

## Introduction

- The development of children's early reading skills is important because these skills serve as the building blocks for later ones (Morris et al., 2003).
- Unfortunately, children from low-income households tend to perform more poorly on reading assessments than do children from higher-income households (Duncan et al., 2007; Reardon & Portilla, 2016).
- One explanation for income-based differences in reading skills is differential access to enriching experiences at home and school (Conger & Donnellan, 2007; Yeung et al., 2002).
- Although parental involvement in education is associated with children's academic success (Fan & Chen, 2001), low-income parents may encounter barriers which prevent such involvement (Hornby & Lafaele, 2011).
- It may be possible for children's experiences in the classroom to compensate for what occurs, or does not occur, at home.

### Present Study

- The present study examined if the amount of daily classroom reading instruction moderated the relation between educational involvement and children's reading skills.

## Method

### Participants

- Data were from the Early Childhood Longitudinal Study – Kindergarten: 2011 (ECLS-K: 2011; Tourangeau et al., 2015)
- $N = 4380$  first-grade children (50% girls) from low-income households, as well as their parents and public school teachers

Table 1. Key Demographics of Sample Participants

Demographics	$n$	%	
Race/ethnicity	Asian	259	6%
	Black	733	17%
	Hispanic	1741	40%
	White	1399	32%
	Other	248	6%
Household Poverty	Poor	2424	55%
	Near poor	1956	45%

Note. Percentages may not add up to 100 due to rounding

### Procedure

- Data were collected through direct child assessments, parent interviews, and teacher questionnaires (Tourangeau et al., 2015).

### Measures

- Parents and teachers reported on various covariates of interest (e.g., number of siblings, years of teaching experience).

## Method (cont.)

### Measures

- **Reading skills:** assessed in the spring of kindergarten and first grade. Items on letter recognition, beginning/end sounds, vocabulary, and reading comprehension were included.
- **Parental involvement:** measured using a composite of nine home- and school-based items ( $\alpha = .54$ )
  - Mean centered ( $M = 0, SD = 0.29$ )
  - Sample items: "Since the beginning of this school year, have you or other adults in your household gone to a regularly-scheduled parent-teacher conference with {child's} teacher or meeting with {child's} teacher?" and "In a typical week, how often do you or any other family members read books to {child}?"
- **Amount of classroom reading instruction:** measured using teachers' responses to the question, "How much time does the typical child in your class usually work on lessons or projects in reading and language arts?"
  - 1 = less than 1.5 hours
  - 2 = 1.5 hours to less than 2 hours
  - 3 = 2 hours to less than 2.5 hours
  - 4 = 2.5 hours to less than 3 hours
  - 5 = 3 hours or more
- **Household poverty level:** assessed using household income and the U.S. weighted poverty thresholds for 2011 (Tourangeau et al., 2015).
  - *Poor* = less than 100% of the federal poverty threshold (~\$23,000 for a family of four)
  - *Near poor* = between 100% and 199% of the federal poverty threshold (~\$23,000-\$46,000 for a family of four)

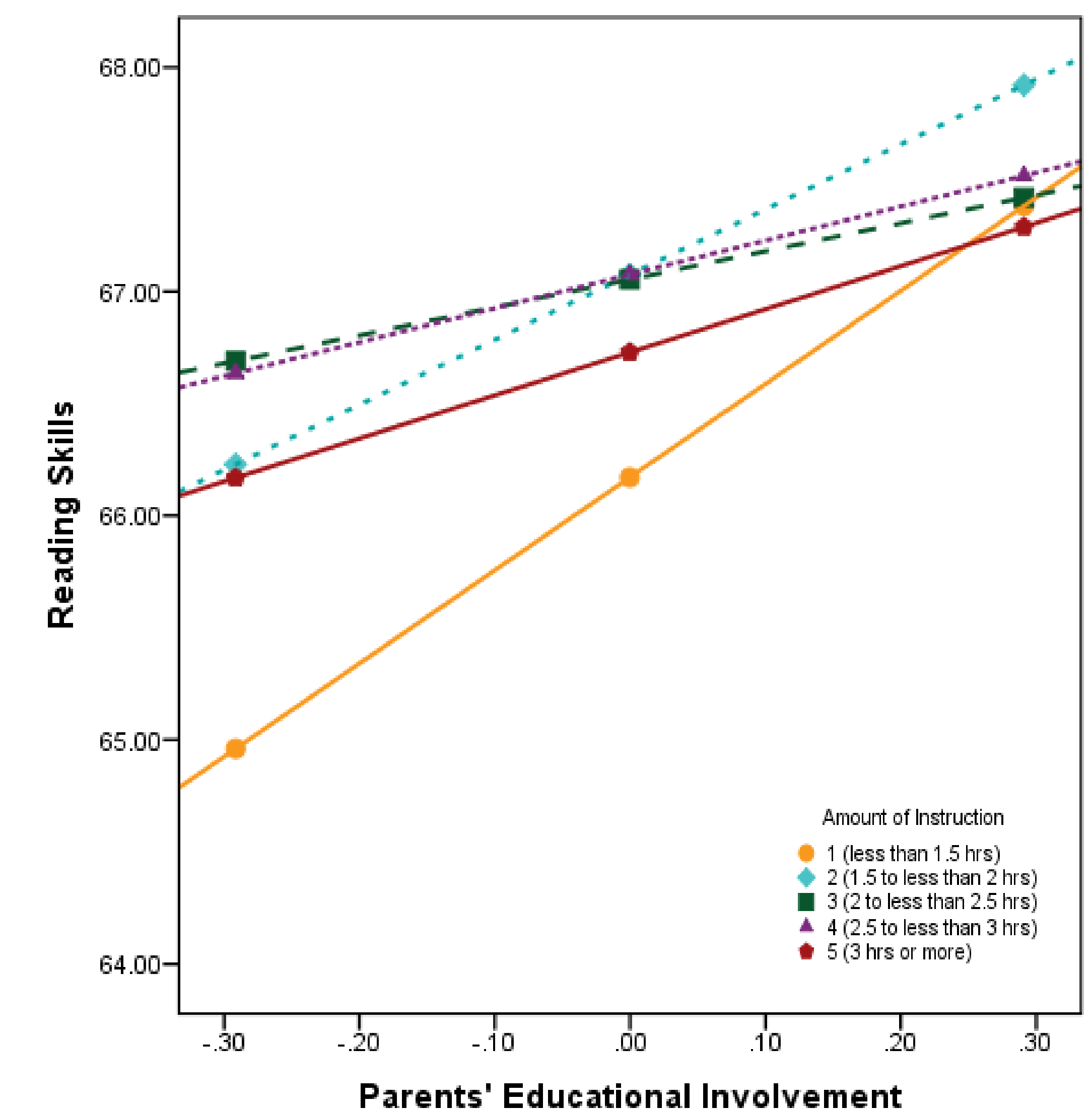
### Analysis

- GLM analysis conducted using the Complex Samples procedure in SPSS (stratum: W4CS4P\_4TSTR; cluster: W4CS4P\_4TPSU; weight: W4CS4P\_4T0)

## Results (cont.)

### Probing the Interaction

- The conditional effect of parental involvement on children's reading skills was significant at:
  - Less than 1.5 hours of instruction ( $b=5.24, t(108) = 3.96, p = .000$ ; line 1 in graph below)
  - 1.5 to less than 2 hours of instruction ( $b=3.90, t(108) = 3.99, p = .000$ ; line 2 in graph below)
- Visual depiction of the interaction between parental involvement (at: 1 SD below the mean, the mean, and 1 SD above the mean) and the amount of reading instruction on children's first grade reading skills:



## Results

Table 2. GLM Results Testing the Interaction Between PI and Amt. of Instruction

Predictor	Wald Test
Child race/ethnicity	$F(6, 103) = 4.40$
Number of siblings	$F(1, 108) = 4.63^*$
Household poverty level	$F(1, 108) = 11.98^{***}$
Kindergarten reading skills	$F(1, 108) = 3627.59^{***}$
Teachers' years of teaching experience	$F(1, 108) = 7.73^{**}$
Parental involvement (PI)	$F(1, 108) = 27.31^{***}$
Amt. of reading instruction	$F(1, 108) = 0.49$
PI x amt. of reading instruction	$F(1, 108) = 2.81^*$

Note.  $N = 3570$  \*significant at  $p < .05$  \*\* Significant at  $p < .01$  \*\*\*Significant at  $p < .001$ . Reference groups: child race = white; poverty level = near poor; amt. of reading instruction = less than 1.5 hours

## Discussion

- Results indicate that children who do not receive ample amounts of reading instruction in the classroom benefit the most from having involved parents.
- This finding suggests that the effectiveness of some forms of intervention, such as parents' involvement, is dependent on what occurs within the classroom.
- Although the involvement of low-income parents is important, increasing their level of involvement simply may not be feasible.
- As such, students of teachers who provide smaller amounts of instruction in their classrooms may benefit from:
  - Receiving at least 2 hours of reading instruction at school.
  - Having strong home-school partnerships.