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Original Article

Comparing Narrative Microstructures between Bilingual Balochi-Persian Preschoolers and Monolingual Persian Preschoolers

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ABSTRACT

Background: With the rapid increase of bilingual children, more attention is needed on different patterns of their narratives. The aim of this study was to compare levels of narrative microstructures generated by typical developing kindergarten children who were bilingual in Persian and Balochi with their monolingual Persian-speaking counterparts.
Methods: A total number of 30 Persian-speaking monolingual children and 13 available bilingual children (aged 48 months old) participated in this study. Their storytelling was audio-recorded and analyzed using Persian-NAP (Narrative Assessment Protocol) guidelines.
Results: None of the NAP indicators (including group structure, phrase structure, modifiers, noun, and verbs) showed any significant difference between monolingual and bilingual children ($0.06 \leq P \leq 0.5$).
Conclusion: We did not find different performances in the five NAP indicators between bilingual and monolingual children. It may be suggested that different patterns of creating phrases and sentences in the two languages do not affect grammatical use in the second language.

Introduction

In recent times, assessment of oral narrative skills can provide valid information about the language ability of children [1]. Making narratives help children to represent past ideas and actions in memory, as well as to evaluate present experiences. During the sharing of narratives, children bond through their linguistic, emotional, and social abilities to make sense of the world [2, 3].

Narrative productions by children are typically retold or generated sentences of fictional events and real or personal events, which can be evaluated at two levels (microstructure and macro- structure) [1, 4].

Microstructure measurements focus on evaluating syntactic features of narrative samples. Grammatical factors like word diversity and frequency, mean length of utterance (MLU), and sentence level complexity are checked at this level, determining the presence of syntactic, morphological, and lexical structures [5].

Macrostructure level considers the overall quality and structure of the oral narrative. Macrostructure of a narrative includes general story, grammar, and elements such as setting, character, initiating event, internal response, and plot. The narrative macrostructure may

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show a child's ability to use or understand causal, temporal, and emotional relations, as well as event representations and evaluative devices.

Findings showed that narrative skills of children progress with age and the greatest growth occurs in preschool years. Retelling of wordless picture books by children showed a similar developmental pattern. Before the age of three, narratives lack overall cohesion and cannot be followed easily. By the age of four or five, stories are more organized and complete. For example, children learn to use causal relationships in their narratives through words like "but", "because", and "so". Development of narrative skills continue till the school-going age [6]. In this study, children aged four were selected because at this age they can provide more complete and coherent narratives; since between the ages of three and four children become increasingly competent narrators [6].

Oral Narratives of Bilingual Children

Children who acquire two languages at home or learn a new language outside (for instance, at school) are called bilingual [7]. For a number of reasons, narrative assessment of bilingual children and understanding their abilities is interesting. First, as countries become more modern and developed, the number of bilingual children increase. Nowadays, in any ethnicity, most children should learn English as a universal language. Maybe, all suburban people should learn the standard language of their country in addition to their native language in order to make relationships more effective. This can be a challenging domain for those learning a second language [8]. Second, oral narrative assessment can provide a rich source on how children use language in natural contexts [9, 10] and is an ecologically valid way of assessing communicative competence [8]. Third, clinicians should be able to distinguish between disorders and differences [11]. Thus, we should know if there are some differences between oral language skills of monolingual and bilingual children, especially in narrations.

As researchers suggested in 1980, basic narrative structure is universal; however, there are some differences in the overall macro and microstructures of narratives of children from different cultures. For example, at the macrostructure level, personal narratives of East Asian children are shorter than European children [9, 12, 13]; also, European and American children share multiple episodes about one experience, focusing on the main one, while Japanese children share a few isolated events [13].

Narrative microstructure level is affected by the structure of a child's native language. Every language has its own structure, which may influence narrative construction [6]. For example, the amount and types of adjectives, adverbs, verbs, and tenses vary in different languages, and in every language, the narrator should use these structures to make a well-organized narrative. This discrepancy may impact narrative structure and content, and create variations between narratives [7, 14]. Despite these cultural and linguistic variations, no studies have sought to document the narrative skills of bilingual children in Iranian bilingual People (nations).

Iran is a multicultural country with at least five bilingual people (nations) that include Kurdish, Turkish, Baloch, Arabic, and Armenian. Persian is the official language of Iran [15-17]. Balochi is spoken by almost seven million people. Most of these people live in Pakistan, Afghanistan, Iran, India, Turkmenistan, and even in East African and Arabic countries. Balochi has both spoken and written form. In all these countries, Balochi is not the official language and is not used in educational systems [16]. Therefore, all Baloch children need to use another language when they start school.

Purpose

Since critical development of narrative skills occurs in the preschool years [18], this study considered some narrative microstructure features of bilingual Balochi-Persian children aged four. The main purpose of this article was to compare the narrative microstructure level of bilingual Balochi-Persian children (in Persian) with their monolingual Persian-speaking counterparts within the five indicators of NAP.

Methods

Participants

The sample size of this study consisted of 43 pre-kindergarten children (13 bilingual and 30 monolingual). Only 48-month-old children were included through simple random sampling. Participants attended kindergartens in Zahedan, the center of Sistan and Balochestan province. They did not have any known history of speech, hearing, learning, or developmental difficulties, and also, they were not being considered for evaluation of special education services.

At first, examiners asked parents to complete the Basic Information Form including child information (such as medical history, speech and language development records, and information about the child's languages that are used in natural context), and education and occupation of parents. Also, teachers were asked to report abilities of children and select those who had appropriate performance. Then, examiners conducted a routine criterion-referenced speech and language assessment session with every child. During this procedure, examiners removed any children with speech and language difficulties. They also removed those children about whom parents or teachers had expressed concerns. All three examiners were senior students of speech and language pathology.

Approval for the study was taken from the Zahedan Welfare Organization and then, all parents were asked to fill informed consent forms if they agreed to join the study.

Narrative Skills Evaluation

To evaluate narrative ability of children, the following measures were used:

Narrative elicitation: Standard procedure established in NAP (see Justice *et al*., 2010 for more detailed information about the administration) was used to elicit each participant's spoken narrative. NAP is a narrative

assessment tool developed in English by Justice *et al.* (2010) [1]. Qasemi *et al.* (2011) developed NAP in Persian, and studied its face and content validities [19]. The results were consistent with those of Justice *et al.* (2010). NAP has an online coding method, which can be less time consuming than traditional transcribing methods. Also, its forms are available for free. It gathers developmental descriptive data in five areas that include sentence structure, phrase structure, modifiers, nouns, and verbs.

Since researchers showed that Shangul Va Mangul is the most familiar story among Iranian children [19], a picture book of this story was selected [20]. This recognizable story was selected because when a story is known to children, they can provide more sophisticated narrations in narrative generation tasks [10].

Examiners gave the story book to the children and asked them to tell the story in Persian. If the children did not respond, examiners prompted them (for example, "tell me about this page"). The elicitation procedure was based on the "narrative elicitation protocol" of NAP. All narratives were audio-recorded by a voice recorder (Sony ICD UX533). The voice recorded samples were transcribed.

Narrative microstructure measurement: All transcripts were scored using the short form of NAP adopted by Qasemi *et al.* (2012). The form includes five indicators covering sentence structure (such as compound sentences, complex sentences, and questions), phrase structure (such as prepositional phrases and compound nouns), modifiers (such as adjectives and adverbs), and verb groups (such as past tenses and present tenses). Each item ranges from 0 (did not occur) to 3 (≥3 occurrences). The scores of all items were summed up and the maximum total score was 48.

The examiners were Persian native speakers. They were trained by a master of speech language pathology who was completely aware of the NAP scoring system. Before the sampling, the examiners did five samples independently and checked them with the trainer. Sampling procedure started when examiners achieved correction criteria up to 95%.

Results

Most of the participants were from middle-income families and also, most parents were graduates and employed.

Due to the small sample size, at first, two sample Kolmogorov-Smirnov tests were used to check the normality of data. The tests showed symmetric and normal distribution of data in all indicators except the verb group indicator (P>0.05). An independent sample T test was done for the parametric groups (such as sentence structure, phrase structure, modifiers, and noun group); and a Mann-Whitney test was conducted for the non-parametric verb group (Table 1).

As shown in Table 1, significant difference between narratives of bilingual and monolingual children was found only in the phrase structure (P>0.05).

Reliability

For measuring intra rater reliability, a rater independently scored randomly 10 of all measures. Results showed that the examiners reliably scored all measures (P ≥ 0.8).

Discussion

In general, our findings were aligned with reports that showed narrative performance of bilingual preschool children in different languages. Our results confirmed other study results, which suggested that second language has little or no effect on narrative microstructure skills of children [21-23].

With regard to this, some studies suggested similar results. For example, Cleave *et al.* (2010) compared SLI (Specific Language Impairment) scores of 26 children (14 monolingual English speakers and 12 dual language learners) in standard language tests and narrative tasks. The scores suggested that acquisition of second language does not cause remarkable changes in narrative skills of children [24], which is congruent with our results.

Also, Gutiérrez-Clellen *et al.* (2008) studied the performance of 71 children between the ages of 4 years, 5 months and 6 years, 5 months in spontaneous narrative samples. The children were categorized in five groups, the first group spoke English as a first language (EL1) with typical language development (TLD), the second group was EL1 speakers with Language Impairment (LI), the third group was Spanish-English bilinguals with TLD, the forth group was Spanish-English bilinguals with LI, and the fifth group was English as a second language (EL2) learners with TLD. As suggested, the difference between using English or Spanish did not affect the performance of monolingual or bilingual children [23]; and no cross-linguistic influences in using NAP grammatical indicators were found. Additionally, researchers suggested that even bilingual children with language impairments like SLI can switch grammatical codes between two languages with typical patterns [25]. Thus, it appears that the effect of a second language on narrative microstructure skills (in any language) is so low that it can be ignored.

Compared to previous studies, we found a difference only in the indicator of the phrase group that consists of complex noun group, additive noun, and prepositional group. However, the significance of the difference is low and should be considered with caution. This means

Table 1: Results of children's narratives

Variable	Sentence structure	Phrase structure	Modifiers	Noun Group	Verb Group
Sig. (2-tailed)	0.219	0.051	0.571	0.067	0.512
Mean±SD					
Bilingual	6±3.36	4.92±2.25	4.07±2.01	4.38±1.6	7.48±3.75
Monolingual	4.8±2.54	3.66±1.7	3.73±1.72	3.33±1.7	

that the bilingual group did not show any considerable difference as compared to monolingual children, and both groups used all indicators in an equal range. Maybe, this is because of different grammatical patterns between Persian and Balochi while constructing phrases. Finally, it can be concluded that a second language does not affect narrative complexity.

Despite many studies showing no cross-linguistic effects on narrative grammatical patterns, there are some studies that reported different results. For example, in a study of storytelling between bilingual Cantonese-English preschoolers, researchers showed that there is no correlation between Cantonese and English morphosyntactic quality. The study compared storytelling of 47 bilingual children aged 4 to 5 years and found higher story grammar scores in English than in Cantonese [26]. In another research, Hipfner-Boucher *et al.* (2015) studied three groups that included ELL English language users, ELL English minority language users, and English first language users through story retelling tasks. There were 75 participants aged between 46 and 69 months. This study founded that ELL minority language users had significantly lower scores on three microstructure measures (sentence length score, number of different words, and grammaticality of children's utterances) [27].

Also, Uccelli and Páez (2007) studied English oral language measures (vocabulary and narrative scores) in 24 low-SES bilingual English-Spanish children aged four years and found that the majority of children scored below the mean score of monolingual children. They reported low levels of vocabulary skills in bilingual children as compared to their monolingual peers [28]. This discrepancy may be due to different elicitation procedures and narrative tasks used in these studies or a result of differences in the languages.

Limitations

One of our limitations was the process of choosing bilingual participants. Most Balochi mothers are housewives and their children grow up in home environments until the age of six. As a result, the number of bilingual kindergarten children is limited. So, we suggested an assessment of oral language skills of bilingual children of preschool and school-going ages in future studies.

A second limitation of our current study was the small sample size. With only 13 bilingual children, it was difficult to generalize the results to a broader population. Thus, we suggested an investigation of oral narrative skills in larger sample sizes in future studies.

Overall, with the method used in this sample, our results showed that second language may not have any effect on narrative microstructure but it is necessary to study other groups to see how we can evaluate narrative abilities of bilingual children in clinical settings. So, we suggested a study of bilingual narrative skills in both macro and micro levels in other languages and with a larger sample size. Additionally, language dominance of children in both languages can be addressed.

Conclusion

The purpose of this study was to compare some narrative microstructure features of typically developing bilingual Balochi-Persian children with Persian monolingual children.

Findings from this study can be used by researchers and practitioners who are trying to better understand oral language competence in Balochi-Persian bilingual children. Comprehensive language information about oral narrative performance of Iranian bilingual children enables us to distinguish between different and disordered behaviors. So, our results may be useful in interpreting the performance of Balochi-Persian bilingual children in clinical settings.

According to the results, there was not any dependency between the children's first and second languages. . However, with regard to previous studies and our small sample size, we recommended that professionals (SLP, special educators, and teachers) can consider possible cross-linguistic effects in their educational planning for this population of children.

However, we need more detailed information about both micro and macrostructure level indicators of bilingual children's oral language abilities with effective and accessible tools. Thus, we suggested an investigation of the development of bilingual children's oral language proficiency during preschool to school-going age (considering both typical and impaired children) in future studies. Using other accessible oral language tools and comparing the results can provide useful information.

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Conflict of interest: None declared.

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