

Introduction

- *Parental Engagement* is associated with a number of positive child outcomes (e.g. Epstein & Sheldon, 2006).
- Parental engagement includes a focus on the partnership between schools and parents.

Dimensions include:

- *School-Based Involvement*, or activities parents engage in at school like volunteering in the classroom or being involved in teacher-parent associations;
- *Home-Based Involvement*, or activities which promote learning in the home like providing children with learning opportunities or creating a space for learning in the home;
- *Home-School Conferencing*, or communication between the school and parents about the child's education and learning (Fantuzzo & Childs, 2000).
- *Executive function*, or the ability to inhibit a dominant response and switch to an alternative response, is important for school readiness (e.g. Blair & Razza, 2007; Bull, Epsy, & Weibe, 2008).
- Executive function is comprised of multiple dimensions which should be studied separately.

Dimensions include:

- *Inhibitory Control*, or the ability to control impulses and emotional responses;
- *Flexibility*, or the ability to move freely from one situation or aspect of a problem to another and modulate emotional responses appropriately;
- *Emergent Metacognition*, or the ability to use working memory and plan or organize future goals and actions (Gioia, Epsy, & Isquith, 2003).

Purpose of the Study

- To explore executive function and parental engagement in a high risk preschool population
 - **Question 1:** What does parental engagement look like in at risk families?
 - **Question 2:** What does executive function look like in at risk preschool children?
 - **Question 3:** How are dimensions of parental engagement related to dimensions of executive function?

Methods

Participants

The families in this study are part of a longitudinal examination of the Getting Ready Project. Data for this study is from the first cohort and was collected during spring of the children's first year of preschool. Both treatment and control families are included in these analyses.

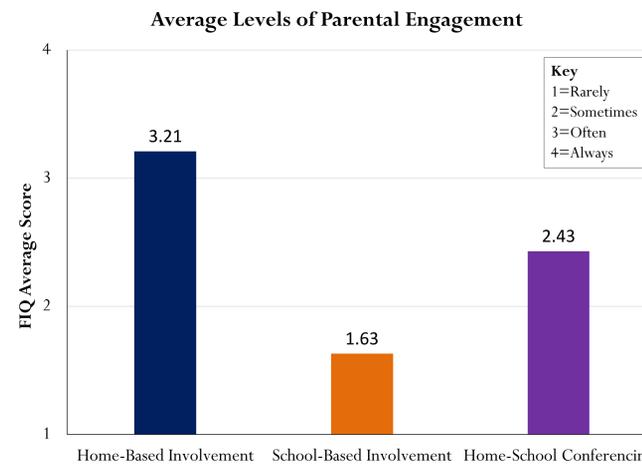
Table 1. Demographic Characteristics at Baseline (N=88)	
Parent Demographics	
Respondent	82% Mother 18 % Father
Age	25 years (range = 12 – 49)
Ethnicity/ Race	62% White/Non-Hispanic 25% Hispanic/Latino 13% Other
Marital Status	59% Married/With Partner 22% Single/Never Married 19% Divorced/Separated
Child Demographics	
Age	3.5 years (range=3-4 years)
Ethnicity/ Race	43% White/Non-Hispanic 34 % Hispanic/Latino 23% Other
Home Language	85% English 15% Spanish
Gender	51% Male 47% Female

Methods

- *School-based involvement*, *home-based involvement*, and *home-school conferencing* were all measured using parent report on the Family Involvement Questionnaire (FIQ; Fantuzzo & Childs, 2000). Items were measured on a four-point Likert scale (1=rarely to 4=always). Composite scores were created for each of the three subscales.
- *Inhibitory control*, *flexibility*, and *emergent metacognition* were all measured using teacher report on the Brief Rating Inventory for Executive Function Preschool Version (BRIEF-P; Gioia, Epsy, & Isquith, 2003). T-scores were created to standardize raw scores according to age and gender norms; a t-score of 50 represents the average.

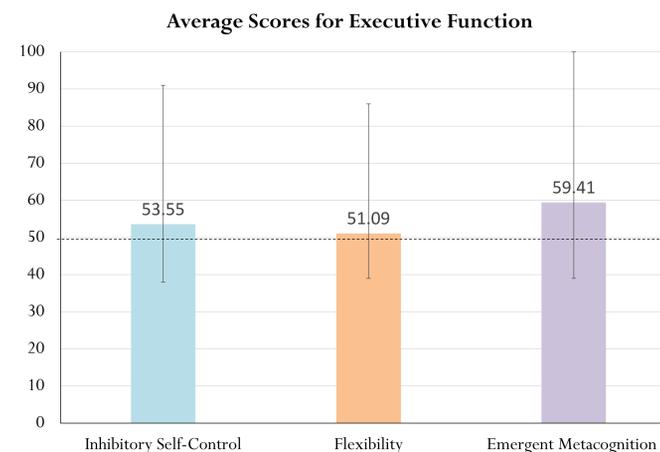
Results

Question 1: What does parental engagement look like in at risk families?

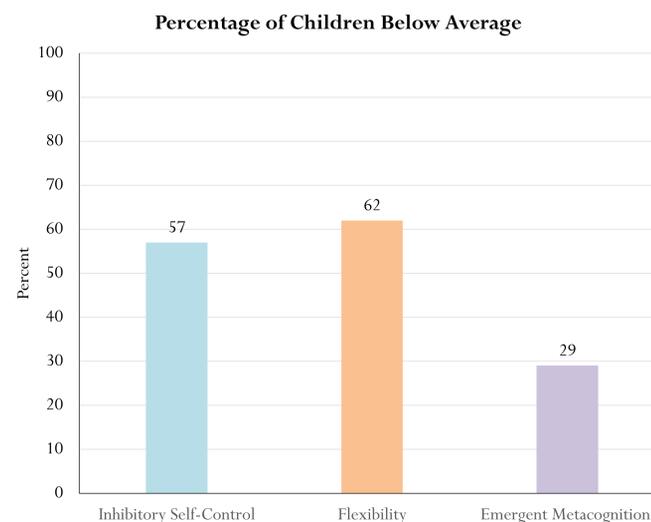


Question 1 Summary: Home-based involvement is the most frequent, followed by home-school conferencing, and then school-based involvement.

Question 2: What executive function look like in at risk preschool children?



Question 2 Summary: Looking at the group as a whole, *children demonstrate average or above average levels of executive function*. However, there is a range of scores across individuals. A greater proportion of children demonstrated below average scores on inhibitory self-control and flexibility.



Results

Question 3: How are dimensions of parental engagement related to dimensions of executive function?

Summary of Regression Analyses for Parental Engagement Predicting Executive Function

	Inhibitory Self-Control			Flexibility			Emergent Metacognition		
	B	SE B	β	B	SE B	β	B	SE B	β
Home-Based Involvement	-.35	.36	-.14	-.34	.32	-.15	-.10	.38	-.04
School-Based Involvement	-.88	.45	-.27	-.75	.41	-.26	-1.01	.49	-.30
Home-School Conferencing	.72	.31	.34*	.67	.276	.36*	.62	.33	.28
R ²	.11			.11			.09		
F	2.63 [†]			2.64 [†]			2.08		

[†]p<.10 *p<.05

Question 3 Summary: We conducted multiple regression analyses to test if dimensions of parental engagement predicted executive function.

- There was a trend for parental engagement and inhibitory self-control. **Higher levels of home-school conferencing predicted greater inhibitory self-control.**
- There was a trend for parental engagement and flexibility. **Higher levels of home-school conferencing predicted greater flexibility.**
- No relationship was found between parental engagement and emergent metacognition.

Discussion

Question 1:

- *Home-based involvement was the most frequent type of parental engagement* for these low income families, followed by home-school conferencing, and school-based involvement.
- This supports the idea that we need to consider more than just traditional school based actions and behaviors when examining parental engagement.
- If we leave out home-based activities, we may underestimate parental engagement.
- School-based involvement and home-school conferencing may be lower as lack of social capital and work and time commitments can be prohibitive for low-income families; this may be especially true for school-based involvement which is a measure of behaviors like volunteering in the classroom or participating in parent teacher organizations.

Question 2:

- *The majority of children were below average on their ability to control emotional responses, inhibit impulses, and switch between aspects of a problem or solution.*
- *The majority of children demonstrated average or above average capabilities in using working memory and planning and organizing future goals and actions.*

Question 3:

- Trends suggest a relationship between parental engagement and inhibitory self-control and flexibility. *Higher levels of home-school conferencing are predictive of greater ability to stop problem behaviors, modulate emotionally responses, and move from one aspect of a problem or solution to another.*
- Communication between parents and teachers may involve discussions of strategies to help children regulate their emotions and behaviors which would contribute to greater inhibitory self-control and flexibility.
- No relationship was found between parental engagement and children's working memory or ability to plan and organize future actions and goals.

Implications for Practice

- This study increases understanding in the field of executive function and parental engagement.
- Additionally, by understanding the association between parent engagement and executive function, interventions can be more fully developed to effectively promote children's executive function skills.

For additional information, contact: Courtney Boise: University of Nebraska-Lincoln, Department of Psychology, (cboise@huskers.unl.edu)

This research was supported by a grant awarded to Drs. Susan Sheridan, Lisa Knoche, and Carolyn Pope Edwards by the Institute for Education Sciences, Department of Education (Grant #R324A120153-12A). The opinions expressed herein are those of the investigators and do not reflect the funding agencies.