

Relation of Maternal Education and Home Literacy Environment to Early Literacy Skills



Angela Chen
The College of New Jersey

Andrew Mashburn, Anita McGinty
University of Virginia



INTRODUCTION

- Socioeconomic status is often, but not always, predictive of literacy interactions in the home (Phillips & Lonigan, 2009).
- Home literacy environment plays a significant role in influencing children's early literacy development (Bennett, Weigel, & Martin, 2002; Bingham, 2007).
- We would like to investigate the relationships between maternal education, home literacy environment, and early literacy skills.

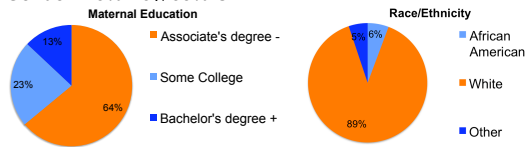
RESEARCH QUESTIONS

- RQ1.** Is maternal education associated with the home literacy environment?
- RQ2.** To what extent is maternal education and the home literacy environment associated with literacy skills at pre-K entry?
- RQ3.** Is the association between home literacy environment and literacy skills at pre-K entry stronger for children whose mother's have lower levels of education?

METHOD

Participants

- 175 children attending preschool in the Appalachian region
- Age** (years): $M=4.52$, $SD=0.28$
- Gender:** 45% Bov, 55% Girl



Measures

- Maternal Education**
Mother-report of highest level of maternal education
- Home Literacy Environment**
 - Maternal Literacy Beliefs** (Lit Beliefs)
Sum of 5 items (measured on a 4-point scale) from the *Caregiver Literacy Survey*
 - Home Literacy Practices** (Lit Practices)
Sum of 12 items (measured on a 4-point scale) from the *Caregiver Literacy Survey*

METHOD CONTINUED

Early Literacy Skills

Test of Preschool Early Literacy, 3 Subsets: Expressional Definitional Vocabulary, Phonological Awareness, and Print Concepts (TOPEL; Lonigan, Wagner, Torgesen & Raschotte, 2007)

Procedure

- Mother completed *Parent Demographic Survey*, *Caregiver Literacy Survey* and *TOPEL* administered to preschoolers Fall of preschool.

Analysis

- Analyses excluded children with missing data (list-wise deletion) and controlled for differences in age, gender, and race/ethnicity.
- Preliminary analyses revealed a non-linear association between maternal education and TOPEL scores. Further analyses categorized maternal education into 3 groups: 2 year degree or below (AA-), some college (SC), bachelor's degree or higher (BA+).
- AA- served as the reference group in regressions.

RESULTS CONTINUED

RQ1. Is maternal education associated with the home literacy environment?

- Results show no significant differences in home literacy environment related to maternal education.

RQ2. To what extent is maternal education and the home literacy environment associated with literacy skills at pre-K entry?

- Maternal education has a strong positive association with early literacy skills.
- There are positive trends between home literacy environment and early literacy skills but the associations are not statistically significant

RQ3. Is the association between home literacy environment and literacy skills at pre-K entry stronger for children whose mother's have lower levels of education?

- Neither maternal literacy beliefs nor home literacy practices have significant interactions with maternal education

RESULTS

Maternal Education and Mean Home Literacy Environment Scores

	AA-	SC	BA+	F	p
Mean Lit Beliefs	19.1	19.2	19.1	0.086	.918
Mean Lit Practices	36.9	35.9	37.7	0.818	.443

t= $p \leq .2$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.
Note: AA = 2 year degree or less, SC = some college, BA+ = bachelor's degree or higher

Relation of Maternal Education and Home Literacy Environment on TOPEL Early Literacy Scores

	TOPEL Composite		Print Concepts		Phonological Awareness		Expressive Definitional Vocabulary	
	B	SE	B	SE	B	SE	B	SE
Maternal Education								
SC(1)/AA-(0)	14.79**	4.61	2.71	2.18	8.56***	2.31	3.52t	1.83
BA+(1)/AA-(0)	31.38***	5.76	18.48***	2.73	6.87*	2.88	6.04**	2.28
Home Lit Environment								
Lit Practices	0.52	0.41	0.12	0.20	0.28t	0.2	0.11	0.16
Lit Beliefs	0.76	1.43	-0.08	0.68	0.29	0.71	0.56	0.57
Interactions								
SC x Lit Practices	-1.22t	.92	-0.64t	0.43	-0.26	0.46	-0.32	0.37
BA+ x Lit Practices	-1.01	1.06	-0.78t	0.50	-0.10	0.54	-2.735	1.68
SC x Lit Beliefs	-3.81	3.13	-0.55	1.49	-2.03t	1.57	-1.23	1.24
BA+ x Lit Beliefs	-4.83	4.25	-2.23	2.02	0.14	2.13	-2.74t	1.68

t= $p \leq .2$. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.
Note: AA = 2 year degree or less, SC = some college, BA+ = bachelor's degree or higher

DISCUSSION

- Maternal education is a significant predictor of early literacy skills and there are positive associations between maternal literacy beliefs/home literacy practices and early literacy skills but the associations are non-significant.
- Limitations: We used a small sample size and new measures of home literacy environment and maternal literacy beliefs
- More research is needed to understand the relations among maternal education, home literacy environment, and early literacy skills

REFERENCES

- Bennett, K. K., Weigel, D. J., & Martin, S. S. (2002). Children's acquisition of early literacy skills: Examining family contributions. *Early Childhood Research Quarterly*, 17(3), 295-317.
- Bingham, G. E. (2007). Maternal literacy beliefs and the quality of mother-childbook-reading interactions: Associations with children's early literacy development. *Early Education and Development*, 18(1), 23-49.
- Phillips, B. M., & Lonigan, C. J. (2009). Variations in the home literacy environment of preschool children: A cluster analytic approach. *Scientific Studies of Reading*, 13(2), 146-174.