

Prescriptions to Read: Early Literacy Promotion Outside the Classroom

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ABSTRACT

This descriptive study examined the impact that an early literacy promotion program, Reach Out and Read (ROR), had on the literacy beliefs, frequency, and quality of literacy activities among low-income, multiracial families, particularly the Latino community. The study also explored parents' perceptions of ROR and its impact on them, their children, and their families. ROR is a pediatric-based early literacy promotion program. This study focused on one ROR program in which pediatricians-in-training provided free books and literacy advice to parents through "prescriptions to read" with their child at least 10 minutes every day. Participants included 22 parents attending an ROR clinic and 15 parents attending a non-ROR clinic. Results were mixed, showing ROR had a positive impact on the children and families it serves by increasing access to books. Yet, results equally show that this positive impact is not as significant or as broad as it might be, demonstrating room for improvement. Factors such as the role of linguistic and cultural capital in the development of early literacy programs that serve ethnically and linguistically diverse families are discussed. In addition, the study raises questions around the implications of experts from other fields providing literacy guidance and advice to parents.

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“They tell me I need to read 10 minutes to the children,
that it’s very good for them.”

— *Parent of a 4-year-old*

Research shows a clear link between early literacy development and later education achievement levels (Dickinson & Tabors, 2002; Valdez-Menacha & Whitehurst, 1992; Whitehurst, et al., 1988). In addition, families have been shown to play an important role in the literacy development of children (Dickinson & Tabors; Whitehurst et al.).

One program aimed at supporting early literacy development is Reach Out and Read (ROR)/*Vamos a Leer*. ROR is a nationwide literacy promotion program carried out by the medical community. ROR began in Boston in 1989 through Dr. Robert Needlman’s initiative to “prescribe books to underprivileged children” (Fitzgerald & Needlman, 1991), as part of the family-physician interface in well-baby clinic settings. In addition to providing books, ROR physicians and nurses provide literacy guidance and advice to parents on strategies and practices to incorporate into the parent-child book interaction.

While there exists a growing body of literature investigating the effectiveness of ROR, much of this research focuses mainly on parent reports of book reading as a measure (e.g., Golova, Alario, Vivier, Rodriguez, & High, 1999; High, Hopmann, LaGasse, & Linn, 1998; Sanders, Gershon, Huffman, & Mendoza, 2000). Furthermore, much of this research has been conducted by the very doctors implementing ROR.

This study expanded upon previous studies of ROR by exploring in a more-holistic sense the activities, values, and literary materials among low-income, ethnically and linguistically diverse families, particularly from within the Latino community. The aim was to identify parents’ perspectives on the impact of ROR participation, by exploring what ROR participants thought and had to say about the ROR program and its impact on them, their children and their families.

REACH OUT AND READ

The Reach Out and Read program is found throughout the United States, Puerto Rico, and Guam. It annually serves 3 million children and distributes nearly 5 million books. Endorsed by the American Academy of Pediatrics, ROR’s mission is to make “literacy promotion a standard part of pediatric care so that children grow up with books and a love of reading” (National ROR Center website).

The ROR model incorporates three main elements. First, pediatricians and nurses are trained to provide early literacy guidance to parents during their well-child check-ups. Training at this particular ROR program consisted of a

1-hour instructional session in which doctors and nurses were educated about dialogic reading, as well as a 30-minute interactive session, both of which were conducted at the introduction of ROR to the clinic (Sanders, et al., 2000). Interviews with participating doctors indicated that additional informational sessions were periodically offered by the lead doctor initiating the program at the study clinic (Billings, 2009). Literacy guidance focused on developmentally appropriate strategies such as the importance of looking at board books and naming the pictures with infants, rhyme and repetition with toddlers, and using open-ended questions while reading to preschool-aged children. Second, during each well-child visit from infancy to 5 years of age, the doctor or nurse provides a developmentally appropriate book for the child to take home, with the goal of building a home library of 10 books prior to the child entering kindergarten. The National ROR Center publishes a book catalog with a large number of “carefully selected” books organized by child’s age. Participating ROR programs may purchase these books at discounted prices. The doctor or attending nurse then selects a book based on those in stock at the time. Third, the doctor or nurse provides the parent with a formal “prescription” to read 10 minutes every day with their child.

The basic premise underlying the ROR program is found in the connection between literacy and health. Early reading problems are linked to school failure, dropout and “lifelong economic disadvantage,” (Needlman, Klass & Zuckerman, 2002, p. 65) including substance abuse and teenage pregnancy, which according to ROR “perpetuate the cycles of poverty and dependency.” ROR founders draw on research-based findings that show children who are read to regularly are more likely to learn to read on schedule. Thus, ROR is an attempt to encourage parents to read to their young children while also providing them the books to do so. Through the provision of books and prescriptions to read, the ROR program ultimately aims to contribute to a healthier, more-literate population.

Research on ROR has demonstrated that participation in this pediatric-based literacy program can significantly increase parent-child book sharing. Until recently, the majority of studies of ROR have been quantitative in nature with many focusing on a single measure of parent report: the reported frequency of book sharing (e.g., Golova, et al., 1999; High, et al., 1998; Sanders, et al., 2000). The interest of the researchers conducting this study was to go beyond frequency of book sharing to examine what ROR participants thought and had to say about the program and its impact on them, their children, and their families; as well as to examine the literacy perspectives held by both the parents and their pediatricians. The study was unique in that it was designed by a collaborative of researchers from the fields of education and medicine, including doctors involved with ROR.

CONCEPTUAL PERSPECTIVES

Early Literacy Development

The role of early literacy skills in enhancing school readiness and bolstering later academic achievement is well documented in research literature (Dickinson & Tabors, 2002; Valdez-Menacha & Whitehurst, 1992; Whitehurst, et al., 1988). While the literature is not entirely conclusive, there is research to show that children who are given books before kindergarten are more successful in first grade (McCormick & Mason, 1986). Furthermore, children whose parents begin reading to them at an early age obtain greater academic success (Scarborough, Dobrich, & Hager, 1991; Valdez-Menacha & Whitehurst; Wells, 1985; Whitehurst et al.).

In its 1998 report on literacy, the National Research Council demonstrated that families who understand the importance of supporting the literacy skills of their children and who are provided with the means to do so (i.e., books and techniques) are more likely to engage in effective literacy activities (Snow, Burns, & Griffin, 1998). Such literacy activities have been shown to translate into cognitive gains and enhanced print awareness that facilitate school readiness.

Sociocultural View of Literacy

A sociocultural view of literacy recognizes that literacy is culturally situated. In other words, the literacy values, practices, strategies, tools, and activities are “embedded in the lived realities of children’s everyday experiences” (Kennedy, Ridgway, & Surman, 2006, p. 16). Too often, educators and educational institutions disregard the linguistic and cultural resources of diverse students and their families (Dyson, & Labbo, 2003; Nieto, 1999; Valdés, 1996). In order to most effectively support the literacy development of diverse populations, a sociocultural approach is needed. A sociocultural approach seeks to understand and draw upon the literacy perspectives and resources of families of ethnically and linguistically diverse backgrounds as a basis to develop strong literacy foundations (Dickinson & Tabors, 2002; Risko & Walker-Dalhouse, 2007).

METHOD

This was a nonrandomized, cross-sectional study that sought to explore the impact on the quantity and quality of literacy practices of primarily low-income, Latino children participating in ROR. Three clinics in the California bay area were identified; one that participated in the ROR program, and two that did not.

This study was part of a larger study that investigated the efficacy and doctors’/parents’ perceptions of ROR, as well as their literacy beliefs and values.

This article reports on findings from the following research questions that focused on the impact of this program from the parents' perspective.

1. Does ROR participation increase the frequency of literacy activities among children and family members?
2. In what ways does ROR enhance the quality of literacy activities among family members and children? What forms of literacy-related practices do parents and other family members engage in with their young children?
3. What are parents' and doctors' perceptions around the impact of ROR?

Literacy activities was operationally defined as book reading for the purposes of this study. This definition was intentionally left open-ended, however, in order to include other forms of literacy practices that might emerge through interviews with parents.

Study Context

The clinic implementing the ROR program is part of a teaching hospital. The waiting room of the ROR clinic offered limited children's books. Although volunteers to read to children were described by the lead ROR doctor as a feature of the program, this practice was never actually observed during the researcher's time in the clinic. All three clinics provided free parenting magazines. None of the three clinics offered any additional literacy-related information such as brochures with advice on literacy development in the home or videos modeling ways to engage in book sharing.

While the information in the prescriptions to read may vary slightly across programs and doctors, doctors participating in this ROR program reported spending 1–3 minutes of the well-child visit implementing the ROR elements. Doctors' self-reports of the specific literacy information given to parents ranged from a simple statement telling parents of the importance of reading to their children to slightly more in-depth advice on how to approach reading with one's child. For example, in explaining the literacy advice typically given to parents, one ROR doctor explained, "I tell parents that reading together can be a good exercise for parents to do with their children... to spend time with their children doing a positive activity that could help... that will help in the future of a child's approach to books, interest in books, interest in reading, so not necessarily focusing on the reading, but focusing on just time with books." The modeling of reading strategies did not appear to be present during these interactions; it was not mentioned by either doctors or parents. Within these 1–3 minute interactions, doctors imparted their literacy advice while handing parents a written prescription to read. They then walked parent and child out to the hallway where the books were stored and where either the doctor or the attending nurse provided the family with their free book.

All three clinics served a primarily low-income, ethnically and racially diverse population that was over 50% Latino, with most families using each of the clinics eligible for Medicaid. Study participants included parents of children attending a well-child visit. Families were eligible to participate in the study if: 1) the family was eligible for Medicaid, 2) the child had missed no more than two well-child visits, and 3) the child age was a) between 9 and 13 months, b) between 2 years, 10 months and 3 years, 2 months, or c) between 4 and 5 years old. These ages were chosen in order to sample across the age groups for which well-child visits are scheduled. Using these criteria, potential participants were identified from an appointment list provided by the clinic.

Parents of eligible patients were approached by the interviewers in the waiting room and asked to participate in a 45-minute interview after the well-child visit. Approximately 30% of the families agreed to be interviewed, and the most-frequent reason given for refusal to participate was lack of time. Caretakers were interviewed in English or Spanish by five different bilingual interviewers, all of whom were native English speakers and who spoke Spanish as a second language. Three of the interviewers were Anglo-American and two were Mexican-American. Eighty-five percent of the interviews were conducted by three of the interviewers, two of whom were Anglo-American and one of whom was Mexican-American. Approximately 75% of the interviews were conducted in Spanish, per parent preference. Interviews were conducted in a small, vacant office adjacent to the waiting room. Data collection took place over a period of eight months with a research team member visiting the clinic one to three times per week.

Participants

As Table 1 shows, the majority of participants from both ROR and non-ROR groups were immigrant mothers who identified Mexico as their country of origin, with slightly more nonimmigrant participants found in the ROR group. ROR parents reported higher mean years of education, as well as slightly higher literacy rates in their native language as compared to non-ROR parents. Both ROR and non-ROR participants were similar in that they tended to live with extended family and/or people not related to them. On average, the number of people per household for each group was six, including children.

Data Sources and Analysis

A 60-item, semistructured interview was used in this study. The interview contained a combination of survey-oriented, fixed questions, as well as open-ended questions that could be categorized as “tour” questions (Spradley, 1979). In addition, a portion of the interview consisting of scaled ratings. In order to be

Table 1. Characteristics of Participants

	ROR (<i>n</i> = 22)	Non-ROR (<i>n</i> = 15)
Country of origin		
Mexico	68%	87%
United States	26%	7%
El Salvador	—	7%
Nicaragua	5%	—
Spanish is the primary language	86%	93%
Mother of child	85%	93%
Mean years of education	10.6	9.2
Received other training	50%	33%
Reads very well in native language	52%	40%
Writes very well in native language	43%	40%
Average number of members in household	6	6

sensitive to parents' range in print-related literacy levels, pictures were used to depict scaled items. Interview questions were translated by professional translators into Spanish and then back-translated to ensure their equivalency to the English version. (See Appendix for sample questions.)

Over a period of 8 months, the research team conducted interviews with a nonrandom convenience sample of 22 parents using a well-child clinic that participated in the ROR program, and 15 parents from two clinics that did not participate in ROR. Interviews were also conducted with the five ROR doctors and the two non-ROR doctors with whom the parents were paired during their well-child visits. The themes addressed in the interview protocol for practitioners mirrored those of the parent interview with slight differences in specific questions that more-directly explored doctors' perspectives and thought processes involved as they implemented the ROR aspect of the visit.

Drawing on Tesch's analytical process (Creswell, 1994), themes and patterns in the content of the interview responses within and across the ROR and non-ROR groups were identified and coded. Analysis in this phase followed the analytical processes outlined by Tesch (Creswell) which involve reading the data, writing conceptual memos, identifying emerging themes, identifying categories based on these themes, annotating the data, coding the data, and writing summary notes. Results were then analyzed in terms of frequency of types of responses and qualitative responses. Data for the ROR and non-ROR parents is reported in percentages.

FINDINGS

Access to Literary Materials

A major component of the ROR program is the provision of age-appropriate books to the children it serves. In order to explore the impact that ROR had on participants' access to literacy materials and children's books in particular, parents were asked about the availability of literacy resources in their home. The majority of ROR and non-ROR parents reported a wide variety of reading materials in their homes, including children's books, bibles, phone books, *Readers Digest* and other magazines, and newspapers. Yet, while most families reported having some literacy resources in their homes, ROR parents were more likely to have children's books at home than non-ROR parents (ROR = 100%, non-ROR = 87%). Furthermore, 16% of ROR parents said that ROR books were the only reading materials in their homes.

Utilization of Literacy Materials

In addition to making literacy materials available, I was interested in whether the ROR books were actually being used in literacy interactions in the home. Ninety percent of ROR parents said that the reading they do with their child included the ROR books they received. Of the 10% that did not use the books for reading, one parent explained, "Not any more, because most are just picture books." Given that many of the ROR families live with extended family members, another underexplored indicator of the impact of ROR is the degree to which the books were used by other household members. Here, 28% of ROR parents reported that siblings used the ROR books, with 28% reporting that other relatives of the child also read the ROR books.

Another measure of the impact of ROR's free books is the regular access the children have to these books once they are taken home. Here, 78% of ROR parents reported storing ROR books in places where their children could easily have access to them such as bookshelves, bins where reading materials were stored, and tables.

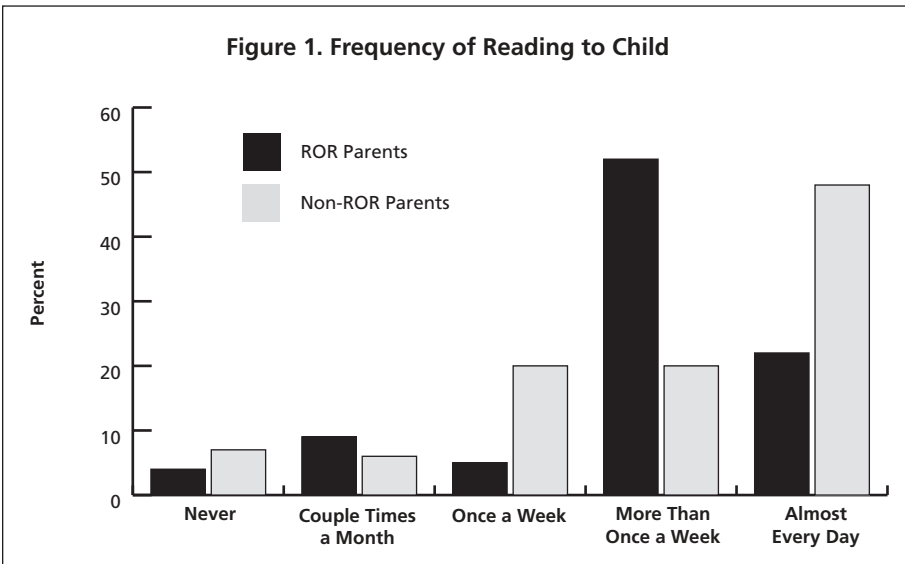
These results suggest that the free ROR books are having a positive impact on supporting the literacy interactions of ROR participants. Through increased access to children's books, these findings demonstrate that ROR is indeed supporting parent-child literacy interaction. For some families, the ROR books are the sole source of literacy materials in the home. This alone is an important finding. Furthermore, these results show that ROR's impact goes beyond the parent and child unit targeted by the well-child visits, as the free books are integrated into family literacy activities that include siblings and other relatives.

Family Interactions with Books

Several studies have demonstrated a positive link between participation in an ROR program and increased literacy interactions between parent and child (High, et al., 1998; Needlman, Fired, Morley, Taylor, & Suckerman, 1991; Sharif, Reiber & Ozuah, 2002). In this study parents were asked to indicate, on a scale of 1 to 5, how often they or someone in their household reads to their child with 1 = never, 2 = couple of times a month, 3 = once a week, 4 = more than once a week, and 5 = almost every day.

In response, most parents from each group stated that someone did get a chance to read with their child. The majority of parents from both groups indicated reading to their children at least once a week. One ROR parent responded, “He does not sleep if he is not reading a book.” Several ROR parents’ responses seemed to echo the information they received from their ROR doctor, while also situating that information within their own belief system and values. For instance, a parent of a 3-year-old replied, “It helps to learn [to read] at home so that when they go to school they will be well-behaved.” Another ROR parent said, “This way kids will learn to like reading and will learn how to listen.” These parents’ sentiments express their culturally centered beliefs and values around the importance of reading regularly to their child and its resulting link to what they view as positive school behavior.

Nonetheless, as Figure 1 shows, results are mixed in terms of demonstrating a positive link between participation in ROR and increased book-sharing literacy interactions. For example, more ROR than non-ROR parents (52% versus 20%) indicated reading to their child more than once a week. In response



to this question, an ROR parent explained, “They [the two daughters] try to read [books] because they know the drawings. I also read to them, but not daily...” However, nearly 50% of non-ROR parents reported that they read almost every day to their child, as compared to only 22% of ROR parents. One non-ROR parent who said that someone reads to her child every day stated, “Yes, [we read] every day, because the teacher at school said it was good to read to kids a lot.”

While ROR programs tend to target the parent-child unit, many immigrants live with extended family. Thus, in addition to the frequency of literacy interactions as an indication of ROR’s efficacy, I wanted to identify who was involved in these literacy interactions with the child. My interest was in better understanding the potential impact that ROR might have on the greater family unit. As Table 2 indicates, parents identified numerous family members that read with their children. The majority of home-based literacy interactions with the child included the mother and father. However, results showed grandparents and other relatives including aunts, uncles, and cousins were also involved in reading with the child. In addition, parents identified other children including friends, neighbors, classmates and/or library groups. While responses were similar for both ROR and non-ROR parents, one interesting finding here is that ROR fathers tended to read with their child more so than non-ROR fathers.

Table 2. Who Reads to the Child at Home

	ROR	Non-ROR
Mother	84%	73%
Father	42%	27%
Grandparent	11%	—
Sibling	5%	7%
Other relative	5%	7%
Other children	67%	83%

Home-Based Literacy Activities

In order to more-broadly explore the possible impact that ROR participation may have on participants, I asked parents a series of questions around children’s daily activities. As Table 3 shows, when parents were asked what their child does when he is at home, results were mixed. Responses for ROR and non-ROR parents were similar, with the most-commonly cited categories being reading, other educational activities such as pretend

Table 3. Parents’ Reports of Children’s Activities at Home

Activity	ROR*	Non-ROR
Reads books	29%	7%
Educational activity	29%	33%
Plays	71%	80%
Watches TV	24%	20%

*NOTE: Five ROR parents are excluded due to missing data

writing and painting, playing, and watching TV. Although similar categories were mentioned, ROR parents were four times more likely than non-ROR parents to cite reading as an activity their child does when she is at home. Demonstrating the impact that ROR had on some parents' literacy interactions with their child, one ROR parent said that when her child is at home he "plays, watches TV" during the day. She continued, "I usually read to him at night. They told me here not to just read to them at night or they're going to think books are just for at night. Now when I take them to the library I read them a book."

To further investigate parents' perceptions of the program's impact, ROR parents were asked if anything had changed in their home because of what they learned from the doctor at the ROR clinic. Here, 14% of the parents mentioned reading and literacy changes. Describing this influence, a parent of a 1-year-old said, "I show [my child] the books and make up stories to go with the pictures, I was told to do that by the doctor." Indicating a shift in understanding of early literacy development, a parent of a 3-year-old revealed, "I didn't know that children could learn to read very young; they taught me that here." A parent of a 5-year-old explained ROR's impact on her understanding of literacy promotion for her preschool-aged child, stating, "[The doctors] helped me. They are the ones who initiated me reading to him. Before, I didn't read to him, so I think this is going to help him [get ready for kindergarten]."

These mixed results demonstrate that access to books is a key way in which ROR is positively impacting families. In addition, for some families, participation in ROR is having a positive impact on their daily activities as well as their understandings of early literacy promotion and development. However, perhaps surprisingly, non-ROR parents appear to be engaging in reading with their child more frequently than their ROR counterparts. Furthermore, ROR parents' perceptions of the impact of the program appears limited to relatively few families.

Parents' Suggestions for the ROR Program

ROR parents from this study were very supportive of the program, expressing gratitude for the free books and literacy advice offered them. When asked specifically whether there was anything the doctor's office could do in the area of reading, very few offered suggestions for changes. Those who did offered their suggestions in an apologetic manner, as if not wanting to appear ungrateful. For example, a parent of a 1-year-old expressed, "They [the doctors] don't have time, but if they could explain to us, it wouldn't be bad. But like I said, they have so much work, but if they could do it — OK. One is always ready to listen and learn about things like that."

When asked about the books they received and whether they would like more or different kinds of books, 100% of parents across all age groups

responded yes, they wanted more books. A parent of a 3-year-old said, “Yes, but it embarrasses me [to ask]. If they can give more that would be good.” In response to whether they would like different kinds of books, responses varied according to age group. One hundred percent of parents of 5-year-olds wanted a greater variety of books, whereas a combined 56% of parents of 1-year-olds and 3-year-olds desired different kinds of books. One parent of a 5-year-old indicated her desire for books that would further support her child’s literacy development, stating, “Give him something he can read too. This book I can’t expect him to read, I need something where I can sit down and teach him the words.” A parent of a 1-year-old indicated her desire both for more books and for books fitting for a toddler, explaining, “I would like there to be more books like stories, good to have cardboard books — they last longer. Yes, maybe two every time. [I] want a variety, not the same every time. More pop-up books that have activities so I can get him to work with me instead of just listening.” A parent of a 1-year-old expressed her satisfaction with the books received, stating, “So far the books the books have been good, have simple words and a lot of colors, good for her right now.”

Delving deeper, I asked parents about the kinds of reading advice they would like to hear from the doctor. Here again, parents conveyed gratitude for the advice they were currently receiving as demonstrated by this parent of a 1-year-old: “Whatever he tells me is good, so I can learn more.” Still, many parents had a wide range of suggestions for literacy-related topics and questions that they would like to have answered. Many of the responses centered on finding more information on children’s literacy development and how parents could best support their children in the literacy process. The parent of a 1-year-old, for example, was interested in learning more about her child’s literacy development, “What stage he is at, and if I’m pushing him too much, because I don’t know where to start him at... that type of thing.”

Limitations

This study was cross-sectional and drew on a nonrandom convenience sample, lacking a true control group. Additionally, although the demographics between ROR and non-ROR participants were similar, they were not equivalent, with educational level and self-rated language and literacy skills slightly higher amongst parents in the ROR group. Direct comparison between ROR and non-ROR results within this study, then, is problematic.

Furthermore, the study relied on parent self-report of literacy practices and did not measure literacy practices pre- and posttreatment. Due to limited personnel and resources, home literacy practices and well-child checkup visits were not observed as part of the study and therefore, results are based on parent self-report of literacy beliefs, behaviors, and advice.

Lastly, while the number of families interviewed provided rich qualitative data, the participants were not numerous enough to generalize the findings to other contexts. Nonetheless, this investigative study provides an important glimpse into the implementation and impact of ROR on the literacy practices of Latino families with young children, both demonstrating the need and providing a basis for larger follow-up studies.

DISCUSSION

ROR's goal is to promote access to literacy by providing free books to families and children, as well as to increase the frequency of literacy interactions between parent and child. In examining whether participation in ROR led to an increase in book-sharing literacy activities, results of this study were mixed and demonstrated that this ROR program may not be having the impact one might expect to see, indicating room for improvement in implementation.

Perhaps the most surprising finding was that non-ROR parents reported they read with their child more frequently than reported by ROR parents; yet ROR parents were four times more likely than non-ROR parents to cite reading as an activity their child does when he is at home. Only slightly more than one-fourth (29%) of ROR parents, however, identified this as a regular activity for their child. One possible explanation of these findings is that participating in ROR has led parents to develop an increased awareness of their book-based literacy activities with their children. Thus, perhaps ROR parents' reports are more accurate than their non-ROR counterparts, leading non-ROR parents to overreport their frequency of book reading with their children. Nevertheless, surprisingly few ROR parents perceived an impact on literacy beliefs or home-based literacy activities as a result of their interactions with a doctor at an ROR clinic.

Still, this study uncovered other ways that this ROR program positively affected the diverse children and families it served. Findings illustrate that ROR participants had increased access to children's texts, with some ROR parents citing the ROR books as the only source of literacy materials in the home. This finding alone is extremely important, as research has shown that access to print is a significant factor in the emergent literacy skills of young children, with low-income families having fewer print resources in their homes and neighborhoods (Neuman & Celano, 2001). Results also show that ROR families greatly relied on the books provided by their doctor in their daily literacy practices. These findings indicate that this ROR program is having a positive impact at a most basic and fundamental level, that of access to print.

Furthermore, this study revealed that access to print through ROR's distribution of books extended beyond the children served at the well-baby clinic visits, with nearly one-third of parents indicating that siblings and other fam-

ily members read the ROR books provided them. These findings demonstrate that the positive impact of ROR on families' literacy-related activities and development extends beyond the parent-child dynamic that is ROR's focus. Additionally, ROR parents were four times more inclined than non-ROR parents to identify reading books as an activity their child engages in while at home. So, while these results do not indicate a strong impact on child-parent book sharing, they do show perhaps a wider, equally important impact on the extended families' access to print with book-sharing activities extending beyond the parent-child unit.

In exploring parents' perceptions of the ROR program, results showed that parents were very happy and grateful for the literacy advice and books provided them through the ROR program. Nonetheless, parents also had several suggestions for improvement; specifically for the kinds of advice they would like to receive from ROR doctors, desiring more information on children's literacy development and ways to best support their success in learning to read. Furthermore, parents overwhelmingly wanted more books for their children. Many also desired books that better met the age-appropriate needs of their children.

Supporting Literacy Development Within Linguistically Diverse Communities

The mixed findings arising from this study may in part be due to factors that lie at the intersection of program implementation and literacy development among ethnically and linguistically diverse families. The majority of the parents in this study were Latino whose native language (L1) was Spanish. Table 1 indicates that roughly half of ROR parents felt that they read very well in their L1, with the remainder indicating less confidence in their reading abilities. In addition, these parents indicated a preference that their children develop biliteracy skills and learn to read in both English and Spanish (Billings, in press). Research has demonstrated that literacy skills transfer from the L1 to the second language (L2) (Cummins, 1991; Troike, 1978) and that parents should be encouraged to use their stronger L1 when participating in literacy activities with their children (Dickinson, McCabe, Clark-Chiarelli & Wolf, 2004). Yet, the availability of bilingual books varied according to child age and book supply, with Spanish/English bilingual books available for only a couple of age groups at the clinic studied (Billings, in press). Thus, many of the families participating in this ROR program had received more books with English text than with Spanish/English text.

The implications here are twofold. First, if the ROR books distributed are not in the parents' L1 and many of the parents' L1 literacy levels are low—with likely lower L2 literacy levels—then it is reasonable to expect that parents'

literacy interactions with their child may not increase as a result of increased access to print simply because the print is, for all intents and purposes, still inaccessible. Second, parents' desires for their children to develop biliteracy skills, while many of the ROR books are in English, may at some level impact parents' choice to read with their child versus some other form of literacy interaction such as oral storytelling, which allows parents to support their child's L1 development.

Unconventional early literacy programs such as ROR are promising in that they utilize the well-child visit—a space not typically considered related to literacy—to promote early literacy development and access to literary materials but one that provides regular interactions with young children and their parents. While many studies of ROR report positive findings linking ROR to increased reading in the home, many of these studies utilize simplified questionnaires that largely rely on frequency of reading as the sole measure of success (High, et al., 1998; Needlman, et al., 1991; Sanders, et al., 2000). Such studies may not be capturing the complex nature and interaction of early literacy beliefs and activities, especially among the ethnically and linguistically diverse families that many ROR programs serve. More-recent research has sought to go beyond these simplified measures of success to include home visits (Weitzman, Roy, Walls, & Tomlin, 2004). However, additional studies are needed to delve deeper into ROR, its outcomes, and implementation.

Valuing the Literacy Perspectives, Values, and Experiences of Diverse Families

It is equally important to consider the perspectives of participating parents. Investigation of the literacy activities of the families participating in this ROR program revealed numerous culturally relevant forms of literacy that the families engaged in on a regular basis (Billings, in press). Recitation of poems, singing, and oral storytelling, are all literacy forms engaged in on a regular basis by both ROR and non-ROR families. These literacy activities tended to center on oral literacy, a literacy form highly valued by the Latino culture; findings that are supported by research that has explored the literacy traditions amongst ethnically and linguistically diverse families (Heath, 1998; Riojas-Cortez, Flores, Smith, & Clark, 2003; Valdés, 1996).

It is critical to further develop our understandings of the literacy forms and activities already engaged in by these diverse families so that early literacy programs such as ROR may build upon these resources. It is perhaps this gap between the literacy forms valued by many Anglo-centered early literacy programs and the different forms brought by the diverse families they serve that influenced ROR's limited impact. The implication here questions the appropriateness of a one-size-fits-all approach of literacy promotion that may not

take into consideration or build upon the skills, values, and range of literacy forms that these families engage in and which are culturally and linguistically influenced. Rather than using the Euro-American family as a model against which to measure the beliefs and practices of other cultural groups—as research suggests is often the case (U.S. Department of Health and Human Services, 2000)—building on the literacy strengths and strategies that are developed in diverse communities can lead to successful literacy development (Dickinson & Tabors, 2002). However, this bridging requires an understanding of children’s cultural and linguistic experiences and values (Risko & Walker-Dalhouse, 2007). As Jiménez and Gersten (1999) point out, it is critical for those working with diverse communities to reach out and learn about their social and cultural values and norms. By building upon the cultural capital of the diverse families it serves, the ROR program is positioned to have a tremendous impact in the early literacy development of young children.

In relation, parents also had thoughtful feedback and suggestions for the ROR program, based on their firsthand experiences as ongoing participants. The suggestions and feedback were very focused on parents’ own needs in better supporting their children’s literacy development. Few, if any, studies to date have investigated parents’ perspectives on ROR. Lack of research in this area is an indication of the low value placed on participating families’ viewpoints and experiences. Yet, it is parents’ perspectives and experiences that can provide great insight into the strengths and weaknesses within ROR and how to improve the program so as to best support parents’ in their literacy development efforts with their youngsters.

Literacy Promotion Outside the Classroom

Although results were mixed, they nonetheless demonstrated that ROR is one viable model for literacy promotion in a space that one would not typically associate with literacy; that of the doctor’s office during regularly scheduled well-baby checkups. Underlying the ROR program is the notion of using spaces outside the classroom to promote literacy development.

Two issues arise here that are worth examining in future research. The first issue centers on the question of whether these are appropriate spaces to promote literacy. What unstudied implications might exist in relation to expanding the promotion of literacy beyond the classroom space? While this paper does not explore this issue, it is one that educators need to be engaged in, if only to inform literacy promotion programs such as ROR. If we agree that it is appropriate to promote literacy in spaces such as doctors’ offices, how might other agencies that have regular interaction with young children and their parents adapt a literacy promotion model such as ROR?

Another level of implication relates to the notion of experts from other fields serving as literacy advisors. The literature on school-based literacy coaching demonstrates its complex and challenging nature, even among teachers and coaches who have considerable expertise and knowledge in the area of reading (Gibson, 2006). The International Reading Association (IRA) (2007) identifies standards for reading professionals that include at minimum, courses in educational processes for paraprofessionals not engaged in teaching reading, to much more rigorous standards for reading teachers. ROR doctors and nurses are not engaged in the act of teaching children how to read, and it is not the intent of the author to suggest that they be held to such standards. And, although the concept of medical professionals providing literacy advice may seem harmless enough, several questions emerge. Should we be concerned that nonexperts are using their role as experts in another field to impart advice in an area in which they have received little training? What are the implications of nonexperts attempting to appropriately advise primarily poor and/or immigrant families in the areas of literacy in the primary and secondary languages? What should be considered “enough” training? The limited research that exists on doctors’ perspectives on the assumed role of literacy advisors has shown that doctors admitted feeling inadequate in the knowledge base they bring to giving advice about literacy. They desired more information around topics such as developmental milestones in literacy development and whether what they are telling parents is “right” (Billings, 2009).

Given the importance of preliteracy skills for kindergarten readiness and the positive effects of providing materials and information about literacy to low-income parents, it is crucial to increase our understanding of the impact of literacy promotion programs such as ROR on the literacy practices of the primarily low-income, diverse populations they serve. It is also critical for educators to not only be aware of, but to actively engage as leaders to dialogue with and inform agencies outside of education—in this case the medical field—who are interested in tapping into their resources and timely opportunities to support in a holistic way, the well-being of children through early literacy promotion.

APPENDIX

Parent Interview Protocol: Sample Categories and Questions

General and Demographic Information

1. Are you the child's mother/father?
2. Tell me about who lives in the house with your child.
Spouse ___ Child(ren) ___ In-laws ___ Parents ___
Other family members ___ Friends ___ Other families ___

In order for us to understand your child better, it helps us if we can get some information about the people in his/her life. We'd like to know you a little better. Can we ask you some questions about you?

3. Where are you from originally?
4. Were you born there?
5. When did you come to the U.S.?

Reading in the Home

1. Who in your household knows how to read? In what language?
2. Who in your household doesn't know how to read?
3. The people who like to read — what do they like to read?
4. If I came to you home, what kinds of books or magazines or newspapers might I see? Do you have children's books? Where did you get them?

Literacy Activities in the Home

1. What does your child usually do when s/he's at home with you?
2. What does your child most like doing with you?
3. Do you tell stories to your child? Does someone else in the child's life tell stories to her/him? Tell us about those stories.
(for ROR parents)
4. Where do you put the books you receive from the well-child visits?
5. How many of these books do you have?
6. What language(s) are they in?
7. What does your child do with the books after the well-child visits?
Does your child ever want to play with the books they get from the well-child visits?
8. Do you or does someone in the house ever get the chance to read them to your child? If so, how often?

Reading and Language

1. What language do you want your child to get books in?
2. What language or languages do you want your child to read in?

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