The Social Science

The Impact of Language on Child's Literacy and Their Development Progress

Omar Alhalabi and Fawaz Almuteire
College of Education, Qatar University, Doha, Qatar

Key words: Shared reading, language development, emergent literacy, children's interest, metalingual utterances

Corresponding Author:
Omar Alhalabi
College of Education, Qatar University, Doha, Qatar

Page No.: 143-149
Volume: 16, Issue 7, 2021
ISSN: 1818-5800
The Social Sciences

Abstract: Fifty-five children and their mothers were studied longitudinally from 18-42 months to determine the effects of home literacy practices, children's interest in reading and mother's metalingual utterances during reading on children's expressive and receptive language development, letter knowledge and knowledge of print concepts. At 27 months, children's interest and the rate of mother's metalingual utterances during shared reading were assessed observationally and mothers reported their home literacy practices. Children's language development was assessed at 30 and 42 months and their letter knowledge and knowledge of print concepts were assessed at 42 months. Children's interest was strongly associated with the rate of mother's metalingual utterances. Home literacy practices, children's interest and the rate of mother's metalingual utterances all predicted expressive language development. Home literacy practices predicted receptive language development and children's interest predicted letter knowledge. The relative contributions of children and mothers to shared reading are discussed.

INTRODUCTION

Shared book reading is a common event for many young children and their caregivers and many parents as well as numerous professionals associate shared book reading with favorable child developmental outcomes. Interest in preschool literacy exposure in general and shared book reading in particular, is understandable as it seemingly provides a rich context for language learning[1]. Elements of adult speech generally thought to foster children's linguistic development such as the frequent use of open-ended questions, the provision of familiar linguistic routines in which children can become progressively more active agents and the elaboration of the child's current focus[2-5] occur at an accelerated rate during shared reading between young children and their caregivers[6, 7]. For these reasons, children's preschool literacy exposure has been explored as a potential source of differences in early language development[8] with numerous studies reporting positive associations between preschool literacy experience and later language and literacy development[9, 10].

Despite these intriguing claims, questions remain regarding the paths of association between early shared reading experiences and later language and emergent literacy outcomes. Much of the research has investigated parental and child contributions to reading processes separately and has generally neglected the role of children's interest as dyads co-construct shared reading conversations[11].

Parent's contributions to shared reading have been extensively investigated with respect to two complimentary domains: Their establishment of home literacy practices in general and their communicative behavior during shared reading. Home literacy practices typically have been investigated through parent report and results from these studies indicate that parents who report reading to their children often and at younger ages and who provide a rich range of literacy materials[11] have children with superior expressive and receptive language development[9, 12] and higher levels of school readiness[13]. Concerns have been raised about the validity of parent report of home literacy practices because the high cultural value placed on these activities may prompt parents to inflate estimates but similar results are found in studies that evaluate home literacy practices by measuring parent's familiarity with children's literature[14] and directly assess the frequency of shared reading[13].

In addition, to their home literacy practices, parents differ in how they communicate with their children during shared reading. These differences in communicative patterns also appear related to children's language development. In general caregivers who engage in communicative strategies that direct their child's attention to language itself and that promote children's language use during shared reading foster superior language development[15, 16, 5].

In his seminal work, Jakobson[17], Adamson[18] and Bruner[19] argued that there are multiple potential targets of attention embedded within any speech act and characterized speech acts that direct attention to language itself as metalingual. In this vein, we consider those types of communicative behaviors that are commonly observed during shared reading such as requests for labels ("What is that?"), prompts to produce language ("Say doggy.") and recasts of the child's language use ("That's right; that is a cat.") as metalingual. Previous studies of early mother child conversations that used coding schemes based on Jakobson's theory[20, 7] have found a positive association between mother's use of metalingual utterances, such as the ones noted above and children's language development. By comparison, referential utterances (i.e., utterances that direct attention to objects and events in the immediate context, for example, "Where's the doggy?" "The ball is under the table.") and social regulative utterances (i.e., utterances that direct attention to regulation of social actions, for example, "Now, it's your turn.") have not predicted language development[7, 5].

Children's contributions to shared reading processes have not been as extensively explored and consequently their role is not as well understood. The few studies that have investigated children's interest in reading indicate that it is associated with language development[21], early reading status[22] and specific emergent literacy knowledge[14, 13]. Moreover, these effects appear to be relatively enduring such that grade school children's attitudes toward reading are associated with their academic standing[23] and with their willingness to select challenging reading material[24]. Cumulatively, these studies suggest that children's interest in reading is an important predictor. However, it is not clear how children's interest promotes learning.

One possibility is that children's interest facilitates more active engagement in the reading process and that, in turn, promotes language use and increased skill. However, the literature to date provides mixed support for this proposition. For example, Jones and Adamson[7] reported a lack of association between children's use of language during shared reading and measures of language skill and Reese[25] reported that children who make more spontaneous conversationally relevant verbal contributions during shared reading actually have weaker receptive language development. Subsequently, it seems necessary to evaluate the level of children's interest during shared reading and how it is related to differences in the content of shared reading conversations.

For this study, we observed mothers during shared reading with their 27-month-old toddlers, an age when shared reading is common in most middle-income families[26-28] but long before formalized reading instruction has been introduced. Using systematic observation, we derived measures of children's interest and the rate of mother's metalingual utterances, we also asked mothers about their home literacy practices. Previously, when children were 18 months of age, we assessed their expressive and receptive language skills. As outcome measures, we collected expressive and receptive language assessments when children were 30 and 42 months of age. We wanted distinct assessments of expressive and receptive language ability because of the differential effects of shared reading on these abilities that have been reported elsewhere in the literature[15,5]. Finally, as indices of emergent literacy ability, we assessed the children's letter knowledge and knowledge of print concepts when they were 42 months of age.

We had two aims. The first was to evaluate patterns of concurrent association when infants were 27 months of age. Influenced by findings that maternal reports of home literacy practices and child interest are related[27, 13], we anticipated that home literacy practices would be positively associated with our observations of children's interest. We also expected that when children were more interested in shared reading, mothers would produce metalingual utterances at a greater rate. This stems from the expectation that when children are not particularly interested in reading, a more rudimentary form of interaction may emerge such that utterances focusing on attention-recruitment (e.g., "Look at the kitty"[29, 30] and

familiar behavioral routines (i.e., pointing and page turning) may dominate and subsequently metalingual utterances will be less common. Finally, we anticipated that increased home literacy practices would be associated with a greater rate of mother's metalingual utterances based on prior reports in the literature that greater frequency of shared reading is positively associated with utterances focused on story content as opposed to utterances focused on regaining a child's attention[31].

Our second aim was to determine how home literacy practices, children's interest in reading and the rate of mother's metalingual utterances during shared reading at 27 months predicted children's expressive and receptive language development at 30 and 42 months and their letter knowledge and knowledge of print concepts at 42 months. First, based on prior reports in the literature that suggest a limited association between home literacy practices and specific early reading skills[22, 14, 12], we expected that the effect of home literacy practices on language development would be stronger than its effect on emergent literacy outcomes but we anticipated that children's interest during shared reading would be predictive of the measures of both language and emergent literacy. Second, we expected the rate of mother's metalingual utterances to be positively associated with language development. Third, because we anticipated that our 27-month shared reading variables would be positively correlated with one another, we expected the variance in the outcomes that these variables were accounting for would be partially shared and accordingly, we wanted to determine the unique and shared contributions of these variables on expressive and receptive language development, letter knowledge and knowledge of print concepts.

Literature review: The effects of the home literacy environment on preschooler's language abilities, emergent literacy and later academic success have been well documented[9], although, some researchers have concluded that the effect sizes are less than impressive (i.e., an overall median correlation of 0.23[10]). Numerous studies have documented relations between the frequency and duration of shared reading in the home during the preschool years and language and literacy abilities[11]. Missing from the literature, however, are studies of the impact of shared reading in infancy. Although, research indicates that at least half of parents begin reading aloud to their children in infancy, few studies have examined shared reading during the first year and a half of the child's life[27]. However, in retrospective studies, the age at which parents began reading to their children has been found to be a robust predictor of later language abilities. The younger the age when shared reading began, the better were the child's subsequent language and literacy abilities[27, 11]. Thus, parents report that they are reading aloud to their infants and evidence suggests that this practice is beneficial to their infant's subsequent language abilities. Because shared reading in infancy has thus far been measured retrospectively, it is unclear whether parent's reports of what age they began reading to their preschoolers is unduly influenced by parent's current experiences with shared reading and their child's current language abilities. Therefore, whether shared reading in infancy impacts later language abilities remains an empirical question.

In all areas of development, infants during the first year have limited abilities compared to preschoolers[27]. For example, by 4 months, infants can recognize their mothers and are reaching for objects. They can balance their heads but cannot pull themselves to a sitting position. By 8 months, many infants can pull themselves to sitting and even standing positions and can sit alone, however, they are not yet walking, even with assistance. Furthermore, 8-month-old infants can vocalize several different syllables but they are not yet responding to verbal requests. Thus, one can imagine that shared reading experiences with infants during the first year would be quite different from shared reading with preschool age children. The purpose of the present study was to investigate whether shared reading in infancy would be related to language abilities at the beginning of the second year of life.

Shared reading is thought to affect later language abilities via. multiple processes. One mechanism through which early reading might influence language development is joint attention. Episodes of joint attention are theorized to provide the infants with predictable learning opportunities which enhance language development[4]. During shared reading, the cognitively demanding task of mapping words onto the correct referent becomes much easier because the referent is located on the page at which both parent and child are visually focused and the parent can easily point when the target object is less salient. Thus, during shared reading, the infant is afforded multiple opportunities to match words with objects[19]. Many researchers have found that the duration of time infants or children spend in joint attention with their caregivers predicts concurrent and future language abilities[4]. Thus, shared reading in infancy might impact language through providing ideal opportunities for joint attention to occur.

Another way that shared reading might enhance language acquisition is through the more complex language that the parent uses during shared reading. For example, the written language register is more sophisticated than spoken language used during care-taking activities or free play[6]. Moreover, children are exposed to a wide variety of objects and environments in books that they might not experience in their daily lives. For example, a child living in an urban environment

might only learn about life in the country or farm animals through a book. Thus, shared reading might impact infant language by allowing the infant exposure to a broader vocabulary as well as a more sophisticated sentence structure.

Third, parents often engage in intensive vocabulary teaching during shared reading activities[8]. For example, when asked to look at a book with their 17-22-month-old infants, Israeli mothers from middle-SES backgrounds began 48% of conversational cycles with "What" questions, 6.7% with "Where" questions and 37.1% with labeling statements[8]. Moreover, different styles of maternal input were found to be related to infant language. Cluster analysis indicated three different maternal styles: some mothers focused on eliciting the production of labels by the infant, other mothers asked the infant to point to the object she labeled and a third group of mothers focused on giving information rather than eliciting information. In that middle-class sample, the label-eliciting style correlated with infant expressive language (i.e., productive vocabulary), the point-eliciting style correlated with receptive vocabulary (i.e., language comprehension) and the information-giving style related to imitative vocabulary (i.e., parroting words that the mother said). Hence, mothers use a variety of methods to try to teach vocabulary to their infants during shared reading and these styles differentially relate to infant language abilities. In other words, shared reading interaction might enhance language development by providing parents with opportunities to directly teach words to their infants.

Another process through which age of onset might impact language is by establishing regular reading habits. Shared reading at very early ages (before receptive language abilities are in place) might impact language indirectly by establishing reading routines that will be firmly in place by the time the infant is able to benefit from them cognitively. It is also possible, however, that reading during the first few months of life impacts productive language in ways that are not mediated by receptive language such as through experience with symbolic representation.

The goal of the present study was to prospectively and longitudinally investigate the effects of shared reading in infancy on language development at the beginning of the second year. Past studies that have examined the effects of early reading on later language have measured age of onset retrospectively[27, 11]. The present study measured shared reading in infancy, before the language abilities of the child can influence the parent's recollection. A second important question that needs to be addressed is: at what age does shared reading begin to impact language? Previous research found the average age of onset of shared reading to be between 7.6 months[27] and 9 months[30]. In the present study, shared reading was assessed at this age (i.e., 8 months) but also in early infancy, 4 months. The present study examined whether there is a benefit for language acquisition if shared reading starts in early infancy or whether the infant needs to have some receptive language abilities in order for early reading to impact language.

At 8 months, receptive language abilities are emerging in the infant. Although parent reports suggest that the average age of onset for first words in comprehension to be around 10 months (M = 10.4, SD = 0.7, range = 9.5-13.0; laboratory assessments of speech perception indicate that by 8 months of age, rudimentary language comprehension skills are in place. For example, infants as young as 7½ months recognize familiar words in fluent speech. Moreover, 2 weeks after hearing three children's stories, 8-month-old infants could discriminate between words heard in the stories and words that they had not heard. Thus, 8-month-old infants appear to have advantages over 4-month-old infants in speech perception and language comprehension. The hypothesis of the present study was that reading at 4 months would not be significantly related to later language but that reading at 8 months would be related to language at 12 months and at 16 months, controlling for 12-month language levels. In other words, reading at 8 months was expected to predict 16-month language over and above the infant's own 12-month linguistic abilities.

Another question addressed in the present study was whether early reading is related to both receptive and expressive language abilities. DeBaryshe[27] found that the age of onset of shared reading was significantly related to receptive language but not to expressive language whereas Payne *et al*.[11] found age of onset to be inversely related to both receptive and expressive vocabulary. Gesturing and labeling on the part of the parent as well as requiring gestures and labels from the infant vary from dyad to dyad and the relations between these behaviors and language differ depending on the type of parental input[8]. Thus, specific predictions concerning whether receptive or expressive language would be affected by shared reading could not be made because the behaviors that parents use during shared reading in early infancy have not been empirically examined. Ninio and Bruner[1] followed the shared reading experiences of one mother infant dyad from 8-16 months. They described this mother's shared reading sequence as involving a verbalization to get the infant's attention, asking a question, giving a label and providing feedback. This pattern was replicated in another descriptive study of 12 parent infant dyads when the infants were 9 months of age[30]. Parents would draw the infant's attention to the book and then label or describe some aspects of the pictures. Parents would also give occasional feedback to their infant's vocalizations. However, no studies of shared reading with infants as young as 4 months were found.

The present study examined the effects of shared reading when infants were 4 and 8 months on their language abilities at 12 and 16 months. Based on previous research that relied on retrospective reporting[27, 11] as well as theories of language learning[19, 4], infants who were read to at 8 months were predicted to have better language abilities at 12 months and at 16 months, even after controlling for 12-month language. Shared reading at 4 months, in contrast was not expected to significantly predict later language. Moreover, the relation of shared reading to receptive versus expressive language was explored. Strengths of the present study include the use of prospective (versus retrospective) parent reports, the longitudinal nature of the study and the inclusion of both mother's and father's reading to their infants, providing a more valid measure of the shared reading opportunities that the infants experienced. Because most studies of shared reading in the home have focused exclusively on the mother infant dyad and because many fathers are also reading to their infants, most past research necessarily underreports the shared reading experiences of many children. Thus, measuring the child's experiences with shared reading by examining only maternal behaviors would give an incomplete picture of the shared reading experiences that the infant actually experiences. Thus, the measure of shared reading in the present study combined reading by both the mother and the father. Finally, as gender differences have been consistently found in early language acquisition, gender of the child was also examined as a predictor of early language. Many studies indicate the presence of gender differences in early vocabulary growth; girls tend to outperform boys. The development of maternal verbal behaviors has also been found to vary with the gender of the infant with mothers of boys showing a significant decrease in verbal encouragement of attention at 8 months. As 8-month-olds are making the transition to crawling and since boys are generally found to be more active than girls, perhaps parents are sensitive to and encouraging of their son's development in the motoric domain and are not emphasizing certain skills relevant to the language domain such as shared reading activities.

DISCUSSION

This study provides a view of shared reading that draws attention to the intertwined nature of caregiver's and children's efforts. Our findings highlight the utility of parents' general literacy practices and their efforts to guide their child's attention to language through metalingual utterances but also documents that variability in children's interest in shared reading is associated with differences in the conversations that accompany shared reading. Furthermore, these results contribute to a growing body of evidence that children's interest contributes to differences in subsequent language and specific emergent literacy skills.

Many of the patterns observed in the current study echo results from previous studies of shared reading. For instance, shared reading was clearly a highly valued activity among participants in this study. All of the mothers indicated on the home literacy practices questionnaire that shared reading was a common and longstanding practice and the families appeared interested in creating literacy rich environments for their children as indicated by the large number of children's books available in most of the households. Finally, the general structure of the shared reading event appeared comparable to what has been presented previously in the literature in that mothers were the more active partner during shared reading[30] and the use of prompts and recasts was prevalent[1].

The results from this study support the perspective that parent's literacy efforts are making meaningful and lasting contributions to their children's development. Home literacy practices significantly predicted children's receptive and expressive language development even after controlling for initial language differences and over a 15-month period. Furthermore, mother's propensity to produce metalingual utterances at 27 months of age was significantly associated with children's expressive language development at 30 and 42 months of age even after controlling for initial differences in language ability.

However, the current study also indicates that children are very active agents in their own development. First, child interest was strongly associated with the rate at which mothers produced metalingual utterances. On the other hand, it was only moderately associated with mother's reading and non-metalingual utterances. We think this pattern indicates that the spontaneous emergence and endurance, of certain communicative patterns during shared reading may be as much a result of children's interests as caregiver's efforts. Moreover, the effect of mother's metalingual utterances on expressive language development was shared with other study variables. Together, we think this pattern of results should temper impulses to advocate that caregiver adopt specific styles of communicative interaction during shared reading without considering children's contributions[32, 5]. We agree with recent admonishments[33] that highly didactic interactions with very young children are developmentally inappropriate: as Piaget[34] argued, the work of children at this age is play. Subsequently, we think that literacy efforts that allow children to follow their sense of play will be most successful. In this light, we suspect that the mothers in the current study who successfully used metalingual utterances to guide their child's attention likely had children who were primed for such interactions by their interests and that intervention efforts incorporating shared reading should look for ways to promote children's interest in addition to modifying caregiver's behavior[35].

Second, the association between children's interest and letter knowledge demonstrates quite compellingly how early interest can propel children toward proficiency in distinct domains, starting from a very young age[36]. Reading is clearly a multifaceted task and one that requires mastery of disparate skills. Letter knowledge, arguably one of the more analytical skills, is essential to successful reading but children also need to develop other skills such as gaining greater insight regarding story agent's motivations and beliefs[37], in order to engage fully in the reading process. We suspect that just as some children when first learning language may temporarily emphasize referential as opposed to expressive functions of language[18,38], there are likely multiple paths to literacy competence. Initial attention to the formal elements is one route but other routes may be fruitful as well. To this end, we suggest that whereas global measures of child interest in shared reading appear to have impressive predictive utility, future research that takes a more fine-grained approach to evaluating the variety of ways in which children can express their interest during shared reading and how these differences may situate children to learn varying aspects of reading may prove even more profitable.

CONCLUSION

The current study supports a model of shared reading that highlights both parental and child contributions. Parent's provision of a reading context, by establishing home literacy practices and use of metalingual routines, makes a significant and enduring contribution to language development. Moreover, children are active agents within that context as evidenced by different levels of interest. Furthermore, child differences are associated with the quality of current reading interactions, future language acquisition and emergent literacy development. Finally, this study highlights the need to better understand how parental and child contributions to shared reading change over the course of the preschool years and how these transitions may be associated with future development.

Advances in the understanding of the role of auditory processing in the genesis of language difficulties have been hampered theoretically by a lack of agreement about the relationship between basic auditory skills, speech perception and phonological processing abilities and also methodologically by frequent uncontrolled group differences in experimental studies.

It should be clear from this review that by no means all children with language learning impairments demonstrate non-verbal auditory processing problems. It has been suggested that where present, auditory processing deficits may be a 'synergistic risk factor' for language impairment 20, that exerts a moderating influence when children are already at genetic risk of language disorder but they are neither necessary nor sufficient to explain language difficulties.

Children with oral language impairments require comprehensive assessment of their cognitive strengths and difficulties to specify more accurately the nature of their difficulties. It is premature given the present state of knowledge to advocate training in auditory skills for these children 47.48. While this might bring about some benefit for their auditory attention and listening skills, the large-scale adoption of such training programmes is counter-indicated until the causal relationships among auditory, phonological and language impairments are clarified.

Children with oral language impairments beyond the pre-school years require intensive programmes of speech and language therapy and there is good evidence of the benefits of phonological awareness training for dyslexia 49.

REFERENCES

01. Ninio, A. and J. Bruner, 1978. The achievement and antecedents of labelling. J. Child Lang., 5: 1-15.
02. Akhtar, N., F. Dunham and P.J. Dunham, 1991. Directive interactions and early vocabulary development: The role of joint attentional focus. J. Child Lang., 18: 41-49.
03. Snow, C.E. and B.A. Goldfield, 1983. Turn the page please: Situation-specific language acquisition. J. Child Lang., 10: 551-569.
04. Tomasello, M. and M.J. Farrar, 1986. Joint attention and early language. Child Dev., 57: 1454-1463.
05. Whitehurst, G.J., F.L. Falco, C.J. Lonigan, J.E. Fischel, B.D. DeBaryshe, M.C. Valdez-Menchaca and M. Caulfield, 1988. Accelerating language development through picture book reading. Dev. Psychol., 24: 552-559.
06. Hoff-Ginsberg, E., 1991. Mother-child conversation in different social classes and communicative settings. Child Dev., 62: 782-796.
07. Jones, C.P. and L.B. Adamson, 1987. Language use in mother-child and mother-child-sibling interactions. Child Dev., 58: 356-366.
08. Ninio, A., 1980. Picture-book reading in mother-infant dyads belonging to two subgroups in Israel. Child Dev., 51: 587-590.
09. Bus, A.G., M.H. Van Ijzendoorn and A.D. Pellegrini, 1995. Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. Rev. Educ. Res., 65: 1-21.
10. Scarborough, H.S. and W. Dobrich, 1994. On the efficacy of reading to preschoolers. Dev. Rev., 14: 245-302.

11. Payne, A.C., G.J. Whitehurst and A.L. Angell, 1994. The role of home literacy environment in the development of language ability in preschool children from low-income families. Early Childhood Res. Q., 9: 427-440.
12. Senechal, M. and J.A. LeFevre, 2002. Parental involvement in the development of children's reading skill: A five-year longitudinal study. Child Dev., 73: 445-460.
13. Wells, G., 1985. Preschool Literacy Related Activities and Success in School. In: Literacy Language and Learning: The Nature and Consequences of Reading and Writing, Olson, D.R. and A. Hildyard (Eds.)., Cambridge University Press, New York, USA., pp: 229-253.
14. Frijters, J.C., R.W. Barron and M. Brunello, 2000. Direct and mediated influences of home literacy and literacy interest on prereaders oral vocabulary and early written language skill. J. Educ. Psychol., 92: 466-477.
15. Senechal, M., 1997. The differential effect of storybook reading on preschoolers acquisition of expressive and receptive vocabulary. J. Child Lang., 24: 123-138.
16. Valdez-Menchaca, M.C. and G.J. Whitehurst, 1992. Accelerating language development through picture book reading: A systematic extension to Mexican day care. Dev. Psychol., 28: 1106-1114.
17. Jakobson, R., 1960. Linguistics and Poetics. In: Style in Language, Sebeok, T.A. (Ed.)., John Wiley and Sons, New York, USA., pp: 350-377.
18. Adamson, L.B., 1992. Variations in the Early use of Language. In: Children's Development within Social Context: Vol. 1, Metatheory and Theory, Winegar, L.T. and J. Valsiner (Eds.)., Lawrence Erlbaum Associates, Hillsdale, New Jersey, pp: 123-141.
19. Bruner, J., 1983. Child's Talk: Learning to use Language. W.W. Norton, New York, USA.,.
20. Deffebach, K.P., 1994. Teaching referential and social-regulative words to toddlers: Mothers use of metalingual language. First Lang., 14: 249-261.
21. Laakso, M.L., A.M. Poikkeus and P. Lyytinen, 1999. Shared reading interaction in families with and without genetic risk for dyslexia: Implications for toddlers language development. Infant Child Dev. Int. J. Res. Pract., 8: 179-195.
22. Crain-Thoreson, C. and P.S. Dale, 1992. Do early talkers become early readers? Linguistic precocity, preschool language and emergent literacy. Dev. Psychol., 28: 421-429.
23. McKenna, M.C., D.J. Kear and R.A. Ellsworth, 1995. Children's attitudes toward reading: A national survey. Reading Res. Q., 30: 934-956.
24. Baker, L., K. Mackler, S. Sonnenschein and R. Serpell, 2001. Parents interactions with their first-grade children during storybook reading and relations with subsequent home reading activity and reading achievement. J. Sch. Psychol., 39: 415-438.
25. Reese, E., 1995. Predicting children's literacy from mother-child conversations. Cognit. Dev., 10: 381-405.
26. Adams, M.J., 1990. Beginning to Read. MIT Press, Cambridge, Massachusetts,.
27. DeBaryshe, B.D., 1995. Maternal belief systems: Linchpin in the home reading process. J. Applied Dev. Psychol., 16: 1-21.
28. Heath, S.B., 1989. Oral and literate traditions among Black Americans living in poverty. Am. Psychol., 44: 367-373.
29. DeLoache, J.S. and O.A. DeMendoza, 1987. Joint picturebook interactions of mothers and 1-year-old children. Br. J. Dev. Psychol., 5: 111-123.
30. Senechal, M., E.H. Cornell and L.S. Broda, 1995. Age-related differences in the organization of parent-infant interactions during picture-book reading. Early Childhood Res. Q., 10: 317-337.
31. Bus, A.G. and M.H. Van Ijzendoorn, 1995. Mothers reading to their 3-year-olds: The role of mother-child attachment security in becoming literate. Reading Res. Q., 30: 998-1015.
32. Lonigan, C.J. and G.J. Whitehurst, 1998. Relative efficacy of parent and teacher involvement in a shared-reading intervention for preschool children from low-income backgrounds. Early Childhood Res. Q., 13: 263-290.
33. Zigler, E.F. and S.J. Bishop-Josef, 2004. Play Under Siege: A Historical Overview. In: Children's Play: The Roots of Reading, Zigler, E.F., D.G. Singer and S.J. Bishop-Josef (Eds.)., Zero to Three Press, Washington, USA., pp: 1-13.
34. Piaget, J., 1962. Play, Dreams and Imitation. W.W. Norton & Company, New York, USA.,.
35. Sonnenschein, S. and K. Munsterman, 2002. The influence of home-based reading interactions on 5-year-olds reading motivations and early literacy development. Early Childhood Res. Q., 17: 318-337.
36. Thomas, B., 1984. Early toy preferences of four-year-old readers and nonreaders. Child Dev., 55: 424-430.
37. McArthur, D., L.B. Adamson and D.F. Deckner, 2005. As stories become familiar: Mother-child conversations during shared reading. Merrill-Palmer Q., 51: 389-411.
38. Nelson, K., 1981. Individual differences in language development: Implications for development and language. Dev. Psychol., 17: 170-187.