



Speech-Language Pathologists' views and their approach towards assessment and management of child language disorders in bilingual context: Indian scenario

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Abstract: This study aimed to gain insight into the SLPs' views about bilingualism and the approach toward the assessment and management of bilingual children with language disorders in the Indian context. The survey included a single questionnaire consisting of 31 questions, involving multiple choice questions, open questions, and Likert scales. It elicited information about demographic data of SLPs, the history of their language and use; SLPs' views about bilingualism concerning clinical practice and theoretical aspects; and SLPs' professional practice and caseload. The survey was conducted in online mode using the google forms platform and it was circulated through e-mail and social media platforms with the link to the online google forms questionnaire. A sample of 33 professionals across (n=29 from urban & n=4 from rural backgrounds) India took part in the study. The education level of the professionals varied from bachelor's to Postdoctoral degrees. The professionals' work experience ranged from one year to eight years. Most of the professionals except three worked at second-tier city levels. This survey was designed to examine current practices for the assessment and management of language disorders in bilingual children. Heterogeneity in the views and approach towards bilingualism was observed. Consensus is needed among the professionals who are practicing regarding the assessment and management of bilingual children. Professionals' mixed views towards bilingualism might be addressed by initial and ongoing continuing education focused on typical bilingual development and second language acquisition.

Keywords: Bilingualism, Child language assessment, Professional practice, Bilingual assessment, Bilingual therapy

1. Introduction

According to psycho-linguistic approaches, 'Bilinguals' are those who routinely use two or more languages or dialects (Grosjean, 1998). Individuals are identified as bilingual when they are exposed to more than one language. The age of acquisition is a critical variable in discussions of the process of learning two languages. Children can be classified as sequential or simultaneous bilinguals based on the age at which these children are exposed to the second language. Simultaneous bilinguals are those who acquires both languages before the age of three, whereas sequential bilinguals are those who acquires a second language after having acquired the primary language by the age of three (Goodman, 2007). In terms of simultaneous bilingualism, infants are open to two languages in a variety of ways. In sequential bilingualism, on the other hand, a child begins learning a second language after figuring out the basic rules of their first language. He or she can hold a conversation and is more cognitively mature than an infant learning two first languages at the same time (Goodman, 2007). Children who have had early and consistent exposure to and interaction with two languages can acquire the skill to establish and utilize distinct grammatical structures for each language, which allows them to become proficient in using both languages. It is estimated that 60% of the world's population is presently bilingual or multilingual (Kiran *et al.*, 2013).

The process of language learning is highly variable and complex, in both monolingual and bilingual contexts. Bilingualism has an impact on many aspects of development. However, language outcomes are the most visible way in which bilingualism affects development (Byers-Heinlein *et al.*, 2019). Children who are bilingual show noticeable



changes in their linguistic and cognitive abilities due to various factors involved in acquiring and utilizing two languages (Thordardottir, Rothenberg, Rivard, & Naves, 2006). Another rationale is that bilingual children are exposed to multiple languages, and as a result, they have to frequently switch between them, requiring them to utilize cognitive flexibility and attentional control (Kroll, Dussias, Bogulski & Kroff, 2012).

It is challenging to evaluate possible language deficits and developmental disorders when children speak or are exposed to more than one language (White & Jin, 2011; Hambly, Wren, McLeod & Roulstone, 2013; Restrepo & Kruth, 2000). Often, children may be over-diagnosed as having a speech and language impairment (Adler, 1998; Ball & Bernhardt, 2008; Kritikos, 2003; Pray, 2003; Terrell & Terrell, 1983), or it can be under-diagnosed attributing to the lack of exposure to the language rather to the actual specific disorder (Hambly, Wren, McLeod & Roulstone, 2013; Flipsen, 1992; Holland, 1992). The intervention process would also involve composite interaction of several factors. Research has suggested that both languages must be considered during the intervention process for multilingual children (Thordardottir, Rothenberg, Rivard, & Naves, 2006). Guiberson and Atkins (2012) found that in their survey, a significant number of speech-language pathologists (SLPs) indicated their comfort in assessing and treating clients belonging to different cultures. However, when it came to working with clients who spoke languages other than English, their comfort level decreased.

Currently, in most countries including India, English is the second language and also a language of mainstream education. Assessment of clients who spoke a language other than English presented challenges as reported by SLPs (Kadyamusuma, 2016; Roberts, 2008). It has been reported that the process of speech-language assessment in bilingual children should involve procedures and tests in both languages (Westernoff, 1994). Research has documented that the lack of availability of appropriate evaluation tests (Crutchley, 1999), is the most common difficulty encountered by SLPs in the United States of America and the United Kingdom during the assessment of bilingual children (Roseberry-McKibbin & Eicholtz, 1994). In the Indian context, there is a lack of evaluation methods and resources specifically designed for testing bilingual children.

A plethora of factors influences the process of assessment and management in the bi/multilingual context. Considering the dearth of literature in the Indian context, a stepping stone to overcoming these factors would be to explore and understand the views and approaches of SLPs toward bi/multilingualism, and current practices in the assessment and management of bilingual children with language disorders. In a linguistically diverse country like India, this necessitates the development of standardized norm-based bilingual tests. As a result, systematic documentation of service delivery methods, intervention approaches, and language selection in the bilingual context are unavoidable.

This study aimed to gain insight into the SLPs' views about bilingualism and the approach toward the assessment and management of bilingual children with language disorders in the Indian context

2. Method

A cross-sectional survey design was used in the present study wherein a total of 33 SLPs practicing across various settings across India were recruited through the snowball sampling method.

2.1 Materials

The survey included a single questionnaire consisting of 31 questions, involving multiple choice questions, open questions, and likert scales. It elicited information about the demographic data of SLPs, the history of their language and use; SLPs' views about bilingualism concerning clinical practice and theoretical aspects; and SLPs' professional practice and caseload.

2.2 Procedure

Ethical clearance was obtained before the commencement of the study from the research ethical committee of the parent institute. The survey was conducted in online mode using the google forms platform and it was circulated through e-mail and social media platforms with the link to the online google forms questionnaire. Google form was launched on September 7th, 2022 and the survey was closed November 30th 2022. Before their participation, informed consent was taken at the start of the questionnaire.



3. Results and Discussion

A sample of 33 professionals across (n=29 from urban & n=4 from rural backgrounds) India took part in the study. The education level of the professionals varied from bachelor's to Postdoctoral degrees. The professionals' work experience ranged from one year to eight years. Most of the professionals except three worked at second-tier city levels.

3.1 History of language and use

It was noted that all professionals were dominant bilingual and also language immersion was mentioned in their reports. First language among professionals were varied significantly: Kannada (36.4%), Malayalam (33.3%), Tamil (9.1%), Telugu and Tulu (6.1%) and Odia, Hindi and English (3%). Among the professionals, around 75% mentioned English language as their second language, followed by Hindi (9.1%) and Tamil (6.1%) and Kannada, Malayalam and Marathi sharing 3%. The distribution of numbers with respect to the age of second language acquisition was scattered across age ranges birth to 10+ years and it is presented in figure 1. About 48 % of professionals rated their proficiency as 'good' in second language, followed by 'excellent' up-to 39% and rest 12% rated as 'fair'.

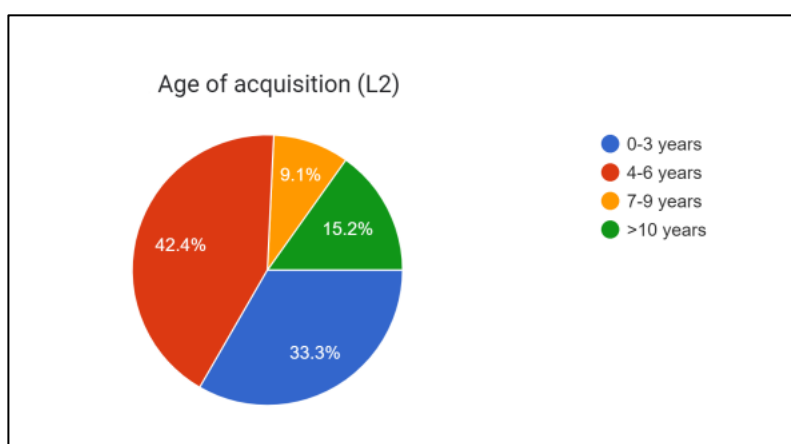


Figure 1. Age of second language acquisition across participants

3.2 Views on Bilingualism and their work

About 90% of the participants opined 'yes' for the statement 'SLPs should be fluent in more than one language'. However mixed views were observed for the question stating professional bodies mandating SLPs to be bi/multilingual and the use of interpreter in the clinical setup for better service delivery. The use of interpreters to assess and treat clients who speak different languages is a common practice reported by several studies (Caesar & Kohler, 2007; Centeno, 2009; Kostich & Weiss, 2007; Roseberry-McKibbin & Eicholtz, 1994). However, the availability of interpreters may vary based on the language spoken, and incorporating interpreters into the clinical process may require more time from the clinician (Kostich & Weiss, 2007).

3.3 Views on bilingualism in clinical practice

More than 90% of professionals agreed that bi/multilingualism helps children to communicate with more people, connect to diverse environments, and therefore provide more opportunities to view and reflect on the world; and, cognitive advantage can be linked to Bi/multilingualism over monolinguals. However, on the contrary, scattered opinions were found on the question 'Does exposure to more than one language in childhood increase the risk of language delay'. The response pattern is presented in Figure 2.

Further, more than 80% of SLPs agreed to cognitive advantage linking into bilingualism. In addition, most of the professionals stated that there would be risk involved in exposure to two or more languages leading to language delay, confusion, difficulty in lexical retrieval, syntactic deficits, and code mixing and switching.

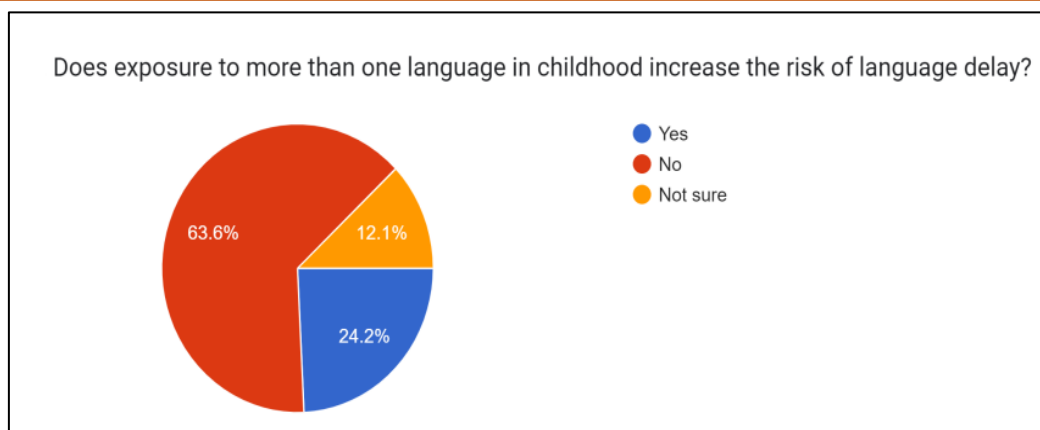


Figure 2. SLPs response to a question 'Does exposure to more than one language in childhood increase the risk of language delay

3.4 SLPs' professional practice and caseload

The results revealed that a greater number of SLPs catered to the needs of a higher percentage of bilingual children (a combination of Indo-Aryan and foreign language) in their work sector. Likewise, among the disorders, nearly 80% of the professionals encounter mixed receptive expressive language disorder to the most among other disorders.

Nearly 35% of the participants (See figure 3) suggested always considering both languages during the assessment of bilingual children and the approach toward the assessment of bilingual children varied among them. Around 60 % of the professionals chose informal assessment as an option to assess bilingual children, followed by formal tests. This finding is supported by ASHA (2004) guidelines. However, (Caesar & Kohler, 2007; Centeno, 2009) study found that most of the SLPs in their survey reported that the use English Standardized tests. In addition to this, earlier studies have noted that SLPs utilize other methods like language sampling (Caesar & Kohler, 2007; Centeno, 2009), and language acquisition history (Centeno, 2009).

SLPs who chose formal assessment, further listed the standardized tests used for the assessment and those were Assessment of Language Disorders (ALD), Kannada Language Test (KLT), Malayalam Language Test (MLT), Hindi Language Test (HLT), Bankson Language Screening Test (BLST), Linguistic Profile Test (LPT), and Assessment Checklist for Speech and Language Skills.

The SLPs (30%) opined for the diagnosis of bilingual children it is necessary to consider the test scores across the languages and about 42 % of SLPs suggested that diagnostic label should be based on the linguistic concepts that the child has acquired irrespective of the languages.

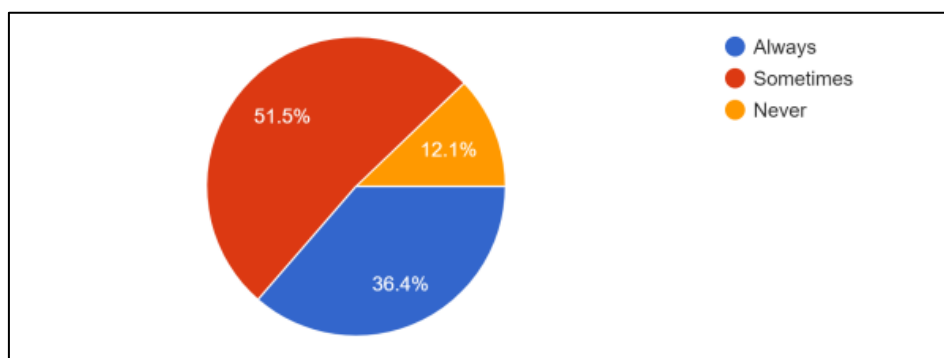


Figure 3. SLPs response to question ` do you assess language abilities in both the languages, if child is a bilingual?

About therapeutic management, an equal percentage of responses were given for choosing the first language and simultaneous target of both languages during therapy. Literature, however, recommends the use of both languages during the assessment and intervention process (Thordardottir , Rothenberg, Rivard, & Naves, 2006). On the other hand, evidence also suggests that clinical practice involving bi/multilingual children often does not equalize with the recommendations in the literature. A study by D'Souza, Bird and Deacon (2012), noted the reports of SLPs

in their survey that 20% of them considered client's strong language for the assessment and treatment process and the rest considered the language which the SLPs spoke.

With regard to the use of a specific therapy approach with bilingual child with language disorder, about 97% of the SLPs stated 'no'. About 60% of professionals reported that they always involve parents/caregivers during decision-making about therapeutic management, and 35% chose 'sometimes' as an answer.

Results of the current survey highlights there is a disconnection between views and the practices in the context of assessment and management of bilingual children. It is important to develop a guideline for the professionals in the country which exhibits cultural and linguistic diversity.

The study findings demonstrate a discrepancy between views and practices in the assessment and management of bilingual children among the professionals. The SLPs may acknowledge the benefits of bilingualism but may not have adequate training and resources to effectively support these children. In addition, SLPs need to be sensitive to the language backgrounds and experiences of bilingual children when assessing their language and cognitive development. To address this issue, it is crucial to develop culturally and linguistically sensitive guidelines that provide a framework for SLPs to work with these children effectively. Such guidelines should take into account the unique needs and experiences of bilingual children, as well as the diverse cultural contexts in which they live.

4. Summary and Conclusion

This survey was designed to examine current practices for the assessment and management of language disorders in bilingual children. The present survey put-forth that SLPs demonstrate the use of varied approach and possess diverse views about bilingualism, and assessment and management of bilingual children. In addition, given the scarcity of language tests available for bilingual children and also for Indian English language, and it's imperative to know what are available formal (standardized) and informal assessment strategies to SLPs when evaluating bilingual children over monolinguals and there is a greater need to develop standardized assessment tools for these linguistically diverse population. Similarly, in order to improve the assessment of linguistically diverse clients, clinicians must have access to developmental norms of speech and language skills for the variety of languages encountered in their caseloads, which is lacking in the Indian context. Incorporating such resources would significantly enhance the effectiveness of current informal assessment strategies. Consensus is needed among the professionals who are practicing regarding the assessment and management of bilingual children. Professionals' mixed views towards bilingualism might be addressed by initial and ongoing continuing education focused on typical bilingual development and second language acquisition.

The major limitation of the present survey study is the low sample size, which does not provide an effective response rate. Although the survey questionnaire was sent and forwarded to the SLPs social media group, only limited entries were received. Future research should be undertaken to obtain a higher number of responses and extend this survey to document the views of parents/caretakers of children with language disorders.

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Supplementary Information

Questionnaire: Speech-Language Pathologists' views and their approach towards assessment and management of child language disorders in bilingual context: Indian scenario

Does this article screened for similarity?

Yes

Ethics Approval

Ethics approval was sought from the Institutional Review Board (IRB).

Informed Consent

Written consent was obtained from the participants.

Author Contributions

Ayisha A P & Sneha M -Data acquisition & analysis, Manuscript preparation; **Darshan H.S** - Concepts, work Design, Data analysis, Manuscript preparation, editing & review ; **Akhila R.**- editing & review. All the authors read and approved the final version of the manuscript.

Conflict of interest

The Author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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