

Convergence: When Two Languages Meet – Part II

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Abstract

The purpose of this longitudinal study was to document the process of one child's bilingual language development where the home language is not the language of the majority community in order to a) answer if language exposure and input in each language must be equivalent for bilingual proficiency to be achieved and b) determine at what point in language development is spoken bilingual proficiency achieved as measured by vocabulary knowledge and use. Language development was assessed through multiple standardized measures and an ongoing expressive inventory of spontaneous words up to 3 years of age. It was determined that even with greater exposure to the majority language, the child developed a firm base for language simultaneously in both languages, and her overall receptive and expressive language skills were above average given her age when tested in either language, with some marked fluctuation over time, specifically on the vocabulary measures. These findings are consistent with the research demonstrating that children are capable of navigating two languages simultaneously and achieving strong bilingual language skills, and furthermore, they suggest that quality and consistent exposure and input in each language, even if unequal or disproportionate, place the dual language learner on the right path to simultaneous bilingualism. Implications for speech/language pathologists and educators are discussed pertaining to their role in the assessment of bilinguals and in providing parents training and resources to maintain

quality exposure and input in the minority language at home.

Summary of Background and Methodology

This study documents the simultaneous bilingual language development of a Brazilian-American female born in the United States, where mother spoke Portuguese and father spoke English to the child from birth. The child will be referred to as RM. Language input consisted of ongoing verbal interactions, describing or narrating everyday activities and events, purposeful language-rich play, singing, book sharing and reading, educational and entertainment videos, and limited interactions with other Portuguese-speaking family members via Skype or family trips. Mother, a trilingual speech/language pathologist (SLP), purposefully employed language facilitation techniques such as modeling, syntactic and semantic expansions, as well as sentence recasting as appropriate throughout their interactions.

Language skills in Portuguese were assessed by a trilingual SLP and language skills in English were assessed by two monolingual SLPs due to the child's relocation to another state just prior to her third birthday. The child was evaluated at the following ages: 1;3, 2;0/2;1, 2;6/2;7, and 3;2/3;3.

The following measures were chosen for assessment: Preschool Language Scale, Fourth Edition (PLS-4), Preschool Language Scale, Fourth Edition, Spanish (PLS-4 Spanish), Receptive One-Word Picture

Vocabulary Test, Second Edition (ROWPVT-2), Expressive One-Word Picture Vocabulary Test, Third Edition (EOWPVT-3), Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4), Expressive Vocabulary Test, Second Edition (EVT-2), and an expressive word inventory of spontaneous words.

Measures were administered in English and also translated and administered in Portuguese. Translation of the PLS-4 Spanish was chosen, as opposed to the PLS-4, as the child more closely compares to bilingual norms as opposed to monolingual norms, and because Spanish and Portuguese are both Latin-based languages that have similar grammatical structures. Unfortunately, there were no vocabulary measures available in Portuguese or Spanish for RM's age, therefore, her vocabulary performance is being compared to monolinguals. Though translation or adaptation of standardized measures invalidates the norms, all standard scores were carefully analyzed to obtain a general picture of RM's dual language development.

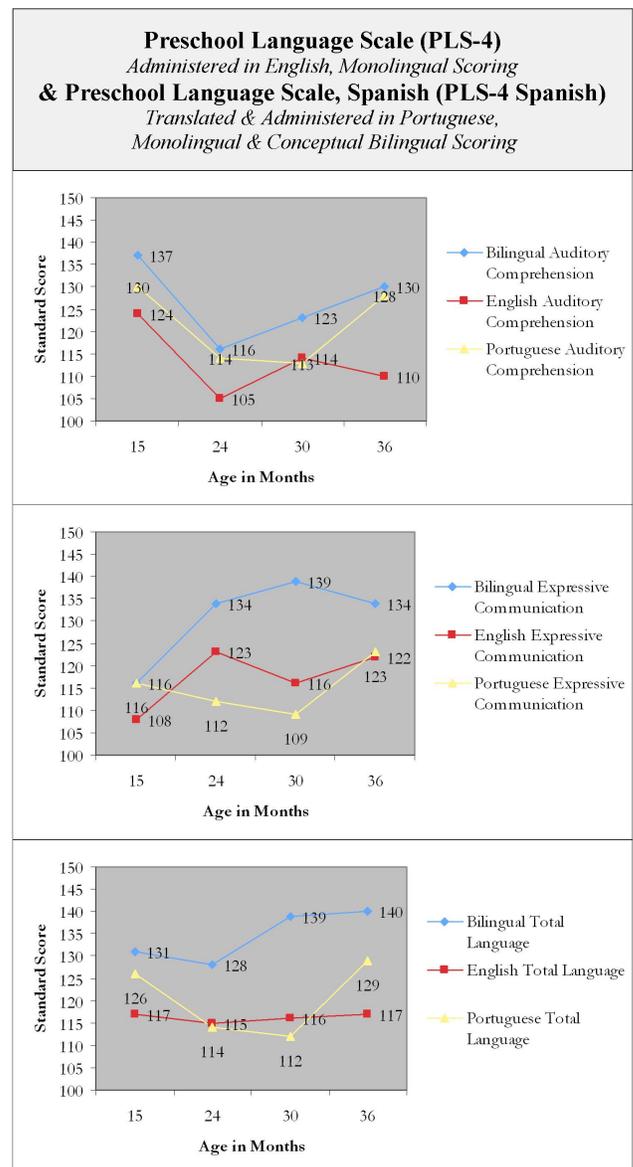
Both single-language (monolingual) and conceptual (bilingual) scoring were utilized for the sake of comparison and to obtain a more detailed analysis of RM's language skills over time.

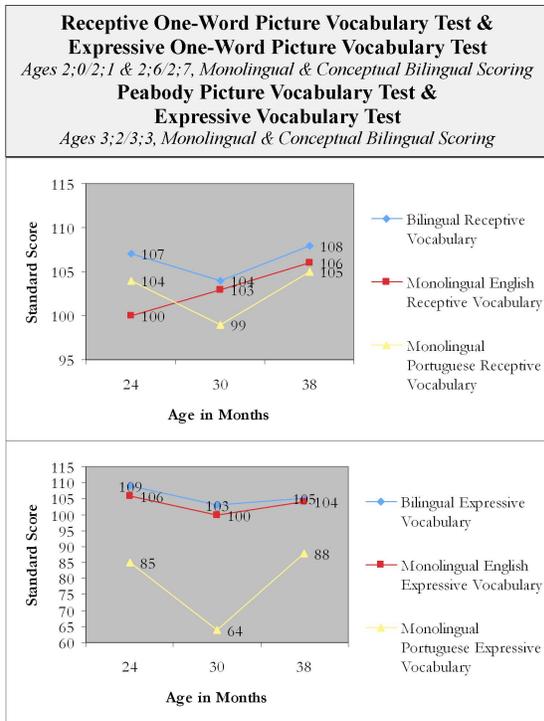
Results and Discussion

All assessments were scored three ways: 1) correct English responses only, 2) correct Portuguese responses only, and 3) conceptual bilingual scoring where all correct English and Portuguese responses were factored into the scoring. Note that on the initial summary of this study (*Convergence: When Two Languages Meet - Part I*), for the testing completed at age 2,

the examiner erroneously did not account for correct English responses from the PLS-4 when utilizing conceptual scoring on the PLS-4 Spanish, and this has been corrected.

The following charts display RM's performance in English and Portuguese shown through both monolingual and conceptual scoring. Again, conceptual scores indicate performance counting correct responses in either language, thus yielding a more complete picture of her combined knowledge and use.





As one can see, there was initial Portuguese dominance, a sudden shift to English preference/dominance, and then the gradual reintegration of Portuguese use. RM's receptive and expressive language skills are above average overall, and her receptive and expressive vocabulary skills are average to below average, with marked fluctuation over time.

In relation to RM's bilingual vocabulary skills, the vocabulary measures were further analyzed and demonstrate that: 1) at age 2, 75% of receptive and 35% of expressive vocabulary was overlapping (i.e. knowledge/use of same word in both languages), 2) at age 2.5, 84% of receptive and 22% of expressive vocabulary was overlapping, and 3) at age 3, 93% of receptive and 48% of expressive vocabulary was overlapping.

Analysis of RM's inventory of spontaneous words shows a total of 674 lexicalized concepts (one concept expressed by one word). Of those 674 concepts, 263 were

verbalized in both languages (known as translational equivalents), therefore, RM demonstrated a total of 937 words at 36 months (566 in English, 371 in Portuguese). This measure shows 39% of her expressive vocabulary as bilingual or overlapping, nearing correlation with the EVT-2 at age 3. This figure is up by 12% when compared to analysis at age 2, which showed 27% of expressive vocabulary as overlapping. The types of words used by RM were nouns, verbs, adjectives, adverbs, possessives, plurals, prepositions, pronouns, articles, conjunctions, common expressions, and questions with inflection. RM was also using 5 to 7+ word utterances by 30-36 months of age.

Between 2 and 3 years of age, several interesting occurrences were noted. First, language differentiation became apparent, where RM began to understand that Portuguese is not the majority language in her community. For example, at 25 months, when having a joint interaction with mother and English-speaking grandmother, she consciously addressed mother in Portuguese and then turned to address grandmother in English. At 26 months, she stated, "Daddy talk inglês (English)." RM also began to understand Portuguese forms for gender differentiation. For example, she said the masculine form of the number two (*dois*) when pointing to two flies, but she correctly switched to the feminine form of the number two (*duas*) when she added the feminine noun and stated "duas moscas" (two flies). RM's translating skills and code mixing skills, which were evident at 23 months and discussed in detail in Part 1 of this study, continued to develop appropriately. It should be noted that code mixing demonstrates linguistic competence and effective manipulation of both languages.

As concluded previously, a firm base for simultaneous language development is achievable even with greater exposure to the majority language within the majority culture. Sudden drops in expressive ability in the minority language may occur once the majority language is introduced, as reflected in RM's results, however, this study demonstrates that the minority language skills gradually increase again with continued quality exposure and input. Furthermore, reduced expressive vocabulary skills in young bilingual children do not necessarily indicate an expressive delay.

Implications

Had the assessment measures been viewed and analyzed from a monolingual lens, an understanding of RM's true language skills would not have been complete, therefore, conceptual scoring, which accounts for knowledge and use in both languages, appears to better classify typical performance (Bedore et al., 2005) and should always be utilized by SLPs evaluating bilingual children.

It should be noted that as majority language skills become more complex, minority language skills may appear delayed and children may stop using the language altogether, but this does not mean that the minority language is gone. For a bilingual parent, this reality can be frustrating, and the tendency would be to stop speaking the minority language altogether. François Grosjean (2011) advises parents, "If the child is starting to be clearly dominant in one language and is tending not to understand or speak the other, then changes will have to be brought to the relative importance given to the two (or more) languages in his or her life." Furthermore he states, "The level of fluency attained in a

language (more precisely, in a language skill) will depend on the need for that language and will be domain specific." It is important for parents and educators to understand that "because the needs and uses of the languages are usually quite different" (Grosjean, 2011), bilingualism does not mean equal proficiency in both languages. Parents should not give up their goal of bilingualism for their families as continued exposure and quality input, as well as creating and maintaining need for the minority language, will produce results in time.

Because of the tremendous benefits of bilingualism in general, as well as the benefits of reinforcing the home language even in children with language disorders (Kohnert et al., 2005), SLPs working with minority families should find ways to encourage and support rich, consistent, and long-term exposure and input of minority languages through parent education, training, and accessibility to appropriate materials and resources.

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