General Outline for today’s session

I. Background Stats: Why is this important?
II. Acculturation: What is it?
III. Development of Bilingualism
IV. Language Difference vs. Language Disorder
V. Proper Bilingual Assessment

Background Information
Why is this issue important?
Continuous immigration throughout the globe is reflected in a greater diversity of languages spoken in many communities throughout the United States and many other nations.

As many as 200 different languages are spoken in Chicago alone, 140 in California, 80 in Palm Beach, 67 in Tempe, AZ, and 60 in Plano, TX.

School-aged children speaking a language other than English in the United States increased rapidly between 1979 and 2007, from 3.8 to 10.6 million. (National Center of Education Statistics [NCES], 2007)

79% of those almost 11 million students were Spanish speakers and were considered to be English language learners (ELLs) (National Clearinghouse for English Language Acquisition [NCELA], 2008a)
Latino are the largest linguistic ethnic minority group in the United States (Ramirez & de la Cruz, 2002);

However, few assessment measures have been created/adapted for this Spanish-speaking population (Ardila, 2007; Echemendia & Harris, 2004).

The reading gap between Hispanics and whites has not changed significantly in the last 17 years - more than 25 points each year.

Nationwide efforts to reduce this academic achievement gap have been unsuccessful. (National Center for Education Statistics, 2008)

Poor assessment procedures may be partly to blame.

Over the past decade, the Latino population in the United States has increased four times faster than the general population (Guzman, 2001). Children under the age of 15 account for 30.5% of the Latino population (National Center for Health Statistics, 1999).
The Latino population, already the nation’s largest minority group, will triple in size and will account for most of the nation’s population growth from 2005 through 2050. Hispanics will make up 29% of the U.S. population in 2050, compared with 14% in 2005.


In a national survey, 82% of U.S. neuropsychologists who offered services to Hispanics self-reported inadequate preparation to work with this population (Echemendia, Harris, Congetti, Diaz, & Puente, 1997)


WHAT PSYCHOLOGY IS DOING
Pearson Survey

- In the spring of 2010, conducted a survey of customers who had purchased a Spanish version of a psychological assessment tool.
- Characteristics of survey group:
  - Half of the group made up of Clinical and School psychologists.
  - About one third worked in schools and about another third in private practice or hospital setting.
  - Almost 50% of respondents from Texas, California, New York, and Florida
  - Almost 75% of respondents labeled themselves proficient or fluent in reading, writing, and speaking Spanish.

Pearson Survey

- Notable Findings:
  - The clients being assessed were generally under the age of 20 with 68% of respondents working with clients between 4 and 7 years of age.
  - Almost a third of clients assessed were of Mexican Origin
  - 86% of respondents conducted cognitive/intelligence/ability testing
  - 80% conducted behavior assessments
  - 73% conducted achievement testing

Pearson Survey - Top Tests

- 43% BASC2 Spanish
- 39% Bateria-III Cognitive
- 39% Bateria-III Achievement
- 36% Vineland-II Spanish
- 33% WISC-IV Spanish
- 32% EIDI Spanish
- 27% Conners Spanish
- 24% ABAS-II Spanish
- 22% WFAI Spanish
- 16% BAI Spanish
- 14% TAPI
- 13% PLS-4 Spanish
- 13% WAIS-III Spanish

- 13% BVAT
- 11% WAIS-III Spanish Mexican ed.
- 11% MMPI-A Spanish
- 10% Test of Phonological Awareness Spanish
- 10% ROWPVT Spanish
- 10% AHM-III Spanish
- 10% EOWPVT Spanish
- 9% Braenken-3 Spanish
- 9% CELF-4 Spanish
- 9% EWAIII
- 9% NEUROPSI Spanish
- 9% WMS-III Spanish
Pearson Survey

- 21% of respondents very satisfied with tests; 59% somewhat satisfied.
- #1 complaint, assessment tools do not have Spanish norms
- Top Three Important Areas for Spanish Assessments
  1. Validity & Reliability
  2. Spanish Norms
  3. Availability in Spanish and English

Pearson Survey

- When assessing your Spanish-speaking clients do you typically use a translator?
  - 17% said Yes, Spanish version with a translator
  - 8% said Yes, English version with a translator
  - 2% said they outsourced testing to bilingual professional
  - 73% said no translator used

Hispanic Neuropsychological Society Survey

- Laura Renteria, PhD conducted survey for the 2010 Hispanic Neuropsychological Society (HNS) Conference
- Invitations sent to 188 HNS members, 158 responded to the survey
- 63.3% Female, 36.7% Male
- Average age: 43 (SD 11.42)
- Ethnicity
  - 55.7% Non-Hispanic White
  - 33.5% Latino/Hispanic
  - 3.8% Biracial
  - 1.9% African American
  - 2.5% Asian Pacific Islander
Hispanic Neuropsychological Society Survey (2010)

- **Primary Work Setting**
  - 37.4% Private Practice
  - 35.5% Hospital
  - 13.3% University/High Schools
  - 12.7% Other

- **Client Population**
  - 61.2% Adults; 17.2% Children; 21.7% Adults & Children

- **Spanish Fluency**
  - 62.4% rated themselves fluent in Spanish
Hispanic Neuropsychological Society Survey (2010)

- 72.8% Do not administer acculturation measure

<table>
<thead>
<tr>
<th>Acculturation Measures</th>
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<tbody>
<tr>
<td>72.8% Hispanic Acculturation Scale for Hispanics (Garcia et al., 1990)</td>
</tr>
<tr>
<td>35.6% Acculturation Scale for Mexican Americans (Hurtado, 1985)</td>
</tr>
<tr>
<td>26.8% Short Acculturation Scale for Hispanic Adults (Phinney et al., 1990)</td>
</tr>
<tr>
<td>24.8% Language and Acculturation Inventory (Rivera et al., 1988)</td>
</tr>
<tr>
<td>18.8% Acculturation Scale (Crosby et al., 1990)</td>
</tr>
<tr>
<td>12.8% Acculturation Scale for Children (Wang et al., 1988)</td>
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<tr>
<td>6.8% Other: Described through Clinical Interview</td>
</tr>
</tbody>
</table>

Hispanic Neuropsychological Society Survey (2010)

IQ & Global Functioning

<table>
<thead>
<tr>
<th>% IQ and Global Functioning</th>
<th>Commercially Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.4% Sperry Standard Progressive Matrices</td>
<td></td>
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<tr>
<td>10.3% Test of Nonverbal Intelligence - Third Edition (TONI-III)</td>
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<tr>
<td>9.3% Woodcock-Johnson: Spanish Edition (WJ-III)</td>
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<tr>
<td>8.3% Wechsler Intelligence Scale for Children (WISC)</td>
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<tr>
<td>7.3% Wechsler Adult Intelligence Scale - Revised (WAIS-III)</td>
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<tr>
<td>6.3% Wechsler Memory Scale - Third Edition (WMS-III)</td>
<td></td>
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<tr>
<td>4.3% Spanish WJ-III, Spanish WJ-III, Spanish WJ-III, Spanish WJ-III</td>
<td></td>
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<tr>
<td>3.3% Spanish WJ-III, Spanish WJ-III, Spanish WJ-III</td>
<td></td>
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<tr>
<td>1.3% Spanish WJ-III, Spanish WJ-III, Spanish WJ-III</td>
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<tr>
<td>1.3% Spanish WJ-III, Spanish WJ-III, Spanish WJ-III</td>
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Hispanic Neuropsychological Society Survey (2010)

Academic Achievement

<table>
<thead>
<tr>
<th>% Achievement</th>
<th>Commercially Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.4% Bateria III Woodcock-Munoz: Pruebas de Aprovechamiento (Bateria-III)</td>
<td></td>
</tr>
<tr>
<td>12% Bateria III Woodcock-Munoz: Pruebas de Aprovechamiento (Bateria-III)</td>
<td></td>
</tr>
<tr>
<td>10.8% Woodcock Language Proficiency Battery - Revised</td>
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</tbody>
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Hispanic Neuropsychological Society Survey (2010)
Hispanic Neuropsychological Society Survey (2010)

Language Processing

<table>
<thead>
<tr>
<th>%</th>
<th>Language – Commercially Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.0</td>
<td>Test de Vocabulario en Imaginario Precolombino (TVP)</td>
</tr>
<tr>
<td>18.4</td>
<td>Batterie Neuropsychologique en Espagnol (BNE)</td>
</tr>
<tr>
<td>10.5</td>
<td>Prueba de Domenico Rosten</td>
</tr>
<tr>
<td>8.5</td>
<td>Multilingual Aphasia Examination, 5th Edition, Spanish (MAE)</td>
</tr>
<tr>
<td>5.1</td>
<td>Clinical Evaluation of Language Fundamentals—8th Edition, Spanish (CELF-4)</td>
</tr>
<tr>
<td>5.1</td>
<td>Bilingual Verbal Ability Test</td>
</tr>
</tbody>
</table>

Emotional Functioning

<table>
<thead>
<tr>
<th>%</th>
<th>Emotional – Commercially Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>40.4</td>
<td>Beck Depression Inventory – Second Edition, Spanish (BDI-II)</td>
</tr>
<tr>
<td>36.7</td>
<td>Beck Anxiety Inventory, Spanish (BAI)</td>
</tr>
<tr>
<td>35.5</td>
<td>Minnesota Multiphasic Personality Inventory – Second Edition, Spanish (MMPI-2)</td>
</tr>
<tr>
<td>21.7</td>
<td>Personality Assessment Inventory, Spanish (PAI)</td>
</tr>
<tr>
<td>19.6</td>
<td>Symptoms Checklist 90-R, Spanish</td>
</tr>
<tr>
<td>19.3</td>
<td>Milieu Clinical Multiaxial Inventory – 3rd Edition (MCMI-III)</td>
</tr>
<tr>
<td>18</td>
<td>Connor's Adult ADHD Rating Scales, Spanish (CARS)</td>
</tr>
<tr>
<td>8.6</td>
<td>Buss–Hayne State-Trait Anxiety Scale, Spanish (BTS)</td>
</tr>
<tr>
<td>7</td>
<td>Trauma Symptom Inventory, Spanish (TSI)</td>
</tr>
</tbody>
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Strengths

- Growing number of measures available that are paying attention to the effects of low or limited education
- Increase in the size of samples used for normative data.
Hispanic Neuropsychological Society Survey (2010)

Weaknesses
- Validity of many tests is not examined
- Tests adapted from English to Spanish are not necessarily fair
- Many measures are outdated and have small sample sizes
- Many tests do not meet Standards for Educational and Psychological Testing (1999)
- Many tests difficult to obtain

Quotes from HNS Survey

Most supervisors...expect results to be as clear cut as when working with English speaking patients. Frankly results are usually a mess, usually because the available tools are inadequate and because extenuating circumstances such as low levels of education confound results incredibly.

As a Latino myself I find it hard to explain to people that I don't want to work with this population any more.

--Anonymous Survey Respondent

Summary

- School system and Nation as a whole not prepared for the demographic changes that are coming.
- Psychologists with the proper training are in the minority.
- Assessment tools as a whole are not up to standard.
What to do?

1. Understand acculturation issues as they pertain to assessment.
2. Learn how bilingualism develops
   - Including known issues as it pertains to assessment.
3. Learn proper assessment techniques.

Acculturation

Group Activity

1. Get into a small group of about 3-6 people.
2. Think about a group of Extra Terrestrials or Monsters from a well known movie.
3. Ask yourselves:
   a) What are some of the challenges that group will face if they decide to live amongst us humans?
   b) What are some of the challenges you would face if you had to live on their world?
• **Acculturation** focuses on the process of psychological change in values, beliefs, and behaviors when adapting to a new culture.

• Influence of Acculturation on Psychotherapeutic work:
  - Family conflict
  - Unfamiliar with demands (e.g. Timed tests; retelling a story)
  - Testing materials (e.g. Bubbling in answers)
  - Unfamiliarity with stimulus (e.g. Memory test)
  - Conflict due to cultural identity (next slide)

- These can influence assessment at all tiers of RTI.

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**Biculturalism / Cultural Identity**

- What is cultural identity? Biculturalism?
- Sue and Sue (1999) revised a model of minority identity development that was originally formulated by Atkinson Morten, and Sue (1989).

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**Stages of Minority Identity Development**

- **Stage one** the client assumes a stance of conformity toward the majority culture with a deprecating attitude toward the self and cultural group.
- **Stage-two** clients experience ambivalence toward their own culture and the majority culture.
- **Stage three** the client appreciates the minority group culture while deprecating the majority culture.
Stages of Minority Identity Development

- **Stage-four** clients are able to sustain positive views of the minority culture while reconsidering the basis for devaluing the majority culture.
- **Stage five** the client is able to fully appreciate minority status while valuing selected aspects of the majority culture.

Other Cultural Factors

- Role of family
  - Traditional Male/Female roles
- Locus of Control
- Response to authority
  - Eye Contact
  - Aim to please
- Individualism vs. Communalism
- Expected role of therapist
  - Cadence of Conversation
- Depth of disclosure
- Personal space

Summary

- Acculturation factors can unduly influence results from testing.
  - Efforts should be made to reduce the effects of these cultural factors (i.e. EDUCATE).
  - Poor test performance can be due to lack of experience.
  - Recognize that acculturation factors are what makes testing bilingual children “messy.”
- Educate supervisors that bilingual testing takes more time.
- All cultural factors can influence assessment at all tiers of RTI.
Bilingualism

Best practices in bilingual assessment
- IDEA amendments, 2007
- Service delivery with multicultural populations
- American Speech-Language-Hearing Association
- Assessment of Bilingual Learners: Language Difference or Disorder?
  Celeste Roseberry-McKibbin
- Interpreters and Translators in Communication Disorders
  Hervier Langdon
- Bilingual Phenomena: Determining a Language Difference vs. a Communication Disorder
  Doreen González, Region 4 Education Service Center
- NAEH Education Paper: Professional Considerations for Improving the Neuropsychological Evaluation of Hispanics
  Tedd Judd, et al.
- Multiple sources from the research of Pena, Iglesias, Goldstein, and Bedore

Over-representation of minority children in special education programs
- Inappropriate referrals
- Lack of bilingual support services
  - Bilingual education
  - English as a second language training
- Cultural Factors
  - Child’s lack of experience with testing “scripts”
- Response to intervention
  - Poor understanding of effects of bilingualism
  - Testing may be picking up language deficit rather than learning deficit.
Second language acquisition and bilingualism - Terms to know

- L1 and L2
- Proficiency
- Dominance
- Simultaneous bilingual
- Sequential bilingual
- Acquisition patterns of typically developing children

L1
- First language
- Primary language
- Language of the home
- Social language

L2
- Acquired second
- Acquired later (when is “later?”)
- May be poorer than, = to, or better than L1
Language Proficiency

- Has to do with the overall efficiency with which a language is used.
- Proficiency is developed differently for each element of a language.
  - reading, writing, comprehension, speaking, etc.
- Also known as Fluency

Language Proficiency

- BICS vs. CALP
  - Basic Interpersonal Communication Skills (BICS) are language skills needed in social situations. It is the day-to-day language needed to interact socially with other people.
  - Cognitive Academic Language Proficiency (CALP) refers to formal academic learning. This includes listening, speaking, reading, and writing about subject area content material. This level of language learning is essential for students to succeed in school.

Dominant Language

- Has to do with the language an individual is most proficient in or uses most often.
- Not necessarily the first language learned
- Also known as Primary Language
Simultaneous vs. Sequential Bilingual Learner

- **Sequential Bilingual Learner:**
  - The individual acquires L2 after L1 has been established (usually by age 3).

- **Simultaneous Bilingual Learner:**
  - The child learns two languages starting at infancy.
  - There is no evidence that simultaneous acquisition of a language causes impairments.

Simultaneous Learner

- In simultaneous learners, each language develops autonomously

Simultaneous Learner

- Simultaneous learners appear to reach key language milestones at the same time as monolinguals (Paradis, 2000; Deuchar and Quay, 2000; Comeau and Genesee, 2001; Genesee, 2002a).
- However, like in monolingual children, there is variability as to when those key milestones are achieved.
  - Hence a delay warrants monitoring not an automatic label of impairment.
Simultaneous Learner

- If additional language is not supported by the community, then additional efforts are needed to develop and maintain proficiency.

Sequential Learner - Four stage development (Tabor and Snow, 1994)

- **Stage 1: Home use**
  - Child will speak home language even when others around them do not understand.

- **Stage 2: Nonverbal Period**
  - Rarely speak and use non-verbal gestures.
  - Period of active language learning.

Sequential Learner - Four stage development (Tabor and Snow, 1994)

- **Stage 3: Telegraphic and Formulaic Speech**
  - Child starts experimenting with new language.
  - Telegraphic speech - use one or two words to express idea. (e.g. Me hungry)
  - Formulaic speech - repeating unanalyzed chunks of words or phrases. (e.g. Lookit)

- **Stage 4: Productive Language**
  - Child starting to actually use the language
  - Simple language at first; lots of mistakes
Sequential Learner - Four stage development (Tabor and Snow, 1994)

- Stages are not mutually exclusive.
- There is a natural ebb and flow into various stages.

Threshold Hypothesis

- For Sequential Learners, a minimum level of proficiency is required in one language in order to achieve the positive cognitive growth associated with the addition of another language.
- Poor development of the L2 or both L1 and L2 may result because the L1 was not sufficiently developed to support the additional development of L2.

Cross linguistic influences

- When two languages come into contact, one language may influence the other or both languages might affect each other.
- These can be a part of the normal process of acquiring a second language.
Communication acts considered normal and appropriate for Sequential Learners

• Arrest
• Attrition (language loss, language forgetting)
• Avoidance
• Language alternation
  - Code mixing
  - Code switching
  - Borrowing

• Language non-use
  - Nonverbal period
  - Silent period
• Over-generalization
• Hesitation
  - Pause phenomenon
  - Dysfluency
• Transfer

- If an assessor is not aware of these normal phenomena, they can mislabel an individual as language disordered.
  - This is particularly important when assessing children during RTI screenings and assessments.
Attrition

- Language loss and language forgetting
- A reduction in proficiency occurring in linguistic competence and performance
- Simultaneous bilingual: proficiency decreases in one of the languages
- Sequential bilingual: performance in L1 can decrease when L2 is introduced
- Attrition occurs in stages
- Receptive skills tend to remain intact

Avoidance

- A specific element of a language is not used
- Simultaneous learner
  - Word avoidance
  - Compensatory strategy used during attrition
- Sequential learner
  - Various grammatical elements may be avoided
  - Best predictor of what a learner will avoid is the difference between L1 and L2

Language alternation

- A change is made from one language to another
  - Code mixing
    - Child is unaware that they are using elements of two languages.
    - Possibly due to limited proficiency
    - For some, this is their language (e.g. Spanglish)
  - Code switching
    - Individual is aware they are using two languages
  - Borrowing
    - Individuals uses element of other language
      - E.g. The French word “Coup”
Language non-use

- Nonverbal period; silent period
- L2 is not used for communication purposes
- Child may be intently listening and learning L2
- Lack of comprehension of L2 limits use of L2
- Psychological factors

Overgeneralization

- A language rule is applied in an unrestricted fashion
- L2 rules are overgeneralized
  - “I don’t know what is it”
  - “I eated a cake.”
- Limited repertoire of modifiers
  - “I have small money for I have little money”

Transfer

- Elements of one language is used in another language. (aka Interference)
  - Syllable structure (pic-a-nic, esilly)
  - L1 syntax in L2: the house big for the big house
  - Lexical transfer: parkiar for estacionar (park)
  - Pragmatics: listening rather than asking questions
Fossilization

• An inaccurate rule stabilizes to the point of continual usage
• Fossilized forms are items or rules that a speaker will keep no matter what the age of the learner or the amount of explanation and instruction received in L2

Backslide

• Although consistent use of a fossilized form has been demonstrated, the bilingual individual begins to use the correct form, only to eventually return to the fossilized form.
  - Temporary
  - Re-emerge in productive performance, even when seemingly eradicated

U-Shape

• After having attained a certain level of proficiency, the bilingual individual regresses only to eventually return to the previous level of proficiency
Acquiring more than one language...

- Is a lifelong complex task
- Much individual variation
- Developmental trajectory is not uniform (skills ebb and flow over time)
- Skills are used differently with different people, to accomplish different purposes and tasks

Acquiring more than one language...

- Gains in receptive language precede expressive language
- Vocabulary learning does not always transfer

SO WHEN IS IT A LANGUAGE DISORDER?
Problematic Communication Behavior

- Difference
  - Not speech/language impaired
- Disorder
  - Speech/language impaired

Rule Out Before Diagnosing a Disorder or Impairment

- Length of residence in the United States
  - Have they had much time to acculturate?
  - How much exposure to English?
- Consistent Attendance
  - Have they attended school consistently?

Rule Out Before Diagnosing a Disorder or Impairment

- Uses of Language
  - Does the culture use language differently (e.g. retelling a story)
- Peer Comparison
  - Is the child learning at the same rate as other students with similar experiential and linguistic backgrounds?
  - How about compared to siblings?
    - Use parent and teacher reports
Rule Out Before Diagnosing a Disorder or Impairment

- Health and Developmental Factors
  - E.g. Developmental delays, malnutrition, vision, hearing, emotional handicaps.
  - Parents may also be good source of information.
- Types of Bilingual program attended
  - Did the child receive instruction in both languages?
  - What instructional modifications were made?

Principles to follow in determining difference vs. impairment

1. Consider source of information
   a. Is the informer culturally and linguistically competent?
   b. How well do they know the child?
   c. How well are they informed about assessment principles?
2. Use screeners and assessments for appropriate purposes.
3. Use culturally and linguistically appropriate measures.

4. Use more than one test whenever possible.
   - Use formal and informal testing.
5. Impairment should be evident in both languages.
6. Pattern of impairment in each language is similar to that of monolinguals.
7. Do not use standardized tests normed on monolinguals only.
8. Involve more than one professional.
Summary

• Bilinguals are not “two monolinguals in one”
• Need to examine
  - skills in both languages
  - how bilinguals use each language
  - How skills in each language are maintained (or lost)

Summary

• Assessors should take into consideration various language factors unique to bilingual individuals before determining the presence of a language disorder
• Once all factors have been considered and, when possible, remediated, then use the results of both formal and informal testing in both languages to determine the presence of a disability/impairment/disorder.

PROPER ASSESSMENT TECHNIQUES
When testing intelligence or personality...

- keep in mind that you are testing Western Intelligence, focuses on acquiring knowledge, and Western definitions of Personality.
  - Eastern intelligence often incorporates aspects like interpersonal skills and humility for both intelligence and personality measures.
- Remember factors mentioned earlier (e.g. timed tests, testing format, etc.)

Basic Procedures During Assessments

- Determine if you are competent
- Determine if high stakes vs. low stakes
- Select appropriate measures
- Determine level of acculturation
- Determine language proficiency
- Using an interpreter/ psychometrist
- Test in both languages
- Interpret results keeping in mind cultural and linguistic factors

Determining Competency

- Do you speak the client’s primary language fluently?
  - If not, refer to another who is (optimal choice) or,
  - If referral not available, obtain the services of a properly trained interpreter.
- Obtain training in pertinent cultural and linguistic factors.
  - Good job, you have a head start on this one!
  - Cultural and linguistic factors vary for all cultures.
Determining Competency

- Do you understand your own cultural perspectives and biases and the potential impact of these on services rendered?
  - Are you biased towards rectifying some ethnic injustice?
  - What are your experiences with being bilingual / monolingual?
- Do you understand the nature of cross-cultural communication?
  - How different is your culture from that of the client?

High Stakes vs. Low Stakes

- Determining the potential uses of results can help determine how strictly one should adhere to all the factors mentioned today.
  - **High Stakes**: the results of testing will be used to determine the receipt of specific services. Improperly obtained results can be detrimental to the individual tested.
  - **Low Stakes**: the results of testing are used to determine rough estimates of functioning or will be used only in specific settings where limitations of results are clearly understood.
Select appropriate measures

- Are the norms appropriate?
  - Norms should represent population being tested
  - If not, this should be noted in the report

- Adapted and translated appropriately?
  - Adaptation => were the item's difficulty and cultural relevance changed.
  - Translation => were the items back translated? And what regional dialect was used?
  - Trend is for publishers to acknowledge this in manuals and test descriptions

Select appropriate measures

- Is the test validated for the purposes for which it is being used?
  - English IQ test with non-English speaker will not measure IQ but rather language ability; therefore, invalid use of test
  - However, valid if the purpose of testing is solely to determine level of functioning as compared to English speakers (i.e. not for determining disability).

- Is test designed for the level of education of the person being tested?

Select appropriate measures

- There are no perfect measures... yet!
  - Heterogeneity of Latinos and other ethnic groups difficult to capture in norms.
  - Regional differences in language.
  - Difficult to capture immigration status.
  - Immigration experience different for different cultural groups.
  - Effect of SES difficult to tease out for all the different variations of the above factors.
Select appropriate measures

- Best Choices for now:
  - WISC-IV, Spanish
  - WAIS-III and WMS-III, Spanish Norms
    - Letter-Number Sequence should be substituted (Renteria, Tinsley, & Pliskin, 2007).
  - Woodcock Muñoz Cognitive and Achievement tests
    - Some limitation if using both
    - NEUROPSI Screener (broad measure of cognitive functioning)
    - NEUROPSI Attention & Memory
    - Bilingual Verbal Ability Tests (BVAT)
      - Multiple languages, US norms

Select appropriate measures

- Best Choices for now:
  - Personality Assessment Inventory - Spanish (PAI)
  - Minnesota Multiphasic Personality Inventory - 2 (MMPI-2)
    - Susceptible to some bias
  - Behavior Assessment System for Children, Second Edition (BASC-2)
  - Symptom Checklist - 90 - Spanish
  - Beck Depression Inventory - II - Spanish
  - Beck Anxiety Inventory - Spanish

Select appropriate measures

- Best Choices for now:
  - Weschler Nonverbal Scales of Ability (WNV)
  - Test of Nonverbal Intelligence - 3 (TONI-3)
  - Comprehensive Test of Nonverbal Intelligence - 2 (CTONI-2)
  - Raven’s Standard Progressive Matrices
  - General Ability Measure of Adults (GAMA)
  - BETA - III
  - Universal Nonverbal Intelligence Test (UNIT)
Select appropriate measures

- **Best Choices for Language:**
  - Preschool Language Scale - 5 (PLS-5) Spanish
    Ages: Birth - 7:11
  - Clinical Evaluation of Language Fundamentals (CELF-4) Spanish
    Ages 5:0 - 21:11
  - Clinical Evaluation of Language Fundamentals-2 (CELF-2) Preschool
    Ages 3:0 - 6:11

Select appropriate measures

- **Best Choices for Concepts:**
  - Bracken Basic Concept Scale (Receptive/Expressive)
    Ages 3:0 - 6:11
  - Bracken School Readiness Assessment
    Ages 3:0 - 6:11
  - Boehm Test of Basic Concepts-3
    Grade K - 2nd
  - Boehm Test of Basic Concepts-3 Preschool
    Ages 3:0 - 5:11

Select appropriate measures

- **Best Choices for Developmental Delay:**
  - Pervasive Developmental Disorders Screening Test (PDDST-II)
    Ages 12-48 months
  - PrimerPaso - Screening test for evaluating Preschoolers
    Ages 2:9 - 6:2
Select appropriate measures

- **Best Choices for Vocabulary:**
  - Test de Vocabulario en Imágenes Peabody (TVIP)
    Ages 2:6 - 17:11 (Spanish version of PPVT)
  - Bilingual Verbal Ability Tests (BVAT)
    Published by Riverside; Multiple languages, US norms

- **Best Choices for Pre-Literacy and Literacy:**
  - The Oral Language Acquisition Inventory (OLAI)
    Grades Pre K - 3rd
    Also available is The Oracy Instruction Guide

- **Best Choices for Other:**
  - Sensory Profile (2 versions)
    Ages (Infant/Toddler) Birth - 3:0 & Ages 3:0 - 10:11
  - Overall Assessment of the Speaker’s Experience of Stuttering (OASES) Ages 18+
  - Cognitive Linguistic Quick test
    Ages 18:0 - 89:11
  - A Quick test of Cognitive Speed
    Ages 18+
  - Kaufman Brief Intelligence Test (KBIT-2)*
    Ages 4 - 90

Determine acculturation

- **Formal Determination**
  - Acculturation Rating Scale for Mexican American II (ARSMA)
  - Short Acculturation Scale for Hispanics
  - Bidimensional Acculturation Scale for Hispanics

- **Informal Determination**
  - Preferred Language (accent?)
  - Where did they do their schooling?
  - What is the racial make up of friends?
  - Time in the USA
Determine acculturation

• Informal Determination (con’t)
  - Can also ask client:
    • In what way do your current problems create pain for you and your family?
    • How do members of your family express (add emotion here)?
    • What types of things make you feel that you are living your life to the fullest?

Determine Language Proficiency

• Remember BICS and CALP are different
  - Basic Interpersonal Communication Skills (BICS) is the day-to-day language needed to interact socially with other people.
  - Cognitive Academic Language Proficiency (CALP) refers to formal academic learning.
    • Standardized testing measures CALP

Determine Language Proficiency

• How to measure CALP.
  - Preschool Language Scale, 5ed (PLS-5)
    • Spanish and Bilingual Norms
    • Ages birth - 7:11
    • Screener available
  - Clinical Evaluation of Language Fundamentals, 4ed (CELF-4)
    • Spanish and English Norms
    • Ages 5:0 - 21:11
    • Screener available
Determine Language Proficiency

- How to measure CALP.
  - Woodcock-Muñoz Language Survey
    - Spanish or English
    - Ages 2:0 - 90+
    - Screener available
  - Woodcock Language Proficiency Battery - R
    - English only
  - Peabody Picture Vocabulary Test (PPVT, English) / Test de Vocabulario en Imágenes Peabody (TVIP, Spanish)
    - Ages 2:6 - 17:11

Using an Interpreter/ Psychometrist

- Interpreter vs. Translator
- Qualifications of Interpreters
  - Ideally certified
  - High proficiency in both languages.
  - In-depth knowledge of cultures.
  - Understand not only the ethical standards of Interpreters, but also those of the assessor.
  - Successful interpreters integrate verbal and nonverbal communication.

Using an Interpreter/ Psychometrist

- Qualifications of Interpreters (con’t)
  - Avoid using telephone interpreters.
    - Non-verbal communication is lost
  - Avoid using anyone invested in the results of the assessment as an interpreter (e.g. family members, friends, attorneys, etc.)
Using an Interpreter/ Psychometrist

• Qualifications of Psychometrist
  - Proficient in all aspects of the language to be used.
    - CALP vs. BICS also plays a role here.
  - Preferably Certified
  - If also used as interpreter, then should have similar qualifications as interpreter

Using an Interpreter/ Psychometrist

• Clinician’s Responsibilities
  - Determine the level of language proficiency of assistant.
  - Explain importance of basic, proper assessment procedures.
    • Especially the importance of standard administration and not providing assistance to client.
  - Explain the typical verbal and non-verbal responses that are diagnostic in nature.

Preparing to use Interpreter or Psychometrist

• Best practice uses a briefing, interaction, and debriefing model
  1. Briefing
    - Clinician and assistant review background information.
    - The purpose of testing is stated clearly.
    - Plan seating arrangements
    - Plan expected levels of interpretation.
    - Simultaneous vs. Consecutive interpreting.
Preparing to use Interpreter or Psychometrist

- Best practice uses a briefing, interaction, and debriefing model

  II. Interaction
  - Clinician and assistant work as a team
  - Clinician should always be present when using an interpreter.
  - All should address the family and client directly.
  - Assistant should be neutral at all times.
  - Clinician is responsible for clinical observations.

III. Debriefing

- Clinician and assistant should review the process.
  - Review testing procedures.
  - Review interactions that caught clinician’s attention.
  - Discuss possible cultural and linguistic factors.

Testing in Both Languages

- The single most important factor in proper testing is testing the client in both languages.
- Sight translation or oral interpretation of English test is suboptimal.

*Side Note: any handouts, consent forms, feedback, etc should also be made available in both languages, but at the very least in the dominant language.
Interpreting Results

• When interpreting the results, keep in mind all the cultural and linguistic factors mentioned.
  - This is a complex process that can be facilitated by using the slides in this presentation
• Make note in the report of any cultural and linguistic factors you feel are influencing results.
• Also note limitations of tests used.

Interpreting Results

• Use data from Language proficiency measures to explain possible strengths and weaknesses in subtest of other measures.
  - E.g. Does deficit in expressive language translate into poorer performance on subtest requiring expressing the answer aloud? Do they do better on tests that only require pointing or simple one word answers?

Interpreting Results

• Are the results consistent across measures?
  - If not, what is different linguistically and culturally between the measures used?
• Consider how the use of an interpreter or psychometrist may have influenced testing.
In short, proper assessment of bilingual individuals is a complex task that requires the consideration of cultural and linguistic factors typically not considered when testing monolinguals.

Questions - Discussions

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