

RESEARCH-TO-PRACTICE SUMMARY

Conceptual Vocabulary Among Preschoolers

Jeannette Mancilla-Martinez

Vanderbilt University

Christa Mulker Greenfader
California State University, Fullerton

Wendy Ochoa
University of California, Irvine

This article summarizes a study that assessed the vocabulary of 32 Spanish-English bilingual preschoolers by: (1) comparing measures that utilize conceptual scoring (i.e., vocabulary knowledge of a concept in either Spanish or English)—and are *designed for and normed on* Spanish-English bilinguals – and traditional English-only measures; and (2) examining children’s item-level performance on conceptually-scored measures. Results indicated that, when assessed through English-only measures, Spanish-English bilinguals’ receptive and expressive vocabulary scores were below average. However, when the conceptually-scored measures were used, their receptive and expressive vocabulary scores fell within average ranges. Item-level analyses indicated potential language differences between bilingual children’s receptive and expressive vocabulary performance. These findings suggest the value of utilizing conceptually-scored measures to accurately assess bilinguals’ vocabulary abilities—especially when differentiating between language differences and language disorders.

Keywords: vocabulary; bilingualism; assessment

For children living in Spanish-speaking homes in the United States—hereon referred to as Spanish-English bilinguals—early vocabulary learning occurs both in Spanish and English, though the amount of exposure to each language and children’s own use of each language varies widely. Yet, more often than not, when it comes time to assess their vocabulary abilities, these young Spanish-English bilinguals are commonly evaluated using English-only measures, producing an incomplete picture of their overall vocabulary knowledge. One of the greatest challenges in gaining insight into this population’s vocabulary performance and development is a historical lack of reliable and valid vocabulary assessments designed for bilingual children (Bedore & Peña, 2008). Research indicates that bilingual children’s vocabulary knowledge is

distributed across languages, severely limiting the extent to which English-only vocabulary measures can provide accurate insight into performance and development in this important domain (e.g., Mancilla-Martinez & Vagh, 2013; Pearson, Fernández, & Oller, 1994). Further, context (e.g., home vs. school) can play a role in priming bilinguals toward one language over the other (e.g., Grosjean, 2008), underscoring the need to attend to both languages when assessing bilingual children's vocabulary.

Theoretical work, such as that outlined by Cummins (1979), indicates that proficiency in one language facilitates proficiency in another. For instance, if a child learns the Spanish word *semilla*, s/he has a general conceptual understanding of the word, facilitating the acquisition of the English equivalent (*seed*). Therefore, use of conceptually-scored vocabulary assessments—i.e., assessments that recognize vocabulary knowledge in terms of known concepts regardless if the label is known in either Spanish or English—may provide a more accurate assessment of bilingual students' vocabulary skills. The call for vocabulary assessments designed for and normed on bilinguals is not new, but very few such measures exist, leaving the use of English-only measures as standard practice. Because such measures capture only a part of bilinguals' vocabulary knowledge, there is a real possibility of over-identification of bilingual children as “at-risk” for compromised academic achievement by virtue of attending to vocabulary knowledge only in their developing language (English, in this case).

Considering how important early vocabulary skills are for future academic success—for both monolingual and bilingual students (Dickinson, 2011; Mancilla-Martinez & Lesaux, 2017)—determining ways to effectively support the vocabulary development of young Spanish-English bilinguals hinges on first gaining the most accurate understanding of their vocabulary knowledge. Tapping vocabulary knowledge using measures that apply conceptual scoring seems like a promising direction to move in for this large and growing population of students in our schools.

THE CURRENT STUDY

In the current study, we examined the utility of using conceptually-scored vocabulary measures when assessing the vocabulary skills of Spanish-English bilingual preschoolers ($n=32$). We compared their vocabulary performance when using *standardized* measures designed for and normed on Spanish-English bilinguals that utilize conceptual scoring, with traditional, English-only vocabulary measures designed for and normed on English monolinguals. For the conceptually-scored measures, the assessor first questioned the child in Spanish (children's dominant language, per parent report); correct answers could be given in Spanish *or* English, and if the child did not correctly respond (or not at all) in Spanish, the assessor would re-administer the question in English, once again allowing for a response in either Spanish or English.

We further investigated the proportion of children potentially deemed “at-risk” for low academic achievement when using English-only measures versus conceptually-scored vocabulary measures. Finally, given that bilinguals receive input in two languages—which likely varies based on context—and that the differences between receptive and expressive vocabulary abilities for both monolingual and bilingual children have been reported, we examined the Spanish-English bilinguals' performance at the item level on the conceptually-scored vocabulary measures, investigating their patterns of performance in each language receptively and expressively.

KEY FINDINGS

Utility of Conceptually-Scored Measures

Vocabulary measures that utilize conceptual scoring appear to be a step in the right direction to gain a more comprehensive understanding of young Spanish-English bilingual children's vocabulary knowledge. Whereas the scores from English-only measures indicated a substantial receptive and expressive English vocabulary gap for this group of young learners, conceptually-scored measures placed them just over normal ranges, expressively and receptively.

Implications for At-Risk Classification

If Spanish-English bilingual students' vocabulary skills are only assessed in English—a common practice in U.S. classrooms—they are much more likely to be identified as “at-risk.” In a normal distribution, roughly 15-16% of the population is expected to fall less than one standard deviation below the mean. Yet, 47% and 59% of children in our sample fell less than one standard deviation below the mean receptively and expressively, respectively, on the English-only vocabulary assessment. On the other hand, when measures that utilize Spanish-English conceptual scoring were considered only 12.5% (receptively) and 6% (expressively) of bilingual preschoolers fell less than one standard deviation below the mean.

Patterns of Performance: Results from the Analysis at the Item Level

Spanish-English bilingual children generally evidenced higher receptive than expressive scores, regardless of whether English-only or Spanish-English conceptually-scored measures were used. Yet, the gap between these two domains was larger in English, when standard scores (the typical metric used in previous studies) were considered. An examination of the extent to which children correctly responded in Spanish or resorted to English revealed that children generally demonstrated Spanish receptive vocabulary knowledge without resorting to English. In contrast, the percentage of correct responses on expressive vocabulary in Spanish was notably lower, resulting in a higher percentage of questions prompted in both languages, and over half of the expressive questions were answered incorrectly in both languages.

These findings suggest different patterns between receptive and expressive vocabulary and indicate that there might be differences between the types of words children know—and the contexts in which they might appear (e.g., home vs. preschool). Children performed highest in Spanish on both receptive and expressive categories for “body parts” and “clothing,” on the receptive categories for “furniture and rooms” and “toys,” and on the expressive categories for “small household items”—vocabulary likely heard and/or used at home. However, children resorted to English at the highest rate on the Spanish-English conceptually-scored receptive and expressive categories for “nouns” and “games and routines,” on the receptive categories for “action words,” and on the Spanish-English conceptually-scored expressive categories for “places to go”—all topics likely encountered with greater frequency in a school context.

SUMMARY AND RECOMMENDATIONS

Results of this study have the potential to pave the way for a more inclusive notion of what it means to evaluate—with implications on how to support—the vocabulary development of young bilingual children, by using standardized vocabulary measures that use conceptual scoring to tap *understanding of concepts* regardless of whether the label is known in Spanish or English. Our findings suggest that using Spanish-English conceptually-scored measures may:

- Improve the diagnostic accuracy of a language disability for young Spanish-English bilinguals; and
- Raise educators' awareness of the strengths that their Spanish-English bilingual students bring to the language-learning task.

We urge educators to focus their efforts on language learning tasks that *build* upon students' conceptual skills. For example, if a Spanish-English bilingual preschooler does not appear to understand instructions or a story, it may well be due to a mere language difference, not a language disorder. That is, the child may indeed understand the concept being presented in the home language versus not understanding the concept in any language. Using conceptually-scored measures to assess bilinguals' vocabulary knowledge can help educators gain a more accurate understanding of their students' vocabulary skills.

It is also helpful for educators to understand that contexts might influence the different types of words that Spanish-English bilinguals know in either language. That is, certain words may be more frequently encountered in the home, and therefore known in Spanish, versus the classroom, where English is the primary language. This understanding can help teachers to select target words and concepts for instruction, thereby building upon the students' home language experiences to support their English development.

Finally, while young Spanish-English bilinguals may exhibit a strong comfort in Spanish receptive vocabulary, the fact that they are fairly balanced between the two languages on expressive vocabulary makes them prime candidates for verbal interactions in the classroom. Encouraging talk across multiple contexts, with peers as well as with teachers and aides, may be a useful strategy.

REFERENCES

- Bedore, L. M., & Peña, E. D. (2008). Assessment of bilingual children for identification of language impairment: current findings and implications for practice. *International Journal of Bilingual Education and Bilingualism*, *11*(1), 1-29. doi:10.2167/beb392.0
- Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research*, *49*(2), 222-251. doi:10.3102/00346543049002222
- Dickinson, D. K. (2011). Teachers' language practices and academic outcomes of preschool children. *Science*, *333*(6045), 964-967. doi:10.1126/science.1204526
- Grosjean, F. (2008). *Studying bilinguals*. Oxford, England: Oxford University Press.
- Mancilla-Martinez, J., & Lesaux, N. K. (2017). Early indicators of later reading comprehension outcomes among Spanish-speaking language minority learners. *Scientific Studies of Reading*, *21*(5) 428-448. doi:10.1080/10888438.2017.1320402
- Mancilla-Martinez, J., & Vagh, S. B. (2013). Growth in toddlers' Spanish, English, and conceptual vocabulary knowledge. *Early Childhood Research Quarterly*, *28*(3), 555-567. doi:10.1016/j.ecresq.2013.03.004

Pearson, B. Z., Fernández, S. C., & Oller, D. K. (1994). Patterns of interaction in the lexical growth in two languages of bilingual infants and toddlers. *Language Learning*, 44(4), 617-653. doi:10.1111/j.1467-1770.1994.tb00633.x