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Kindergarten Teachers' Beliefs About Students' Knowledge of Print Literacy and Parental Involvement in Children's Print Literacy Development

This research was an exploratory study in a large city in central Canada that examined kindergarten teachers' beliefs about students' knowledge of print literacy, as well as their beliefs about parental involvement with children in print literacy activities. The role of families' socioeconomic status was examined in relation to teachers' beliefs. Based on completed questionnaires, significant differences were found in teachers' beliefs about aspects of children's print literacy knowledge as well as in areas of parent-child print literacy involvement based on the SES of families. Findings from this research provide important insight into kindergarten teachers' beliefs.

Cette recherche était une étude préliminaire entreprise dans une grande ville du Canada central. Elle portait sur les croyances des enseignants à la maternelle quant aux connaissances de leurs élèves en matière de littératie de l'imprimé d'une part, et quant à l'implication des parents dans les activités de leurs enfants en littératie de l'imprimé d'autre part. Nous avons étudié le rôle du statut socio-économique des familles par rapport aux croyances des enseignants. Les réponses aux questionnaires indiquent que les croyances des enseignants relatives aux connaissances de leurs élèves en matière de littératie de l'imprimé et à l'implication des parents dans les activités de leurs enfants en littératie de l'imprimé variaient de façon significative en fonction du statut socio-économique des familles. Les résultats de cette recherche offrent des idées importantes sur les croyances des enseignants à la maternelle.

From an early age, children's parents and early childhood educators play a crucial role in their social, emotional, cognitive, and physical development. On entry into formal schooling, teachers begin to play an important role in children's development. It is known that teaching activities shape children's development, and teaching activities are often associated with teachers' beliefs (Cooney, 2001; Justice, Mashburn, Hamre, & Pianta, 2008). Indeed, Williams and Burden (1997) claimed that everything teachers do in the classroom is affected by their beliefs. Examining teachers' beliefs is important as insight into teachers' beliefs can provide information about children's learning experiences and their achievement (Guo, Piasta, Justice, & Kaderavek, 2010).

Examining children's early print knowledge is also important because it relates to later school success (Purcell-Gates, 2001). Print literacy can be defined as interactions involving some form of written text for communicative purposes, generally involving the reading or writing process (Purcell-Gates, Jacobson, & Degener, 2004). It has been shown that the more children know about

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concepts of written language, the more successful they are at learning to read and to write at school (Purcell-Gates; Snow, Burns, & Griffin, 1998). Earlier studies that examined print literacy engagement in the homes of families from low socioeconomic status (SES) backgrounds found that families most stereotyped as not engaging in print literacy activities reported and were observed engaging involved, in many types of print literacy activities in the home (Lynch, 2008; Purcell-Gates, 1996). For example, many families reported engaging in storybook sharing with children, reading the alphabet, messages, and labels to children, as well as writing the alphabet and messages (Lynch; Raikes et al., 2006). Unexamined in those studies were teachers' beliefs about low-SES parents' involvement with children in print literacy activities. Because there are links between children from low-income families and their school-based literacy scores (McGee & Richgels, 2003; Smith, Brooks-Gunn, & Klebanov, 1997), it is important to examine all factors that may relate to this trend, including teachers' beliefs about children's print literacy knowledge and about parental involvement with young children in print literacy events, which this study addresses. Further studies are needed on teachers' beliefs to understand teachers' practice more fully.

Background

The positioning of this study stems from a sociocognitive theoretical frame in which reading and writing are considered both cognitive/linguistic skills as well as complex social practice (Barton, Hamilton, & Ivanic, 2000; Purcell-Gates et al., 2004). Based on this frame, it has been suggested that what young children learn about print before schooling relates to how others in their families and communities use print (Barton et al.; Berger, 2005). From this view of literacy, family literacy practices that might deviate from school-based literacy practices demonstrate difference, and not deficiency. Building on their interests, engaging them in real events for real purposes, and providing opportunities for them to experiment with print can support children's learning of early literacy concepts (Neuman & Roskos, 1997).

Stipek and Ryan (1997) suggested that children from lower-SES families enter schools with less academic knowledge that is valued by schools than children from higher-SES families. Knowledge and experiences are shaped by the home, and schools can build on or inhibit these diverse experiences (McNaughton, 2001). "Emergent literacy research has taught us that young children learn these skills [i.e., letters of the alphabet, phonemic awareness], and others, by observing and participating in different print literacy practices that are considered important and integral to their own communities" (Purcell-Gates, 2004, p. 167). By gaining knowledge of the types of print some SES parents engage in with their children, educators can further support a link between home and school literacy.

Some of the ways that parents influence children's school-based literacy development include children's book knowledge, their alphabetic letter familiarity including letter sounds, and their vocabulary development (Goldenberg, 2004). Parental involvement has been associated with the literacy knowledge young children bring to school (Snow et al., 1998), and greater parent involvement in their children's education has been shown to result in improved academic achievement for children as well as more positive attitudes and

behavior toward schooling (Edwards, 2003; Xu & Filler, 2008). In order to support parental involvement, it is important that schools incorporate strategies to complement parents' attempts to support their children's development (Gillanders & Jimenez, 2004). Indeed, by learning the familiarities children bring with them from home and bridging what is known to them with new material and ideas, "teachers can build a cumulative literacy culture in the classroom that draws on each child's home experiences with print while simultaneously expanding the two worlds" (Duke & Purcell-Gates, 2003, p. 35).

Teachers play an important role in parental involvement. In particular, their valuing of parental input supports their actions to involve parents and is likely to increase home and school engagement (Anderson & Minke, 2007; Brown & Medway, 2007). It is well known that family involvement in children's education supports better outcomes (Hoover-Dempsey & Sandler, 1997; Xu & Filler, 2008). It is also known that families are more likely to respond to communications from schools when the option for involvement fits with the family's needs (Hoover-Dempsey, Walker, Jones, & Reed, 2002). It has been suggested that parents with less formal education are less involved in children's schooling (Paratore, 2003). It has also been suggested that some cultural groups are less involved in children's schooling (Griffith, 1996). Some cultural groups believe that teachers have the authority for children's learning and that therefore they should not be challenged (Hammer & Miccio, 2004). In such cases, parents may be involved at home in children's learning, but may be less likely to ask teachers questions or to interfere with the teachers' work and thus would participate less in classroom activities. Differences in parents' and teachers' views of education can result in parents being viewed as uncaring and uninvolved in children's education when such is not the situation (Delgado-Gaitan, 2001). Teachers should take the initiative to involve parents in more informal exchanges about children's work (Dickinson & Tabors, 2003) in order to learn about their beliefs about parental involvement and their home literacy activities.

The purpose of this study was to gain a better understanding of kindergarten teachers' beliefs about children's print literacy knowledge and parent-child involvement in print literacy activities based on families' SES. The following questions were addressed.

1. Are there differences in teachers' beliefs about children's print knowledge in kindergarten based on the SES of children's families? If so, what are they?
2. Do teachers vary in their beliefs about parental involvement in children's print literacy development based on the families' SES? If so, how?

Method

Participants

In the larger study of teachers' beliefs about children's print literacy knowledge, 72 kindergarten teachers in an urban center in central Canada participated. Kindergarten teachers taught 5-year-old children in half-day programs. Teachers were randomly selected from a list of elementary schools provided by administrators in two large district school boards in the urban center. There were 110 questionnaires mailed to randomly selected kindergarten teachers in the two boards, and 72 were completed (response rate=65%).

Based on the request of one district school board, principals of each elementary school were contacted before the questionnaire was sent to kindergarten teachers. Most of the 60 teachers who reported on their sex claimed to be female (57) and were teaching 20 or more students (40 out of 63). Approximately half of the 65 participants who reported on their teaching experience had been working for at least 15 years (33). Data were collected over a four-month period toward the end of the school year (March-June) in order for teachers to reflect on their beliefs about children's knowledge and their interactions with parents over the past year. A small honorarium was also given to teachers in appreciation for their involvement in this study. Of the 72 questionnaires that were completed, 45 questionnaires had a Learning Opportunities Index (LOI) associated with their school, and these schools were the focus for the current analysis. The LOI provided an opportunity to examine the role of families' SES in relation to teachers' beliefs. One of the two district school boards had composed a LOI for their schools, which is a composite measure of 10 variables that are combined into a single index (McKeown, 2005). The LOI takes into account factors such as the number of lone-parent families, parents' education and income levels, and housing and immigration. Schools with a higher LOI score are considered "less needy" due to the relative make-up of the population served, that is, generally higher-SES. All questionnaires were included in the qualitative analysis that examined teachers' written comments.

Data Sources and Procedure

A questionnaire was used to record teachers' beliefs about students' print literacy knowledge and their beliefs about parental involvement with children in print literacy activities (see Appendix). Of the three sections of the questionnaire, two are focused on here for the purposes of this research. The questionnaire was based on several sources. The statements related to children's print concepts were based on Clay's (2002) *Concepts About Print* measure and *The Kindergarten Program—Revised* (Ontario Ministry of Education, 2006). Clay's *Concepts about Print* measure has been shown to correlate with many other early literacy measures (Purcell-Gates, 1996) and has proved to be a sensitive indicator of behaviors that support children's reading development. Several of the language expectations listed in *The Kindergarten Program—Revised* are based on Clay's measure. For this section of the questionnaire, teachers responded twice regarding students' print literacy knowledge (at the beginning of the school year and at the end). The statements related to parental involvement were based on interviews with low-income parents about print literacy events as well as in-home observations of early literacy activities (Lynch, 2008; Purcell-Gates), and on Ministry of Education language expectations for kindergarten (Ontario Ministry of Education). A teacher was asked to review the questionnaire, and her suggestions were incorporated. The teacher had experience working at the kindergarten level and had completed graduate studies in education.

Nineteen statements focused on teachers' beliefs about children's print literacy knowledge, and 13 focused on teachers' beliefs about parental involvement in print literacy events with children. The questionnaire had an overall strong reliability as measured by Cronbach's alpha (.88), as did each section focused on in this study. For statements 1-19 (children's print knowledge—

beginning), a .92 alpha was calculated. For statements 1-19 (children's print knowledge—end), a .76 alpha was found, and for teachers' beliefs about parent involvement, an alpha of .92 was calculated. The following were examples of statements about children's print literacy knowledge and parent involvement on the questionnaire: "Children know the names of most of the alphabetic letters"; and "Parents do not engage in writing activities with their child at home" (reverse scored). Teachers' responses were recorded on a 5-point Likert scale that included a range of responses from *Strongly Agree* (SA) to *Strongly Disagree* (SD), and teachers were also given an option to respond in a category labeled *Don't Know* (DK) in order to capture the most accurate teachers' responses. Higher scores on the instrument indicated that teachers believed children had more print literacy knowledge and that parents were more involved with children in print literacy events. Some of the items required inverse scoring, and few teachers chose to respond in the *Don't Know* category. Teachers were informed that the purpose of this study was to examine their beliefs about their role in children's print literacy knowledge and the role of parents in developing that knowledge. It was requested that teachers respond to statements in relation to the current students they were teaching and to think about most students in their class when responding. In addition to responding to statements, an open-ended section of the questionnaire provided an opportunity for teachers to write comments about the research topic, of which 52 of 72 teachers did. It took approximately 15-20 minutes for teachers to complete the overall questionnaire.

Data Analysis

Data analysis involved descriptive statistics, *t*-tests, and qualitative data analysis. Descriptive statistics were computed for teachers' beliefs about children's print literacy knowledge and beliefs about parental involvement in children's print literacy activities. Also, *t*-tests were used to examine whether there were significant differences in the mean scores of teachers' responses based on the LOI. The median LOI score of the completed questionnaires was used to create two equal groups from a possible range of LOI scores from 1-483. Five scores close to the median were omitted, and two groups, each consisting of 20 teachers representing 20 schools, were formed. Group 1 consisted of schools with a LOI score within the approximate range of 1-200, and Group 2 consisted of scores within the range of 300 and 483. A descriptive analysis using the constant comparative method (Merriam, 1998) of teacher comments was also included in the results.

Findings

Differences were found in the type of print literacy knowledge that teachers' believed children had, both at the beginning and at the end of kindergarten based on SES. There were significant differences in teachers' beliefs about the following: children's knowledge of the sounds of the alphabetic letters both at the beginning and end of kindergarten, $t(36)=2.35, p<.05$ (beginning) ($ES=0.35$), $t(38)=2.71, p<.05$ (end) ($ES=0.40$); children's knowledge that people read print from top to bottom, $t(34)=2.15, p<.05$ (beginning) ($ES=0.34$), $t(35)=2.39, p<.05$ (end) ($ES=0.37$); and children's ability to identify a capital letter, $t(36)=2.31, p<.05$ (beginning) ($ES=0.35$), $t(38)=2.68, p<.05$ (end) ($ES=0.39$). For each of these

statements, the mean score was higher for teachers working in schools with children from higher-SES families (see Table 1). As one teacher commented, “The range of literacy achievement in kindergarten is so vast,” yet overall, the socioeconomic background of families seemed to relate to differences in teachers’ beliefs about children’s print literacy knowledge.

There were no significant differences in teachers’ beliefs about parent involvement overall based on SES factors. However, when individual statements were examined, significant differences were found in teachers’ beliefs about areas of parent-child print literacy engagement, again favoring higher-SES families (see Table 2). Teachers of students from higher-SES families believed that parents had more knowledge of literacy activities occurring in their child’s classroom, $t(38)=3.10, p<.01 (ES=0.50)$, that parents were more interested in their children’s literacy development, $t(38)=2.08, p<.05 (ES=0.33)$, and that parents engaged in more writing activities with children at home, $t(35)=2.49, p<.05 (ES=0.35)$, as well as more story reading with children, $t(36)=3.18, p<.01 (ES=0.46)$. Some of the written comments by teachers working in higher-SES areas supported these findings: “Many of my students are read to. I find the ones who are most successful also spend time discussing stories with their parents—in fact having conversations.” Another teacher commented, “It is also very obvious that the children who are not read to at home are much behind the other children academically.” A further teacher’s statement: “When parents get involved in the home-school connection program their children profit the

Table 1
Teachers’ Beliefs about Children’s Print Literacy Knowledge Based on Teacher Grouping

| <i>Children’s literacy knowledge</i> | <i>n</i> | <i>M</i> | <i>SD</i> |
|--|----------|----------|-----------|
| <i>Sounds of alphabetic letters—beginning*</i> | | | |
| Group 1 | 20 | 2.20 | 0.95 |
| Group 2 | 18 | 2.94 | 1.00 |
| <i>Sounds of alphabetic letters—end*</i> | | | |
| Group 1 | 20 | 4.00 | 1.00 |
| Group 2 | 19 | 4.68 | 0.48 |
| <i>Read from top to bottom—beginning*</i> | | | |
| Group 1 | 17 | 2.76 | 1.20 |
| Group 2 | 19 | 3.58 | 1.07 |
| <i>Read from top to bottom—end*</i> | | | |
| Group 1 | 19 | 4.10 | 0.81 |
| Group 2 | 18 | 4.67 | 0.59 |
| <i>Identify a capital letter—beginning*</i> | | | |
| Group 1 | 20 | 2.85 | 1.18 |
| Group 2 | 18 | 3.67 | 0.97 |
| <i>Identify a capital letter—end*</i> | | | |
| Group 1 | 20 | 4.29 | 0.72 |
| Group 2 | 19 | 4.79 | 0.42 |

Note. There were significant differences between Groups 1 and 2.

* $p<.05$.

Group 1=low LOI schools; Group 2=high LOI schools.

Table 2
Teachers' Beliefs about Parent Involvement in Children's Print Literacy
Based on Teacher Grouping

| <i>Parental Involvement</i> | <i>n</i> | <i>M</i> | <i>SD</i> |
|--|----------|----------|-----------|
| <i>Knowledge of literacy activities**</i> | | | |
| Group 1 | 20 | 3.24 | 1.22 |
| Group 2 | 19 | 4.26 | 0.18 |
| <i>Interest in children's literacy*</i> | | | |
| Group 1 | 20 | 3.76 | 1.14 |
| Group 2 | 19 | 4.39 | 0.60 |
| <i>Engagement with writing activities*</i> | | | |
| Group 1 | 20 | 2.85 | 1.14 |
| Group 2 | 17 | 3.65 | 1.00 |
| <i>Story reading**</i> | | | |
| Group 1 | 20 | 3.40 | 1.19 |
| Group 2 | 18 | 4.39 | 0.61 |

Note. There were significant differences between Groups 1 and 2.

* $p < .05$; ** $p < .01$.

Group 1=low LOI schools; Group 2=high LOI schools.

most." Many teachers, regardless of whether they were working in high or low-SES areas, stated that parental involvement with children at home in literacy events was important for children's school success, particularly reading to children or discussing storybooks. Another common theme in teachers written comments was their focus on the need to inform parents about how to support children's literacy development at home. One teacher stated, "Most parents want to help their children but are unsure how" and explained that her role was to show them how. Another teacher stated, "I think that if we give parents the proper set of tools—good useful tools they can make an incredible difference."

Overall, common themes in the qualitative data were that both parents and teachers have important roles in children's literacy learning, that fostering literacy at home is critical, that it is important that parents are given school-based information such as book bags and newsletters and that teachers should and do educate parents.

Discussion

This study of kindergarten teachers' beliefs found differences in the types of early literacy knowledge that teachers believed students had at the beginning and at the end of the school year based on whether they were teaching children from high- or low-SES families. There were also differences in teachers' beliefs about types of parental involvement in children's literacy development based on SES factors. In all cases, teachers believed that children from families of higher-SES backgrounds had more literacy knowledge in specific areas and that their parents were more involved in specific ways. Although differences continue to exist in children's literacy achievement based on SES (McGee & Richgels, 2003), it was somewhat unexpected to find differences in teachers' beliefs for children at such a young age, considering that many family literacy

intervention programs are designed to improve both parental involvement in children's schooling and young children's print literacy knowledge before school entry (DeBruin-Parecki & Krol-Sinclair, 2003; Wasik, 2004). Furthermore, preschool programs may play a role in supporting all children's literacy knowledge (Lynch, 2008). In addition, recent studies that have been completed with diverse cultural and SES groups demonstrate that many low-SES parents report playing an intricate role in their young children's print literacy development (Lynch; Raikes et al., 2006). Considering that family literacy programs were available in some schools in the study, teachers still identified differences in children's literacy knowledge and aspects of parental involvement in literacy activities.

Based on teachers' beliefs, one area of difference in children's print literacy knowledge included children's knowledge about top to bottom directionality. This would relate to children's exposure to shared reading (Clay, 2002), and teachers in this study believed that parents engaged less in this activity with children if they were from lower-SES backgrounds. Furthermore, children's knowledge of the alphabetic sounds provide a foundation for learning to read (Whitehurst & Lonigan, 1998), and differences in teachers' beliefs about this type of print literacy knowledge found at the beginning of kindergarten were also found at the end of kindergarten. Such may signal the importance of teachers' perceptions of children's early literacy knowledge when they enter kindergarten and the inability of teachers to improve children's literacy level beyond a certain range based on their incoming literacy knowledge. It may also suggest differences in expectations for children's print literacy knowledge leaving kindergarten based on SES. Further research is needed on the reasons for teachers' beliefs considering this finding of difference in teachers' beliefs.

It may or may not be the case that such beliefs related to actual knowledge that some of the teachers had of children's literacy levels based on formal and informal class assessments and meetings with parents. Some kindergarten teachers do assess children on items that are related to those on the questionnaire because the items relate to curriculum expectations. However, observation of children rather than formal assessments at the kindergarten level is stressed in the board. Furthermore, some teachers' comments indicated that they met with parents two or three times a year, whereas others encouraged parents to volunteer in the classroom. There were variations in the types of assessments as well as teachers' interactions with parents. Regardless of whether differences in teachers' beliefs were a reflection of actual knowledge in some cases, teachers believed that children from low-SES homes did not have the same level of literacy knowledge as students from families of higher-SES backgrounds. Early differences in children's print literacy knowledge are important as such knowledge provides a foundation for learning how to read, which affects all areas of the curriculum.

Many of the teachers in this study made comments about the important role of parents in supporting children's early literacy development. Indeed, "teachers who believe that parents are capable of contributing to their children's education success are more likely to act in ways that secure parental involvement than those holding less positive views" (Hoover-Dempsey et al., 2002, p. 845). Teachers believed that higher-SES parents were more involved in reading

stories with children, and many teachers stated that they requested that parents engage with children in this activity. In fact, some teachers' written comments indicated that they requested that parents read every day to their children. Many teachers felt there was a need to "inform" and "show parents" school-based literacy instruction, for example, by providing steps on how to interact with their children in shared reading. As stated by one teacher, "We need to provide parents with ideas and examples of literacy teaching." Despite teachers' strong interest in supporting children's early literacy development as well as their provision of a means to support it, comments from teachers centered on the need for parents to learn about school-based activities. None of the teachers who wrote comments mentioned the importance of finding more effective ways to support children's literacy in school by understanding what might already be happening with print in the home. Earlier research highlights the importance of examining out-of-school literacies to support children's learning in school (Hull & Shultz, 2002). When some families from low-SES backgrounds engage in various reading and writing activities as part of everyday literacy events such as interactions with flyers, calendars, and so forth (Lynch, 2009), building parent-child interactions around already meaningful events may better support children's early literacy learning. In the current study, most teachers focused on reading storybooks with children. Although engaging in reading storybooks can be an effective means of supporting children's literacy development and has been studied extensively in early literacy research (Aram & Biron, 2004; Snow et al., 1998), there are many paths to learning how to read and write (Gregory, Long, & Volk, 2004).

Teachers believed that parents in higher-SES areas were more knowledgeable of classroom literacy activities. Moreover, teachers believed that parents of higher-SES backgrounds were more interested in children's literacy development and more engaged in writing activities at home with their children. In some cases, low-SES parents may feel less confident that they will be effective in helping children with literacy learning or may have increased demands on them that limit their presence at school (Weiss et al., 2003). As part of the qualitative comments on why teachers believed that some parents were not involved in their children's literacy development at home, teachers cited "time" and "uncertainty about how to help their children" as important reasons. When parents may already be engaging in print literacy activities as part of their everyday lives such as grocery shopping, the involvement of children in such activities can provide an opportunity for them to learn about print in a meaningful, purposeful way and could be encouraged. This is especially important for those teachers who believe it is difficult to involve parents in school-based literacy development or view parents as being less involved in children's education. Many teachers expressed an interest in supporting children's early literacy development by trying to involve parents in school-based literacy activities at home, but had focused on school-based literacy as the only path to children's success. It is important to support all parents in the types of activities they engage in with children in the out-of-school context that can build children's early literacy knowledge. It has been suggested that informal engagement with parents to explore their beliefs and common print practices can provide this information (Edwards, 1999, 2003). Children's success in

school has been linked to consistency between the home and school environments, and teachers can support children's learning by finding out more about home literacy practices and incorporating these into the classroom (Hull & Schultz, 2002).

There are a number of ways to prevent generalizations about parental involvement. It is perhaps most critical that preservice and inservice teachers have opportunities to discuss and explore research on diverse types of literacy events that occur among low-SES families in order to address stereotypes that may exist, including beliefs about parent involvement. It is also important to research ways of strengthening teachers' beliefs about how to involve parents in children's literacy development, most notably in undergraduate teacher education programs where there has historically been little focus on the involvement of parents (Baum & McMurray-Schwarz, 2004).

Conclusion

It is known that emergent literacy skills are important for children entering elementary school because schools provide an age-graded rather than a skills-graded curriculum in which early delays are magnified at each additional step (Whitehurst & Lonigan, 1998). Differences were found in this study in the type of knowledge that teachers believed children had at the beginning and at the end of kindergarten based on SES, which might suggest differences in instructional goals for children based on beliefs about children's knowledge or differences in expectations for them. It may also be the case that children enter school with less school-based literacy knowledge and teachers' beliefs about early differences in literacy knowledge are accurate. Nevertheless, the areas of difference teachers perceived of children from high and low-SES families did not change over the kindergarten year, which may relate to the extent that teachers believe they can create change in children's knowledge when they enter their classrooms. Considering that differences are magnified at each level, it is important that teachers believe that they have a strong effect on all children's learning regardless of SES factors. Indeed, it is important that teachers believe they can help all children achieve curriculum expectations.

Research has shown that teachers' practices that promote the involvement of parents are more important than SES or ethnicity in determining parental involvement (Epstein, 2001). One of the reasons parents become involved in schools is in response to an invitation from the school (Hoover-Dempsey & Sandler, 1997), and it is important that teachers provide a welcoming environment for all parents to discuss their questions or concerns. Considering the importance of early literacy development for later literacy learning (Weinberger, 1996), it is important to examine all areas that may relate to differences in children's literacy achievement. This study has identified areas where teachers believe differences exist in children's print literacy knowledge and in aspects of parental involvement when the SES of families is examined.

There are limitations to using a questionnaire such as the risk for socially acceptable responses. However, a questionnaire provides an opportunity to reach a wide range of participants (Nardi, 2006) and provides a starting point for delving deeper into trends that may exist. Furthermore, this study did not ask teachers about the type of formal and informal assessments they had used with children or about their contact with parents. It can be assumed that some

items on the questionnaire were assessed by teachers, thus representing teachers' knowledge rather than their beliefs. In addition, the LOI provides a general measure of SES, and thus some children and families might vary in socio-economic background within a given school.

Future research, such as a study incorporating classroom observations as well as detailed interviews with teachers and parents from different SES backgrounds, would provide further understanding of teachers' beliefs and possible insight into children's early literacy development. Furthermore, the assessment of young children in relation to teachers' beliefs about children's print literacy knowledge based on their families' SES, would provide information on the accuracy of teachers' beliefs and therefore may prove beneficial to educators. Although this study focused on teachers' beliefs about parents' print literacy involvement with their young children, particularly involvement in reading and writing activities with young children, research has shown that other forms of engagement, such as oral language interactions, play an important role in children's print literacy development (Senechal, Ouellette, & Rodney, 2006; Souto-Manning & Swick, 2006). Future research that examines other areas of early literacy development in relation to teachers' beliefs about children's literacy knowledge and beliefs about parental involvement may provide new insight into children's early literacy achievement. Findings of this research demonstrate the need for further examination of teachers' beliefs and the role of families' SES in relation to teachers' beliefs.

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Appendix

Teacher Questionnaire

Children's Print Literacy Knowledge

1. Children know the names of most of the alphabetic letters.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
2. Children know the sounds of most of the alphabetic letters.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
3. Children can write at least some of the letters of the alphabet.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
4. Children can write their name.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
5. Children do not know how to hold a pencil.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
6. Children are not aware that people read English from left to right.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
7. Children can readily name labeled objects in the classroom.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
8. Children can write simple words, such as *cat*.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
9. Children know that people read print from top to bottom.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
10. Children can write some or all of the alphabet.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |

11. Children do not know that people read the left page before the right page.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
12. Children can read simple words, such as *cat*.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
13. Children can point to a capital letter successfully if asked to.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
14. Children could point to a picture if I asked him/her to.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
15. Children could not point to a word if I asked him/her to.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
16. Children can write simple stories composed of a couple of simple sentences using invented and/or conventional spelling.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
17. Children can make accurate predictions when engaging in story sharing.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
18. Children cannot read most of the print in simple picture books (i.e., a word, phrase, or simple sentences per page).

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |
19. Children have a favorite storybook.

| | | | | | | |
|-----------------------------|----|---|---|---|----|----|
| At beginning of school year | SA | A | N | D | SD | DK |
| At end of school year | SA | A | N | D | SD | DK |

Parental Involvement in Children's Print Literacy

1. Parents have read environmental print with/to their children.

| | | | | | | |
|--|----|---|---|---|----|----|
| | SA | A | N | D | SD | DK |
|--|----|---|---|---|----|----|
2. Parents do not have knowledge of the specific literacy activities occurring in my classroom.

| | | | | | | |
|--|----|---|---|---|----|----|
| | SA | A | N | D | SD | DK |
|--|----|---|---|---|----|----|
3. Parents are very interested in their children's reading and writing development.

| | | | | | | |
|--|----|---|---|---|----|----|
| | SA | A | N | D | SD | DK |
|--|----|---|---|---|----|----|
4. Parents have read school work sent home to their children.

| | | | | | | |
|--|----|---|---|---|----|----|
| | SA | A | N | D | SD | DK |
|--|----|---|---|---|----|----|
5. Parents do not engage in writing activities with their child at home.

| | | | | | | |
|--|----|---|---|---|----|----|
| | SA | A | N | D | SD | DK |
|--|----|---|---|---|----|----|
6. Children have been read to regularly (daily/weekly) by parents.

| | | | | | | |
|--|----|---|---|---|----|----|
| | SA | A | N | D | SD | DK |
|--|----|---|---|---|----|----|
7. Parents have engaged in writing activities regularly (daily/weekly) with their child.

| | | | | | | |
|--|----|---|---|---|----|----|
| | SA | A | N | D | SD | DK |
|--|----|---|---|---|----|----|
8. Parents have engaged in drawing activities with their child.

| | | | | | | |
|--|----|---|---|---|----|----|
| | SA | A | N | D | SD | DK |
|--|----|---|---|---|----|----|
9. Parents talk about books with their children.

| | | | | | | |
|--|----|---|---|---|----|----|
| | SA | A | N | D | SD | DK |
|--|----|---|---|---|----|----|

10. Children have not been read stories at home.
SA A N D SD DK
11. Children who enter my classroom have not engaged in writing the alphabet at home with parents.
SA A N D SD DK
12. Parents have engaged in reading instructions/ directions with their children.
SA A N D SD DK
13. Parents have not read print, other than storybooks, with their children.
SA A N D SD DK