The Ethics of Assessment and Treatment in SLP Clinical Practice: Considerations for Standardized Testing

Alice E. Smith, PhD, CCC-SLP with support from Catherine Crowley, JD, PhD, CCC-SLP

"A Language Test that Stigmatizes Black Children", John McWhorter, Ph.D., NYT, Oct 7, 2022

Language differences vs. deficits

Dialectical and language code switching

Overdiagnosis and underdiagnosis

ASHA Principles of Ethics I. Rules of Ethics

"A. Individuals shall perform all clinical services...competently."

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3 areas of evidence-based practice ASHA

Clinical expertise/expert opinion

External and internal evidence

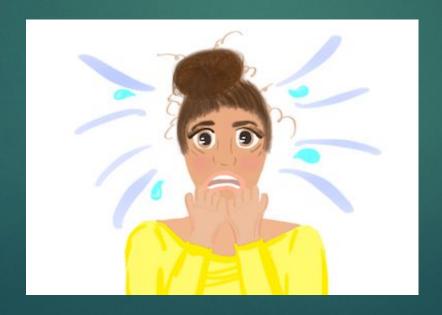
Client/patient/caregiver perspectives

Treatment tends to be more evidence-based

School-based SLPs have reported they used EBP

for treatment and not assessment (Fulcher-Rood, et al.

2020, p. 695; Hoffman, et al, 2013)



2,762 SLPs responded to the survey
–93% had master's in CSD/SLP
–85% of respondents had their ASHA CCC-SLPs

The majority read only 0-4 ASHA journal articles a year on either assessment or intervention. (Hoffman, et. al, 2013)



ASHA EBP Evidence Maps

https://apps.asha.org/EvidenceMaps/

Deciding what to use to assess

Standardized tests

Ethnographic interviewing

Language Sampling

Observation Methods

Dynamic Assessment

Self-Reporting Measures

Many of us start with a standardized test... Maybe we need a score? or because it is easier to buy, give, and score a test?



Standardized SLP Assessment Tools

Criterion referenced - benchmark comparison

Norm referenced - ranking among peers in the norming group

Validity - are we measuring what we think we are

Reliability - are our results consistent and minimally due to random error

Discriminant accuracy - outcome measures are similar to other measures of the same construct

Cultural bias in standardized testing

Test takers especially from minority backgrounds are culturally, ethnically, linguistically and racially diverse

Cultural bias is tendency of a test to favor the cultural/ethnic background of the test designers and normative group

Test scores may understate or overstate the actual performance of the test takers

Betz, S., Eickhoff, J., & Sullivan, S. (2013). Factors Influencing the Selection of Standardized Tests for the Diagnosis of Specific Language Impairment. Language, Speech, and Hearing Services in Schools, 44, 133-146.

Most SLPs used omnibus language tests (CELF, PLS, CELF-P, etc.) and single word vocabulary tests (PPVT, EOWPVT, ROWPVT, etc.).

When asked why the SLPs selected a certain test, publication date was the *only* test characteristic that correlated with frequency of test use. Betz, S., Eickhoff, J., & Sullivan, S. (2013). Factors Influencing the Selection of Standardized Tests for the Diagnosis of Specific Language Impairment. Language, Speech, and Hearing Services in Schools, 44, 133-146.

These findings indicate that validity, reliability and discriminant accuracy were not associated with the reasons the SLPs identified for using a particular test.

The use of long standing tests might save time, yet it can prevent SLPs from using tests based on cutting edge research.

Many of the currently used tests identify language disorders based on theories that were cutting edge 30, 40 and 50 years old.

(Betz, et al, 2013; Fulcher-Rood, et al., 2020)

Why do SLPs continue to use standardized tests to identify a language disorder when the most widely used tests primarily assess whether the student has acquired the morphology of Standard/General/Mainstream American English (Brown's morphemes) and vocabulary?

We know morphology of SAE is only the morphology of one variety of English. We also know that performance on vocabulary is highly linked to the child's/student's family's socio-economic level and parents' educational level.

Any evaluator who uses a test or any evaluation materials to identify disability without analyzing its psychometric integrity is doing a disservice to the students they evaluate. It also violates ASHA Code of Ethics.

e.g., What is the reference standard for sensitivity and specificity? Is it appropriate? (Betz, et al., 2013; Crowley, 2010; Dollaghan, 2007).

Sensitivity vs. Specificity

Sensitivity - does a test correctly identify as positive someone who actually has the problem/disease (the TRUE positive rate with few false negatives)

Specificity - does a test correctly identify as negative someone who does not have the problem/disease (the TRUE negative rate with few false positives)

What does the ASHA Code of Ethics have to do with compliance with the standards of the federal law, the Individuals with Disabilities Education Act (IDEA), 2004?

Individuals shall comply with local, state, and federal laws and regulations applicable to professional practice and to the responsible conduct of research (ASHA Code of Ethics, Principle IV(S).

What is the standard required by the federal special education law, Individuals with Disabilities Education Act (IDEA) 2004?

The federal special education law, IDEA 2004, requires that all assessment materials be "valid and reliable" and free of cultural or racial biases. Additionally evaluation materials must be able to distinguish a true disability from lack of adequate instruction in reading or math and from "Limited English Proficiency." 20 U.S.C. § 1400 et seq.

What is the standard required by the federal special education law, IDEA 2004?

► The federal special education law, IDEA 2004, requires that all assessment materials be "valid and reliable" and free of cultural or racial biases. Additionally, evaluation materials must be able to distinguish a true disability from lack of adequate instruction in reading or math and from "Limited English Proficiency" 20 U.S.C. § 1400 et seq

"Every Student Succeeds Act" 2015, pp 153-164 replaced NCLB and IDEA

The phrase "limited English proficient children" was changed to "English language learners" and success is measured by advancement toward English language proficiency on State standards within 5 years of being identified as needing those services

Identifies children who are English learners with disabilities and/or who are immigrants and addressed the needs of Native American and Alaska Native children

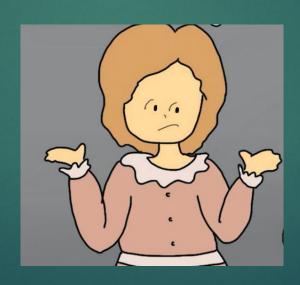
Goal to meet "diverse needs" of all students

Every Student Succeeds Act....

Requires assessment all children who may be English learners within 30 days of school enrollment

Reduces standardized one size fits all tests based on adequate yearly progress and all kids take same test

Supports identification goal evidence-based assessment and screening tools, literacy instruction materials and accommodations, and professional development training for staff Can we modify scoring of the standardized language tests for various dialects of English to correctly identify a language disorder?



Are "scoring modifications" for English dialect in tests like the CELF effective?

In "modified scoring" students receive credit for responses that are grammatical within their dialects but not in GAE.

He cooks. He is fine. Baby's mother.

"The girl cuttin'. It red. He done sung." (McWhorter)

Do you know all the correct possible responses?

Must be able to distinguish language differences vs deficits to score correctly.

Risk of underidentification of true language impairment

Are "scoring modifications" for English dialect in tests like the CELF effective? <u>NO!</u>

- ➤ Modified scoring affected the diagnostic accuracy of the CELF-4 so students who had a disorder were less likely to be identified as having a disorder (sensitivity problems).
- ➤ Without modified scoring, more typically developing students were identified as having a disorder (specificity problems).



Hendricks & Adlof, 2017

Barragan, B. Castilla-Earls, A., Martinez-Nieto, L., Restrepo, M.A., Gray, S. (2018).

Performance of Low-Income Dual Language Learners Attending English-Only Schools on the Clinical Evaluation of Language Fundamentals—Fourth Edition, Spanish. Language, Speech, and Hearing Services in Schools, 49, 292–305.

The CELF-4S is the most widely used standardized test used with school-age Spanish-English ELLs in the U.S.

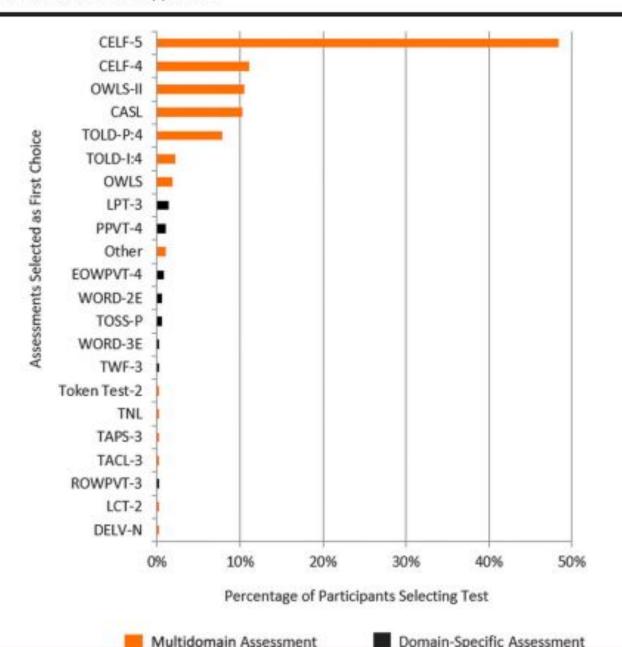


Barragan, B. Castilla-Earls, A., Martinez-Nieto, L., Restrepo, M.A., Gray, S. (2018). Performance of Low-Income Dual Language Learners Attending English-Only Schools on the Clinical Evaluation of Language Fundamentals—Fourth Edition, Spanish. *Language, Speech, and Hearing Services in Schools*, 49, 292–305.

In every 3 typically developing Latino children from low-income Spanish-English ELLs attending English-only school were incorrectly identified at 1.5 SD below the mean, that is were false positives, when using the CELF-4 Spanish. 1 in 2 of these TD children were misidentified using the 1SD below the mean as the cut off, which is the recommended cut off score.



Figure 1. Norm-referenced tests that are most frequently selected as first-choice language tests. Full test names are listed in the Appendix.



Ogiela, D. & Montzkaa, J. (2021) Norm-Referenced Language Test Selection Practices for Elementary School Children With Suspected Developmental Language Disorder. Language, Speech, and Hearing Services in Schools, 52, 288-303.

If according to our Code of Ethics we cannot discriminate, how can over 80% of SLPs use the CELF-5, OWLS, and CASL when those tests primarily assess whether the student has acquired the morphology of Mainstream American English and a certain set of vocabulary?

The key consideration in distinguishing between a language difference and a language disorder is the language norm of the student's own speech community.

(Wolfram, Adger & Christian 1999:105)

How fair is this to an AA boy whose mother had an 8th grade education or less?

Dr. Ida Stockman, 2000, showed the mean for these students on the PPVT-3 was not 100, it was closer to 77.

The use of standardized tests is part of the implicit bias in our field's most widespread clinical practice.

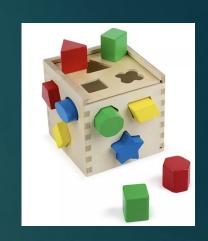
Word Structure of the CELF-5

20 of 33 items on Word Structure are non-obligatory features of many varieties of American English (60%)

- · Regular plurals: Here is one book. Here are two books.
- Possessive nouns: Whose dog is this? It is (Jack's, but also Jack dog)
- Contractible copula: It's red. (it red)
- Auxiliary be: This girl is cutting (The girl cutting)
- Regular past tense: This is the fence that the dog jumped. (This is the fence that the dog jump)
- Irregular past tense: This is the letter that the girl wrote

PLS-5 Looks at many concepts that are not naturally acquired but taught and learned so it tests what quality of education the child has had

- Body parts (2-2:5)
- Look at these crayons. Show me (colors) 4-4:5)
- · Identifies shapes (star, circle, triangle, square) 5:0[5:5)
- Points to letters (5:6-5:11; 6:0-6:5)
- Advanced body parts (elbow, forehead, eyelashes, wrist) (5:6-5:11)
- Demonstrates emerging literacy through print awareness (show me the author's name, the title of the book) (7-7:11)



These tests discriminate against children/students who have not grown up in homes where MAE is spoken or who did not attend quality preschool programs to learn concepts like the ones tested on the PLS.

But wait....

Don't we have to make sure that a child/student acquires GAE, the language variety of mainstream sources of achievement (power and money) in the U.S.?

Yes....

But no child/student should be identified as having a language disability simply because they have not acquired Standard/General American English

As Dr. John McWhorter wrote in the *New York Times* 10/7/22, A Language Test that Stigmatizes Black Children

"But for kids to be designated as linguistically deficient right out of the gate, based on notions such as that if they don't always use the verb 'to be' they don't understand how things are related, makes no sense. It constitutes a dismissal of eager and innocent articulateness. And as such, it is an errant and thoughtless injustice that must be stopped."

Dr. McWhorter continues....

"Speech pathologists.... must start not just questioning but resisting en masse these outdated tests that apply a Dick-and-Jane sense of English on real kids who control a variety of coherent and nuanced Englishes."

The Ann Arbor, Michigan court case 1979 against the law for African American students to be identified for special ed based on speaking AAE.

https://www.youtube.com/watch?v=KKlmaFQniB0

Overall, our goal is to provide appropriate and ethical services

We must consider all three components of EBP in order to make "informed, evidence-based decisions and provide high-quality services reflecting the interests, values, needs, and choices of individuals with communication disorders." (ASHA, EBP)

So what else can we do for best practice?

Standardized tests

Ethnographic interviewing

Language Sampling

Observation Methods

Dynamic Assessment

Self-Reporting Measures

But...

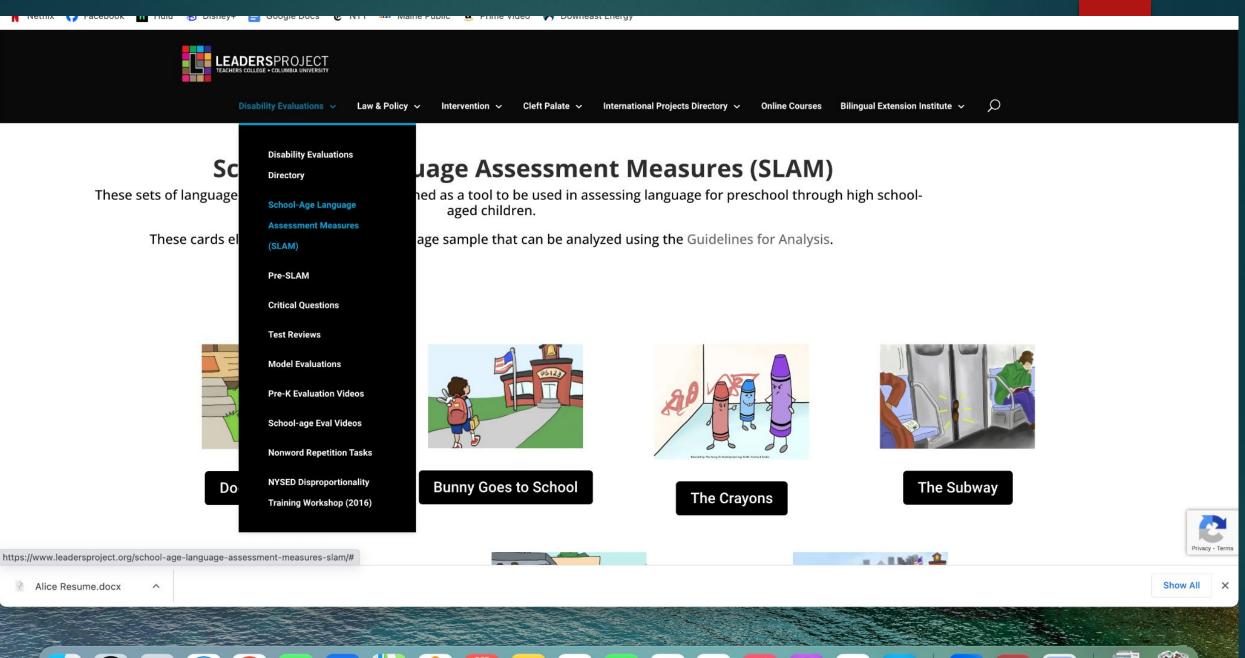
Many SLPs do not regularly use language sample elicitation and analysis in clinical practice or have the skills or time to do so.

(Pavelko, et al, 2016; Nippold, et al, 2017; Pavelko et al 2016; Barako Arndt & Schuele, 2013)

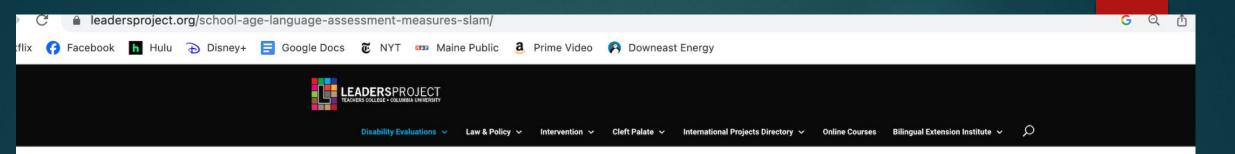


Catherine Crowley, J.D., Ph.D., CCC-SLP leadersproject.org









School-Age Language Assessment Measures (SLAM)

These sets of language elicitation cards were designed as a tool to be used in assessing language for preschool through high schoolaged children.

These cards elicit an evidence-based language sample that can be analyzed using the Guidelines for Analysis.



Dog Comes Home



Bunny Goes to School



The Crayons



The Subway



Baseball Troubles



The Ball Mystery



Lost Cellphone

SLAM BOOM! Cards for Teletherapy/Telepractice Dog Comes Home: click here

Find other SLAM materials here!

SLAM Dog Comes Home_Gallery1



SLAM Dog Comes Home_Gallery2



SLAM Dog Comes Home_Gallery3



SLAM Dog Comes Home_Gallery4



SLAM Dog Comes Home_Gallery6



SLAM Dog Comes Home_Gallery7





Dog Comes Home - School-age Language & Assessment Measures (SLAM) (Crowley & Baigorri) SLAM Guidelines For Analysis

Preschool - Early Elementary Language Elicitation Task

Write examples of student's sentences to add to written evaluation to show narrative skills, syntax, inferences/problem solving skills, cohesion, theory of mind, perspective taking, social/pragmatic language, dynamic learning.

Often typically developing (TD) kids need prompts to answer some questions, so don't be afraid to give prompts. BUT do not give the answers, you might need to point to different pictures ("but what about this?", "does that make sense?") Develop your clinical judgment by doing this with at least 10 TD students of the same age you are evaluating.

Point Scoring: 0 (incorrect even w/ many prompts), 1 (doesn't answer fully), 2 (provides reasonable response)

Can you put these in order? (Most students need some prompts. Let student move the cards.).

2 Points

Tell me the story. (Looking for understanding of the story, including the girl putting the dog in her bag, so her mom won't find it and brings the dog home. No need to write the whole narrative, just great sentence or overall macroanalysis)

Points

What is the girl thinking here? Theory of mind, perspective taking. (Show picture with thought bubble. Looking for student to show understanding of mom's perspective of not allowing/wanting dogs. Complex sentence opportunity "She is thinking that..."

Points

Why is she putting the dog in her bag? Making inferences/problem solving, causal cohesion, elicits complex syntax by use of "because..." (Show picture, highlight girl's mouth to finger gesture) Looking for something about hiding and sneaking the dog home.

Points

Why is the girl getting so dirty? Making inferences/problem solving, causal cohesion, complex syntax by use of "because..." (Show first 4 pictures to see how she got dirty over time) Looking for some explanation, ideally that playing with dog is the reason.

> 2 Points

Why is she in the bathtub with a white dog now? (How do you know?) Making inferences/problem solving, causal cohesion, complex syntax by use of "because.." or "dog is clean now." (Show bathtub picture and earlier ones with black dog) Looking for dynamic learning, describe this in your evaluation.

2 Points

What is the mom going to do now? Theory of mind, perspective taking. (Point to bathtub picture) Looking for ideas of what mom will do, acceptable answers are anything that is reasonable, (let her have the dog, spank her, punish her, get rid of the dog, etc.)

What would you say to your mom if you were the girl now? Theory of mind, perspective taking, persuasive argument, social/pragmatic language. Prompt: "Think about what you would say if you were the girl and really wanted that dog".

Points

www.Leadersproject.org SLAM Sco

Download: SLAM Dog Comes Home Cards (English)

This set of language elicitation cards and questions was designed as a tool to be used in assessing language for preschool and elementary school aged children. These cards elicit an evidence-based language sample that can be analyzed using the Guidelines for Analysis. Developed by Cate Crowley and Miriam Baigorri. Illustrated by Tina Yeung.

Crowley, C. & Baigorri, M. (2014). School-age Language Assessment Measures: Dog Comes Home. Leadersproject.org https://www.leadersproject.org/2015/03/18/slam-dog-comes-home-school-aged-language-assessment-measure/

Translations:

- BENGALI (বাংলা): SLAM Dog Comes Home Bengali Translation
- BENGALI (Roman Alphabet): SLAM Dog Comes Home Bengali (Roman Alphabet) Translation
- FRENCH (français): SLAM Dog Comes Home French Translation
- JAPANESE (日本語): SLAM Dog Comes Home Japanese (日本語) Translation
- MANDARIN (普通话; Simplified): SLAM Dog Comes Home Mandarin (Simplified) Translation
- RUSSIAN (русский язык): SLAM Dog Comes Home Russian (русский язык) Translation
- SPANISH (español): SLAM Dog Comes Home Spanish Translation
- HINDI (हिंदी): SLAM Dog Comes Home Hindi Translation
- MALAYALAM (മലയാളം): SLAM Dog Comes Home Malayalam Translation
- TAMIL (தமிழ்): SLAM Dog Comes Home Tamil Translation
- PUNJABI (ਪੰਜਾਬੀ): SLAM Dog Comes Home Punjabi Translation
- ARABIC (عربى; Multiple Dialects): SLAM Dog Comes Home Arabic Translation
- BRAZILIAN PORTUGUESE (Português): SLAM Dog Comes Home Brazilian Portuguese Translation
- TAGALOG: SLAM Dog Comes Home Tagalog Translation
- ALBANIAN: SLAM Dog Comes Home Albanian Translation
- SWAHILI: SLAM Dog Comes Home Swahili Translation

SLAM Guidelines for Analysis support note-taking and analysis: click here

SLAM BOOM! Cards for Teletherapy/Telepractice Dog Comes Home: click here

Find other SLAM materials here!

SLAM Dog Comes Home_Gallery1



SLAM Dog Comes Home_Gallery2



SLAM Dog Comes Home Gallery3



Summary of ASHA's Code of Ethics and the need for Evidence Based Practice methods for assessment

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"A. Individuals shall perform all clinical services...competently."

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ASHA Principle of Ethics II; Rules of Ethics

"C. Individuals shall enhance and refine their professional competence and expertise through engagement in *lifelong learning* applicable to their professional activities and skills."

"But my supervisor says I have to...." is no excuse.

Individuals in administrative or supervisory roles shall not require or permit their professional staff to provide services or conduct clinical activities that compromise the staff member's independent and objective professional judgment. (ASHA Code of Ethics, II(F).

Individuals shall not knowingly allow anyone under their supervision to engage in any practice that violates the Code of Ethics.(ASHA Code of Ethics, IV(J).

In summary, under the ASHA Code of Ethics,

We cannot engage in discriminatory practice.

We need to learn what we don't know to ensure that we don't discriminate.

We need to follow federal, state, and local laws and regulations.

We need to follow evidence-based practice.

We cannot engage in discriminatory practice.

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