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Ana Franco Illinois State University, afranco@ilstu.edu

Tricia Larkin Illinois State University, pllarki1@ilstu.edu

Ann Beck Illinios state university, arbeck@ilstu.edu

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## Assessing Bilingual Children with a Language Disorder

Ana Franco

Illinois State University

# ASSESSING BILINGUAL CHILDREN WITH LANGUAGE DISORDERS Assessing Bilingual Children with a Language Disorder

### Introduction

The population in the United States is rapidly diversifying, and it is estimated that 4.9 million English-Language Learning (ELL) students are currently in the United States (National Center for Education Statistics, 2019). ELL students come from diverse linguistic backgrounds and have varying proficiencies in English and their native language. The linguistic and cultural differences bilingual ELL students present when they attend public schools have created challenges for the current assessment and treatment services available for those bilingual children with communication disorders. Speech-language pathologists (SLPs) are required to assess bilingual children suspected of having a language disorder, one of the most common childhood learning disabilities. Unfortunately, many of the assessments used to diagnose a child with a language disorder follow standard measures that are designed for monolingual speakers, whose native language is only English. As a result, bilingual children may be misdiagnosed with language disorders.

To overcome the potential problems of misdiagnosing a language difference for a language disorder, clinicians must be aware of sociocultural and linguistic differences that are unique to each student. Through this paper, current assessment challenges will be discussed to help future clinicians effectively assess bilingual children whose primary language is not English. This review will explain the use of standardized assessments, informal assessments, a dynamic assessment, and the sociocultural approach to create a comprehensive assessment. A resource manual is attached that further describes the components of the assessment process explained in the literature review.

#### **Bilingual Language Development**

Before assessing a bilingual student, SLPs should be familiar with the language development of bilingual children and how it differs from the language development of monolingual English speakers. Typically developing bilingual children follow the same language milestones as their monolingual peers and fall under two categories: simultaneous bilingualism or sequential bilingualism (Kohnert, 2010). Simultaneous bilingual learners are defined as children who learn two languages at the same time or before the age of three and progress through language milestones similarly to their monolingual peers. A sequential bilingual learner acquires a second language after having acquired a first language and after the age of three. Simultaneous bilingual children can become highly proficient in each language if given the appropriate exposure and communication opportunities in each language (Kohnert, 2010). However, when initially learning a second language, sequential-bilingual children may encounter language delays and inaccuracies in syntax structures as part of their "learning errors" (Grech & Dodd, 2007).

During the early years of language development, sequential bilingual children may demonstrate lower vocabulary in comparison to monolingual children. Mahon and Crutchley (2006) compared vocabulary in English between typically developing monolingual and bilingual students using the British Picture Vocabulary Scales II. The findings demonstrated that the bilingual children have lower semantic skills in English than the monolingual children. The results gathered also showed that bilingual children score lower at a younger age and develop higher vocabulary in English as they age. The authors explain that at a younger age, semantic development and knowledge in English for bilingual children may be slower than monolingual children. However, the vocabulary gap that exists with bilingual children appears to decrease as exposure to English increases in school (Mahon & Crutchley, 2006).

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Paradis (2016) reviewed studies to examine the lexical, morphological, narrative, and verbal memory of bilingual children in comparison to monolingual English speakers and found that bilinguals may take longer than three years to catch up to their monolingual peers. Some influential factors that impact language development in bilingual children include age, language usage, length of exposure to English, caregiver education, and English exposure outside of school (Paradis, 2016). Bilingual children are greatly influenced by the exposure of each language they receive and the use of language they experience when interacting with caregivers. These are clinical challenges to consider when assessing children due to the individual differences that can vary from monolingual English speakers.

#### Language Distribution

Although bilingual children have two separate linguistic systems that allow them to distinguish one language from the another, they do not always keep languages separate when they speak. Code-switching often occurs with bilingual speakers when they switch between one language to a second language within sentences or between words (Garcia, Leibold, Buss, Caladruccio, & Rodrigez, 2018). Code-switching is typical for bilingual speakers and is not indicative of a language disorder. Most bilingual children have a dominant language that is specific to a setting, social context, or communication partner that creates an uneven language distribution. For example, a study done on fourth and fifth graders who spoke Spanish and English examined how bilingual children categorized and classified words in each language using a word naming activity (Ordóñez, Carlo, Snow, & McLaughlin, 2002). The results showed that 68% of the words that the bilingual children used to classify items were unique to either Spanish or English. In other words, the bilingual children appeared to have a language preference when asked to name different items that are specific to each language. This is typical for

bilingual children who use their native language only at home and a second language at school or in the community. Thus, it is highly recommended that SLPs test bilingual children in both languages, instead of a single language, to account for possible uneven distribution of vocabulary exposure and knowledge. Not only should SLPs consider which languages are spoken by the child, but the amount of time the child hears in each language that can greatly influence the child's vocabulary production (Grech & Dodd, 2007).

#### Specific Language Disorder (SLI)

Children with a Specific Language Impairment (SLI) have significant delays in early language development and have language skills that are below average (Paradis, 2007). A language impairment can affect various areas of language including phonology, syntax, morphology, and pragmatics. Children with a language disorder may have an expressive language disorder that impacts language production and a receptive language disorder that impacts the child's ability to understand language or follow directions.

More specifically, children with SLI are often characterized as having great difficulty producing grammatical morphology that is age appropriate. Children who are typically developing usually take 12 months to transition from non-tense marking morphemes to tensemaking morphemes, while children with SLI show a gap of four years for this transition (Paradis, 2005). A study done by Gutiérrez-Clellen, Simon-Cereijido, and Wagner (2008) found that Spanish-English bilingual children with SLI showed morphosyntactic errors proportionate to monolingual children with SLI, especially when producing tense morphemes (e.g., -ed, -s, &ing). Additionally, just like monolingual children with SLI, bilingual children with SLI can also have vocabulary deficits such as word-finding difficulties (Paradis, 2007). Other aspects of language that can be affected include lexical, written language, and pragmatic skills.

It is important to note that bilingualism is not an additional risk factor for children as there are just as many monolingual children diagnosed with SLI as there are bilingual children (Kohnert, 2010). Additionally, children with a language impairment have difficulty with learning language, they do not have neurological, cognitive, sensory, or emotional impairments (Paradis, 2007). Speech-language pathologists must be familiar with bilingual language development that is typical and atypical in order to accurately diagnose a bilingual child suspected of a language disorder. For a language disorder to be identified, there must be a language deficit in the child's native language and second language (Kohnert, 2010). A bilingual child must demonstrate low language skills in both languages and not just one for a language disorder to be identified. A language difference will be indicated when a child exhibits normal language skills in one language and low language skills in the second language he or she is learning (Kohnert, 2010).

#### **Assessment Challenges**

#### **Standardized Assessments**

Standardized language assessments are commonly used to assess a child's language skills compared to other children his or her age who are typically developing. However, most of the tests have been standardized for white, monolingual children and may not always be representative of minority groups who are cultural and linguistically diverse (ASHA, 2019). Clinicians can incorrectly use standardized assessments to identify a bilingual child as having a language disorder. Standardized assessments do not reflect a child's bilingual language development that differs from monolingual children. Studies also show that typically developing bilingual children can have similar language characteristics to monolingual children with language disorders. For example, a study done by Paradis (2005), revealed that there is an

overlap in the grammatical errors of typically developing children acquiring a second language and monolinguals with SLI. This overlap in linguistic characteristics between ELL and monolingual children with SLI would potentially identify bilingual children with a language disorder when they do not have a language disorder. Therefore, using English standardized language tests with non-native English bilingual speakers may lead to a misdiagnosis of SLI (Paradis, 2005). Based on these findings, SLPs must use caution when considering grammatical morphological errors as an indicator of SLI with bilingual children. Results from standardized assessments should not be used as the only assessment measurement and should be used as an informal measurement when the normative sample is not representative of the child's linguistic and cultural difference (White & Jin, 2011).

When administering standardized assessments, it is important to reduce test bias by considering how familiar the child is with the tasks within the test. Bilingual children may score lower due to lack of familiarity with the vocabulary used in standardized assessments and the type of stimuli presented (Peña & Quinn, 1997). It should be noted that English speaking children are used to labeling or identifying the name of objects when interacting with parents, while culturally diverse children are used to describing the function of objects with their caregivers. Peña and Quinn (1997) studied Puerto Rican and African American children to assess if the familiarity of a task influences the language results of a bilingual child which can lead to a misdiagnosis of a SLI. These authors administered The Expressive One Word Picture Vocabulary Test-Revised (EOWPVT-R) to children. The EOWPVT-R requires children to label pictures and 90% of the bilingual children scored below the norms. The results demonstrated that labeling and vocabulary tests do not accurately identify a language impairment with bilingual children and can lead to overdiagnosis (Peña & Quin, 1997). This is a possibility that

clinicians should be aware of when using standardized assessments with culturally and linguistically diverse children. The type of stimuli represented may not always reflect the child's cultural exposure, experiences, and environment. Therefore, poor performance on language assessments measures are not sufficient to identify a bilingual child as having SLI because poor language performance could also be indicative of a language difference (Peña & Quinn, 1997). Therefore, clinicians must use a combination of methods to complete a valid assessment that will measure all the linguistic skills of a bilingual child.

Ebert, Pham, and Kohnert (2014) conducted a study that also indicated object labeling was an unreliable measure to use with bilingual children was performed by. The study used rapid autonomic naming (RAM) to measure how fast a child can name familiar pictures shown. The results from the picture naming activity demonstrated that typical English speakers named pictures faster and more accurately than either the monolingual SLI group or the typical developing bilingual speakers. Bilingual children may not know the name of an object in English but may know it in their native language making it unfair to assess vocabulary knowledge in only one language (Ebert, et al., 2014). Overall, this study explained how using assessment results that use picture naming tasks may not be representative of the child's communication competency and could instead cause a typically developing bilingual child to be diagnosed as language impaired.

#### **Assessment Recommendations**

#### Language Sampling

During the assessment process, clinicians should collect a language sample in the child's native language and in English to obtain information about the child's language development and differences between languages. Language sampling is a criterion-reference measure used for

analysis of the grammatical structure of a child's mean length utterance, number of different words, and words per minute in oral or written form (Rojas & Iglesias, 2009). This analysis reduces the cultural and linguistic bias that is represented in standardized testing. For example, a study done by Sanchez (2006), demonstrated that reading and writing tasks used for testing Peruvian children's language placed them at a disadvantage; the bilingual children primarily used oral communication within their native communities instead of the testing method of written language that is common in the United States. When comparing syntax and semantics across languages, clinicians should be aware that each language has different syntax structures and form. For example, in Spanish, adjectives come after the noun, whereas in English, adjectives come before nouns. This syntax difference may influence a child's English grammar and sentence structure.

Not only can language sampling be used to assess a child's grammatical and semantic skills, but it can also be used to analyze their pragmatic development including perspective talking and the ability to use language for different purposes (e.g. conversation, narrative, expository; Rojas & Iglesias, 2009). The clinician can assess if a child is able to stay on topic and how they deliver information to the listener. Clinicians can also use a child's narrative sample to assess their story grammar components. Story grammar can be used to analyze how the child describes the setting, event, plan, action, and ending of a given story. Using wordless picture book tasks is a great way clinicians can analyze narrative components and compare them to what is expected to the child's age (Rojas & Iglesias, 2009). However, it is also important to keep in mind that bilingual children may have variations in the narrative story telling due to cultural variations that have influenced their ability to tell stories.

#### **Dynamic assessment**

Clinicians use dynamic assessment (DA) with bilingual children to minimize bias by measuring the child's ability to learn rather than assessing what the child currently knows and has been exposed to. This assessment approach is based on Vygotsky's "zone of proximal development" that evaluates how a child's cognitive trajectory is influenced by social experiences with the help of adults (White & Jin, 2011). Dynamic assessment differs from standardized testing in that the child and the clinician are actively interacting during the assessment process to teach and modify teaching that is individualized to the child. Peña and Iglesias (1992) conducted a study using DA or the test-teach-retest method with 50 bilingual children, some with a language impairment and others who were typically developing, to assess each child's ability to learn object labeling. The results indicated that the typically developing children scored significantly higher on the vocabulary retest than the children with a language impairment. The bilingual children with a language disorder demonstrated greater difficulty learning new concepts and required greater direct teaching to learn concepts (Peña & Iglesias, 1992). Not only can this testing method be used to reduce cultural and linguistic bias, but it also helps differentiate typically developing children from those with a language impairment. Clinicians can use DA to assess how a child will respond to therapy and use feedback by comparing the pre and posttest performance rather than just posttest performance (White & Jin, 2011). DA allows the clinician to adjust teaching strategies based on the child's response and can assist in designing an intervention that is individualized to culturally diverse children (White & Jin, 2011). However, a limitation of DA is that this form of assessment requires subjectivity in administration creating results and interpretations that are less consistent and valid (Peña & Iglesias, 1992).

#### Sociocultural approach

A sociocultural approach is appropriate to use with bilingual children because it considers the social and cultural environment of the individual in relation to the child's language. According to White and Jin, (2011), an important part of this assessment process is acquiring knowledge about the child's family culture, language, socioeconomic status, among other sociocultural factors to reduce bias. During this procedure, the first step is for the clinician to review the child's following documentation: medical, educational, and family history. Clinicians should conduct an ethnographic interview to gather information about family, interactions, child's language skills, and cultural perspective of the family. Clinicians should use a client-centered perspective to emphasize the impact the child's social and cultural environment has on his or her language development. The clinician should also observe the child in multiple settings and with different communication partners to assess each language in a natural setting (White & Jin, 2011). This comprehensive assessment is beneficial in understanding what language the child uses in different settings and to understand the child's overall communication competence in each language.

A disadvantage of the sociocultural approach is that it is time consuming for clinicians. The RIOT procedure includes "review, interview, observe, and test" just as the socio-cultural approach, but also includes post-testing the child in all languages spoken (White & Jin, 2011). The clinician will need to test the child in each language using a collection of informal and formal assessments.

#### Conclusion

When working with bilingual children from diverse backgrounds, SLPs should use a diverse array of assessments to determine if a child has a language impairment. Clinicians who work with culturally diverse children should use informal measures (e.g. language sampling),

dynamic assessment, and the sociocultural approach to accurately assess a child's language skills and communication competence in each language. When working with culturally diverse individuals, SLPs should be aware of family attitudes and provide the appropriate education to the families during the assessment and treatment process. There are many influential factors that should be considered during the assessment process. The following resource manual is intended to further describe the assessment process recommended when working with children whose primary language is not English.

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