IMPLICATIONS OF THE STUDY

The preliminary and extensive study offers evidence to understand the pattern of acquisition of biliteracy in children in the Indian context as children in India are exposed to two or more languages in schools. The findings suggest a developmental pattern in the acquisition of literacy skills in Kannada and English. The study succeeded in identifying potential predictors for Kannada and English and suggested differential predictors in both. The common predictors were listening comprehension which significantly correlated with reading in both Kannada and English. Rapid verbal naming was yet another skill which predicted written language in both Kannada and English. Written language in both Kannada and English was in turn predicted by phonological awareness that served as a stronger predictor of written language in English than for Kannada.

Given, the importance of literacy in today’s world, the ABC tool developed is a useful tool that can be used for screening Kannada-English biliterate children in the Grades V to VII and also for clinical purposes. The ABC tool also helps in the assessment of biliterate children in schools who show difficulty in learning literacy skills. The ABC tool provides a multidimensional database to a Speech-Language Pathologist and gives a strong foundation for selecting skills for management of children with learning difficulties between languages like Kannada and English. However, further research is necessary to increase the confidence and applicability of the ABC tool.

The findings of the study support both the central processing hypothesis and the script dependent hypothesis suggested by Geva and Siegel (2000) and others. Given the differential pattern of literacy acquisition in Kannada and English, there is
a need to assess children with learning disability in both the languages in a clinical set up. These findings further implicate the emphasis of parallel tools when a biliterate child with literacy difficulties needs assessment. This could differentiate and aid in identification of a more general learning disability or ‘differential dyslexia. The findings suggest that when a child learns more than one script, there is the potential for uneven literacy acquisition. This idea of “differential dyslexia” that is where the child may be dyslexic in one language but apparently not in another, is in support of various (Kline & Lee, 1972; Leker & Brian, 1999; Miller-Guron & Lundberg, 2000; Veii, 2006; Wydell & Butterworth, 1999). The results are not necessarily due to a function of language exposure but the way dyslexia manifests itself in different languages, demonstrating that a given underlying weakness may cause difficulties in one language but not another (Smythe & Everatt, 2000). The findings are in support of Smythe and Everatt (2000) who believed that research on existence of differential dyslexia, challenges the notion that an individual with dyslexia individual who experiences difficulties in one language will have difficulties in all languages.

An understanding of this model in the Indian context suggested how differently, few skills such as listening comprehension and writing to dictation are crucial for literacy acquisition in English and reading comprehension and writing are crucial for Kannada. This model is inferred and designed based on results obtained from a host of statistical analyses. A further empirical testing of the model could reveal the units or the levels that may be disintegrated in a biliterate child with learning disability. The study contributed to the existing models of biliteracy acquisition and disorders from the perspective of different language and script structures.
Few tasks such as writing to dictation serves as screening tasks to obtain information on the risk of a child becoming learning disability in Kannada or English or both. The findings of the study suggest that children should be assessed in both Kannada and English. Assessing a child only in English will not give a true picture of the child’s literacy difficulty.

The findings of the study suggest that remedial or management strategies for children with learning disability who have different type of difficulties in the two languages may require different approaches and techniques. For example, while phonological awareness training may not help in improving the reading ability in Kannada, that in English can improve reading ability in children. Children are required to be trained for adequate phonological sensitivity to improve their reading in Kannada. Listening comprehension which is usually the most neglected area needs attention and should be employed in Kannada and English as part of Speech-language therapy program to enhance the listening skills and improve the reading ability of children.

The findings on phonological awareness suggest that, phonological sensitivity seems to be more crucial for reading Kannada and children seem to transfer these skills to alphabetic language such as English in the present study. Encouraging the inclusion of phonological awareness activities in the school curriculum can facilitate transfer of skills or strategies which support using both languages rather than teaching strategies separately in Kannada and English. Nag (2007) studied children from 5-10 years of age and reported that in Kannada children achieve phonological sensitivity by later than Grade 4 compared to available reports which suggest that they achieve at a much younger age in alphabetic languages (English). Nag (2007) reported that in Kannada while
phoneme awareness is slow to emerge (Grades 3-4), syllable awareness is achieved much earlier (Grades 1-3). Further research is warranted to understand how well the strategies can be used for two languages and how those strategies support phonological sensitivity in both the languages.

While findings on phonological awareness warrant common strategies for teaching Kannada and English, that in reading single words and nonwords suggested that if we can assume there is transfer of skills from Kannada to English causing errors in irregular nonwords of English, then transfer of skills from transparent to opaque languages in biliterates is likely to have negative effect or a disadvantage. This indicates that while teaching biliterate children one should teach words in a context so that decontextualized reading effects may be nullified. Teaching biliterate children through reading comprehension is recommended so that biliterate children always have a context to learn words in the classroom situation. Findings on writing to dictation suggested similar failure to transfer of skills for Kannada and English. Hence, teaching strategies should be more context dependent to teach reading and writing in Kannada and English.

The findings of the present study suggested that there is a transfer of strategy (in terms of bottom-up and top-down processing) along with transfer of skills for a transparent orthography (Kannada) and an opaque orthography (English) in Kannada-English biliterate children. Children appeared to transfer top-down strategy of Kannada to English. This paves way for using analytical (bottom-up processing) v/s wholistic approach (top-down processing) to reading and writing in biliterate children. This calls for attention during remediation to strengthen underlying skills such as listening comprehension, phonological awareness and rapid verbal naming
while teaching alphabetic languages; strengthen language knowledge, meaning, etc.
while teaching alphasyllabary.

The findings of the study suggest that ‘biliterate children’ are a unique group of children and it is essential to identify difficulty at each and every level of literacy skills and use the strategies accordingly. Strategies for these children need to be developed to strengthen those skills which facilitate transfer of skills and reduce (inhibit) those which cause interference. For example, listening comprehension, phonological awareness and reading comprehension should be encouraged in both the languages; reading single words-nonwords and writing to dictation should be taught in a contextualized manner so that it aids children to learn new words to read and write in the classroom situation.

Issues on cross-language transfer between two different languages such as Kannada and English would highlight on the transfer of skills in biliterate children and its influence on literacy acquisition. Further research is warranted to study the transfer of skills for L1 and L2.

LIMITATIONS OF THE STUDY

One methodological issue needs to be acknowledged. The present study was a cross-sectional design. Children in the present study were not beginning readers when the study was carried out. There is a need for empirical evidence about the relationship between literacy skills in both the languages at the start of literacy instruction with additional longitudinal evidence, which would help to track the developmental trajectories for biliteracy acquisition.