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Grammaticality in Written Language of Bilingual-Biliterate Children with Learning Disability

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Abstract

It has been well established that children with Learning Disability (LD) have deficits in their grammatical knowledge. Additionally, research involving the assessment of written language difficulties in both the languages of biliterate students is not routinely conducted. Need for such research in a country like India is indispensable since majority of the citizens in India are bi/multilinguals.

Thus, the purpose of the present study was to investigate whether language (Kannada vs. English) and genre of writing (Expository vs. narrative) has an influence on the grammatical abilities in the written language of children with LD. The participants were 15 Kannada-English bilingual- biliterate children with LD and 14 Typically Developing Children (TDC) within the same age group (9 to 10 years of age) and similar linguistic background.

Children were asked to produce written compositions in response to verbal prompts to one expository and one narrative task in both Kannada and English. Total number of grammatical Tunits (Gram T-unit) in the sample was calculated using the SALT software.

On comparison of the percentage of Gram T-units, it was found that TDC performed better than children with LD on most of the tasks. In Kannada, there was no significant difference between the performances of children between the two tasks. In English, there was a significant difference in the performance of children when the narrative and expository tasks were compared. The reasons for the effect of task on L2 and the absence of a similar effect in L1 have been looked into. The results have been discussed in terms of how the amount of exposure to a particular language determines the grammatical abilities in a particular language. Furthermore, how language and nature of the tasks (Expository vs. narrative) influence written language of children have also been discussed.

Keywords: biliteracy, written language, expository task, narrative task, grammatical T-units, grammaticality, written language, learning disability

Language Skills

Speaking and writing are the two main types of communication used by human beings. Writing is a complex skill which involves the interaction of various cognitive as well as physical factors (Bromley, 2007). This is because a writer has to keep in mind several things simultaneously

such as the reader, the type of text and the matter to be written (Bain, Bailet & Moats, 1991) which require sound cognitive capacities. Berninger (2000) refers to reading as "language by eye" and writing as "language by hand". This reference by Berninger emphasizes that writing involves language too. Writing requires a huge set of linguistic faculties such as a good vocabulary system, anaphoric references, knowledge of text structures etc., which implies that a well-developed, organized and elaborate linguistic system is obligatory for writing (Pontecorvo & Zucchermaglio, 1989).

Importance of Writing

Given that writing is a linguistic skill, writing is of paramount importance since children are conventionally assessed based on their performances in written exams in school settings (Hooper, 2002). Thus, children with Learning Disability (LD) who might exhibit written language difficulties would be at a huge disadvantage. In this regard, assessment of written language skills in children with LD becomes very important. In this study, the term 'Learning Disability' is used to refer to 'Specific Learning Disability'. Specific Learning Disability has been defined as " a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage" (IDEA, 2004).

Review of Literature

Majority of the research on children with LD have concentrated on the reading difficulties while research on written difficulties has often been neglected. Contrary to research on reading difficulties, research on written language difficulties has seen an increase only since the past two decades (Hooper, 2002). Berninger (2006) conducted a study where a follow up of people with dyslexia who were participants of earlier treatment studies was done. It was found that long after the reading difficulties were remediated, the writing difficulties in these individuals still persisted over the years and they found it difficult to find appropriate remediation for their writing difficulties. Thus, more research in the area of written language difficulties is required in order to better understand the nature of difficulties so as to aid the professionals in assessment and management of such difficulties.

A good composition of text involves the appropriate use of grammatical rules, complex sentences, subject- verb agreement and pronouns. It has been reported that children with LD use simple sentences, reversed sentences, manifest inaccuracy in subject verb agreement along with errors in using tenses and pronouns (Lerner, 1993). Amoolya & Shanbal (2012) used a grammaticality judgment task to examine sentence comprehension skills in children with LD in the age range of 6 to 12 years. The results of the study demonstrated less accurate and slower responses in children with LD compared to age matched typically developing children. Some of the grammar classes, in which the children with LD showed deficits included tenses, comparatives, conditional clauses, causatives etc. The results of the study also demonstrated that children with LD were less sensitive to subject-verb-agreement in comparison with typically developing

children. Abrahamsen and Shelton (1989) investigated the reading comprehension in children with LD. The results of their study demonstrated that the reading comprehension abilities of children with LD improved when syntactic modifications alone and both semantic and syntactic modifications were done to the text. On the other hand, semantic modifications alone did not result in such improvements in reading comprehension. This study reveals that the syntactic deficits in children with LD affect their literacy abilities. Several other studies have also demonstrated that children with LD show problems in various aspects of syntax such as center embedded sentences, passive voice (Huggins & Adams, 1980), grammatical morphemes (McClure, Kalk, & Keenon, 1980) etc.

According to DSM-V TR criteria, written language disorders include deficits in the areas of grammar, spelling, punctuation as well as clarity and organization of written expression. Thus, the present study focuses on the grammatical deficits manifested in the written language of children with Learning Disabilities, which is one of the core deficits exhibited by these children.

Bilingual Children and Language Acquisition

Another challenge in the area of research in written language is the study of children who are acquiring language and literacy in more than one language. These children are referred to as 'biliterates'. Dworin (2003) defines biliteracy as the development of competency in two written languages with development occurring either simultaneously or successively. Studies that have been conducted on the development of written language have focused mainly on the development in one language but not both (Gort, 2006). This approach has been criticized by Grosjean (1985, 1989) as viewing bilinguals in a monolingual fashion and posits that this way of research partially represents their linguistic knowledge. Gort (2006) further notes that many studies on L2 writing (In the bilingualism literature, the native language has often been referred to as the first language or L1 and the language acquired later has been referred to as the second language or L2) compare their findings to the monolingual data. Krapels (1990) puts forward that this is an important limitation in the area of biliterate writing research since there is an inherent assumption that L1 writing competence influences L2 writing competence.

Especially in a country like India, which is a multilingual and multicultural country, this issue is all the more relevant. In India, children are often required to learn at least two languages while growing up or in school. De Silva (1998) suggests that it is crucial to understand how bilingual children develop written language in both the languages so that developmentally, linguistically and culturally appropriate assessment and treatment strategies can be developed. Also, out of the few studies which have been conducted on bilingual-bilterate children, most of the research on literacy in bilinguals has focused on how the early skills such as inventive spelling, phonological processing, word reading etc are acquired (Bialystok, 2007; Geva, 2006; Shanahan & Beck, 2006). Thus, research on how biliterate children compose lengthier texts (narrative texts, expository texts etc) is lacking.

In an Indian study conducted by Shanbal (2010), the development of literacy in Kannada-English emerging bilingual-biliterate children studying in the fifth, sixth and the seventh grade was studied. A part of her study involved the participants of the study composing an expository text for the topic 'My school' in both Kannada and English. The results of Shanbal's (2010) study

revealed that children produced greater number of grammatical T-units in Kannada compared to English. Shanbal (2010) hypothesizes that this could be due to the fact that development of written language is dependent on the development of oral language. Better grammatical abilities in the written language of children in Kannada might be since Kannada was the native language. On similar lines, poorer performance in English could be because skills could still be developing in English, which was the L2/ academic language of these children.

Thus, the present study was conducted as a preliminary step to answer a few questions that have not been widely addressed in the area of written language research in developing Kannada-English bilingual-biliterate children.

Purpose and Objectives of the Study

The purpose of the present study was to explore the grammatical abilities in the written language of Kannada-English bilingual-biliterate children with LD when compared to age and language matched Typically Developing Children (TDC). The present study looked into the following research questions specifically:

- 1) Do the grammatical abilities in written language differ between Kannada-English bilingual-biliterate children with LD and TDC?
- 2) Is there a difference between the performance of the participants in Kannada (L1) and English (L2) language?
- 3) Is there a difference between the performance of the participants with respect to the two tasks / genres of writing (Narrative versus Expository)?

Method

Participants

A total of 14 Typically developing children (TDC) (7 males and 7 females) and seven children with Learning Disability (LD) (6 males and 1 female) were included in the study. All the children studied in the fourth grade and aged between 9 to 10 years. Kannada was the native language/ first language (L1) and English was the second language (L2)/ medium of instruction for children in the school settings. All the participants learnt Kannada in their early years and were gradually exposed to English mostly after starting schooling. Therefore, all the participants in the study were considered as sequential bilinguals. By the time of the present study, all the participants were already exposed to the English language for a period of about six to seven years. All the children in the present study, including those with a Learning Disability had the ability to read and write both in Kannada and English. However, Kannada was taught as a single subject in school and all other subjects were taught in English, since English was the medium of instruction. The typically developing children were chosen from a school in Mysore and were screened using WHO Ten Questions Disability Screening Checklist (Singhi, Kumar, Malhi & Kumar, 2007). Those children with behavioural, sensory or neurological issues or a history of delay in development were not included for the study. In order to ensure that the children included in this group did not have any written language difficulties, they were also screened using the Tool for screening children with writing difficulties (ToSc-WD) (Shanbal, 2003).

Children with LD were chosen from those who came to avail Speech-Language therapy services at an institutional setup with a complaint of academic problems. Speech-Language Pathologists (SLPs) along with Clinical psychologists diagnosed children with LD. SLPs used Test of Early Reading skills (ERS) for Indian children (Loomba, 1995) to identify children with Learning Disability. The children who performed two standard deviations below their grade level on the Test of Early Reading skills were chosen as participants for the study. Clinical psychologists assessed the IQ of children with LD and those children with Performance Intelligence Quotient (PIQ) greater than 80 according to Raven's progressive matrices were chosen for the study. The children with LD included in the present study were those without a speech and language delay. However, they had low performance on the syntax section of Linguistic Profile Test in Kannada (LPT; Karanth, Ahuja, Nagaraja, Pandit & Shivashankar, 1991) with their scores ranging between 55.95 to 69.07. These scores suggested that children with LD performed at the level of 7 to 8 years old typically developing children. All the children in the LD group had poor reading and writing skills in both Kannada and English.

The revised version of the NIMH Socio-economic status scale (Venkatesan, 2011) was administered and only those who belonged to the middle socio-economic status were chosen for the study. Language use questionnaire (Shanbal, 2010) was given to the parents of all the participants so that they could rate the children's amount exposure to the languages and their capacities in each of the two languages. The results acquired from the questionnaire revealed that, on an average, the children had greater exposure to Kannada (75% to 100%) at home, whereas, they had greater exposure to English (75% to 100%) at school. It was also found that children, on an average, had better abilities of comprehending spoken Kannada (75% to 100%) compared to English (25% to 50%).

Test Material

The participants were instructed to produce written compositions to two tasks, one belonging to the expository and the other belonging to the narrative genre. The topic for the expository task was "My favorite game" and that for the narrative task was "My family vacation". Along with the topic, verbal prompts were also used in order to elicit better compositions. The topics and the prompts were chosen after giving it to five experienced Speech-Language Pathologists (SLPs). The SLPs were asked to rate whether the topics and prompts were appropriate for 9 to 10-year old Kannada-English bilingual-biliterate Indian children.

Procedure

Children were asked to compose written texts for the same topic in both Kannada and English on different occasions. So, the children were asked to produce four written compositions on four different occasions and the order of presentation was counter balanced. The four written composition tasks included Kannada narrative task, Kannada expository task, English narrative task and English expository task. Children were given thirty minutes to complete each task. The topics and the prompts were discussed in short before the children started writing. The children were encouraged to write in complete sentences.

The written compositions collected were transcribed verbatim into Microsoft office word. T-units were identified in the written compositions and coded. T-units have been defined as "the

shortest, grammatically allowable sentences" (Hunt, 1965, p. 21; cited in Danzak, 2011). A sentence including an independent clause along with its subordinate clauses (Hunt, 1965) and modifiers (Gutiérrez-Clellen & Hofstetter, 1994) is considered as a T-unit. After coding the T-units, the T-units that conformed to the grammatical rules of the respective languages were considered as grammatical T-units which were identified and coded. After coding the grammatical T-units, the total number of grammatical T-units was calculated by the Systematic Analysis of Language Transcripts (SALT; Miller & Chapman, 2001) software. Later, the percentage of grammatical T-units was calculated as the number of grammatical T-units divided by the total number of T-units in the sample multiplied by 100.

GRAM T-Unit= Number of T-units without errors/ Total number of T-units* 100

This procedure was carried out for both narrative and expository tasks in each of the two languages (Kannada and English).

Results

Shapiro-Wilk's test for normality was carried out for the data which revealed that the data followed a normal distribution (p>0.05). Therefore, a parametric test, mixed ANOVA was carried out with group (TDC versus LD) as the between-subjects factor and tasks (Narrative versus expository) as well as language (Kannada versus English) as within-subjects factor. Mixed ANOVA was done to examine the main effect of group, language and task and the interaction effect of group and language; group and task; task and language; group, task and language. Since 3- way interaction effect was found, paired t-test was done to compare the languages (Kannada versus English) in each task in addition to comparing tasks (narrative versus expository) in each language separately for TDC and LD. Similarly, independent two sample t-test was done to compare TDC and LD in each language and task.

The results of mixed ANOVA revealed that there was a main effect of task (F (1, 27) = 21.314, p < 0.01) and group (F = 30.405, p < 0.01). On the contrary, it was found that there was no main effect of language (F (1, 27) = 3.192, p > 0.05). Also, an interaction effect of group with language (F (1, 27) = 6.439, p < 0.05) was found. But, an interaction effect of group with task (F (1, 27) = 0.314, p > 0.05), task with language (F (1, 27) = 1.599, p > 0.05) was not found. A total interaction effect of group and task and language (F (1, 27) = 8.878, p< 0.01) was revealed by the analysis of results of the present study.

Comparison between TDC and LD

Independent two samples t-test was carried out for comparing the two groups (TDC and LD) in each language and task.

Table 1: Mean percentage of grammatical T-units in TDC and children with LD across tasks and Languages

Groups	Language	Kannada		English	
TDC	Task	Mean	SD	Mean	SD
	Narrative	78.05	17.25	51.66	19.42
	Expository	83.86	15.64	70.83	20.39

LD	Narrative	26.36	19.34	46.31	32.34
	Expository	58.84	23.65	45.72	25.26

When the performances of TDC and children with LD was compared for the narrative task in Kannada language, it was found that there was a significant difference (t (27) = 7.577, p < 0.01) between the performance of children in the two groups. It was found that TDC (Mean= 78.05, SD= 17.24) produced greater percentage of grammatical T-units than children with LD (Mean= 26.36, SD= 19.34) (see Table 1). When the performance of TDC and children with LD were compared for the narrative task in English, it was found that there was no significant (t (27) = 0.534, p > 0.05) difference between the performances of TDC (Mean= 51.66, SD= 19.42) and children with LD (Mean= 46.31, SD= 32.34) (see Table 1).

When the performance of TDC and children with LD was compared for the expository task in Kannada, it was found that there was a significant difference (t (27) = 3.333, p < 0.01) between the two groups, with TDC (Mean= 83.86, SD= 15.64) performing better than children with LD (Mean= 58.84, SD= 23.65) (see Table 1). Comparison between the performance of TDC and LD for the expository task in English revealed that there was a significant difference (t (27) = 2.933, p< 0.01) between both the groups. The analysis of results showed that TDC (Mean= 70.83, SD= 20.39) produced greater percentage of grammatical T- units compared to children with LD (Mean= 45.72, SD= 25.26) (see Table 1).

Within Task Comparisons and Within Language Comparisons for TDC and LD

The results of paired t-test for TDC revealed that there was a significant difference between the percentage of grammatical T-units in Kannada and English for the TDC group (t (13) = 4.051, p < 0.01) in the narrative genre of writing. The results revealed that the percentage of grammatical t-units were greater for Kannada (Mean= 78.05, SD= 17.24) compared to English (Mean= 51.66, SD= 19.42) (see Table 1). When Kannada (Mean= 83.86, SD= 15.64) and English (Mean= 70.83, SD= 20.39) (t (13) = 1.906, p > 0.05) languages were compared with respect to expository tasks, it was found that there was no significant difference between the performance of TDC in both the languages.

When the percentage of grammatical T-units was compared in Kannada between narrative (Mean= 78.05, SD= 17.24) and expository tasks (Mean= 83.86, SD= 15.64), it was found that there was no significant difference between the two genres/ tasks (t (13) = -1.101, p > 0.05). When the percentage of grammatical T-units were compared in English between narrative and expository tasks, it was found that there was significant difference between the two genres/tasks (t (13) = -2.772, p<0.05) with greater percentage of grammatical T- units in the expository task (Mean=-70.83, SD=-20.39) compared to the narrative task (Mean=-51.66, SD= -19.42) (see Table 1). Therefore, the results of the study suggested that there was an effect of the genre of writing on the written language of children in the English language, whereas no such effect was seen in the Kannada language.

Within task comparisons between languages for children with LD, the results of paired ttest for the LD group revealed that there was a significant difference between narrative tasks for English and Kannada languages (t(14) = -2.33, p<0.05) with greater percentage of grammatical T-

units in English (Mean=46.32, SD=32.34) compared to Kannada (Mean=26.36, SD=19.34). The results of paired t-test for the LD group revealed that there was no significant difference (t (14)=1.211, p>0.05) between expository tasks for Kannada (Mean=58.84, SD=23.65) and English (Mean=45.72, SD=25.26) languages (see Table 1).

The results of paired t-test for the LD group across tasks for Kannada language revealed that there was a significant difference between narrative and expository tasks (t (14) = -4.438, p <0.01), with the percentage of grammatical T-units being greater in the expository task (Mean= 58.84, SD= 23.65) compared to the narrative task (Mean= 26.36, SD= 19.34). The results of paired t-test for the LD group across tasks for the English language revealed that there was no significant difference (t (14)=0.074, p>0.05) between narrative (Mean=46.32, SD=32.34) and expository tasks (Mean=45.72, SD=25.26) (see Table 1).

Discussion

When the performance of TDC and children with LD were compared, it was found that TDC produced significantly higher percentage of grammatical T-units compared to children with LD in the narrative and expository tasks in Kannada as well as expository task in English. These results are in consonance with several earlier studies that have put forth the grammatical difficulties present in children with LD (Abrahamsen and Shelton, 1989; Amoolya & Shanbal, 2012; Huggins & Adams, 1980; McClure, Kalk, & Keenon, 1980).

However, there was no significant difference found between the performance of TDC and children with LD on the narrative task in English. This could be because TDC in general produced significantly lesser percentage of grammatical T-units for the narrative task in English compared to the expository task. This could possibly be due to the nature of the narrative task, which the children might have found more difficult compared to the expository task. This result is similar to the results obtained by Cragg and Nation (2006) where they analyzed the written narratives in children with poor reading comprehension in comparison with those who had good comprehension abilities. The participants had to compose written narratives in response to a sequence of fifteen pictures. They found that the children with poor reading comprehension did not differ significantly from those with good comprehension abilities with respect to syntactic complexity and length. However, the researchers found that children with poor comprehension produced narratives which did not capture the content of the story entirely, had reduced number of main ideas, and their story structure was less complex which led the researchers to conclude that they had not grasped the causal meaning of the story. Perhaps, in the present study, the children found writing about their favorite game more interesting compared to writing about their family vacation. Probably, the demands on memory imposed by the narrative task where children had to remember the places they had been to and what they had done during the vacation was greater compared to writing about their favorite game. This could be since children usually played almost every day and experienced playing games regularly which reduced the load on their working memory compared to remembering a vacation they had experienced just once and probably a long while ago. The load on their working memory imposed by the narrative task might have curtailed them from using more grammatical sentences in the narrative compared to the expository task. This could be because the children in the present study were emerging writers who could not draw on all the linguistic and cognitive resources required for writing simultaneously.

The results of the study revealed that there was a significant difference between Kannada and English in the narrative genre of writing. TDC were found to perform better in Kannada than English. This could be because of the greater number of years of exposure to spoken Kannada in their early years compared to English since Kannada was the native language of children. Also, children used Kannada most of the time at home as shown by the results of the language use questionnaire. Despite the fact that children were introduced to written language of Kannada and English almost at the same time, greater knowledge of spoken Kannada might have led to the better performance in Kannada compared to English. Shanbal (2010) also found similar results in her study where the children in her study were found to perform better in Kannada compared to English. Therefore, Shanbal (2010) concluded that development of written language is concurrent on the development of oral/ spoken language. This finding further supports the fact proposed by various researchers that written language and oral language are the components of the linguistic system and differ only in terms of the sensory input/motor output i.e., oral language is either "language by ear" (aural) or "language by mouth" (oral) whereas written language is "language by hand" (Berninger, 2000; Berninger, Abbott, Abbott, Graham & Richards, 2002). Thus, it has been deduced that written and spoken language are not separate (Berninger, 2000; Berninger, Abbott, Abbott, Graham & Richards, 2002).

There was no significant difference between languages in the expository task. This could be because the participants in the study might have found writing on the topic 'My favourite game' easier than the narrative task of writing on the topic 'My family vacation'. This is also supported by the finding that TDC produced lesser number of grammatical T-units in the narrative task compared to the expository task. Since the children found the expository task easier, the limited knowledge of the English language might not have shown an effect when compared to the narrative task where the difference between the languages was significant.

When the tasks were compared within Kannada language, it was found that there was no significant difference between expository and narrative tasks. This could be because Kannada was the native language of children. Therefore, the sound grammatical knowledge children had in their native language (L1) was not affected by the nature/ difficulty of the task (expository or narrative). On the other hand, in English it was found that children performed significantly better in expository task compared to narrative task. This could be probably since English was their second language and hence the nature/ difficulty of the task affected the children's performance. We can also conclude that the grammatical knowledge in these children was still emerging since it was their second language (L2), which did not match the number of years of exposure to their L1 since they were mostly sequential bilinguals. Previous research has also found that children's syntax was more refined in expository tasks compared to narrative tasks (Berman & Nir-Sagiv, 2007; Danzak, 2011; Nippold, Hesketh, Duthie, & Mansfield, 2005).

In the narrative task, it was found that there was a significant difference in the performance of children with LD between the two languages. Children with LD performed significantly better in English compared to Kannada. This could be because children with LD in the present study had syntactic difficulties in Kannada demonstrated by their poor performance on the syntax section of LPT in Kannada. However, their syntactic abilities might have been better in written English since

they were more exposed to English in academic settings compared to Kannada. In the expository task, when the performance of children with LD was compared between Kannada and English, no significant difference was found. This finding is similar to the finding obtained for TDC also. Children with LD might have found the expository task easier compared to the narrative task and thus might have performed comparably in both the languages with respect to the expository task.

Comparison of performance of children with LD in Kannada between the two tasks, revealed that they performed significantly better in the expository compared to the narrative task. This could be since children with LD might have found the expository task easier than the narrative task since the expository topic might have put lesser memory demands compared to the narrative tasks. This pattern was similar to that found in TDC. In English, when the two tasks were compared, it was found that there was no significant difference between their performance for narrative and expository tasks. This could be due to the fact that children with LD had similar grammatical abilities in English, to which they were exposed to more academically in comparison with Kannada. Therefore, they performed similarly in English regardless of the task.

Summary and Conclusions

To summarize, the results of the present study revealed that, in general, TDC performed better than children with LD on all the tasks except narrative task in English. This finding highlights the grammatical/syntactic deficits present in children with LD. Thus, our first research question as to whether TDC and children with LD differ in terms of their grammatical abilities has been answered. Our next research question was whether there was a difference between the performances of children with respect to the two languages. It was found that with respect to the narrative task, TDC performed significantly better in Kannada than English while there was no significant difference between the two languages for the expository task. In children with LD, children performed significantly better in English compared to Kannada, whereas no significant difference was noticed in the performance of children in expository task between Kannada and English. Regarding our third research question as to whether there was a difference in performance according to the tasks/ genres of writing, it was found that the participants performed better in the expository genre compared to the narrative genre. Similar findings have also been reported in the previous literature.

With the results of the present study we can conclude that language and genre of writing has an effect on the written language of children. Our study further emphasizes the grammatical deficits present in children with LD and the fact that the syntactic deficits in oral language are reflected in written language as well. Thus, it can be concluded that, oral and written languages are not distinct entities. From the present study, it can also be concluded that, greater the amount of exposure to a particular language, better the grammatical abilities of children in that particular language. The present study is a preliminary attempt to understand how language and genre of writing have an effect on the grammatical abilities in written language of emerging bilingual-biliterate writers. Studies in this direction could guide the selection of tasks/ genres of writing to be worked upon during intervention. The present study also highlights that bilingual-biliterate children must be assessed in both the languages along with different genres of writing in order to gain a complete picture of their abilities as writers and that conclusions should not be drawn just by evaluating their written language abilities in just one genre or language (Danzak, 2011;

Hedman, 2012). Danzak (2011) suggests that bilingual- biliterate children should be provided with opportunities to write in both the languages (L1 and L2) whenever plausible and also make overt comparisons between the morphological and syntactic systems of the two languages. Danzak (2011) suggests that this can be achieved through structured translation activities so that metalinguistic awareness and general linguistic knowledge in children improves rather than knowledge in a specific language. Remediation of written language difficulties should concentrate on providing meaningful opportunities for writing in children in an assimilated fashion and provide language specific instruction whenever necessary.

On the other hand, an important limitation of the present study is its limited sample size. Future studies with larger sample sizes are warranted to make generalizations. Further studies can also include levels of language such as lexical, syntactic, discourse systems, etc., and how they interact with languages and genres of writing.

References

- Abrahamsen, E. P. & Shelton, K. C. (1989). Reading comprehension in adolescents with Learning Disabilities: Semantic and syntactic effects. *Journal of Learning Disabilities*, 22 (9), 569-572.
- Amoolya. G., & Shanbal, J. C. (2012). Sentence comprehension in children with Learning Disabilities. *Student Research at A.I.I.S.H. Mysuru (Articles based on dissertations at AIISH)*, 10, 20-31.
- Bain, A. M., Bailet, L. L., & Moats, L. C. (1991). Written language disorders: theory into practice. Austin, TX: Pro ed publishers.
- Berman, R. A., & Nir-Sagiv, B. (2007). Comparing narrative and expository text construction across adolescence: A developmental paradox. *Discourse Processes*, *43*, 79–120.
- Berninger, V. A. (2006). Developmental approach to learning disabilities. In: Siegel, I.; Renninger, A., editors. *Handbook of Child Psychology, Child Psychology and Practice*. IV. New York: John Wiley & Sons; p. 420-452.
- Berninger, V. W. (2000). Development of language by hand and its connections to language by ear, mouth, and eye. *Topics in Language Disorders*, 2,650-84.
- Berninger, V.W., Abbott, R.D., Abbott, S.P., Graham, S., & Richards, T. (2002). Writing and Reading: Connections between Language by Hand and Language by Eye. *Journal of Learning Disabilities*, 1, 39-56. doi: 10.1177/002221940203500104
- Bialystok, E. (2007). Acquisition of literacy in bilingual children: A framework for research. *Language Learning*, *57*, 45–77.

- Bromley, K. (2007). Best practices in teaching writing. In L.B. Gambrell, L.M. Morrow & M. Pressley (Eds.), *Best practices in literacy instruction* (pp. 243-263). New York: The Guilford Press.
- Cragg, L., & Nation, K. (2006). Exploring written narrative in children with poor reading comprehension. *Educational Psychology*, 26, 55–72.
- Danzak, L. R. (2011). The integration of Lexical, syntactic, and discourse features in bilingual adolescents' writing: An exploratory approach. *Language, Speech and hearing services in schools*, 42, 491-505.
- De Silva, A. D. (1998). Emergent Spanish Writing of a Second Grader in a Whole Language Classroom. In B. Pérez (Ed.) *Sociocultural Contexts of Language and Literacy*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Dworin, J. (2003). Examining Children"s Biliteracy in the Classroom. In A. I. Willis, G. E. Garcia, R. Barrera & V. J. Harris, (Eds.), *Multicultural Issues in Literacy Research and Practice*. Mahwah, NJ: Lawrence Erlbaum.
- Geva, E. (2006). Second-language oral proficiency and second-language literacy. In D. August & T. Shanahan (Eds.), *Developing literacy in second-language learners: Report of the National Literacy Panel on Language-Minority Children and Youth* (pp. 123–140). Mahwah, NJ: Erlbaum.
- Gort, M. (2006). Strategic code-switching, interliteracy, and other phenomena of emergent bilingual writing: Lessons from first grade dual language classrooms. *Journal of Early Childhood Literacy*, 6 (3), 323-354.
- Grosjean, F. (1985). The Bilingual as a Competent but Specific Speaker-hearer. *Journal of Multilingual and Multicultural Development*, 6 (6), 467–77.
- Grosjean, F. (1989). Neurolinguists, Beware! The Bilingual is not Two Monolinguals in One Person. *Brain and Language*, *36*, 3–15.
- Gutiérrez-Clellen, V. F., & Hofstetter, R. (1994). Syntactic complexity in Spanish narratives: A developmental study. *Journal of Speech and Hearing Research*, *37*, 645–654.
- Hedman, C. (2012). Profiling dyslexia in bilingual adolescents. *International Journal of Speech-Language Pathology*, 4(6), 529–542.
- Hooper, S. R. (2002). The language of written language: an introduction to the special issue. *Journal of Learning Disabilities*, 35(1), 2–6.
- Huggins, A. W. F. & Adams, M. J., (1980) Syntactic aspects of syntactic comprehension. In: R. J. Spiro, B.C. Bruce, & W. F. Brewer (Eds.), *Theoretical issues in reading comprehension* (pp. 87-112). Hillsdale, NJ: Erlbaum.

- Hunt, K.W. (1965). *Grammatical structures written at three grade levels* (NCTE Research Report No. 3). Champaign, IL: National Council of Teachers of English.
- Karanth, P., Ahuja, G. K., Nagaraja, D., Pandit, R., & Shivashankar, N. (1991). *Language disorders in Indian neurological patients- A study in neurolinguistics in the Indian context (Project no.5/8/10-1(oto)/84-NCD-I IRIS cell)*. New Delhi: (Indian Council of Medical Research 8403810).
- Krapels, A. R. (1990) 'An Overview of Second Language Writing Process Research', in B. Kroll (ed.) Second Language Writing: Research Insights for the Classroom, pp. 37–56. Cambridge: Cambridge University Press.
- Krapels, A.R. (1990) 'An Overview of Second Language Writing Process Research', in B. Kroll (ed.) Second Language Writing: Research Insights for the Classroom, pp. 37–56. Cambridge: Cambridge University Press.
- Lerner, J. (1993) *Learning Disabilities: Theories, Diagnosis, Teaching Strategies.* (6th Ed.) Hougton Mifflin Company.
- Loomba, M. (1995). Descriptive analysis of the sequential progression of English reading skills among Indian children (Unpublished Masters dissertation). All India Institute of Speech and Hearing, University of Mysore, Mysore.
- McClure, J., Kalk, M. & Keenon, V. (1980). Use of grammatical morphemes by beginning readers. *Journal of Learning Disabilities*, 13, 262-267.
- Miller, J., & Chapman, R. (2001). Systematic Analysis of Language Transcripts (Versions 7.0) [Computer Software]. Madison: University of Wisconsin-Madison, Waisman Center, Language Analysis Laboratory.
- Nippold, M. A., Hesketh, L. J., Duthie, J. K., & Mansfield, T.C. (2005). Conversational versus expository discourse: A study of syntactic development in children, adolescents, and adults. *Journal of Speech, Language, and Hearing Research, 48*, 1048–1064.
- Pontecorvo, C., & Zucchermaglio, C. (1989). From oral to written language: preschool children dictating stories. *Journal of Reading Behavior, XXI* (2), 109-126.
- Shanahan, T., & Beck, I. L. (2006). Effective literacy teaching for English-language learners. In D. August & T. Shanahan (Eds.), *Developing literacy in second-language learners: Report of the National Literacy Panel on Language-Minority Children and Youth* (pp. 415–488). Mahwah, NJ: Erlbaum.
- Shanbal, J. C. (2003). *Tool for screening children with writing difficulties* (Unpublished Master's dissertation). All India Institute of Speech and Hearing, University of Mysore, Mysore.

- Shanbal, J. C. (2010). *Acquisition of biliteracy in children* (Unpublished doctoral dissertation). All India Institute of Speech and Hearing, University of Mysore, Mysore.
- Singhi, P., Kumar, M., Malhi, P., & Kumar, R. (2007). Utility of the WHO Ten Questions Screen for Disability detection in a rural community- the North Indian experience. *Journal of Tropical Pediatrics*, 53(6), 383-387.

Venkatesan (2011). *NIMH Socio-economic status scale, Revised version*. National Institute for the Mentally Handicapped: Secunderabad.

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