
The receptive-expressive gap in narratives of bilingual children with and without language impairment

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Abstract

Speech-language pathologists find it difficult to distinguish language impairment (LI) from language differences even among children who speak English fluently, (Kritikos, 2003; Roseberry-McKibbin, & Eicholtz, 1994). A popular method for making this distinction is analyzing children's narratives, providing insight into multiple levels of language, including vocabulary, syntax, and story structure. This method seems appropriate for bilingual children since the same story structure schemas appear in many languages' narratives (see Berman & Slobin, 1994 for review).

The difficulty discerning LI from language difference arises because many linguistic behaviors of bilingual children with TD mirror the behaviors of monolingual children with LI. For example, bilingual children with TD often comprehend more than they produce (Yan & Nicoladis, 2009), in either their first language (L1; XXXX) or second language (L2; XXXX), with the magnitude of the discrepancy shrinking as language experience increased (XXXX). This receptive-expressive gap has been left unexplored in the bilingual narrative literature.

We sought to determine first if a receptive-expressive gap existed in the L2 narratives of bilingual kindergarten children with and without LI and second if this gap changed by first grade. We predicted that the gap would be larger in the LI compared to TD group and would shrink for both groups by first grade.

Participants were drawn from 166 children from northern Utah and central Texas who participated in a longitudinal investigation exploring diagnostic markers of bilingual LI (XXXX). LI was determined using a reference standard following the model of Tomblin et al (1996). Three experienced bilingual SLPs reviewed narrative, morphosyntax, and vocabulary performance on language samples and responses to standardized tests. Twenty-one were identified with LI and matched with TD bilingual peers on sex, age, IQ, nonverbal intelligence, and language exposure based on parent and teacher interviews. Only children with data points for all tests of interests were included. Children were administered the Test of Narrative

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Language (TNL; Gillam & Pearson, 2004). This English language test provides standardized receptive, expressive, and overall scores and includes three levels of narrative support: No pictures, sequenced pictures, and single pictures.

In order to determine whether a receptive-expressive gap was present for bilingual children with and without LI at kindergarten, we performed a repeated measure ANOVA with Modality (receptive v. expressive) as the within-subjects variable and LI Status (TD v. LI) as the between-subjects variable. There were main effects for Modality, $F(1, 38) = 9.58$, $p < .01$, $\eta^2 = .20$, (receptive better than expressive) and LI Status, $F(1, 38) = 31.43$, $p < .01$, $\eta^2 = .45$, (TD better than LI) but no significant interaction between the two, $F(1, 38) = 3.09$, $p = .09$, $\eta^2 = .08$, indicating that bilingual children with and without LI presented with a receptive-expressive gap at kindergarten. We then added to the model Time (kindergarten v. first grade) as a within-subjects variable. Results showed main effects for Time, $F(1, 38) = 60.61$, $p < .01$, $\eta^2 = .62$ (first grade better than kindergarten), Modality, $F(1, 38) = 4.82$, $p = .03$, $\eta^2 = .11$ (receptive better than expressive), and LI Status, $F(1, 38) = 46.59$, $p < .01$, $\eta^2 = .55$, (TD better than LI) as well as a significant interaction between the three, $F(1, 38) = 6.09$, $p = .02$, $\eta^2 = .14$. Follow up analyses at the univariate level showed no statistically significant receptive-expressive gap for either group at first grade.

Results indicate that bilingual children with and without LI present with receptive-expressive gaps in their second language narrative abilities at the early stages of learning L2. Additional experience with the L2 results in a diminution in the gap. We speculate that story structure schema can be easily transferred from Spanish L1 to English L2, supporting comprehension to a greater degree than production, which creates a receptive-expressive gap. Language experience provides the L2-specific words and grammar that support narrative production, diminishing the gap over time. This has important implications when interpreting clinical findings.