive Function-Preschool (BRIEF-P; Gioia, Epsy, Isquith, 2003): Teacher-report, 24 items, 5-point Likert scale

- Inhibitory Self-Control:* ability to modulate actions, responses, emotions, and behavior via appropriate inhibitory self-control
- Flexibility:* ability to move flexibly among actions, responses, emotions, and behaviors
- Emergent Metacognition:* developing ability to initiate, plan, organize, implement, and sustain future-oriented problem-solving; cognitively self-manage tasks; and use information from working memory to guide performance and behavior
- Overall Executive Functioning:* child's overall level of executive dysfunction

Woodcock Johnson Tests of Achievement-3rd Edition (WJ-III; Woodcock, McGrew, & Mather, 2001): Standardized child assessment

- Broad Reading:* reading decoding, reading speed, and the ability to comprehend connected discourse while reading
- Broad Math:* problem solving, number facility, automaticity, and reasoning

ANALYTIC APPROACH

- A confirmatory factor analysis (CFA) was conducted using Mplus to explore the factor-structure of the CPRS.
- Correlations were computed between the child-parent relationship, family demographic characteristics, and child behaviors and skills.

Results

Table 2. Descriptives

Measure	Possible Range/Score	Mean (SD)
CPRS – Conflict	1-5	1.90 (.76)
CPRS – Closeness	1-5	4.82 (.32)
SSIS – Social Skills (Teacher Report)	M=100; SD=15	105.08 (14.83)
SSIS – Problem Behaviors (Teacher Report)	M=100; SD=15	97.74 (15.82)
SSIS – Social Skills (Parent Report)	M=100; SD=15	109.98 (11.95)
SSIS – Problem Behaviors (Parent Report)	M=100; SD=15	100.98 (14.49)
BRIEF-P – Inhibitory Self-Control	M=50 (SD=10)	49.83 (11.32)
BRIEF-P – Flexibility	M=50 (SD=10)	48.12 (9.91)
BRIEF-P – Emergent Metacognition	M=50 (SD=10)	51.47 (10.33)
BRIEF-P – Overall Executive Functioning	M=50 (SD=10)	50.35 (11.03)
WJ-III – Broad Reading Composite	M=100; SD=15	93.11 (10.90)
WJ-III – Broad Math Composite	M=100; SD=15	100.62 (10.00)

RESEARCH QUESTION 1:

What is the factor structure of the CPRS?

Table 3. Child Parent Relationship Scale Factor Loadings

Item	Factor 1: Conflict Estimate (S.E.)	Factor 2: Closeness Estimate (S.E.)
My child and I always seem to be struggling with each other.	0.731 (0.040)	
My child is uncomfortable with physical affection or touch from me.	0.438 (0.069)	
My child easily becomes angry at me.	0.756 (0.033)	
My child remains angry or is resistant after being disciplined.	0.651 (0.041)	
Dealing with my child drains my energy.	0.678 (0.041)	
When my child is in a bad mood, I know we are in for a long and difficult day.	0.758 (0.035)	
My child's feelings toward me can be unpredictable or can change suddenly.	0.821 (0.031)	
My child is sneaky or manipulative with me.	0.704 (0.044)	
I share an affectionate, warm relationship with my child.		0.705 (0.099)
If upset, my child will seek comfort from me.		0.581 (0.097)
My child values his/her relationship with me.		0.712 (0.083)
When I praise my child, he/she beams with pride.		0.730 (0.067)
My child spontaneously shares information about himself/herself.		0.546 (0.069)
It is easy to be in tune with what my child is feeling.		0.737 (0.066)
My child openly shares his/her feelings and experiences with me.		0.684 (0.062)

- Conflict and closeness factors are significantly negatively correlated, as expected ($r = -.178, p = .005$)
- Fit indices are acceptable (RMSEA = 0.076; CFI = .924)
- A chi square difference test comparing the proposed two factor model with a one factor model was significant ($\chi^2 (df=1) = 57.461, p < .05$)
- All factor loadings are significant at alpha = .05 (see Table 3)

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RESEARCH QUESTION 2:

What is the relationship between family demographic characteristics, child variables, and the quality of the child-parent relationship?

Table 4. Demographics

	Parent age at time of child's birth	Parent education	Family income	# of care providers
CONFLICT	-.152*	-.118*	-.053	.043
CLOSENESS	-.018	.118*	.052	.183**

Note: ** $p < .01$; * $p < .05$; $p < .07$

- Higher levels of closeness in parent-child relationship is associated with more care providers in the child's life and higher levels of parental education.
- Lower levels of conflict in parent-child relationship is associated with older parent age at the birth of the child and higher levels of parental education.

Table 5. Social and Behavioral Skills Outcomes

	Social Skills (parent)	Social Skills (teacher)	Problem Behavior (parent)	Problem Behavior (teacher)
CONFLICT	-.408***	-.114*	.604***	.163*
CLOSENESS	.182**	.080	-.149*	-.014

Note: *** $p < .001$; ** $p < .01$; * $p < .05$; $p < .08$

- Higher levels of conflict in the parent-child relationship is associated with high levels of child problem behavior, as reported by parents and teachers, and fewer child social skills, as reported by parents.
- Higher levels of closeness and lower levels of conflict in the parent-child relationship is associated with better child social skills, as reported by parents.

Table 6. Executive Functioning Outcomes

	Inhibitory Self-Control	Flexibility	Emergent Metacognition	Overall Executive Functioning
CONFLICT	.156*	.125*	.142*	.163**
CLOSENESS	.055	.052	.036	.052

Note: ** $p < .01$; * $p < .05$

- Higher levels of conflict in the parent-child relationship is associated with more child executive functioning problems.

Table 7. Achievement Outcomes

	Broad Reading	Broad Math
CONFLICT	-.176**	-.118*
CLOSENESS	.063	-.006

Note: ** $p < .01$; * $p < .05$; $p < .07$

- Higher levels of conflict in the parent-child relationship is associated with children's lower academic achievement.

Discussion & Implications

This study provides evidence for the use of the CPRS for assessing the parent-child relationship in early childhood.

As expected, more positive parent-child relationships were generally associated with positive family characteristics (e.g., higher parental education; older parental age at birth of child).

- It is interesting to note that family income was not associated with the quality of the parent-child relationship.
- The number of care providers in a child's life was positively related to the quality of the parent-child relationship. It is possible that when children have more daily providers, parents are more intentional in spending positive time with their children at home

In this study of at-risk children, a positive parent-child relationship characterized by low levels of conflict is associated with better child outcomes across home and school. Thus, positive parent-child relationships may serve a protective factor for children experiencing risk (e.g., low-income; low parental education).

- Positive parent-child relationships were associated with positive social-emotional outcomes and fewer executive functioning problems. Positive parent-child relationships characterized by high levels of closeness and low levels of conflict may provide additional learning opportunities for parents to model adaptive social, emotional, and behavioral skills to children (e.g., Parker et al., 1999; Pianta et al., 1991, 1997).
- More conflictual parent-child relationships were associated with poorer reading and math outcomes. Positive and warm parent-child relationships facilitate cognitive development and school readiness (e.g. Parker et al., 1999).

Because the parent-child relationship is modifiable and associated with positive outcomes, interventions can target this relationship in order to strengthen the relationship and provide children with a positive micro-level influence.

- The results point to the importance of school psychologists partnering with parents to help nurture more positive parent-child relationships in early childhood, especially for young children exhibiting problem behaviors and executive functioning deficits, to help interrupt negative child trajectories
- School psychologists could coach early childhood educators in how to facilitate positive parent-child interactions, and support parents whose children are demonstrating challenging behaviors.

Limitations & Future Research Directions

- Although the model fit is acceptable, the measure could be improved through further analytic exploration.
- These results are correlational in nature, therefore, we cannot assume causation or the direction of the relationships between the parent-child relationship and child outcomes.
- These results reflect just one time point; we do not know how these factors influence the quality of the parent-child relationship over time.