
*Key measurement issues
in the study of
low-income families
and school readiness*

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Early Disparities in School Readiness Skills

- n Importance of early academic skills for later achievement
 - n “Skills beget skills” (National Bureau for Economic Research, 2005)
 - n “Matthew Effects” (Cunningham & Stanovich, 1997)
- n Examination of early academic trajectories from K-5th grades indicate persistence of income disparities (NICHD SECCYD; Bachman & Mohan, 2006) or widening of gaps over time (ECLS-K; Votruba-Drzal et al., 2009)
- n Focus of presentation: Parenting for early literacy development in low-income families

Outline

- n Theoretical frameworks
- n Measurement of early literacy outcomes
- n Limitations of quantitative parenting measures
- n Insights from qualitative and mixed methods research

Parenting for School Readiness

n 2 Primary Parenting Dimensions

- n Socialization and Didactic (Bornstein, 1989)

n Theoretical frameworks for understanding parental teaching of early literacy skills:

- n Household production models – resources and investment of time and money (Becker, 1991; Foster, 2002)

- n Family stress models – psychological distress associated with less stimulating and responsive parenting (Conger et al., 2002; McLoyd, 1990)

What are “emergent literacy skills”?

n “Precursor skills”^a

- n Alphabet knowledge
- n Phonological awareness
- n Writing letters or own name
- n Oral/receptive language
- n Phonological memory
- n Colors

n Conventional skills

- n Standardized Reading Test

^a National Early Literacy Panel report (National Institute for Literacy , 2008)

Quantitative Measurement of Parental Teaching Practices

- n Commonly assessed with Home Literacy Environment (HLE) scales or the HOME-Cognitive Stimulation subscale (Caldwell & Bradley, 1984)
- n Generally include 2 major components (resources and behaviors) that align with investment perspective (how spending time & money?)
- n **Resources**
 - n Number of adult and children's books, magazines, newspapers in home (print exposure)
 - n Computer, educational videos or CDs
- n **Parent Behaviors**
 - n Teaching letters, numbers, shapes, colors, sizes
 - n Reading to child, and parents reading to themselves
 - n Taking child on educational outings (museums, zoos, etc.)
 - n Limiting TV watching

Limitations of Quantitative HLE Measures

n **Longitudinal Measurement Issues:**

- n Static measures: one point in time or averaged across years
- n Between-child vs. within-child findings
 - Recent Parent Involvement example: Within-child changes in parent involvement in elementary school not significantly associated with achievement trajectories (El Nokali, Bachman, & Votruba-Drzal, 2010)

n **Domain-Specificity Issues:**

- n Increasing research has shown that not all literacy-related or cognitively stimulating parenting practices comparably predict reading acquisition (Morrison, Bachman, & Connor, 2005).
- n In natural experiments, first grade instruction effects on reading achievement but not receptive vocabulary (Morrison et al., 1996, 1997).
- n Randomized experimental evidence: Surprisingly little association between shared-book reading experiences and preschoolers' emergent literacy development (Evans, Shaw, & Bell, 2000; Scarborough & Dobrich, 1994; Sénéchal & LeFevre, 2002; Whitehurst, et al., 1994).
 - Implication: Global measures of parenting that combine practices which stimulate both literacy and language skills will mask these domain-specific, causal mechanisms.

Limitations continued

n **Restriction of Range Issues:**

- n Researchers commonly face restriction of range issues in observations and parent-reports of HLE practices in low SES families, as well as for some ethnic minority groups (e.g., Berlin, Brooks-Gunn, Spiker & Zaslow, 1995).
- n Income and maternal education disparities in early literacy and language skills partially explained by HLE disparities (Raviv, Kessenich, & Morrison, 2004; Linver, Brooks-Gunn, & Kohen, 2002)
 - In other words, low-income children score lower on early reading measures because their parents score lower on HLE measures compared to middle-income counterparts.

n **Construct Validity Issues:**

- n Qualitative and mixed methods work indicate that additional literacy socialization practices may be operating among low-income families that are not adequately captured by traditional quantitative scales

Qualitative Evidence of Parenting Variability in Low-Income Families

Three Examples:

- n Study 1: Baker, Sonnenschein, & Serpell (1994); The Baltimore Early Childhood Project
 - n 80 children and families followed 3-5 yrs (Pre-K/G1 – G3)
 - n African American and White lower- and middle-income families
 - n Parent diaries, ecological inventories, ethnotheory interviews, rating scales, and standardized child assessments

- n Two major themes emerged from interviews regarding literacy socialization: Reading as entertainment or skills

Literacy Socialization Practices in Lower- and Middle-Income Families

n **Reading as Entertainment**

- n Parents show children that reading books is fun;
- n Encourage children to pick out books about topics or characters they like; and
- n Encourage children to read and look at books in their spare time
- n *Endorsed more frequently by middle-income parents

n **Reading to Acquire Skills**

- n Parents encourage children to recognize letters, recite the alphabet, practice reading words for lists or cards, and learn letter-sound correspondences
- n *Endorsed more frequently by lower-income parents

n The reading as entertainment orientation benefited lower- and middle-income children's literacy acquisition.

n These dimensions were quantified and early indicators of literacy socialization themes predicted standardized 3rd grade reading skills

n These parent behaviors are expected to not only promote reading acquisition, but the development of literate habits and reading engagement.

Parenting Variability within Low-Income, African American Families

- n Study 2: Reginald Clark, 1983
 - n 10 African American families from Chicago with 1- or 2- parents and low- or high-achieving high school students
 - n Data collected over 6 months, including taped semi-structured interviews, participant observation in homes for over 48 hours, and questionnaires
- n Distinct family processes and parenting practices emerged between families of low- and high-achievers

Parenting Profile for Low-Income, African American, High Achieving Students (Clark, 1983)

When these high-achieving adolescents were in preschool and elementary school, "parents attempted to prepare children for school tasks during home conversations, study encounters, and other activities that called upon the child to speak, read, spell, and solve challenging problems. . . . Parents usually monitor[ed] homework closely, including work with flash cards, art projects, research projects, reading, and writing assignments, in the child's first school years, while slowly urging self-regulation in these activities" (pp. 136-137).

Parenting Profile for Low-Income, African American, Low Achieving Students (Clark, 1983)

“There are no consistent, regularly performed learning rituals in these homes. Reading of school materials, writing, and homework are seldom, if ever, done in the home. Although parents sometimes 'remind' the students of homework obligations, there are no parental attempts to supervise or check student's progress. . . . These parents may have some vague idea of the student's school performance; they may know that their child is being only minimally productive, but they feel powerless to help the student improve or to control his or her behavior" (p. 195).

Who is responsible for teaching children at home? Including more parent-figures in research

- n Increasing awareness of other co-parents in low-income families
 - n Co-residing grandparents
 - n Custodial grandparents
 - n Social fathers

- n Another possibility: older siblings
 - n Qualitative work from immigrant families describes key role of older siblings for assisting younger siblings with homework (Caplan, Choy & Whitmore, 1992), as well as serving as language-brokers for the family (Orellana et al., 2003).

Supportive Parenting Practices in Low-Income, Immigrant Families

- n Study 3: Caplan, Choy, & Whitmore, 1992
- n Indochinese refugees from Southeast Asia
 - n 6,750 participants from 5 U.S. cities
 - n Subsample of 200 families (536 children) completed interviews in native language
 - n School transcripts and other documents collected
 - n Many families were low-income with little English fluency, and children may have missed months or years of formal schooling while living in relocation camps.
- n Despite these economic hardships and limited English, many of the children adapted quickly to new school environments and excelled academically.

Sibling Support for Immigrant Children's Reading Achievement

“Among the refugee families . . . homework clearly dominates household activities during weeknights. Although the parents' lack of education and facility with English often prevents them from engaging in the content of the exercise, they set standards and goals for the evening and facilitate their children's studies by assuming responsibility for chores and other practical considerations. After dinner, the table is cleared and homework begins. The older children, both male and female, help their younger siblings. Indeed, they seem to learn as much from teaching as from being taught. It is reasonable to suppose that a great amount of learning goes on at these times--in terms of skills, habits, attitudes, and expectations as well as the content of a subject. The younger children, in particular, are taught not only subject matter but how to learn. Such sibling involvement demonstrates how a large family can encourage and enhance academic success” (Caplan, Choy & Whitmore, 1992; pp. 39-40).

Conclusions from Qualitative Research with Low-Income Families

- n A recurrent theme from qualitative work is that routines and rituals may be operating in low-income families that support not only reading acquisition, but the development of literate habits.
- n In some low-income and/or immigrant families, it appears that the “teaching” aspect of parenting for school readiness has been delegated to other family members, such as siblings.
 - n If other co-parents are excluded from common HLE assessments, then these families will continue to receive lower scores and restriction of range issues will be perpetuated.

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