



Culturally and Linguistically Appropriate Assessment of School-age Language Through Telepractice: Boom Cards and SLAM to Elicit and Analyze Language Skills

Melanie Alcala,BA, Sayume Romero,BS, Danielle Askowitz,BS, Abigail Calise,BA, Tiffany Neira,BA, Cha-Anya Glover,BA, Gabrielle Stern,BA, Christine Ulin,BS, Kathleen White, MFA, Catherine J. Crowley, PhD, CCC-SLP

SLAM BOOM! cards



Discussion

- This study addresses the need for online materials to appropriately assess school-age children's language skills via telepractice.
- Based on a sample of six school-age students, the use of interactive SLAM-BOOM cards was an effective way to elicit language samples for analysis.
- Both in-person and telepractice use of the SLAM materials elicited rich expressive, receptive and pragmatic language.
- SLAM-BOOM interactivity where students drag cards while sequencing was equivalent with in-person SLAM card experiences.
- Whether children came from monolingual, bidialectal or bilingual homes, there was no impact to the outcomes.
- Given that in-person use of SLAM cards is appropriate across preschool to high school, SLAM-BOOM is expected to be as well.

Background

- This project looked to gather language samples via teletherapy that are equally as robust as samples from in-person elicitation
- SLAM was adapted to BoomCards to emulate in-person experiences
- Boom Learning is an online platform for *interactive* digital slides.
- **School-age Language Assessment & Measures (SLAM):** (Crowley & Baigorri, 2014)
 - SLAM materials were "designed to minimize cultural and linguistic bias." (Washington, et al, 2020)
 - SLAM elicits persuasive and expository language shown by studies to provide quality language samples.
 - SLAM reduces prior knowledge expectations that are often required with standardized assessments
 - Available for free on **Leadersproject.org**: 25,000 visits a month; also in Spanish, French, Mandarin, Bengali, Japanese, etc.

Methods

- Identically elicited language samples from in-person and teletherapy sessions were compared.
- Six typically developing (TD) children were assessed:
 - Three via telepractice with SLAM BOOM!, aged 5;10-7;0
 - Three via in-person with tactile SLAM Cards, aged 5;8-9;0
- Samples were analyzed for complexity of utterances, and dialect-neutral indices of narrative cohesion per Burns et al. (2012)

Results

- Students demonstrated engagement through timely responses to questions and focused attention to materials and clinician.
- Both telepractice and in-person methods elicited comparably high levels of complex utterances (simple, compound, complex)

Average Subordination Index	
In-Person	Telepractice
1.77	1.61

- **Both methods elicited comparable dialect-neutral indices:**

Indices	In-Person	Telepractice
Referential Cohesion: Maintaining clear referents	-He thinks of idea that he's gonna get his lunch out. -The girl who took the bunny out. -I would tell her all of the nice things that he did.	-I want a net that I just throw at the bunny. -The boy feeds the bunny his carrots. -To hide her . To hide the dog .
Temporal Cohesion: Linking two or more events via a time marker	-He was looking at the board when the teacher was teaching -When he was going to school, his bunny was in his backpack. -When her mom came in to check on her, she saw her. . .	-He got excited when the teacher said, "C for carrots." -And when I want, I can use the other one. -When the dog went in the bathtub, the dog was all dirty.
Perspective Taking: Theory of Mind	-She thinks she's so happy that the bunny is going away -She's thinking she's happy now -She's thinking that she knows her mom wouldn't like the puppy	-Teacher is now happy since there's no rabbit in school. -She's happy because the bunny is out of her classroom. -She's remembering her mom said, "no dog's allowed."

Limitations

- Sample size was not robust and may not be representative of the population as participants all had access to internet and technology.
- Clinicians elicitation manner and prompts presented with variability.

Future Research

- Analyze within groups of monolingual, bidialectal, and bilingual students.
- Analyze SLAM materials as dialect/language-neutral analyses of language.
- Compare TD samples to those with language/pragmatic disorders
- Analyze samples from an expanded age range through high school

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