Parent Reading Belief Inventory: Reliability and Validity with a sample of Mexican-American mothers

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Introduction

- Investigations of parental beliefs have been derived from the notion that beliefs guide parents’ activities and actions with children (Goodnow, 2002).

- Parents’ beliefs are components of the “developmental niche” that inform parents’ care giving activities and practices (Harkness & Super, 2006).

- Parents’ beliefs are fundamental to the interface between child and culture and are the starting point for the experiences a child has with the child (Sigel & McGillicuddy-deLisi, 2002).

- Parents’ literacy beliefs are an important feature of the sociocultural contexts in which children acquire literacy (Serpell, Sonnenschein, Baker, Ganapathy, 2002).
There is a growing body of evidence indicating parents’ literacy beliefs are related to children’s performance on literacy-related tasks.

For example, Sonnenschein and colleagues (1997) found a consistency between parents’ beliefs about how to foster reading and children’s knowledge about print, phonological awareness, and narrative competence.

Similarly, DeBaryshe, Binder, and Buell (2000) reported an association between mothers’ beliefs about early literacy instruction and children’s literacy skills.

More recently, Weigel, Martin, and Bennett (2006), using the Parent Reading Belief Inventory, found a relationship between their literacy beliefs and preschool children’s emergent literacy skills.

However, there are few quantitative studies that link Mexican-American mothers’ literacy beliefs with their literacy practices and complement the qualitative research (Gallimore & Goldenberg, 2001; Reese & Gallimore, 2000) by providing practitioners a more comprehensive view of this relationship.
Valid and reliable measures are needed to examine the nature of the relationship between Mexican-American mothers’ literacy beliefs and children’s literacy activities and performance.

The *Parent Reading Belief Inventory (PRBI;* DeBaryshe & Binder, 1994 was designed to examine parents’ beliefs about:

- goals and process of reading aloud to young children
- theories of emergent literacy and environmental influence on language development

Although DeBaryshe and Binder (1994) reported acceptable psychometric properties in a sample of African-American and European American mothers of low-income backgrounds, it is unknown whether the PRBI functions similarly with Mexican-American mothers.
Aims of the Investigation

- The purpose of this investigation was to examine the reliability and validity of the *Parent Reading Belief Inventory* in a sample of Mexican-American mothers from low-income families.

- The specific aims of this investigation were as follows:

  1. to examine the internal consistency of the seven scales of the *PRBI*

  2. to evaluate the *PRBI*’s factor structure

  3. to test criterion-related validity by examining family characteristics and home literacy practices
## Method
### Participants

<table>
<thead>
<tr>
<th>Mothers</th>
<th>Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>274 mothers of Mexican-American descent</td>
<td>119 females</td>
</tr>
<tr>
<td></td>
<td>155 males</td>
</tr>
<tr>
<td></td>
<td>11.12 years of formal education (SD = 1.62)</td>
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<td>Lived in an urban area of the Southwestern United States</td>
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<td>94 bilingual (English/Spanish)</td>
<td>Preschool enrollment:</td>
</tr>
<tr>
<td>180 monolingual (English)</td>
<td>16 Developmental Preschool</td>
</tr>
<tr>
<td></td>
<td>programs</td>
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<tr>
<td></td>
<td>129 Even Start programs</td>
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<tr>
<td></td>
<td>129 Child Development Ctrs</td>
</tr>
<tr>
<td></td>
<td>(public child care and preschool programs offered through the local city government)</td>
</tr>
</tbody>
</table>
Procedures

- Mothers completed two questionnaires:
  
  1) *Parent Reading Belief Inventory* (DeBaryshe & Binder 1994)

  2) *Home Literacy Activities Questionnaire* (Hammer, Miccio, & Wagstaff, 2003)

- The mothers chose to complete the questionnaires (English or Spanish version) at home or had the questionnaires read to them by the preschool teachers.
Questionnaires

- *Parent Reading Belief Inventory* (DeBaryshe & Binder, 1994)

- 42 items rated on a 4-point Likert scale (1 strongly disagree to 4 strongly agree)

- 7 scales

  - **Positive Affect** - positive affect associated with reading
  - **Verbal Participation** - the value placed on children’s active verbal participation when reading
  - **Resources** - whether limited resources are an obstacle to reading
  - **Teaching Efficacy** - views on parents’ role as teachers of school-related skills
  - **Knowledge Base** - whether children acquire moral orientations or practical knowledge from books
  - **Environmental Input** - the malleability of language development
  - **Reading Instruction** - the appropriateness of direct reading instruction
The Home Literacy Activities Questionnaire (Hammer, Miccio, & Wagstaff, 2003)

Examined the frequency of children’s literacy activities (e.g., reading a book, coloring, pretending to write), mother-child literacy activities (e.g., looking at books together, teaching the child the alphabet, etc.), and mothers’ literacy activities (e.g., reading a book, reading a magazine, etc.).

Mothers’ responses were scored on a 7-point scale:

1 = rarely or never  
2 = several times a year  
3 = 1 time per month  
4 = 2 - 3 times per month  
5 = 1 day per week  
6 = 2 - 4 days per week  
7 = 5 - 7 days per week
Discussion

- Similar to DeBaryshe and Binder (1994), our results revealed good internal consistency for 5 of the 7 scales: Teaching Efficacy, Positive Affect, Verbal Participation, Knowledge Base and Resources.

- Two scales, Environmental Input and Reading Instruction, had low reliability estimates.

- The mothers we studied provided conflicting responses to the Environmental Input scale items. The majority of mothers disagreed with the scale’s first item that probes their belief about parents’ influence over their children’s talkativeness. Conversely, most mothers expressed agreement with the item that examines their belief about the inheritability of children’s language abilities.

- These results suggest that Mexican-American mothers interpreted these items as examining two different constructs. “Talkativeness” may be viewed as a personality trait that can’t be changed, while the second construct “language ability” may be understood as a specific developmental process influenced by genetic factors.
Our findings also revealed that one component provided the best summary of the observed variables in the PRBI, paralleling the DeBaryshe and Binder study. The 7 summed scale scores were summarized by one component and explained slight over half of the variance in our sample of Mexican-American mothers.

Criterion validity was supported by the PRBI’s association with measures of family characteristics and characteristics of children’s home literacy environment.

Our analysis suggests that language use (bilingual, monolingual) is associated with Mexican-American mothers’ literacy beliefs. Because higher PRBI scores reflect endorsement of schools’ literacy beliefs, our results parallel other research that suggests English proficiency is positively related to level of acculturation (Espinoza & Massey, 1997).

Similar to DeBaryshe and Binder (1994), our results indicate that Mexican-American mothers who hold beliefs consistent with the schools’ literacy beliefs engage more frequently in literacy practices.
● All aspects of the children’s home literacy experiences were significantly related with the mothers’ PRBI score, with the exception teaching a child to write.

● Our results suggest that there is a relationship between Mexican-American mothers’ literacy beliefs and reported home literacy practices, paralleling DeBaryshe and Binder’s findings.

● An abbreviated version of the PRBI, which excludes the Environmental Input and Reading Instruction scales, can be used with Mexican-American mothers to investigate the link among parents’ literacy beliefs, home literacy practices, and children’s literacy and language outcomes.

● Further research is needed to improve the consistency of the Environmental Input and Reading Instruction scales.
Selected References


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