EMERGING BILINGUALS: WHAT THE MONOLINGUAL SLP SHOULD KNOW

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Resources

• ASHA “Practice Portal”
  • The goal is to assist audiologists and SLPs by providing best available evidence and expertise in patient care, identifying resources vetted for relevance and credibility, and increasing practice efficiency
  • Provides evidence-based practice resources for practitioners
  • Evidence maps, client & patient handouts, templates and tools, clinical topics, and professional issues related to specific communication disorders

Factors Influencing Second Language Acquisition

• Age of introduction to each language
• Environment in which the languages were acquired
• The emphasis the child’s community or home poses on the importance of the first language
• The child’s motivation towards the second language

Types of Bilinguals

• SIMULTANEOUS
  • Child born into bilingual community
  • One parent native speaker of another language
  • Exposure to both languages before age 3

• SEQUENTIAL
  • Child moves to a new language community
  • Child speaks L1 until school entry
  • Exposure to L2 after the age of 3 or 4

Standardized tests

• Sec. 300.304 (c)(1) Assessments and other evaluation materials used to assess a child under this part
• (i) Are selected and administered so as not to be discriminatory on a racial or cultural basis;
• (ii) Are provided and administered in the child’s native language or other mode of communication and in the form most likely to yield accurate information on what the child knows and can do academically, developmentally, and functionally

“Only by providing culturally and linguistically appropriate services can we provide the quality of services our clients/patients deserve” (ASHA, 2004, para. 3)
Distributed Skills

Distributed skills within and across linguistic domains

- Dominance and Proficiency fluctuate
- At any point in time a single language may not be stronger across all measures, topics, settings

Cross-language associations

- Facilitative &/or competitive
- Determined by:
  - Age, developmental stage, skill in each language, exposure to each language, task demands, language domain & typological features of languages

Individual variation

- Age of exposure to English
- Context of Acquisition
- Absolute & relative proficiency in each language
- As in monolinguals:
  - SES
  - Parent education
  - Home literacy
  - Learning style
  - Aptitude/cognitive ability

Language Exposure

Detailed information on exposure to both languages

- Age of first exposure
- Length of exposure
- Context of exposure
- Who speaks what
  - About how many hours per week
  - Rating of proficiency

Language Exposure

MINIMUM 40-50% exposure to English is required for a period of a full year CONSISTENTLY for fluent conversational skill

Academic language will take another 3-4 years

LEAPQ

Code Switching

Utterances that contain elements from both languages:

- A Spanish Session:
  - es que la niño have it more fun in the night (from Namazi, 2012 in prep)
  - para yo quiere una fish de hace rato.

- An English session
  - aha my tia
  - A mesa

(from Namazi 2012, in prep)
Language Acquisition is Dynamic

- Language is in a state of flux and this is especially evident in children who have been immersed in two cultures & languages.
- A child acquiring 2 or more languages simultaneously will inadvertently mix elements of the languages.
- Structure, syntax & articulation will comingle until the child discriminates & categorizes the differences into distinct and separate languages or categories.

Expectations for Language Development in Bilingual Children

- Words in both languages act as a bridge between the dominant and less dominant languages at ages 18–30 months (Daniel, n.d.)
- Children as young as 18 months can understand and use two languages independently of one another
- Skills may not be equally distributed across languages (Kohnert & Derr, 2004)
- Words and functions in each language vary by topic, context, and communication partners
- Some skills will be present only in the relatively weaker language, and some only in the relatively dominant language (presumably more there)

Hurdles for ALL SLPs

Norm-referenced tests are not appropriate for bilingual children due to:

- Content bias
- Linguistic bias
- Disproportionate representation in normative samples

Content Bias

Content Bias (Laing & Kamhi, 2003)

- Test stimuli, methods, and procedures assume that all children have been exposed to the same concepts and vocabulary or have similar life experiences.
- Typically, assessment stimuli focus on concepts and vocabulary utilized in white middle class settings which puts culturally and linguistically diverse children at a disadvantage.

Linguistic Bias

Linguistic Bias (Laing & Kamhi, 2003)

- Refers to disparity between language/dialect used by the examiner and the language or dialect expected in the child's response.
- Bias can still be present with the use of an same language speaker, interpreter, when you consider dialect or regional/national differences in language usage or vocabulary of the two same language speakers.

Disproportionate Representation in Normative Sample

Disproportionate Representation in Normative Sample (Laing & Kamhi, 2003)

Why do we have a disproportionate representation in normative sample?

- Culturally and linguistically diverse populations are seldom included in normative samples of standardized tests.
- Testing results are invalid because culturally and linguistically diverse children are not being compared to similar peers.
- Standardized tests do not test the full range of bilingual skills, even for tests that included bilingual children in the normative population. (Goldstein, et al., n.d.)
Assessment of Bilingual Children
(Goldstein, et al., n.d.)

To complete a valid assessment, you must:
● Understand the construct you are assessing
● Identify the question you are trying to answer
● Gather data from a variety of sources

Questions to consider:
● What are the child’s strengths/weaknesses?
● What is the child’s learning style?
● What is the child’s ability to learn?
● What type of progress is the child making?

These questions sum to help answer the BIG question: is the child typically developing, or does he/she have a language impairment?

Assessment of Bilingual Children
(Goldstein, et al. n.d.)

For bilingual children, information should gathered on:
● Language history: Amount and length of exposure
● Structure of their non–English language (lexicon, syntax, phonology)
● Age of acquisition (of both languages): sequential or simultaneous acquisition.
● Opportunities for and proficiency of use of both languages
● Socio–cultural characteristics of their community
● Family socio–economic status

Parent Questionnaire
(Anderson, 2004)

Areas of inquiry when interviewing parents:
● Language use by the child at home, school, with peers
● Use of language across topics, contexts, situations
● Language used with the child at home by each family member, at school, by peers
● Changes in use of Spanish & English across time by the child
● Changes in language input for Spanish & English across time
● Parental concern about the child’s language learning ability
● Parental attitude toward maintenance of Spanish skill

Teacher Questionnaire
(Anderson, 2004)

Areas of inquiry when interviewing teachers:
● Present educational placement
● Changes in educational placement across time
● Instruction in each language
● Time spent using each language during class work
● Areas taught in each language
● Literacy (and pre–literacy) skills in each language
● Academic concerns
● Language use by child within school setting
● Language input to the child within school setting
Clinical Implications
- Reporting family concerns and obtaining family history is a valuable part of the evaluation process.
- Combining an analysis of a language sample with parent interviewing and family history is a clinically strong tool for identifying children with language impairment.
- For school-aged children, a teacher questionnaire provides valuable clinical information for the SLP.

Non-Word Repetition
- Relies on short term processing: Older children better than younger children
- Unaffected by language exposure
- Performance affected by:
  - Nonword length
  - Affects kids with PLI more so than typical kids
  - Wordlikeliness: evidence for long-term knowledge
  - Phonotactic structure: articulatory complexity and prosodic patterns

Scoring Methods
Item or phoneme level
- Item: nonword scored on its entirety – binary
  - More clinically efficient
  - Higher sensitivity and specificity
  - A better approach
- Phoneme: each phoneme scored separately → percent phonemes correct
  - More detail
  - High agreement has been found

Dynamic Assessment
To identify the skills that an individual child possesses as well as their learning potential
Emphasizes the learning process and accounts for the amount and nature of examiner investment
Highly interactive and process-oriented

Traditional Assessment (Static)
- Passive participants
- Examiner observes
- Identify deficits
- Standardized

Dynamic Assessment
- Active participants
- Examiner participates
- Describe modifiability
- Fluid, responsive
Test–Teach–Retest

- Most familiar approach
- Differentiates strong and weak language learners.
- Test
  1. Assess child’s current performance
  2. Teach
     - Use mediated learning experience (MLE)
     - Teach, watch how child responds, adjust according
     - Help child develop strategies
     - Observe child’s modifiability
       - Modifiability: description of how child responds to
         MLE
  3. Retest
     - Compare performance to original assessment
     - Assess transfer of strategies

Approaches

- Vary the task/stimulus
- Modify test presentation
- Embed language forms in realistic thematic contexts
  - Assess in naturalistic environment
  - Allow child to perform task to demonstrate knowledge vs. point
    to picture
  - Better at identifying language difference vs. language disorder
- Graduated Prompting
  - Child’s response helps determine which language forms and
    structures to target and how much improvement a child may
    make in intervention.

Dynamic Assessment

(Peña, Quinn, & Iglesias, 1992)

Administered EOWPVT to Puerto Rican children with and without
language impairment (LI) using a test–teach–retest approach to dynamic
assessment.

No difference was found between the language impaired and typically
developing children on pretest measures.

Results of post-test measures indicated:
- Typically developing children earned significantly higher posttest
  scores than the children with LI.
- Observations of the following significantly differentiated LI and
typically developing children.
- Ease of a child’s ability to learn and use new skills presented in
  structured and novel environments (specifically vocabulary).
- Effort required by clinician to teach new skills to child.

Dynamic Assessment

Clinical Implications

- For bilingual children, Dynamic Assessment may
  provide better diagnostic data than standardized
  assessments.
- Clinicians must examine the child’s ability and ease
  to learn new skills.
- If the child takes more effort in learning new skills, it
  may be an indicator of a language disorder.
- Assessment is ongoing and responses to intervention
  need to be tracked in order to correctly identify
  bilingual children with language disorders.

Language Sampling

(1 Gutierrez-Clellen, Restrepo, Bedore, Peña, & Anderson, 2000)

- Examined socio-linguistic influences.
- Discussed obtaining language samples
  from Spanish-speaking children from
different bilingual and dialectal
backgrounds.
- Investigated procedures currently
  available for researching and practicing
clinicians.
Narrative Sample

- Story retells using wordless picture books
- Standard protocol and resources available at Saltsoftware.com
- Brief 3-5 minute samples typically averaging 10 or more utterances are adequate for analysis
- 3 dialect-neutral language measures are recognized as indicators of oral language development:
  - MLUw
  - NDW
  - WPM

MLU-w

- Mean Length of Utterance in words – A measure of syntactic complexity

- Recommended in cross-linguistic and bilingual populations
  - Maintains cross-language consistency

NDW

- Total Number of Different uninflected Words
- A measure of lexical diversity and productivity
- Developmentally sensitive measure of narrative productivity

WPM

- Words per Minute
- A measure of language proficiency for emerging bilinguals
- Correlated with age and increasing L2 proficiency

Infants and toddlers should be using the following major communicative functions by 12 months of age:

- Social interaction: initiate or maintain a social game or routine, provide comfort, show off, tease
- Behavior regulation: regulate the behavior of others to obtain and object, get them to carry out an action, stop someone from doing something
- Joint attention: direct other's attention in order to comment upon, provide information about, or acknowledge shared attention to an object or event

(Crais, 2011)
The rate of intentional communication is predictive of language outcomes in children with developmental delays.

- Higher rates of nonverbal intentional communication are associated with improved language outcomes
- Norms:
  - 12-month olds communicate intentionally 1x/minute
  - 18-month olds communicate intentionally 2x/minute
  - 24-month olds communicate intentionally 5x/minute
- Joint attention skills have been shown to predict comprehension and production skills

Factors that can help distinguish late talkers from children with language disorders (other than vocabulary size):

- Rate of vocabulary growth: Children whose vocabulary growth was slowest between 24 and 36 months of age had poorer grammatical outcomes at age 3 than other late talkers
- Sound development
- Comprehension
- Social skills
- Cognitive development
- Gesture skills
- Gesture use can help predict which children will eventually “catch up” to peers
- Play skills
- Imitation skills

The Importance of Play
(Crais, 2011)

- Play skills: the level of symbolic play exhibited by young children predicts their later language skills
  - Ex. Symbolic play skills at 24 months were predictive of receptive and expressive language at 36 months
- Play also impacts types of interactions and opportunities a child may have
- Helping young children develop play skills gives both children and caregivers increased opportunities for interactions and expanded context for communication
- Profiling play skills along with other developmental areas helps identify the child’s strengths and challenges and can support diagnostic and intervention planning decisions
  - Ex. Comparing play as a non-linguistic benchmark against expressive/receptive language skills

Assessing Play
(Crais, 2011)

- Informally: observation of parent/child interaction
- Checklists: Carpenter’s Play Scale (1987), Cashy’s Developmental Assessment of Play Scale (2003), Westby’s 7 stages of symbolic play, CSBS (more formal means of assessing combinatorial play, such as stacking blocks, and symbolic play and gestures to allow comparison across domains, such as play vs. gestures vs. words)
- Note: play skills will vary based upon characteristics of play partners, type of toys available, and type of play
- Cultural differences in play: what is the purpose of play?
  - To learn
  - For entertainment
  - Parent participation in play varies
  - Labeling and describing child’s play vs. directing child’s play

Primary Language Impairment and Bilingual Language Learners
(Kohnert, 2010)

- If primary language impairment (PLI) occurs at the same rate in bilingual children as monolingual children, then 7% of bilingual language learners at PLI.
  - No difference in severity between 6- to 10-year old monolingual and Spanish-English bilingual children with PLI (comparison for each group was typically developing children matched for age and language background) (Windsor, et al, 2009)
- Comparing monolingual and bilingual children’s performance. monolingual children with PLI and typically developing bilingual children demonstrate similar grammatical errors and poor scores on single-language vocabulary measures.
- Comparing a bilingual child with suspected PLI vs. typically developing bilingual peers with similar cultural and language learning experiences there are significant and variations due to expected variation in any group of children as well as differences in levels of language proficiency.
Characteristics Shared by Students with LD and ELL (Kohnert, 2010)

- Uses gestures rather than words
- Speaks infrequently
- Speaks in single words or phrases
- Has poor recall
- Has poor comprehension
- Has poor syntax
- Has poor vocabulary
- Has poor pronunciation
- Has difficulty sequencing ideas and events
- Has short attention span
- For English Language Learners without disabilities, these characteristics will appear ONLY when L2 is being used. These are typical characteristics of L2 acquisition process.

Intervention in the Home Language (Kohnert, et. al., 2005)

- Systematic support for home language of children with language impairment (LI) is critical to long-term success of language intervention
- Quality and quantity of positive, reciprocal language-based interactions supports child's success in processing /acquisition of forms unique to each language
- Promotion of use of home language is motivated by:
  - Social, emotional, cognitive development within cultural context of family
  - Language as major vehicle for communicating family’s values and expectations, expressive care and concern, providing structure and discipline, and interpreting world experiences

Intervention in the Home Language (Kohnert, 2005)

- Typically developing second generation children of immigrant parents have social-emotional and educational advantages when they have learned home language in addition to English
  - Higher self-esteem
  - Better relations with family members
  - Greater academic aspirations
- Young children who have not had sufficient opportunities to develop cognitive skills in L1 before learning L2 are at greater risk for academic delays than peers who developed L2 more fully
- Learning and retention of L1 (home language) is based upon:
  - Opportunities to learn and use it
  - Motivation to speak it
  - Degree of prestige associated with L1 use in immediate cultural and majority communities
- L1 learning may backslide or be incompletely acquired without support

Intervention in the Home Language (Kohnert, 2005)

For LI children, slower pace of language learning combined with lower “starting point” when L2 (majority language) is acquired means that these kids will need more input into home (L1) language than TD peers to develop L1 appropriately
- KEY: facilitating home language should be fundamental objective in intervention programs of preschool aged children with LI
- Instruction in home language during preschool years supports later academic achievement in majority language and generalization of skills
- Studies show that intervention in 2 languages revealed capacity of bilingual kids with LI to learn 2 languages to a similar level of monolingual peers with LI (who used 1 language)
- TD school-aged children who learned to read first in L1 (and then L2) had an advantage in academic achievement and reading compared to peers who learned to read only in L2

Intervention in the Home Language (Kohnert, 2005)

- If we want young children to develop skills necessary to be successful communicators in all language environments, we should provide direct support for EACH language
- Instructing caregivers to select 1 language of the 2 upon which to focus in intervention may result in increased effort and processing time on part of adult, and may negatively affect quantity and quality of interactions with child
  - Codeswitching may be primary speech community of the home
  - This is typical! Children codeswitch at same proportion as their caregivers

Parent Education (Kohnert, 2005)

- So how do we provide intervention in languages we don’t speak?
  - Train parents to use specific language facilitation strategies and use multiple instruction methods (written materials, videotaping, demonstration, COACHING)
  - Suggest activities that are defined (singing, book reading) and that lend themselves to interactions in a single language (vs. mixing languages in conversation)
  - Peer-mediated strategies
    - Pairing child with LI with TD child who uses same home language for play and facilitated interactions
- NOTE:
  Some strategies recommended to support language development are based upon research in majority population in US. These may not be consistent with family’s cultural values (ex. “following the child’s lead”)

NOTE:
Cognates in Vocabulary Therapy
Older School-Age Children

What are Cognates?
- Crosslinguistic Cognates
  - Share form (orthography or phonology) and meaning in both languages
    - Accidente – Accident
- Translation Equivalents
  - Share meaning NOT form
    - Silla – Chair
- Degree of overlap varies
  - Banana – Banana
  - Alarm – Alarma
  - Blouse - Blusa

Research with Adults
- Bilingual adults are faster & more accurate in processing written and spoken cognates compared to non-cognates of similar length, difficulty, or frequency (Sanchez-Casas & Garcia-Albea, 2005)
  - Benefit is greatest when stimuli presented in the bilingual’s WEAKER language (e.g. Dufour & Kroll, 1995)
  - Cognate advantage for picture naming shown in bilingual adults with Aphasia (Kohnert, 2004)

What about in Children?
- Sensitivity associated with:
  - Age/grade level
  - Reading & academic skills
  - Degree of visual & phonological overlap
  - L1 ability
  - Previous knowledge of word/concept in the L1
- Spanish Immersion students perform better than English monolinguals on cognate items of English PPVT-R (Cunningham & Graham, 2000)

The Research
- Kelley & Kohnert (2012)
  - Are TD Spanish-English bilinguals more likely to identify or name cognate versus noncognate stimulus items?
  - What learner variables are associated with cognate performance on receptive and expressive vocabulary tests in English?

Participants (Kelley & Kohnert, 2012)
- 30 Spanish-English emerging bilinguals between 7;10 and 13;0
  - L1, Spanish at home only
  - L2, English at school & community
  - No educational instruction in Spanish
  - 4 to 8 years of consistent exposure to English
Is there a Cognate Advantage?

- **YES**
- As a group, children identified and named more spoken vocabulary items that were cognates
  - Indicates Spanish to English, phonological-to-lexical-semantic bootstrapping
  - Less well-known words more likely to benefit from this advantage

Kohert & Kohnert, 2012

Clinical Implications

- Vocabulary development is a key area of persistent weakness in children with LI
  - Word categories, functions, attributes & practicing verbal analogies
  - Tier 2 vocabulary

- In emerging bilinguals, cognates can be an additional area to target in treatment

Kohert & Kohnert, 2012

Learner Variables & Cognate Performance

- For identification, older children had greater benefit from cross-language phonological overlap

- For naming, children with higher nonverbal IQs had greater benefit

Clinical Implications

- Careful selection of stimuli, SLPs can take advantage of cross-language correspondences
  - E.g. Tier 2 vocabulary
  - Brilliant – Brilante

- E.g. Math vocabulary
  - Distance – Distancia

- Use cognates in spoken & written treatment activities
  - Venn diagrams or other visual organizers to compare/contrast

Kohert & Kohnert, 2012

Bibliography


Bibliography


