Poster Session #1 – Friday, May 30 at 8:30 a.m. Community Terrace

PS1F01

Evaluating SLP Decision-Making After Universal DLD Screenings

Tyler Christopulos; University of Utah

Developmental Language Impairment (DLD) impacts children's academic and social outcomes, highlighting the need for early identification. Universal screenings offer an alternative to referral-based systems but raise questions about school-based speech-language pathologists' (SLPs) decision-making for failed cases. This study explored SLP decision-making after district-wide universal screenings of 3985 first-grade students using a sentence recall measure. Of these, 1009 (25.3%) failed at a cut-off score of = 84. Nearly half of the failed cases concluded with a single teacher consultation initiated and conducted by the SLP, who then determined that no further action was necessary. SLP caseloads increased by an average of 1.58 students. Findings indicate an overreliance on teacher input, potentially reducing the sensitivity of screenings and delaying further needed action. Teachers often face challenges identifying students with language impairments, limiting the efficacy of this process. To address these issues, districts should provide professional development for teachers and establish clear guidelines for SLP decision-making. Ensuring adequate resources and support for schools is critical to support effective universal screening programs for DLD.

PS1F02

Attitudes of District SLPs Toward Workload, Resources, and Feasibility Following Universal DLD Screenings

Tyler Christopulos; University of Utah
Andrah Lake Hansen; University of Utah

Developmental Language Disorder (DLD) negatively impacts children's academic and social outcomes, underscoring the importance of effective identification systems. Universal screenings offer a promising alternative to traditional referral-based systems but present unique challenges for school-based speech-language pathologists (SLPs). This study examined SLPs' attitudes after one year of district-wide universal language screenings for first-grade students in a large school district in the Intermountain West. A total of 67 SLPs completed a survey evaluating their perspectives on workload, district resources, and long-term feasibility. Each of the 15 survey items was rated on a 5-point Likert scale. Results indicated that SLPs found the workload manageable, district resources insufficient, and the long-term feasibility of screenings cautiously optimistic. These findings highlight the need for enhanced resource allocation and training to ensure sustainable implementation. Strengthening collaboration between SLPs and general education teachers could further support the long-term success of universal screenings. Addressing these challenges can position universal screenings as a transformative approach for early identification and intervention for children with language impairments.

PS1F03

The Effect of Imageability on Early Vocabulary Acquisition in Autistic and Non-Autistic Children

Eileen Haebig; Louisiana State University
Ezra Moore; Louisiana State University
Stanley West; Louisiana State University
Christopher Cox; Louisiana State University

Vocabulary composition and word-learning biases are closely interrelated in typical development.?Learning new words involves attending to certain properties?to?facilitate word?learning. Such word-learning biases are influenced by perceptually and conceptually salient word features, including high imageability. This study examined the association between word imageability and the point at which individual words are acquired by autistic and non-autistic children. We first collected word imageability ratings for the words on the Communicative Development Interview (CDI; Fenson et al., 2007) because existing word imageability databases only partially cover the CDI words. Our imageability ratings highly correlated with existing word imageability scores from different sources for overlapping words. Our subsequent analysis revealed that, at the word level, imageability predicts when autistic and non-autistic children acquire words, above and beyond word frequency. Importantly, the association between word imageability and word acquisition did not differ between our groups, suggesting that autistic and non-autistic children are biased to learn highly imageable words – thus the groups demonstrate an overlapping learning bias. This work extends previous research findings on this topic.

Funding sources: Research Competitiveness Subprogram – Louisiana Board of Regents

PS1F04

Working Memory, Language Comprehension and Production, and Underlying Neural Networks in Down Syndrome

Krista Wilkinson; Penn State University
Carol Miller; Penn State University
Chaleece Sandberg; Penn State University
Diane Williams; Penn State University
Jacquie Mogle; Clemson University
Sophie Wolf; Penn State University

This poster reports on preliminary data from a project examining the role of phenotypic characteristics of trisomy 21 on speech, language, and swallowing in individuals with Down syndrome. Working memory profiles suggest greater vulnerability in auditory working memory than visual working memory, though auditory working memory is crucial for language comprehension and production. This study examines the relationship between working memory and language outcomes behaviorally and through brain imaging. Language data from 11 participants (with at least three more expected) were analyzed. Participants completed the Peabody Picture Vocabulary Test-V (PPVT-V), auditory (digit span) and visual (Corsi Block) working memory tasks, and language production measures (sentence repetition, verbal fluency). Brain imaging has also been

completed with six participants. PPVT-V scores and syntactic retention in sentence repetition correlated with auditory but not visual working memory. Some cross-hemispheric connections showed increased connectivity associated with higher scores on the PPVT-V and the percentage of constituents retained. Auditory working memory deficits may contribute to expressive morpho-syntactic challenges in Down syndrome. Findings may inform language interventions tailored to the support needs of this population.
Supported by NIH grant 1R01DC020622-01A1

PS1F05

The Role of Word Order in Toddlers' Acquisition of Novel Adjectives

Madelyn Cecilia Escario; New York University
Marielle Ngoma; New York University
Sudha Arunachalam; New York University

Adjectives are thought to be difficult to acquire (e.g., Davies et al., 2023; Ricks & Alt, 2016). Some researchers suggest that noun-adjective order affects acquisition (e.g., Fernald, Thorpe, & Marchman, 2010; Ramscar et al., 2010). Using an online experimental word-learning task, we asked how well typically developing English-acquiring toddlers (N = 24; data collection in progress) between ages 26 to 33 months (mean age = 31 months) learn novel adjectives that occur before the noun (e.g., "This is a blick dog") as compared to after the noun (e.g., "This dog is blick"). Children heard novel adjectives in one of these orders and were presented with a forced choice between two possible referents for the adjectives. Preliminary results indicate that children pointed at above-chance levels when adjectives occurred before the noun (60% accurate; $t(9) = 3.31$, $p = 0.0091$) but were at chance when adjectives occurred after the noun (51% accurate; $t(13) = 0.16$, $p = 0.87$). The findings may have implications for how clinicians use adjectives in vocabulary interventions. Funding: NYU internal funds

PS1F06

Associations between language and in-the-moment mental rotation effort in autism

Sophie Barth; University of Missouri
Mila Vulchanova; Norwegian University of Science and Technology
Caroline Larson; University of Missouri

Differences in the association of language and visuospatial systems in autism spectrum disorder (ASD) may explain notable heterogeneity observed in both domains. The current study used pupillometry, a physiological measure of in-the-moment cognitive effort, during a mental rotation task to examine associations between structural language and visuospatial cognition. Participants were 25 children and young adults with ASD and 25 age- and IQ-matched neurotypical (NT) peers. The mental rotation task involved four conditions: two- and three-dimensional figures; two- and three-dimensional objects. We measured structural language using the grammar subscale from the Test of Language Development: Intermediate. Growth-curve mixed-effects model results indicated group differences in the association between language and latency of cognitive effort for 3D

stimuli. Autistic individuals with relatively better grammar performance had shorter latencies, whereas NT individuals with relatively better grammar performance had longer latencies. Findings underscore selective divergence between language and visuospatial systems and suggest the importance of examining the time course of their interaction in ASD.
International Partnerships for Excellent Education and Research, Research Council of Norway (309231); Norwegian University of Science and Technology strategic PhD grant.

PS1F07

Promoting English and Spanish with Computer-Assisted Bilingual Vocabulary Instruction (CABVI)

Karla Garcia; Texas Christian University
Alice Regalado-Lee; Texas Christian University
Jean-Franco Rivera-Pérez, Ph.D., CCC-SLP; Texas Christian University
Emily Lund; Texas Christian University

Purpose: This study evaluates the Computer-Assisted Bilingual Vocabulary Instruction (CABVI) program's effectiveness in enhancing Spanish (L1) and English (L2) vocabulary acquisition among Dual Language Learners (DLLs). It examines whether language of instruction influences receptive, naming, and definitional vocabulary outcomes. Method: Twenty-one Spanish-speaking preschoolers were randomly assigned to bilingual Spanish-English instruction (n=8), CABVI English-only instruction (EI; n=7), or a business-as-usual (BAU) condition (n=6). CABVI incorporated audio prompting, interactive storybook reading, and vocabulary-focused tasks targeting 37 words. Vocabulary was assessed at three time points: pretest, posttest, and a six-week follow-up. Logistic regression models were used to analyze the effects of condition, language, and time on vocabulary outcomes. Results: Bilingual CABVI intervention significantly enhanced Spanish vocabulary across all tasks compared to EI and BAU groups, whereas both Bilingual and English CABVI groups showed similar English vocabulary gains. Conclusion: Bilingual CABVI can enhance monolingual English-speaking clinicians' ability to support DLLs' linguistic needs. The study highlights the potential of technology-based bilingual interventions as part of a broader approach to supporting DLLs' unique linguistic needs.

PS1F08

Intervention Service Utilization by Families with Young Children with Down Syndrome in Urban and Rural Areas of Wisconsin and Minnesota

Miriam Kornelis; University of Minnesota - Twin Cities
Rachel Cressler; Gillette Children's Hospital
Brynn Hesselberg; University of Minnesota - Twin Cities
Marianne Elmquist; University of Wisconsin, Madison
Claudia Schabes; University of Wisconsin, Madison
Audra Sterling; University of Wisconsin, Madison
Lizbeth Finestack; University of Minnesota - Twin Cities

Children with Down syndrome (DS) benefit from early interventions such as speech-language therapy (SLP), physical therapy (PT), occupational therapy (OT), and audiological services. However, it is unknown whether service access differs by urban-rural designation. In this study, we investigated the utilization of interdisciplinary services for young children with DS in the greater Minnesota and Wisconsin areas, assessing rural versus urban utilization. We extracted data from a larger longitudinal study with families with young children with DS (Mage= 13 months), in which caregivers participated in surveys about family demographics and the habilitative services their child with DS currently receives. Across urban-rural designations, more than 50% of participants reported current utilization of each intervention service (SLP, PT, OT) and 22-31% reported an audiologic evaluation in the prior year. Participants in urban areas report greater rates of service access for each service, most notably for PT, with a 22% difference. This study provides insight into the early intervention service utilization of young children with DS in rural and urban communities of Wisconsin and Minnesota. This project is funded by NIH (R21HD111807).

PS1F09

Interrelationships of Language, Executive Function, and Physical Activity in Children Who are Deaf and Hard of Hearing

Jessica Mattingly; Boys Town National Research Hospital
Krystal Werfel; Boys Town National Research Hospital
Emily Lund; Texas Christian University

Children who are deaf and hard of hearing (DHH) are known to perform differently than their peers on measures of executive function. Additionally, physical activity positively impacts word-learning in typically developing (TD) children and children who are DHH. However, little is known about the inter-domain relationships of language, executive function, and physical activity and if they differ in DHH, which was the purpose of this study. Fifty children, between 7 and 17, participated in language (CELF-5) and executive function (NIH Toolbox) assessment. Parents reported structured physical activity participation and executive function (BRIEF-2). Performance-based executive function was significantly different between groups; medium effect sizes for language scores and parent-reported executive function were also found. Executive function predicted language, with performance-based measures predicting language in DHH. Amount of physical activity did not predict language or parent-reported executive functioning, but it did predict performance-based executive functioning for TD. These findings provide a better understanding of how inter-domain relationships differ for children who are DHH and guide directions for future research. Funding was provided by NIH-NIDCD (R01DC017173: Werfel and Lund) and Texas Christian University.

PS1F10

Integrating Automatic Speech Recognition and Natural Language Processing into Language Screening for Bilingual Spanish-English Speakers

José Ortiz; University of Maryland, College Park
Anna Soares; University of South Florida
Maria Adelaida Restrepo; University of South Florida
Shelley Gray; Arizona State University
Jessica Nolasco; University of Maryland, College Park

Language screening is a critical component in the early identification of developmental language disorder (DLD), but existing approaches often fail to meet the needs of bilingual children. This study explores how automation, using automatic speech recognition (ASR) and natural language processing, can be leveraged in language screening for Spanish-English bilinguals. Using an existing dataset we examined the performance of automation in transcribing and scoring child responses on the Spanish Screener for Language Impairment in Children (SSLIC). We compared manual and ASR transcripts to assess transcription accuracy and evaluated the accuracy of an automated scoring algorithm. This research provides insight into the efficacy of automated transcription and scoring for bilingual language assessments and the potential of modern technology to enhance early DLD identification.

PS1F11

Characterizing school-age children's effort and automaticity in a sentence recall task

Tracy Preza; University of Illinois Urbana-Champaign
Dancheng Liu; University at Buffalo
Carol Miller; Pennsylvania State University
Abdlrahman Alabdallah; Pennsylvania State University
Jinjun Xiong; University at Buffalo
Sean Redmond; University of Utah
Pamela Hadley; University of Illinois Urbana-Champaign

This study examined measures of effortful and automatic sentence production in children with developmental language disorder (DLD) obtained from the Redmond Sentence Recall Task (RSR). Children with DLD were expected to produce more stall-type disruptions as indicators of effort (i.e., repetitions, filled and unfilled pauses), and be less automatic (i.e., fewer words per minute, fewer non-disrupted utterances) than same-aged peers. Effort and automaticity were also expected to relate to general language ability. RSRs from 74 children with typical language development (TD) and 58 with DLD were transcribed and analyzed for stall rate, non-disrupted rate (e.g., no disruptions) and words per minute (WPM). Stall rate and non-disrupted rate were weakly correlated with general language ability, and WPM was moderately correlated with language measures. The DLD group used significantly more stalls and fewer WPM and non-disrupted utterances than the TD group. Analyzing sentence disruptions to reveal effort in language production and the potential added value of these measures for identifying DLD will be

discussed. This research is funded by NSF/IES 2229873. Original data collection was funded by NIDCD R01DC011023.

PS1F12

Narrative Tell and Retell in Mandarin-English Bilingual Children

Minsi Sun; The University of Texas at Dallas
Li Sheng; The Hong Kong Polytechnic University
Danyang Wang; Towson University
Pumpki Lei Su; The University of Texas at Dallas

Language Sample Analysis using narrative tasks is an evidence-based tool for assessing bilingual children's expressive language. However, the impact of elicitation method (tell vs. retell) and languages on narrative performance remains unclear for Mandarin-English (ME) bilingual children. In this study, narrative samples elicited from 62 ME bilingual children using the Multilingual Assessment Instrument for Narratives (MAIN) were analyzed for macro- and microstructure measures. For macrostructure, children produced better narrative retells than tells across structure, complexity, and number of internal state terms, with cross-linguistic differences only in story structure. For English microstructure, children demonstrated improved story length, lexical diversity, and sentence length, but not syntactic complexity during retell. For Mandarin microstructure, children demonstrated improvement only in story length and lexical diversity during retell. Results showed that macrostructure skills can be more readily acquired through modeling and remain relatively stable across languages, whereas the malleability of microstructure skills differs across languages and types of measures. Findings could guide clinicians on choice of elicitation method and expected performance in ME bilingual children. This research was supported by the Spencer Foundation (grant number 20190085).

PS1F13

Children's Cross Situational Word Learning Across Accents and Time Scales

Emily Bagan; University of Wisconsin - Madison
Margarita Kaushanskaya; University of Wisconsin - Madison

Children demonstrate a remarkable ability to learn words despite ambiguity and variability in naturalistic environments. Cross-situational word learning (CSWL) is one proposed mechanism for learning where individuals track co-occurrence probabilities to resolve word-referent ambiguity. One aspect of everyday linguistic environments – accented speech – has not yet been tested in the context of CSWL. Yet, learners are regularly faced with situations requiring them to learn words from diverse speakers, who often have accents. We examine how monolingual English-speaking children between the age of 6-9 learn and retain novel words across native English-accented and Spanish-accented speech and different time scales. Preliminary results indicate that children can learn novel words through cross-situational statistics across accents, and that retention declines with time. Findings from this study have implications both for models of learning and memory, and for structuring linguistic environments that are most conducive

to learning. This project was supported by the National Institute of Health (NIH) grant (R01DC016015).

PS1F14

Verbal mediation of shifting in children with developmental language disorder

Lauren Baron; MGH Institute of Health Professions
Annika Schafer; MGH Institute of Health Professions
Kelsey Black; MGH Institute of Health Professions
Shivani Patel; MGH Institute of Health Professions
Ziyi Cao; MGH Institute of Health Professions
Asiya Gul; MGH Institute of Health Professions
Yael Arbel; MGH Institute of Health Professions

Many children with developmental language disorder (DLD) also have impaired executive function. However, performance on executive function tasks may be facilitated by verbal mediation, or the use of self-directed language to guide behavior. This project aims to examine the effects of verbal mediation on shifting task performance in school-aged children with DLD in comparison to children with typical language development (TD). The effect of verbal mediation was measured by comparing switch cost when the task was completed with versus without articulatory suppression. Preliminary results revealed that suppressing verbal mediation increased switch costs for children with DLD but not those with TD. The additional time on switch trials and an overall increase in reaction time appeared to support accuracy, suggesting effective but inefficient verbal mediation in children with DLD. Final results will have implications for interpreting clinical assessments and the development of executive function interventions. This work was funded by NIDCD F32DC020095.

PS1F15 - **WITHDRAWN**

Midfrontal Theta Synchronization and Set-Shifting in Children With and Without Developmental Language Disorder (DLD)

Asiya Gul; MGH Institute of Health Professions
Lauren Baron; MGH Institute of Health Professions
Annika Schafer; MGH Institute of Health Professions
Kelsey Black; MGH Institute of Health Professions
Ziyi Cao; MGH Institute of Health Professions
Shivani Patel; MGH Institute of Health Professions
Yael Arbel; MGH Institute of Health Professions

We examined cue-related neural dynamics in typically developing (TD) children and those with developmental language disorder (DLD) during a modified local–global task using two complementary measures of theta-band synchronization: phase-locking value (PLV) and inter-trial coherence (ITC). Both metrics were computed in successive time windows (0–200, 200–400, and 400–600?ms post-cue) across frontal, central, and parietal sites.

In children with TD, both PLV and ITC demonstrated strong and dynamically modulated theta synchronization, with clear associations between neural dynamics and performance,

though sometimes reflecting a speed-accuracy trade-off (e.g., faster responses at the expense of accuracy). In contrast, children with DLD exhibited less flexible and more inconsistent theta synchrony, with higher switching costs, delayed set-shifting, and inaccurate responses. These results suggest that optimal theta-band coordination during cue processing is crucial for efficient mental set updating. That atypical synchrony may underlie the executive control difficulties observed in DLD.
This work was partially funded by an NIH NIDCD grant F32DC020095 (PI: Baron) R01DC018295 (PI: Arbel).

PS1F16

Evaluating Taxonomic Knowledge of Children with Intellectual and/or Developmental Disabilities who use Augmentative or Alternative Communication

Courtney Trevino; Texas Christian University
Emily Lund; Texas Christian University

Experiments evaluated taxonomic knowledge of children with intellectual and developmental disabilities (IDD) who use augmentative or alternative communication (AAC). In experiment 1, which included 18 children who use AAC and 18 age-matched peers, participants completed a receptive categorization task at three taxonomic levels: superordinate (animal), basic (dog), and subordinate (Labradoodle). Results revealed significant differences in group performance, suggesting delay in taxonomic knowledge. Experiment 2 compared the same taxonomic task outcomes for the AAC group and 17 vocabulary-matched peers. Results revealed significant group differences at basic and subordinate levels, suggesting disordered knowledge not explained by vocabulary size. Experiment 3 compared the same taxonomic task outcomes of three groups: AAC group children with an IQ above 70, those with an IQ below 70 (both n = 9), and 6 verbal, IQ-matched peers (IQ below 70). Although results were not significant, effect sizes were medium to large, suggesting potential group differences in a fully powered study. Taken together, results suggest that children with IDD who use AAC present with deficits in taxonomic knowledge. An intramural grant from TCU funded this study.

PS1F17

Exploring Collaboration Between School-Based SLPs and Kindergarten Teachers: A Mixed Methods Study

Anne Reed; Florida State University/Florida Center for Reading Research
Kelly Farquharson; Florida State University/Florida Center for Reading Research

Collaboration between school-based speech-language pathologists (SLPs) and kindergarten (K) teachers supports students with speech-language impairments (SLI). These students often face challenges in speech intelligibility, vocabulary, and anxiety, impacting their academic performance, particularly in reading and mathematics. Interprofessional practice (IPP) between SLPs and K teachers addressed these needs, but barriers like time constraints and scheduling limit its effectiveness. This study employs an explanatory, sequential (quant-QUAL) mixed methods design to explore the extent and nature of collaboration between SLPs and K teachers, focusing on factors such as self-efficacy, experience, and training. Quantitative data from surveys and qualitative

data from interviews will be analyzed to understand the relations between these factors and collaboration levels. Preliminary findings indicate similar overall collaboration ratings for SLPs and K teachers (N = 160), with differences in specific collaborative behaviors. The study aims to inform strategies for enhancing IPP through pre-service and in-service training, ultimately improving educational outcomes for students with SLI. Understanding these dynamics paves the way for more effective collaboration in school settings. Partial funding through CAPCSD PhD Scholarship and U.S. Department of Education Grant.

PS1F18

A Pilot Study of Language Preferences and Ableism: What Autistic Adolescents and Adults Want Professionals to Know

Alice Keithly; Wichita State University
Devin Farris; Wichita State University
Amanda Murfin; Wichita State University
Karissa Marble-Flint; Wichita State University
Trisha H. Self; Wichita State University

The language that educational and medical professionals use can assist in providing the best care; alternatively, words can create barriers between professionals and the individuals they serve and can hinder the care relationship. A range of terms are acceptable to use with autistic individuals with the two most common being identity first language (IFL) or person first language (PFL). It is vital for professionals to use the language preferred by the individual to provide person-centered care. While previous research has queried autistic individuals about their preferences through surveys, a gap exists in exploring the actual impact language has on autistic individuals. This pilot study aimed to fill that gap. Autistic adolescents and young adults (N =12) participated in semi-structured interviews regarding their preferences for PFL or IFL and what they want professionals to know about autism and ableism. Significant statements in the interview transcripts were identified and thematic analysis was conducted.?Clinical and research implications will be shared. Funding: NIH LRP Award (Marble-Flint)

PS1F19

Leveraging AI to Assess Social Attention in Young Autistic Children

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Shijian Deng; UT Dallas, Dept. of Computer Science
Siva S. N. Vasireddy; UT Dallas, Dept. of Computer Science
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Feroz M. Hatha; UT Dallas, Dept. of Computer Science
Jia Li; UT Dallas, Dept. of Computer Science
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Yapeng Tian; UT Dallas, Dept. of Computer Science
Pamela Rollins; UT Dallas, Dept. of Speech, Language, & Hearing

Challenges in social attention are an early indicator of autism and can significantly impact toddlers' language and communication. However, accurately assessing social

attention in toddlers remains difficult, often delaying early identification and intervention. This study aimed to develop the first artificial intelligence (AI) model to analyze social attention in autistic children. We extracted over 10,000 video frames from the Rollins Autism Corpus, a dataset of autistic toddlers engaging in a play-based assessment. Using the Computer Vision Annotation Tool, we manually annotated video frames for the toddlers' gaze targets. These annotations were used to train a multimodal large language AI model to automatically detect the gaze of autistic toddlers. Model accuracy was evaluated using a macro-average F1 score and intersection over union and center distance of annotations. Preliminary results showed limited success in gaze detection, revealing a "neurotypical bias" in the reference database. These results underscore the importance of developing a more representative reference database with increased representation of autistic children to enhance model training and fine-tuning. This research was supported by a UT Dallas Seed Program for Interdisciplinary Research award.

PS1F20

Early intervention for children with ASD: Maternal Satisfaction and Family Well-Being

Lisa Wisman Weil; Emerson College
Caroline Carreras; Children's Speech and Language Services, LLC

Parents are experiencing high levels of stress compared to other adults, and parents of children with autism spectrum disorder (ASD), are particularly vulnerable to increased levels of stress related to the specialized care their children require (Office of the Surgeon General, 2024). For parents of children with disabilities, early intervention (EI) has the potential to alleviate stress; however, research is needed to determine whether and how EI promotes family well-being. This study used a mixed methods retrospective design to investigate factors that contribute to family well-being in a small sample of children with ASD and their mothers. 13 mothers completed an online survey examining their well-being and their experiences with EI. Eight of the mothers completed an additional interview to better understand their experiences with EI. Quantitative and qualitative analyses revealed the mothers had high levels of satisfaction with EI speech and language services; participant experiences were moderated by access to EI, family well-being, and the desire to improve the EI system for other families. This study was supported by the Emerson College Graduate Student Research Fund.

PS1F21

Validity of Informational Text Retells for Preschoolers with Developmental Language Disorder

Sarah Lynn Neiling; University of Cincinnati
Allison Breit; University of Cincinnati
Ling-Yu Guo; University of Cincinnati

Despite the ripeness of informational texts for language samples, they are seldom used, particularly with preschoolers. Addressing the time-intensive burden of language sample analysis, the current study examined reliability and validity of a rubric scoring scheme for an informational text retell, which included expository structure, syntactic cohesiveness,

and text-related vocabulary. Participants were monolingual English-speaking preschoolers with DLD (N = 63; M age = 53.44 months, SD = 8.39 months). With high inter-rater reliability, moderate test-retest reliability, and moderate to high unidimensionality, it demonstrated promising reliability. When correlated with the Clinical Evaluation of Language Fundamentals Preschool-2 (CELF P2), it demonstrated weak concurrent validity, indicating the informational text retell rubric could bear unique information in a language evaluation. Funding: Institute of Education Sciences Grant R324A130205

PS1F22 - **WITHDRAWN**

Development of the Western-DHH Spoken Language Assessment Tool and Take-Aways from the Co-Design Process

Rachel Benninger; Western University
Lisa Archibald; Western University

Students who are d/Deaf and/or Hard of Hearing (DHH) need additional support in the classroom to reach their full learning potential. DHH students in hearing classrooms benefit from curriculum-based assessment and instruction, but these are often lacking. Specialist teachers of the DHH support these students and can contribute valuable information to the development of a spoken language assessment tool for DHH students. This project used a design research approach to co-design an assessment tool in collaboration with the intended end-users (specialist teachers of the DHH). Following the initial development of an assessment tool prototype, iterative cycles of testing, providing feedback, and revising took place. A four-part assessment tool was developed, tested, improved, and implemented into practice based on its use in real-world contexts. The final assessment tool is now available online and is being implemented into practice across parts of North America. This project provides a co-design framework for collaborative teams and addresses considerations for co-design projects (e.g., strengths and challenges of co-design). Funding provided by Social Sciences and Humanities Research Council of Canada #890-2018-0072.

PS1F23

Existential Quantification and Scalar Implicatures in Child Imbabura Kichwa

John Grinstead; The Ohio State University
Santiago Gualapuro Gualapuro; Southern Illinois University

4 years-olds monolingual and multilingual children can draw “some-but-not-all” pragmatic implicature interpretations of sentences that include existential quantifiers in subject position. The lexicon and morphosyntax are predictive of children’s implicature interpretations in English and Spanish, which are typologically similar languages. Will we find the same relationships in a typologically distinct language, Imbabura Kichwa, a northern Quechuan language spoken in Ecuador? We test 48 bilingual Kichwa-Spanish-speaking children (range–4:11–8:11, mean age=83.16 months, SD=13.45 months), using a Truth Value Judgment Task and measure their lexicons (NDW) and morphosyntax (MLUw) using a Frog Story re-tell task. Results show that our youngest participants can draw ‘wakin mana tukuy’ (some, but not all) pragmatic implicature interpretations.

However, neither NDW nor MLUw correlate with children's judgments, though they do correlate with each other and with age. We discuss how results may relate to the structure of the Quantity Scale in Spanish and English vs. in Kichwa and relate these findings to the theory of Lexical Refraction. Funding provided by the National Science Foundation (NSF- 1551903).

PS1F24

Speech Fluency in Multilingual Adolescents: A Comparative Study of Cantonese (L1) and Mandarin (L2) Narrative Production

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This study explores speech fluency differences between Cantonese (L1) and Mandarin (L2) in multilingual adolescents, filling a gap in research on non-Indo-European languages. Speech fluency, a key aspect of oral language ability, includes speech rate, breakdowns, and repairs. While fluency generally improves with language proficiency, L1 speech is typically more fluent than L2, though this gap may shrink as L2 proficiency grows. The study involved 31 native Cantonese-speaking first-grade adolescents with early exposure to Mandarin from Hong Kong secondary schools. Participants produced oral narratives using the picture story "The Flowerpot Incident" in both languages. Narratives were analyzed for speech rate, silent pauses, filled pauses, self-corrections, and repetitions. Results revealed that silent pauses were the most common disfluency in both languages. Adolescents demonstrated faster speech rates, more self-corrections, and fewer repetitions in Cantonese compared to Mandarin, while showing comparable performance in silent and filled pauses. These fluency differences and similarities may be attributed to factors like language proficiency, speaker-specific characteristics, and language-specific features, particularly linguistic distance. However, further research on the impact of linguistic distance is needed to enhance our understanding.
Funded by a PolyU grant P0040955.

PS1F25

Perspectives of adults with language disorders, parents, teachers, and speech-language pathologists on language assessments for special education eligibility

Carol Miller; Penn State University
Diane Williams; Penn State University
Lauren J. Van Scoy; Penn State University
Erika VanDyke; Penn State University
Tyshia Myers; Penn State University
Courtney Gallagher; Penn State University

Assessment for language-related special education needs can be made more strengths-based and useful for planning intervention. Our qualitative study addressed a need for research on the lived experiences of people with neurodevelopmental disabilities, their families, and care providers regarding language assessments. We conducted interviews with 17 participants across these groups. Transcripts were analyzed using descriptive

content analysis. Preliminary themes include: the whole child; multiple diagnoses; associated effects of language problems; characteristics of assessments; how assessments and reports can be improved; and interprofessional collaboration. The results of the study will suggest how school-based assessments for spoken and written language problems can be improved and will be used to create a survey for data collection from a larger sample to assess the generalizability of the findings. Funded by Penn State Social Science Research Institute.

PS1F26

BI-TODLS TOY STORY: EXAMINING CONSISTENCY IN LANGUAGE SAMPLES COLLECTED VIA TELE-PRACTICE

Stephanie Pedraza Marin; Northeastern Illinois University
Murielle Standley; Northwestern University
Adriana Weisleder; Northwestern University

Toddlers develop language at different rates, and language sampling is one method to assess their skills. Traditionally, samples are collected in clinical settings, but this can be challenging for families with limited access. Telehealth has shown promise in expanding speech-language services, especially for families in rural, minority, or low-income communities. However, it remains unclear whether high-quality language samples can be collected via telehealth due to variations in home environments. This study examines how the number and type of toys in a naturalistic caregiver-child interaction, as well as the home environment, influence language output. We hypothesized that toy quantity and type would affect the number and types of words toddlers used. Spanish-English bilingual parent-child dyads were recorded via Zoom during a 20-minute play session. Language samples were transcribed to measure vocabulary and coded for toys used and environmental factors. Preliminary findings suggest that toy type did not impact language production, while noisier settings reduced talkativeness. These insights can help refine language sampling methods across different settings.

PS1F27

Investigating the Predictive Value of Gestures to Identify Language Delay in Bilingual Toddlers

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Bilingual toddlers' language delays are often dismissed as the result of bilingual exposure rather than a potential indicator of a language or communication impairment. Language Sampling Analysis (LSA) is the gold standard for identifying children with language delays or impairments, but rarely used with bilinguals, in part due to a lack of bilingual SLPs. Furthermore, LSA includes only verbal measures. Research with monolinguals suggests that including gestures in measures of communication helps predict language outcomes better than verbal measures alone. Gestures may serve as a useful additional indicator for identifying language delay in bilingual toddlers as they can be observed in naturalistic interactions and characterized even by monolingual SLPs. This study presents

data from 50 Spanish-English bilingual two-year-olds who participated in a 20-minute free-play interaction with their caregiver at home. First, we characterize bilingual toddler's language and gesture use at 24 months. Then, we examine whether adding a measure of gesture to a naturalistic language sample (LSA+G) is a better predictor of language status at 30 months than LSA measures alone. This research is supported by the National Institute on Deafness and Other Communication Disorders (NIDCD).

PS1F28

Evaluating Concurrent Validity of a Novel Grammatical Language Probe

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Norm-referenced omnibus language assessments are useful for evaluating overall language ability, but there are very few items per assessment that target specific grammatical structures. We developed an expressive grammatical language probe that targets regular past tense -ed, third person singular present tense -s, present progressive is/are verb+ing, and do/does question formation so that these specific morphosyntactic skills can be evaluated. The purpose of this study is to test the concurrent validity of the grammatical probe by comparing the probe scores of 82 school-aged children to their standard scores on the Word Structures subtest of the CELF-5 and their scaled scores on the SPELT-3. We hypothesize that there will be a positive association between the probe scores and the scores on the standardized assessments, indicating that the grammatical probe is valid for evaluating morphosyntactic skills in children. This study was supported by funding from the National Institute on Deafness and Other Communication Disorders (R01 DC019374-01).

PS1F29

Speech Variability, Speech Perception, and Expressive and Receptive Vocabulary Skills in Children With and Without Speech Sound Disorders

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Rationale: Children with speech sound disorders (SSD) sometimes produce words inconsistently over repeated attempts, and it has been proposed that variability may indicate underlying representations for words that are underspecified. The current study investigates the relationship between speech variability, speech perception, and expressive and receptive vocabulary skills in children with and without speech sound disorders, analyzing the data both by group and continuously.
Methods: Twenty-eight children, 14 with TD and 14 with SSD, completed a battery of speech and language measures, a speech perception task, and the Word Inconsistency Assessment to calculate lexical variability and segmental variability.
Conclusions: Children with above-average vocabularies had significantly better speech perception than children with average vocabularies, and lower segmental variability.

Implications: Children with lower vocabularies are at risk for poor speech perception skills. Segmental variability may index specificity and stability of phonological knowledge in children.
Funding: This research was supported by the National Institute on Deafness and Other Communication Disorders (NIDCD) under Award Number R21DC016142 granted to Françoise Brosseau-Lapré

PS1F30

The Role of Early Noun Vocabulary in Late Talkers' Verb Learning during a Treatment Study

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We examined early predictors of verb learning by Late Talkers (LTs) receiving VAULT Treatment (Alt et al., 2020, 2021, 2025). Noun knowledge is important when learning verbs as there is an interdependence between these word classes in a sentence. However, LTs tend to know a smaller proportion of nouns (Jiménez et al., 2021; Perry et al., 2024), yet similar proportion of verbs (Horvath et al., 2019) out of their total vocabulary compared to typical peers. Nouns are also potentially important for learning verbs as many early learned words are "denominalizable nouns", acting as both noun and verb. LTs' knowledge of these words as nouns at 30 months is related to their knowledge of them as verbs at 42 months (Biblin et al., 2023). Our preliminary results show that LTs with a higher proportion of pre-treatment nouns (but not verbs or denominalizable nouns), regardless of their pre-treatment vocabulary size, tended to learn more verbs during treatment. Knowing early predictors of verb learning can inform clinical decisions of children's readiness for learning different classes of words as treatment targets.
Funding: NIH-NIDCD R01DC015642.

PS1F31

Investigating the Research to Practice Gap for Evaluating Multilingual Learners in Schools Through a Community-Based Retrospective Chart Review

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Students who are culturally and linguistically diverse (CLD), i.e., students from ethno-racially minoritized backgrounds and those who are bilingual or English language learners, have historically been at risk of both over- or under-identification for special education services, particularly in the areas of speech, language, and literacy. While the literature has emphasized best practices for evaluating multilingual learners, it is not clear that the research is being translated to practice. This presentation will describe a partnership between a university and an urban school district, where a retrospective chart

review process was used to operationalize challenges and barriers to equitable identification of student needs. Results indicated a mismatch between language exposure and language of testing and an overreliance on standardized scores for eligibility decisions. We also examined tests administered, eligibility decisions, and service recommendations by student age and other demographic factors. Based on the results, a plan for district professional development, training, and policy and procedural changes will be described. This project was funded by a Community Impact grant from the Rutgers Equity Alliance for Community Health.

PS1F32

"Anxiety, depression, emotional lability, and poor peer relations among children with ADHD, DLD, and co-occurring ADHD+DLD

Sean Redmond; University of Utah
Amy Wilder; University of Utah

Attention-deficit/hyperactivity disorder (ADHD) and developmental language disorder (DLD) are common and commonly co-occurring disorders. Both conditions have been linked to elevated levels of anxiety, depression, emotional lability, and poor peer relations. Few studies have considered the impacts of both ADHD and DLD within the same study sample. A 4-group design consisting of children with ADHD, DLD, ADHD+DLD, and neurotypical development (TD) (n=78; mean age=10;6) was leveraged to examine the relative contributions of ADHD and DLD to parent-reported socioemotional problems. Children with ADHD were rated above clinical cutoffs at higher rates than children with TD on all scales and children with ADHD+DLD were higher than children with DLD on all scales except anxiety. Except for peer relations, children with DLD and TD were rated similarly. Significant mean group differences were present on ratings of children's emotional lability and peer relations problems. After controlling for the contributions of age, sex, maternal education, nonverbal IQ, and ADHD symptoms (19-39% of individual variability), the contributions of language deficits to socioemotional problems were no longer significant. Clinical implications discussed [Funding: NIDCDR01DC017153].

PS1F33

AAC Implementation in Schools: Perspectives of Speech-Language Pathologists and Special Education Teachers

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Speech-language pathologists (SLPs) and special education teachers are key service providers for students with complex communication needs (CCN) who use augmentative and alternative communication (AAC). This state-wide survey of SLPs and special educators is about perspectives of the importance of factors related to AAC implementation in schools, as well as potential barriers/facilitators. Findings demonstrate that SLPs and special education teachers' generally equally rate the importance of stakeholder knowledge and attitudes, individualized support and instruction, as well as

environmental access. However, there is a difference between SLPs and special educators' perception of the quality of implementation for AAC factors. Understanding the perspectives of SLPs and special educators is essential to improving the quality of assessment, treatment and support for students using AAC. SLPs and special education teachers work with many of the same students and fully understanding their individual and collective perspectives will allow school teams to plan and implement the best intervention support. The next step in this line of research is determining how to address barriers for school-based AAC implementation. Funding: Project PAL (H325D230072), U.S. Department of Education

PS1F34

A Qualitative Investigation of Speech-Language Pathologists' Perspectives on Strategies Associated with Gestalt Language Processing and the Natural Language Acquisition Protocol

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Courtney Venker; Michigan State University

Gestalt language processing (GLP) and the Natural Language Acquisition (NLA) Protocol have grown in popularity within speech-language pathology. GLP/NLA is not supported by peer-reviewed empirical research but includes several clinical recommendations. To investigate perspectives on strategies associated with GLP/NLA, this study included interviews from 17 practicing speech-language pathologists (SLPs) who work with autistic children. We inquired about perspectives on six strategies SLPs may use with autistic children. SLPs nearly unanimously endorsed three strategies: acknowledging all communication modes and attempts, following the child's lead, and trying to determine what a child might be communicating, which are strategies associated with general good practices. Most SLPs also expressed support of expanding a child's spoken utterances, which is a strategy advised against in certain stages of GLP/NLA. Responses were mixed for modeling language without regard for grammar or word order and modeling language with no verbs, which are specifically advised in GLP/NLA at specific stages. Findings suggest that it is inadequate to talk about overall recommendations associated with GLP/NLA; it will instead be beneficial to examine specific strategies individually.
Funding: NIH R01 DC020165 (Venker).

PS1F35

Predictors of morphosyntax in young bilingual Arabic-English speaking children: The role of home literacy, family routines, and child age

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Arabic-English speakers comprise the second largest population of English learners in U.S. public schools (NCES, 2023), and Arabic is the fastest growing language in U.S. (U.S. Census Bureau, 2023). These considerations make it such that scholarly investigations in Arabic are crucial for advancing research in child language acquisition.

This study examined the contributions of home literacy and family routines in bilingual Arabic-English speaking children's morphosyntactic skills via parent report. Results revealed significant differences between mothers and fathers. Clinical implications and limitations will be discussed. This work was funded by an ASHFoundation Graduate Student Scholarship and NIDCD (T32DC014435).

PS1F36

South Asian shared Reading Intervention (SARI) Protocol

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Asian Americans remain underrepresented in speech-language research (Millager et al., 2024). This study examines the South Asian shared Reading Intervention (SARI) protocol, a culturally responsive shared book reading intervention for South Asian families with children with language disabilities.

We seek to answer: how does the SARI protocol affect South Asian parents' use of interactive reading behaviors (e.g., pausing/questioning, repeating, and expanding utterances), and what impact does SARI have on the expressive vocabulary of preschool-aged South Asian children with language disabilities or late language emergence (LLE)?

We will examine SARI's efficacy using a multiple baseline single-case design. SARI modifies dialogic reading by replacing PEER with PRE (prompt, repeat, expand) and CROWD with DAAL prompts (define, ask, anticipate, link). Five South Asian parent-child dyads participated. Parent-child interactions and vocabulary are measured pre- and post-intervention.

Data collection is ongoing, with expected improvements in interactive reading behaviors and vocabulary. If effective, SARI will provide a culturally responsive intervention for South Asian families.

Funding Sources: Arizona State University Graduate Student Government Dissertation Grant; U.S. Office of Special Education Programs (OSEP) PRIDE Training Grant.

PS1F37

Narrative or Conversation: Which Language Sample Type is Optimal for Bilingual Children?

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Rationale: This study examines differences between two language sample types, conversation and narrative, to determine if there is an optimal type for assessing bilingual school-age children's syntactic complexity and lexical diversity.

Methods: Conversation and narrative language samples were elicited from 24 typically developing school-age children in three groups who participated in the study: monolingual English, bilingual Spanish-English, and bilingual Mam-English. Two measures of syntactic complexity and two measures of lexical diversity were calculated.

Results: Preliminary results indicate that bilingual children's mean length of utterance varies systematically with language sample type, as does number of different words. Conclusions: Results demonstrate differences in morphosyntactic and semantic measures between narrative and conversational language samples elicited from bilingual children. The optimal type of language sample elicited by a speech-language pathologist may be best determined by the suspected area of difficulty for each specific child.
Augustana New Faculty Research Award (Potratz) and Eunice Kennedy Shriver National Institute of Child Health & Human Development (NICHD) grant R01HD087452 (PI: Redford).

PS1F38

A Cross-Sectional Analysis of Executive Functions and Language Relationship in 2- to 17-year-olds with Down syndrome

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Individuals with Down syndrome (DS) face barriers in daily living, in part because of deficits in executive functioning (EF) and language and communication. Research has identified profiles of communication and EF strengths and weaknesses in DS. Interestingly, these profiles appear to remain stable across development, and there is preliminary evidence that language and EF are related in young adults with DS. This study included two age groups, 2- to 5- and 9- to 17-year-olds with DS, to explore the relationship between expressive and receptive language and EF using non-parametric statistics. Implications for future research and clinical work will be discussed.
Funding: Waisman core grant NIDCHD 50HD105353 (Chang), NICHD R21 HD111807-01 (MPIs Sterling/Finestack), and NIDCHD R01 DC019092-04 (MPIs Sterling/Hoover).

PS1F39

Characterizing Relations between Preschoolers' Science Vocabulary and Educational Media Use

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Science achievement gaps emerge as early as kindergarten and are strongly linked to disparities in early science knowledge. One key predictor of science knowledge is children's science-specific vocabulary, which supports their ability to acquire and understand scientific concepts. One primary avenue for children to learn new words is educational media, yet little is known about how different platforms contribute to the development of science vocabulary. To address this gap, the current study examines the link between children's science media exposure and their domain-specific vocabulary

knowledge. Ninety-six parents of preschool-aged children in the U.S. completed surveys assessing their children's general and science vocabulary, media exposure, and home learning environment. Results showed that reading science books significantly predicted science vocabulary, whereas engaging with science TV shows and apps did not. These findings have implications for educators and caregivers seeking to support early science learning and bridge achievement gaps. This work was funded by the Wisconsin Alumni Research Foundation.

PS1F40

Effects of Secondary Tasks on Planning Performance in Preschoolers with DLD and Typical Language

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Preschool-age participants with and without developmental language disorder (DLD) were compared on their performance on the Tower of Hanoi (TOH) planning task under four administration conditions. Participants first completed the TOH with standard task instructions. Subsequently, they completed three other TOH conditions that included secondary tasks in counterbalanced order. The articulatory suppression condition prevented self-directed speech through repetition of a word, plan aloud promoted self-directed speech by instructing participants to describe their actions, and foot tapping included a secondary task unrelated to language. Participants in the DLD and typical language groups performed equally accurately on the standard TOH, although participants with DLD tended to require more moves to solve the puzzle, which indicates less efficient planning performance. Both groups' standard condition TOH accuracy was lower than the other conditions, likely due to order effects. Children with typical language had equivalent performance across the three secondary task conditions, but participants with DLD showed reduced accuracy in the plan aloud condition. These preliminary results suggest that instructing children with DLD to produce self-directed speech is not beneficial for cognitive performance.
NIDCD R21DC018624

PS1F41

Bridging Gestures and Words: Maternal Pointing and Early Vocabulary of Young Children with Down Syndrome

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Caregivers use gestures, such as pointing to an object, to support spoken words and make a connection to their referents. This study examined the longitudinal relationship between maternal pointing and vocabulary in young children with Down syndrome (DS). Twenty young children with DS and their mothers completed a free play at Time 1, which were coded for maternal pointing–touch, proximal, and distal. Mothers reported children's vocabulary on the CDI. Maternal distal points were positively correlated with child

expressive vocabulary at Time 1. Linear regression revealed maternal total points at Time 1 predicted receptive and expressive vocabulary at Time 2 and 3. A multiple regression for types of points indicated that distal and proximal points were significant predictors of receptive vocabulary at Time 2, but no predictors were significant for expressive vocabulary. The multiple regression for type of point on children's vocabulary at Time 3 was not significant. Maternal use of pointing may serve as a precursor to vocabulary growth in children with DS.
Funding Sources: Campus Research Board UIUC, CHAD Pilot Grant UIUC.

PS1F42

Expressive language and executive function growth in children born preterm

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Children born preterm can present with cognitive, linguistic, motor, and behavioral concerns, with significant variability between individuals. Executive function skills include attention, working memory, initiation, and planning, which are reliably an area of difficulty for children born pre-term. Additionally, there is a growing body of research that indicates an association between executive functioning (EF) skills and language development and suggests that EFs predict language skills in children born preterm. However, studies with children born full-term also suggest an inverse relationship, with language shaping children's EF outcomes. The purpose of this study was to examine whether expressive language at 24-months and 36-months can predict executive function at 36-months in children born preterm. Results demonstrate that vocabulary size at 24 months is significantly associated with later executive function at 24 and 36 months. Analysis of language transcripts at 36 months are currently in progress, so that we can examine whether the role of EFs in language development generalizes across different measures of language. This project was funded under the National Institute of Health (NIH) grants R01HD044163 and R01DC020447.