Exploring Maternal Interactions During Shared Book Readings in Indian Home Contexts

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Abstract
The importance of parent-child shared book reading (SBR) is well established. However, there is a limited understanding of parental interaction patterns during SBR among preschool children in the Indian context. Using a cross-sectional observational study design, mothers' verbal and nonverbal behavior during SBR was analyzed in 26 Kannada-speaking mother-child dyads. Relationships between the quantity of SBR experiences and parental attitudes and beliefs about storybook reading were examined. Findings revealed that mothers predominantly used dialogic reading strategies followed by extra-textual talk, print referencing strategies, and nonverbal strategies. Few correlations were found between parental attitudes and beliefs and the quantity of SBR experiences. Implications for parent training in SBR are discussed.

Keywords Shared book reading · Parental practices · Maternal interaction · Exposure to reading · Attitudes and beliefs

Introduction

Early home literacy experiences, in particular shared book reading experiences (SBR), are important for children's language and literacy development (Zhou & Salili, 2008). SBR is a practice in which parents read text, explain pictures, discuss characters and events, and relate book content to personal experiences or daily-life scenarios (Saracho, 2017). SBR provides a platform for children to advance their vocabulary, pragmatics, grammar, narrative comprehension, and early literacy skills (Korat et al., 2007; Mol & Bus, 2011; Sénéchal & LeFevre, 2001). Parent interactions during SBR are critical to the impact of the activity on children's language and literacy. Parental use of dialogic reading strategies, extra-textual strategies, print referencing strategies, and nonverbal strategies play a role in the success of SBR (Anderson et al., 2012; Justice et al., 2002; Zevenbergen & Whitehurst, 2003). Additionally, the amount of time parents spend engaged in SBR activities is linked to child outcomes (Sloat et al., 2015). However, parent-child interactions and engagement during SBR vary based on sociocultural context and parents' attitudes and beliefs toward SBR, which can influence the impact of the activity on children's language and literacy (Leseman & de Jong, 1998).

In an effort to exploit the effects of skilled parent-child interactions during SBR, home training programs have been developed to facilitate parents' SBR practices (e.g., Justice et al., 2011). Understanding cultural variations surrounding SBR practices is critical in order to culturally adapt language and literacy parent training programs and support parents. An SBR using picture books helps to integrate young children into the ideology of the culture (Nodelman, 2006: 131). In Indian contexts, emerging data indicate that parents' value SBR; however, to date research regarding parent-child interactions during SBR is not available (Pandith

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et al., 2022). Such information may guide the use of parent training programs, which in turn may facilitate language and literacy outcomes in India. Such studies are important in light of the National Education Policy 2020 (Government of India, 2020) and the India Early Childhood Education Impact Study (Kaul et al., 2017), both of which emphasize learning opportunities during early childhood development. The inclusion of this simple activity has an immense impact on a child's subsequent language, literacy, socio-emotional and cognitive capabilities even before they are enrolled in school (Mol & Bus, 2011). This study is an initial step in a long-term goal to adapt parent SBR training in Indian homes. This study examines mothers' verbal and nonverbal behavior during SBR and the relationship between attitudes and beliefs about SBR and time spent engaged in SBR.

Parental Attitudes and Beliefs and Quantity of SBR

The quantity of SBR in the home is linked to child language and literacy outcomes (Mol & Bus, 2011; O'Farrelly et al., 2018). For example, Demir-Lira et al. (2018) examined the quantity of parent-child storybook reading experiences among young children residing in the United States. They reported that the number of book-reading utterances and number of book-reading episodes predicted children's receptive vocabulary, reading comprehension, and motivation. Parental attitudes and beliefs about SBR influence the levels of engagement in literacy-based activities at home (Baker & Scher, 2002; Wu & Honig, 2010). If parents have positive reading attitudes and beliefs, they will be more likely to engage in SBR activities (Bingham, 2007; Sénéchal & LeFevre, 2002). In a sample of Malaysian families, positive associations between parent attitudes and involvement corresponded to child literacy outcomes (Harji et al., 2016). In a sample of parents residing in Germany, Niklas et al. (2020) reported that parents with a more positive attitude toward SBR read more frequently to their child. The authors posit that parents' attitudes are a critical construct in understanding the impact of SBR.

Parent-Child Interactions During SBR

During SBR, parents utilize a variety of strategies that promote children's language development (Dowdall et al., 2020; Noble et al., 2019). Dialogic reading strategies, such as those identified in the PEER sequence, appear to be active components linked to positive child outcomes (Towson et al., 2016). Strategies include **P**rompting the child, **E**valuating the child's response, **E**xpanding the child's response, and **R**epeating the prompt. The PEER sequence can be completed through the use of completion prompts or cloze procedures, *wh*-questions, expansions, recall prompts, and

open-ended prompts (Han & Neuharth-Pritchett, 2014; Sim (2012); Whitehurst et al., 1988). That said, the differential impact of specific strategies is not fully understood.

Extra-textual strategies (i.e., predicting, recalling, bridging) include talk that goes beyond the book in terms of scenarios, explanations, and events (Korat et al., 2007; Price et al., 2009). This interaction paves the way for the child to cognitively think beyond what is mentioned in the book (Li & Fleer, 2015). Notably, bridging involves the mother connecting the story event to the child's personal life, which provides the opportunity for the child to learn the cultural and moral values. Studies from Asian contexts suggest that SBR is often considered a means to promote moral values, conduct, and socialization styles (Chang & Huang, 2016; Luo et al., 2012).

Print referencing (i.e., use of verbal and nonverbal cues about the forms and characteristics of the print) during SBR has long-term benefits on literacy skills (Piasta et al., 2012). This includes strategies such as orienting the child to print organization (e.g., the title of the book, direction of print), focusing on print meaning (e.g., function of print, linking illustrations to text), focusing on letters (e.g., identifying sounds and letters), and focusing on words (e.g., tracking the words while reading; identifying letters in words) (Justice et al., 2008). It is interesting to note, in a study of 42 Taiwanese mother-child dyads, mothers most frequently discussed book knowledge (e.g., this is the front page) and seldom discussed print knowledge (e.g., this word is go), word meaning and usage (e.g., look at its mouth that is used for eating), or performing the action of book reading with their young children (Chang et al., 2016).

Apart from verbal strategies, parents also tend to use nonverbal strategies. Attentional gestures such as pointing and physically making the child point or turn the pages facilitate SBR experiences (Landry et al., 2012; Rohlfing et al., 2015; Sénéchal et al., 1995). Frequent use of deictic gestures (such as pointing, showing, and giving) along with speech has been reported among Spanish and Italian mother-child dyads (Lavelli et al., 2015, 2019; Minto-García et al., 2020). These gestures have been used to shift the focus of the child to identify, discuss, and provide feedback about the pictures in the books and the meaning of words.

Parent-Child Engagement and Interactions During SBR: Indian Context

In India, as per Census data (2011), there are 158.8 million children (13.12% of the total population) in the age range of three–six years. In the country with a reported national literacy rate over 74%, early childhood education and participation are emphasized as part of the early childhood programs in India. Early childhood settings function as a

safe environment for children of working parents instead as a place of language and literacy stimulation (Kaul et al., 2017). In India, the learning culture in the school environment also affects how literacy learning is provided to children (Kumar, 2019). Often children are exposed to a print environment during formal instruction at the kindergarten level. It may be that, as Khurana and Rao (2011) reported, parents prefer storytelling over storybook reading, irrespective of parental education level. The Centre for Early Childhood Education and Development (CECED) and CARE India (2016) documented that SBR is not a culturally familiar routine. Of the few studies examining the home literacy environment in Indian homes, three examined children's exposure to and quantity of literacy activities. Kalia (2007) examined the exposure to storybook reading in home environments of bilingual children (n = 24) who were enrolled in two preschools in Bangalore, India. Exposure was determined by calculating the number of trips to the library and completing the Children's Titles Checklist—CTC (Sénéchal et al., 1996). Parents reported that they did not frequently visit a library, had approximately 22 books at home, and engaged in storybook reading with their children approximately three times per week. Based on their study among 145 kindergarten children from a low-income community in Mumbai, India, Kalia and Vagh (2008) reported a wide variation in engagement in storybook reading in contrast to a middle-income community in Bangalore. Greater access to books and greater opportunity for reading-related activities was significantly higher for the middle-income community as compared to the low-income community. Parents of children from low socioeconomic strata and who were less educated reported that they set aside time for teaching activities at home instead of shared book reading. In a later study, Kalia and Reese (2009) surveyed 50 parents of kindergarten children from a public-school setting in Bangalore, India regarding storybook reading. Parents reported that children had between 0 and 40 books at home and were read to two to three times per week.

More recently, Pandith et al. (2022) surveyed 100 parents regarding their reading exposure, child's interest in reading, storybook reading practices, and attitudes and beliefs towards storybook reading in the Udupi district in Karnataka in southwest India. The majority of parents initiated storybook reading with their children at two years of age or older. Parents read to their children one to two times per week for 10 min and had fewer than ten books in the home. Parents reported that their children were interested in storybook reading and reported the use of quality storybook reading practices. The parents in the study were aware of the benefits of storybook reading and exhibited a positive attitude and beliefs toward reading. They reported that they enjoyed reading to their children and also had good memories of reading in their childhood.

In the current study, the multilinguistic context of the selected study region (Udupi district, Karnataka state in India) offers a unique opportunity to understand how parents are involved in SBR practices. Apart from the native language, children are also exposed to regional and dialectal variations of languages such as Tulu, Kannada, and Konkani, along with other languages spoken by migrant families in the community such as Malayalam, Tamil, Telugu, Marathi, or Hindi. At school, apart from regional language, English is often included as the medium of instruction. Kalia and Reese (2009) report that middle-socioeconomic strata parents often prefer to speak in an Indian language to pass on their cultural heritage, but encourage reading books in English inorder to facilitate schooling in English. Despite the rich multilingual context, a point of concern is the limited availability and access to children's books written in native languages.

Summary and Study Purpose

To date, no study has examined the interactions between parents and their children during SBR in Indian home contexts. This information will aid in understanding the nature of SBR practice in the Indian context and explore the presence of any culture-specific interaction behaviors. This study extends the work of Pandith et al. (2022) through an examination of parent verbal and nonverbal behavior during SBR and engagement in SBR. A cross-sectional exploratory study was used to answer the following research questions:

1. What behaviors do parents exhibit during SBR in Indian home contexts?
2. Is there a relationship between parents' attitudes and beliefs and the quantity of SBR in the home?

Method

Prior to initiation of data collection, approval from Institutional Ethics Committee (IEC no: 228/2019) and Clinical Trials Registry- India (CTRI no: CTRI/2019/06/019764) was obtained.

Participants

In this cross-sectional exploratory study, 26 mother-child dyads (who are native speakers of Kannada and having Kannada as the home language), selected through purposive sampling from the Udupi district, Karnataka, India, participated in the study. The investigator (first author), contacted

the principals of two private schools in the district. The call for participation notice to the respective parents of children who fit the inclusion criteria was issued only by one principal. The second school as an avenue to solicit participants did not come to fruition. Inclusion criteria for the children included (a) age range between three and six years; (b) speech and language within normal limits as determined by the Assessment of Language Development Test (Lakkanna et al., 2008); and (c) no known developmental, neurological, psychiatric, hearing, visual, or cognitive impairment. Inclusion criteria for the parents included (a) minimum educational qualification of 10th grade; and (b) reported that they read a minimum of one book in the last 30 days to their children. Parents with any health-related or psychological problems or who used only electronic or digital media to narrate stories to their children were excluded.

Of the 40 parents contacted, 11 parents agreed to participate. All parent volunteers met the inclusion criteria. Through the investigator's personal contacts from the native Kannada-speaking community, an additional 15 parents attending other pre-primary schools in the same study region of Udupi district were included. Following consent, an initial informal interview was carried out with the parents focusing on demographic details and the language screening was completed. This occurred in the home environment.

Among the study participants, 14 of the children were male, and the remaining 12 were female. Children ranged in age from three years to five years, eight months (mean age of 4.62 years). Among the parents, only mothers participated in the study. As indicated in Table 1, the mothers were aged between 28 and 42 years (mean age of 34.69 years) with 51.5% of mothers being stay-at-home and 76.9% having completed more than 12 years of schooling. The majority of the participants were from the upper middle group (57.6%) followed by the lower middle group (30.7%) based on the modified Kuppuswamy socioeconomic scale (Saleem, 2019).

Data Collection

Data collection occurred in the home. First, the parents completed a survey questionnaire focusing on the parental attitudes and beliefs about SBR (taken from Pandith et al., 2022 questionnaire on parental perspectives regarding storybook reading), as well as the quantity of SBR (i.e., number of times per week spent reading to child, number of minutes per day spent reading to child). For the attitudes and belief section, the participants were instructed to read each of the 15 questions and circle the appropriate response option of a 4-point Likert scale (response option as: Strongly Agree, Agree, Disagree, and Strongly Disagree). For details on questionnaire development and content validity refer to Pandith et al. (2022).

The parents were then asked to select any book in the home used during storybook reading time. Then, the mother was asked to read the storybook to their child in a quiet room in their home environment. The following instruction was given: "Read the book with your child just like you would normally read." Because the books in their homes were very short and the children did not demonstrate interest, the investigator provided a Kannada picture storybook (an Aesop fable storybook titled 's*imhadhu charmadholage kathe'* which means *'The Donkey in Lion's skin'*) for four dyads (See Appendix A and B for book details). The Aesop fable storybook was selected as it is one of the common and readily available fictional fable storybooks with more illustrations and less text. The storybooks selected by mothers are those which are commonly found in home environments. Most of these books are traditional classics and some are culture-based mythological stories that all the mothers definitely read during their childhood or are aware and familiar with, irrespective of their caste or religion. All the storybooks selected were read-aloud books specific to the preschool age group and more than 75% of the content was illustrations. Of note, even though the sample of mothers

Table 1 Demographic characteristics of children and mothers

	n(%)
Characteristics of children	
Age in years	
3.0–3.5	5 (19.23)
3.6–4.0	-
4.1–4.5	6 (23.08)
4.6–5.0	9 (34.62)
5.1–5.5	4 (15.38)
5.6–5.8	2 (7.69)
Gender	
Male	14 (53.8%)
Female	12 (46.1%)
Characteristics of Mothers	
Age in years	
28–30	5 (26.9%)
31–35	11 (42.3%)
36–40	8 (23.07%)
41–42	2 (7.69%)
Education	
10th Standard	3 (11.5)
12th Standard	3 (11.5)
Graduate	9 (34.6)
Post-graduate	11 (42.3)
Working status	
Employed outside home	10 (38.4)
Stay-at-home	16 (51.5)
Socioeconomic status	
Upper	3 (11.5)
Upper middle	15 (57.6)
Lower middle	8 (30.7)

spoke Kannada, only 10 parents chose Kannada books and the remaining 16 parents used English storybooks. All the parents explained the story in Kannada, with certain common words being spoken in English itself. Further, there was a difference in the storybook genre used during SBR. All the parents had taken folk tales; fable storybooks, among which, eight were Aesop's fable moral stories and three were mythological stories. These books contained easy to understand text with beautiful illustrations, which had characters and the usage of depicted role's language and thoughts that gave a connection to the situation.

The storybook interaction between the mother and child was recorded using a camera (Canon 600D) with a microphone (Maono AU-400) placed on the mother. There was neither a time restriction nor any cue given to the parent during the activity. At the end of the recording, the investigator had a short orientation session with the parents focusing on strategies to improve the family's reading behaviors. All participants were given a storybook as compensation for participating in the study.

Transcription of Samples

Transcription of the interactions during the storybook reading was done manually by the investigator by listening to the audio recordings for further analysis. The video recordings were further viewed to confirm that the entire interaction including the nonverbal behaviors was captured. The transcriptions of all the audio-recorded samples were verified by a graduate speech-language pathologist who is a native Kannada speaker. The interrater reliability in transcription for the randomly selected 20% of each sample was 0.72 using Cohen's kappa ratio.

Data Coding

Parent verbal and nonverbal behavior codes were derived from previous research investigating parent-child dyads during SBR and a prior pilot study which was carried out on two mother-child dyads. The additional behaviors which were observed during the parent-child interactions in the present study were added to the final coding protocol (See Appendix B). The investigator viewed each video recording concurrent with the written transcription and coded the mother's verbal behavior according to the pre-determined categories. Each utterance was replayed several times till the investigator coded the interactive behavior. Next, the investigator coded the mother's nonverbal behavior. Each utterance was reviewed by the second author as needed to make coding decisions by mutual discussion and verification of video and transcription samples.

Reliability

The second author independently coded five randomly selected samples using the prepared coding protocol. Interrater reliability analysis using kappa statistics was performed to determine the consistency of codes. On measuring the interrater reliability, very good reliability was noted between the two raters on the interactive behaviors. The interrater reliability for coding maternal interactive behaviors was 0.87.

Statistical Analysis

To answer Research Question 1 (i.e., What behaviors do parents exhibit during SBR in Indian home contexts?), the number of mothers utilizing verbal and gestural codes was analyzed and descriptive statistics were reported using SPSS version 17. To answer Research Question 2 (i.e., Is there a relationship between parents' attitudes and beliefs and quantity of SBR in the home?), the composite score for the parental attitudes and beliefs was correlated with the number of times per week spent reading to child, number of minutes per day spent reading, amount of time spent reading during the SBR task, and the number of book-related utterances used during the SBR task using Spearman's correlation.

Results

Maternal Interactive Behaviors During SBR

The total number of mothers' utterances during SBR varied from 18 to 300 with a mean of 79.12 and median value of 64 during the task of shared storybook reading (See Table 2). The coding suggested the presence of a total of 18 different adult interactive behaviors.

Among the observed strategies as indicated in Table 3, all 26 mothers used direct attention (drawing the child's attention and looking at the child while narrating the story) and asking open- and close-ended questions. The strategies such as elaboration (giving information about the picture and/or text), and providing feedback were used by 92.3% (24 parents). While recalling was used by 76.9% of parents, the print referencing (drawing attention towards the title of the book, parts of the book and pointing to the book while reading) was used by 69.2%. Though observed to a lesser extent, mothers also used strategies such as repetition, predicting, recasting, expansion, reading, prompting, labeling, retelling, and bridging.

Along with verbal interactive behaviors, the mothers also employed nonverbal strategies such as gestures (i.e., using

Table 2 Frequency (n) and percentage (%) of parental engagement in SBR

SBR Strategies	n (%)
Dialogic reading strategies	
Direct Attention	26 (100)
Asking questions	26 (100)
Elaboration	24 (92.31)
Providing Feedback	24 (92.31)
Repetition	17 (65.38)
Reading	15 (57.69)
Expansion	13 (50)
Recast	13 (50)
Prompting	9 (34.62)
Labeling	8 (30.77)
Retelling	8 (30.77)
Extra-textual strategies	
Recalling	20 (76.92)
Predicting	15 (57.69)
Bridging	3 (11.54)
Print referencing strategies	
Referencing print	18 (69.23)
Nonverbal strategies	
Gestures	20 (76.92)
Physical prompt	11 (42.31)
Having fun	11 (42.31)

Table 3 Frequency of maternal interactive behaviors

		N	%
Amount of time reported reading			
Number of times per week spent reading to child	Never	-	-
	1–2 times/week	13	50
	3–5 times/week	2	7.69
	6–7 times/week	11	42.31
Number of minutes per day spent reading to child	< 5 min/day	1	3.84
	10 min/day	11	42.31
	30 min/day	11	42.31
	> 60 min/day	3	11.54
Amount of time read during SBR task (minute: second)	Less than 2:00 min	07	26.92
	2:00–3:59 min	10	38.46
	4:00–5:59 min	4	15.38
	6:00–7:59 min	2	7.69
	8:00–9:59 min	2	7.69
	10:00–11:59 min	0	0
	12:00–13:59 min	1	3.85
Number of book related utterances during SBR	18–50 utterances	10	38.46
	51–100 utterances	12	46.15
	101–200 utterances	02	7.69
	201–300 utterances	02	7.69

the hand, body or face to depict an action), having fun by smiling and laughing, and physical prompts (e.g., hugging and patting the child) while involved in enjoying the book together.

Quantity of SBR

Quantity as measured by the amount of time reported for reading, the amount of time spent reading during the SBR task, and number of book-related utterances is reported in Table 2. Among the 26 parents, 42.3% reported that they read books to their child on the previous day, usually read books for around 10–30 min a day, and about six or seven times a week to their children. The actual time spent reading during the SBR task varied from one minute to 12 min. Excluding one parent, the actual reading time for the SBR task was below 10 min. The book related-utterances varied from 18 utterances to a maximum of 300 utterances with 84.61% having less than 100 book-related utterances during the SBR task.

Parental Attitudes and Beliefs About Storybook Reading

As given in Table 4, all parents agreed or strongly agreed that they enjoyed reading to their child, understood the positive benefits of reading, and the need to develop a broad interest in reading in my child (i.e., 100%). A majority of parents read stories to their child whenever they wanted (i.e., 96.2%), believed their child's performance in reading at their school was due to the reading habits in the home environment (i.e., 96.2%), and had good memories of being read to in their childhood (i.e., 84.6%).

All parents disagreed or strongly disagreed with the fact that schools are only responsible for teaching the children reading (i.e., 100%). A majority disagreed or strongly disagreed that their child was too young to learn about reading (i.e., 96.2%), that they did not read storybooks to the child because there is no quiet environment at home (i.e., 92.3%), because their child would not sit still, or because at times they were tired (i.e., 92.3%).

Correlation Between Attitudes and Beliefs and SBR Quantity Measures

A Spearman correlation was done to explore if there is a relationship between parental attitudes and beliefs with measures of quantity (Table 5). A positive correlation was noted between reported time spent (per day/week) reading to child and the constraints they face for involving daily reading (difficulty/boring to read, lack of quiet place in the house, and more important work at home). A positive correlation was also noted between the book-related maternal utterances and difficulty reading due to the lack of a quiet place in the house. No correlation was noted between the amount of time taken for the SBR task and the parental attitudes and beliefs (except their memories of being read to as

Table 4 Percentage (%) and frequency (n) of parental response on their attitudes and beliefs about storybook reading

Items	% (n)				Mean (95% CI)	Median
	Strongly agree (4)	Agree (3)	Disagree (2)	Strongly disagree (1)		
I have good memories of being read to when I was a child	30.8(8)	53.8(14)	15.4(4)	0	3.15 (2.88–3.42)	3
I enjoy reading storybooks with my child	69.2(18)	30.8(8)	0	0	3.69 (3.50–3.88)	4
I read storybooks to my child whenever he or she wants	65.4(17)	30.8(8)	3.8(1)	0	3.61 (3.38–3.84)	4
Schools are responsible for teaching children story book reading and not parents	0	0	7.7(2)	92.3(24)	1.07 (0.96-1.18)	1
I find it boring or difficult to read storybooks to my child	0	23.1(6)	46.1(12)	30.8(8)	1.92 (1.62–2.22)	2
I have to scold or discipline my child when we try to read storybooks	3.8(1)	23.1(6)	50(13)	23.1(6)	2.07 (1.75–2.39)	2
I don't read storybooks to my child because he or she won't sit still	7.7(2)	7.7(2)	53.8(14)	30.8(8)	1.69 (1.44–1.94)	2
My child is too young to learn about reading	3.8(1)	0	38.5(10)	57.7(15)	1.50 (1.21–1.78)	1
Even if I would like to, I'm just too busy or too tired to read storybooks to my child	3.8(1)	15.4(4)	53.8(14)	26.9(7)	1.96 (1.64–2.27)	2
I don't read storybooks to my child because there is no quiet place in the house	7.7(2)	0	57.7(15)	34.6(9)	1.84 (1.50–2.18)	2
I don't read storybooks to my child because I have other, more important things to do as a parent	0	7.7(2)	65.4(17)	26.9(7)	1.80 (1.57–2.03)	2
Children inherit their language ability from their parents, it's in their genes	7.7(2)	26.9(7)	38.5(10)	26.9(7)	2.15 (1.78–2.52)	2
Most children do well at reading words in school because their parent read storybooks at home	88.5(23)	7.7(2)	3.8(1)	0	3.84 (3.65–4.03)	4
I think that it is important to develop a broad interest in reading in my child	92.3(24)	7.7(2)	0	0	3.92 (3.81–4.03)	4
I think reading books will help my child develop new vocabulary, thinking, understanding, and moral values	76.9(20)	23.1(6)	0	0	3.76 (3.59–3.94)	4

a child). A negative correlation was found for all the measures of quantity and their memories of being read to as a child.

Discussion

In the present study, we discuss the study findings with reference to the observed SBR strategies in the Indian home context for preschool children, parents' attitudes toward SBR, and the relationship between parents' attitudes and quantity of SBR.

Maternal Verbal and Nonverbal Behaviors During SBR

During SBR, some dialogic reading strategies were used by a majority of the mothers. These included direct attention, asking questions, providing feedback, and elaborating. Fewer mothers used labeling, retelling, recasts, expansions, and prompts. As noted, the differential impact of these strategies is not known; however, each serves a different purpose (Han & Neuharth-Pritchett, 2014; Sim 2012). For example, asking questions elicits a response from the child, while labeling provides a model. Use of the full array of strategies may create additional opportunities for vocabulary building, sentence construction, and drawing the child's attention to the main events in the story. Based on this sample, parents may not be using a wide variety of strategies. Of note, 15 parents read the words and sentences in the book along with the use of various dialogic strategies. More data in a controlled SBR activity may give insight into the degree parents read as compared to using dialogic reading strategies.

A majority of mothers used extra-textual strategies, specifically predicting and recalling. This interaction paves the way for the child to make inferences and think critically (Li & Fleer, 2015), which is consistent with parental attitudes and beliefs, wherein all parents agreed or strongly agreed that reading books develop a child's vocabulary, thinking, and understanding. However, only three parents used bridging, which is linked to connecting stories to personal and

Table 5 Correlation between attitudes-beliefs and SBR quantity measures

	Number of times per week spent reading to child	Number of minutes per day spent reading to child	Amount of time read during SBR task	Number of book related utterances during SBR task
I have good memories of being read to when I was a child	-0.44*	-0.46*	-0.5**	-0.4*
I enjoy reading storybooks with my child	ns	ns	ns	ns
I read storybooks to my child whenever he or she wants	ns	ns	ns	ns
Schools are responsible for teaching children storybook reading and not parents	ns	ns	ns	ns
I find it boring or difficult to read storybooks to my child	0.41*	ns	ns	ns
I have to scold or discipline my child when we try to read storybooks	ns	ns	ns	ns
I don't read storybooks to my child because he or she won't sit still	ns	ns	ns	ns
My child is too young to learn about reading	ns	ns	ns	ns
Even if I would like to, I'm just too busy or too tired to read storybooks to my child	ns	ns	ns	ns
I don't read storybooks to my child because there is no quiet place in the house	0.59**	0.43*	ns	0.44*
I don't read storybooks to my child because I have other, more important things to do as a parent	ns	0.48*	ns	ns
Children inherit their language ability from their parents, it's in their genes	ns	ns	ns	ns
Most children do well at reading words in school because their parent reads storybooks at home	ns	ns	ns	ns
I think that it is important to develop a broad interest in reading in my child	ns	ns	ns	ns
I think reading books will help my child develop new vocabulary, thinking, understanding and moral values	ns	-0.45*	ns	ns

* Correlation is significant at the 0.05 level (2-tailed); **Correlation is significant at the 0.01 level (2-tailed)

ns – non-significant

cultural experiences, including the opportunity for the child to learn about moral values. While parents perceived SBR to advance moral values, they may not be using strategies to exploit the development of moral values during SBR. Similarly, studies from other Asian contexts also suggest that storybook reading is often considered a means to provide educational opportunities regarding moral values (Chang & Huang, 2016; Luo et al., 2012). Training parents to use bridging may be in concert with this value.

The use of print referencing strategies was also noted in the study. This strategy has been reported to boost child's letter knowledge, phonological awareness, and literacy skills (Aram & Shapira, 2012; Sim, 2012). In the study, 18 mothers discussed the title, pointed while reading the text, and drew attention to print concepts (e.g., calling attention towards contents on the cover pages of book, pointing to the words in the book). However, among these 18 parents, only one parent drew their child's attention toward print characteristics of the book such as letters and sounds. This is consistent with Chang et al. (2016) who found that Taiwanese parents discussed book knowledge frequently, but did not focus on print knowledge. Justice et al. (2002) opined that parents' usage of print-related talk is more noted during sharing an alphabet book-reading as compared to shared book reading. While this may contribute to why parents did not use print referencing strategies, it may be that parents did not know how to use print referencing strategies.

In addition to the verbal behaviors, this study documented evidence of the use of nonverbal strategies (e.g., physical prompts, gestures, and having fun). Of the 26 dyads, 20 mothers used representation/iconic gestures (i.e., using hand, body, or facial gestures to depict an action /object represented in the book). The physical prompt behavior was employed by 11 parents, in which the mother maintained

physical contact with the child (e.g., hugging, patting). Further, 11 parents in the study were noted as having fun while reading by smiling and laughing at the events in the book. Parental interaction during SBR enhanced the child's nonverbal gesture use along with language (Landry et al., 2012). Often these behaviors are less emphasized in SBR parent-training models; however, the presence of these behaviors in this sample indicates that this may be an important component of parent SBR training in the Indian context.

Attitudes and Quantity

Taken together, the parents in this sample possessed positive attitudes toward book reading. The findings of the present study are in consonance with Pandith et al. (2022) study among 100 parents of preschool children from the same study region who reported that parents understood the positive benefits and had a positive attitude towards reading. As noted, parental attitudes and beliefs play a role in the quantity and quality of storybook reading in the home. However, in this sample, no relationships were observed between parental attitudes and beliefs and time spent during the SBR task. This may indicate that, in actual practice, the parental attitudes towards SBR may not be converted to the frequent reading or length of time during reading episodes, despite having good memories of being read to in their childhood and understanding the importance of SBR. These correlations suggest that the quantity of SBR may be hindered by multiple constraints such as the inability to find a quiet place in the house to read to their child and the need to focus on other important work at home. In the Indian context, the actual practice of SBR may be restricted due to the amount of household work and the higher importance given to their child's school-based activities and assignments rather than SBR. Along similar lines, previous research in the Indian context (Kalia & Vagh, 2008; Pandith et al., 2022) suggests that parents focus more on teaching activities at home rather than shared reading despite being aware of the benefits of SBR and exhibiting a positive attitude and beliefs towards SBR.

Limitations and Future Directions

Multiple factors which were uncontrolled in this exploratory study included storybook selection and the amount of time for the SBR activity. The presence of investigators and the videorecording of the interaction during the SBR task may have influenced the behavior of the mother and child and made the activity less naturalistic. As such, the implication of the mother's nonverbal and verbal behaviors are limited. Future studies should examine the effects of the storybook selection on mothers' behavior during SBR as in

Saracho's (2017) work. Future studies should include frequency counts of strategy use within a controlled unit of time and investigate how these strategies are incorporated during SBR. Multiple SBR sessions may increase the validity of the data. It will be interesting to probe the coding of other behaviors such as mothers' silence during mother-child interaction. Further, relationships between parent and child behavior should be examined. The four-point rating scale used in the survey questionnaire may not provide an actual representation of parental attitudes toward storybook reading. A potential social desirability bias also would have occurred as the study participants completed the questionnaire in the presence of the investigator. While the results point toward some patterns and trends in SBR, future research further needs to examine mothers' and fathers' behaviors with a larger sample size. Future studies need to focus on the quantity and quality of parent-child interaction strategies in children with communication disorders in the Indian context. Future studies should also investigate the impact of multilingual and/or bilingual SBR in home and school within Indian contexts considering the selection of Kannada and English books by parents for SBR. As noted in the outcomes of parent-teacher literacy partnerships in Malaysian contexts presented by Harji et al. (2016), a bilingual home and school program may be critical for reading development.

Summary and Implications

Overall, the present study outlines the SBR interaction strategies used among mothers of preschool children in the Indian context. Findings point toward some implications for training parents in the use of SBR: (a) Findings indicate that mothers utilized dialogic strategies that are consistent with skilled SBR, but not all the strategies were implemented. In the context of current national policies and the existing research evidence, there is a critical need to focus more attention on home literacy environment activities such as SBR. Parental training to make the storybook reading an interactive and engaging activity and go beyond just reading out the words in the book is warranted; (b) It may be that a program such as PEER would provide a formalized parent-training process to increase the use of the various strategies with specific purposes; (c) Fewer mothers used extra-textual behaviors, in particular bridging. Highlighting the role of bridging may be tied to the parental value of using SBR as an opportunity to promote moral values; (d) Use of print referencing, specifically strategies that focus on letter knowledge or phonemic awareness, should be emphasized. Training for parents that includes these effective SBR strategies for success in reading is important; (e) Finally, the use of nonverbal strategies should be emphasized and

validated. Continuing to explore parental interactions, both verbal and nonverbal, in home contexts which are multilingual can perhaps increase the impact of SBR to enhance our children's early language and literacy development.

Declarations

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