Differences between monolingual and bilingual children on the SSLIC measure.

 $M_a delaida Restrepo^{*\dagger 1}, Lourdes Martinez^{*1}, and Shelley Gray^{*1}$

¹Arizona State University, USA (ASU) – Department of Speech and Hearing Science, PO BOx 870102, Tempe, AZ, United States

Abstract

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The purpose of the current project was to examine how a screening measure developed for bilingual children to screen for language impairment (LI) performed with monolingual children. Usually in the US, bilingual children are assessed with measures developed for monolingual children, and thus, the normative sample is not always appropriate for comparison due to bilingual effects in a variety of language skills (Author, 2013; author, under review).

We developed a Spanish? screening measure for bilingual children who speak Spanish as their native language and English as their second language (the Spanish Screener for Language Impairment in Children – SSLIC). It assesses areas that have been found to be sensitive to LI in Spanish and bilingual speakers (Bedore & Leonard, 2001; Gutierrez-Clellen et al, 2004). Morphological deficits in Spanish LI are well documented in the noun phrase and some in the verb phrase (Bedore & Leonard, 2001). Simiarlarly, sentence repetition is an important measure in screening LI across many languages (Archibald & Joanisse, 2009). Of 8 different areas after development and tested, we retained 5 subscales: morphology, sentence repetition, non-word repetition, antonyms, and rapid naming (RAN). Results from discriminate analyses indicated that these measure demonstrated very good sensitivity and specificity for bilingual children. Of all the measures, morphology and sentence repetition contributed to the differentiation in three age groups (5, 6 and 7 year olds). Non-word repetition added to the discriminant function in 5 year olds, and Rapid naming added to the discriminant function in 7 year olds (author, 2015).

For the current study, we examined performance from a monolingual group with typical development (MTD), and two bilingual groups, one with typical development (BTD) and one with language disorders (BLI).

Method. We tested 89 children, 32 MTD from Mexico (mean age 5.6), and 32 with BTD (mean age 5.6) and 25 BLI (mean age 5.6) from the bilingual sample. We matched the three groups on: Age (+/-2 months), parental education, and gender. All children had to score above 75 on a nonverbal IQ screening scale and had to pass a hearing screening. Further, the bilingual groups had to demonstrate Spanish proficiency above or equal to English and the parents reported that Spanish was spoken home at least 50% of the time. All children

^{*}Speaker

[†]Corresponding author: laida.restrepo@asu.edu

received the CELF-4 Spanish. MTD children had to score above $85 ext{ (x} = 108, SD = 14.16)$ and the BTD children had to score above $70 ext{ (x} = 87.91, SD = 10.75)$ because the mean for the bilingual sample on the CLEF-4 was 84. The BLI children had to score 69 or below (x = 57.8, SD = 7.39).

All children received the following measures: morphology, sentence repetition, antonyms, rapid naming time and errors, and non-word repetition based on the final screener results for the bilingual children.

Results. One way ANOVAs with three groups were run on each measure. All ANOVAs were significant; however not all groups differ in the post-hoc analyses. In morphology, sentence repetition, and antonyms all groups (MTD, BTD and BLI) were significantly different from each other. In RAN time and errors, and non-word repetition, the BLI group differed from the MTD, but the two TD groups did not differ from each other. Further, the BTD and BLI did not differ on RAN time. These results indicate that morphology, antonyms, and sentence repetition are important in differentiating children who are monolingual and bilingual and that are also sensitive to the identification of LI.