

SRCLD 2022 Poster Session 3

PS3S02

Using visual analog scales to assess effects of Spanish phonological intervention for Spanish-English bilingual children

Alicia Escobedo; San Diego State University/UC San Diego

Philip Combiths; University of Iowa

Fanny Sarmiento-Martinez; San Diego State University

Abigail John; San Diego State University/UC San Diego

Irina Potapova; San Diego State University

Jessica Barlow; San Diego State University

Sonja Pruitt-Lord; San Diego State University

Measurements of effectiveness are a critical component of intervention, as they reflect what changes occurred during or after treatment (Gierut, 1998). In phonological intervention, one commonly used measure is the percent accuracy of an intervention target produced by a child with a speech sound disorder. However, percent accuracy of targets often does not capture subtle changes that children make throughout intervention (Munson et al., 2012). The current study investigates the use of visual analog scales (VAS) to measure intervention effectiveness with five young Spanish-English bilingual children who received Spanish phonological intervention. All participants (n = 5) were Spanish-dominant bilinguals with a speech sound disorder between the ages of 4 and 6. Each participant was assigned an intervention target based on sounds missing from their phonological system. Digital recordings of 18 treatment sessions were reviewed to allow for scoring of children's treatment target using a VAS. The results of this study will provide more information on how VAS may capture finer, more nuanced changes made to children's treatment targets during intervention that are not captured through percent accuracy measures. Funding: NIDCD R21DC017201.

PS3S03

Using Self-Directed Speech Production to Predict Tower of Hanoi Performance in Preschoolers with DLD

Leah Kapa; University of Arizona

Children with developmental language disorder (DLD) have executive function deficits that may be related to their delayed development of self-directed speech (i.e., speech to oneself to guide thoughts and behaviors). We examined the relationship between self-directed speech production and performance on the Tower of Hanoi planning task among twenty preschoolers with DLD. Logistic regression was used to determine if the production of self-directed speech predicted whether children solved or failed Tower of Hanoi trials. Self-directed speech was a negative predictor of Tower of Hanoi trial accuracy, and self-directed speech production was positively correlated with trial difficulty. This pattern of results suggests that the negative relationship between self-directed speech and planning accuracy may be explained by the fact that participants produced self-directed speech more often on difficult trials that they were more likely to fail. This is consistent with findings from typically developing participants that challenging tasks elicit more self-directed speech. Taken together, these results show that

preschoolers with DLD spontaneously produce self-directed speech during planning tasks and are more likely to use self-directed speech when facing higher cognitive demands.

PS3S04

The relative impacts of ADHD and SLI on children's judgments of grammaticality

Sean Redmond; University of Utah

Mabel Rice; University of Kansas

Andrea Ash; University of Utah

Rationale: Grammaticality judgments (GJs) represent a potentially useful clinical marker for specific language impairment (SLI). Previous work suggests GJs may be influenced by children's executive functioning. Because ADHD may commonly co-occur with SLI, consideration of potential impacts of ADHD on children's GJs is warranted. Methods: A GJ task was administered to 64 children (age: 6;1-8;5) along with a battery of verbal, nonverbal, ADHD, and executive function measures. Potential group differences were examined [TD, ADHD, SLI, ADHD+SLI], as well as levels of association among children's GJs and other measures from the battery. Results: Children with SLI and ADHD+SLI performed significantly lower than children with TD. Children with ADHD performed similarly to children with TD. Children with SLI performed similarly to children with ADHD+SLI. Associations between children's GJs and their ADHD and executive function symptoms were weak and non-significant. GJs were moderately and significantly correlated with other language measures. Conclusions: GJs join nonword repetition, sentence recall, and tense-marking as an efficient index of language disorder that seems to be unaffected by children's ADHD status. Funding provided by NIDCD

PS3S05

The frequency and function of discourse-marker "like" in the speech of older children with ASD

Emily Zane; James Madison University

Rebekah Jones; James Madison University

Geralyn Timler; James Madison University

Ruth B. Grossman; Emerson College

Discourse markers (e.g., "I mean" and "well") aid in conversational flow, reciprocity, and in conveying the speaker's message. Previous research finds that individuals with ASD use discourse markers less often than neurotypical individuals, especially those markers that are listener-directed ("um") vs. ones that are speaker-oriented, (e.g., "uh"). However, the use of one ubiquitous listener-directed discourse marker, "like" (e.g., "This is, like, my favorite"), has not yet been studied in ASD. The current study examines the overall frequency and patterns of usage of "like" in the conversational speech of older children with ASD. We compare frequencies/patterns of use to age-/language-matched neurotypical peers. Against predictions, findings reveal equivalent frequencies of "like" use between groups and similar patterns of usage. These findings suggest that not all discourse markers are similarly underused by adolescents with ASD, even those that are listener oriented. In this study, participants with ASD used "like" to signal nuanced pragmatic information to their listener, thereby revealing unexpected pragmatic strengths that have gone unnoticed until now. Funding source: NIH-NIDCD R01 DC012774-01.

PS3S06

The Effects of Speaker and Exemplar Variability on Children's Cross-Situational Word Learning

Kimberly Crespo; University of Wisconsin-Madison

Margarita Kaushanskaya; University of Wisconsin-Madison

Cross-situational statistical word learning (CSWL) – the ability to learn words by tracking co-occurrence statistics of words and their referents over time – has been identified as a fundamental mechanism underlying lexical learning but has not been tested against variable input. In the present study, we examine the separate and combined effects of speaker and exemplar variability on CSWL in typically developing (TD) English-speaking monolingual children. Results revealed that variability in speakers and exemplars did not facilitate or hinder XSWL performance. However, input that varied in both speakers and exemplars simultaneously hindered children's word-learning. Results from this work suggest that accommodating multiple forms of variable input may incur costs. Overall, this research may provide new theoretical insights into how fundamental mechanisms of word-learning scale to accommodate more complex and naturalistic forms of input. This research was supported by NIH grants R01 DC011750 awarded to Margarita Kaushanskaya and F31 DC019025 awarded to Kimberly Crespo and Margarita Kaushanskaya.

PS3S07

The Effects of Language Proficiency on Narrative Macrostructure in Spanish-English Bilinguals

Maria Kapantzoglou; Portland State University

Jenny Magallon; Portland State University

This study examined the effects of Spanish and English language proficiency on narrative macrostructure skills of Spanish-English speaking children. Forty typically developing Spanish-English speaking children, 5-7 years of age, participated in the study. Language proficiency in each language was measured as a continuum of performance using children's oral language samples. Narrative macrostructure was also measured based on children's Spanish and English language samples. Linear regressions were performed to determine the effects of language proficiency in each language on story grammar elements. Results indicated that children's Spanish and English proficiency affect their narrative performance.

PS3S08

The Effect of Word-Learning Biases on Early Vocabulary Acquisition in Young Children with Autism Spectrum Disorder

Eileen Haebig; Louisiana State University

Claire Bourgeois; 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, concreteness, and iconicity. This study examined the association of vocabulary knowledge and word features in young children with ASD (n = 280) and typically developing (TD) toddlers (n = 1,054). Secondary analyses were conducted using data from the National Database for Autism Research and the Wordbank database. Expressive vocabulary was measured using the MacArthur-Bates Communicative Development Inventory. Although the trajectories for concreteness, iconicity, and imageability are similar between children with ASD and TD toddlers, divergences were observed. Differences in imageability are seen early but resolve to a common trajectory; differences in iconicity are small but consistent; and differences in concreteness only emerge after both groups reach a simultaneous peak, before converging again. This study reports unique information about the nonlinear growth patterns associated with each word feature for and distinctions in these growth patterns between the groups.

Funding sources: Research Competitiveness Subprogram – Louisiana Board of Regents

PS3S09

The Diagnostic Accuracy of Bilingual PGU in Bilingual Spanish-Speaking Children with and without Developmental Language Disorders

Michelle Hernandez; University of Houston

Amy Castilla-Earls; University of Houston

This study compared the diagnostic accuracy of Percentage of Grammatical Utterances (PGU) and Mean-Length of Utterance (MLU) in differentiating bilingual children with and without developmental language disorder (DLD) using 2 approaches: best language and both languages. This study included 69 Spanish-English bilingual children ages 4;0 to 6;11 (years; months) with (n = 33) and without DLD (n = 36).?Story generation and story retelling tasks were used to elicit language samples in English and Spanish. The diagnostic accuracy of PGU was calculated using two methods: (1) Best language (highest PGU between the English and Spanish and MLU for that language); (2) Both languages (combined PGU that included the total number of grammatical utterances over the total number of utterances across Spanish and English language samples and MLU in each language).?Findings indicated that using a bilingual PGU in combination with MLU in both languages yielded the best model. These findings support using a combined method?of PGU and MLU in English and Spanish when assessing bilingual children.

PS3S10

The Comorbidity of ADHD and DLD in School-Aged Children, L2 Acquisition, and the Types of Errors they Produce

Amélie Albert; Laurentian University

Chantal Mayer-Crittenden; Laurentian University

The purpose of this study was to analyze the effects of the co-occurrence of developmental language disorder (DLD) and attention-deficit disorder with or without hyperactivity (ADHD) on language development and second language acquisition in a minority Francophone setting. Results from different tests were observed to analyze the types of errors produced by bilingual children having only ADHD, DLD or both. An unpublished non-word repetition task, as well as the Recalling Sentences subtest of the CELF-5 battery, were used to assess the children. The data for this research comes from a longitudinal study and 15 subjects were categorized into three

different groups: a group of children with ADHD only (n=5), a group of children with DLD only (n=5) and a group of children with concurrent ADHD and DLD (n=5). The different language domains that were analyzed were verbal working memory and morphosyntactic knowledge. The results demonstrated that like DLD, ADHD may have an impact on language and that speech-language pathologists should be aware of the types of errors that affected children can produce on these tasks.

PS3S11

Sharing the Characteristics of “Caregiver-Child Interactions” to Improve the Reproducibility and Replicability of Your Research

Betul Cakir-Dilek; University of Minnesota- Twin Cities

Marianne Elmquist; University of Wisconsin-Madison

Andrea Ford; University of Minnesota- Twin Cities

Kirstin Kuchler; University of Minnesota- Twin Cities

Sarah Jane Brown; University of Minnesota- Twin Cities

Amy Riegelman; University of Minnesota- Twin Cities

Scott Marsalis; University of Minnesota- Twin Cities

Lizbeth Finestack; University of Minnesota- Twin Cities

Caregiver-child interactions (CCIs) are an important and common context for measuring caregiver and child language and communication behaviors when researchers seek to evaluate an intervention’s effectiveness. In order to increase the replicability, reproducibility, and generalizability of an intervention’s effectiveness, we need to understand how, and to what extent, researchers describe this measurement context itself. In that vein, our purpose was to explore specific measurement features of CCIs. Using scoping review methods we identified randomized control trials (RCT) (n = 11), non-RCTs (n = 2), and single group studies (n = 8). We extracted information related to the characteristics of CCIs. Studies varied in defining the characteristics of CCIs including the length, context, and how the interaction was measured. We found that the reviewed studies did not frequently report information about these characteristics. Our results indicate the need for presenting more detailed information about CCIs because it affects the reproducibility and replicability of the studies. We will conclude with recommendations for describing CCIs when used as a context to measure caregiver and child language and communication behaviors.

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PS3S12

Shared book reading and language development: What is actually being measured?

Megan Figueroa; University of Arizona

Shared book reading is hypothesized to moderate the effects of socioeconomic disadvantage on language outcomes, potentially because the context of book reading facilitates the use of so-called “high-quality” linguistic input. Here, I examine the possibility that uncovering a correlation between shared book reading and later language skills has no explanatory value on its own. These studies confound “language skills” with vocabulary acquisition—context-dependent, socially-determined knowledge that continues throughout one’s lifetime. What researchers are actually measuring are what words children learn from a specific activity—shared book reading.

I examined meta-analyses measuring the effects of early shared book reading on children's later language skills. Studies tend to link literacy practices at home with larger vocabularies based on standardized measures like MCDI and PPVT. Vocabulary becomes a stand in for "language skills" and, ultimately, for social class and all that comes with that privilege.

PS3S13

Reminiscing Conversations and Clinical Collaborations: An exploration of motivational interviewing techniques to foster more inclusive intervention

Charlotte Clark; University of Wisconsin, Eau Claire

Jerry Hoepner; University of Wisconsin, Eau Claire

Rebecca Jarzynski; University of Wisconsin, Eau Claire

Ryan Nelson; University of Louisiana, at Lafayette

MiKayla Schuebel; University of Wisconsin, Eau Claire

Marissa Niehoff; University of Wisconsin, Eau Claire

Research demonstrates how parent-child reminiscing conversations are important to a child's cognitive, socio-emotional, and language development. Therefore, speech language pathologists are recognizing the importance of including such conversations as a part of intervention.

Research also demonstrates, however, that there are important cultural and socio-economic differences in how these conversations manifest between parent and children. Collaborating with parents is essential to understand their own particular values and expectations when it comes to reminiscing. The aim of this study is to explore the potential of motivational interviewing techniques as a way of fostering collaboration between parents and clinicians with different backgrounds. Motivational interviewing has been used in healthcare and educational settings to empower those who seek to make a change. We use inductive analysis to examine the impact of motivational interviewing on clinician- parent collaboration as they explore together the therapeutic benefits of reminiscing with children. Knowledge of how to use motivational interviewing techniques to foster such collaboration will support clinicians in implementing reminiscing interventions that are appropriate for individual families.

PS3S15

Phonological short-term and long-term memory effects on nonword repetition performance in college students with and without dyslexia

Michelle Moore; West Virginia University

Hannah Krimm; University of Georgia

Yu Zhang; Oklahoma State University

Peter Richtsmeier; Oklahoma State University

College students with dyslexia often have persistent phonological processing deficits, but the underlying nature of the deficits is not fully understood. This current study tested the performance of college students with and without dyslexia on a nonword repetition (NWR) task designed to systematically test phonological short-term and long-term memory effects using nonword length and consonant age of acquisition (CAoA) variables, respectively. There were no significant differences in NWR performance between the control and dyslexia groups when dyslexia status was based on self-report of a diagnosis. However, when group status was based

on decoding ability regardless of referral or self-report, there was a group x CAoA x nonword length interaction. The magnitude of the CAoA effect substantially increased as nonword length increased for the poor decoding group, whereas the effect was similar across multisyllabic nonwords for the control group. Results suggest that weaker activations in phonological long-term memory are more prone to error as the short-term memory demands increase for students with dyslexia. There are also implications for considering compensated versus uncompensated dyslexia in our assessment and interpretation of student performance.

PS3S16

Modeling Late and Typical Vocabulary Acquisition: The Importance of Approximating Toddlers' Linguistic Environment

Jennifer Weber; University of Colorado Boulder

Eliana Colunga; University of Colorado Boulder

Understanding child language development requires accurately representing children's lexicons. However, most past work modeling children's lexical semantic structure has utilized adult norms or corpora of adult language. The present work uses lexical networks created from Word2Vec embeddings trained on a newly-created toddler-directed language corpus. We compare predictions from a Word2Vec toddler network, a network created by training Word2Vec on typical adult input, and a model trained using both corpora. The toddler-only network outperformed the other two when predicting normative vocabularies of typically developing children from 16-30 months, indicating that a general toddler language corpus is a better tool for modeling early lexical development. Further results also showed that Word2Vec-derived networks perform better than networks created using other distributional methods. Here, we extend this approach to modeling individual late talker trajectories. Our results suggest that despite late talker heterogeneity and small vocabularies, semantic networks and computational models can still capture patterns in vocabulary acquisition in order to predict vocabulary growth over time. We discuss how these and other methods such as machine learning can help individualize further research and intervention approaches.

PS3S17

Measuring changes in intentional communication in infants at elevated likelihood of autism from a community sample

Elizabeth Choi; University of Southern California

Elizabeth Phelps; University of Southern California

Chloe Rey-Talley; University of Southern California

Stephen Morrison; University of Southern California

Cristin Holland; Columbia University Irving Medical Center

John Sideris; University of Southern California

Linda Watson; University of North Carolina at Chapel Hill

Grace Baranek; University of Southern California

We sought to characterize the ways in which intentional communication of infants at elevated likelihood of autism – identified from a community sample – changes over time in the context of an intervention study. Additionally, we compared intentional communication rates to communication scores on standardized measures of early language. We used paired samples t-

tests and Wilcoxon signed-rank tests to determine whether there were significant differences in intentional communication scores over time from mean 14.1 to 18.5 months. We found significantly higher rates of intentional vocalizations, combined vocalizations and gestures, and total acts post- vs. pre-intervention, with no significant difference in rates of uncombined intentional gestures across time. Standardized language scores did not change significantly from pre- to post-intervention. Our findings revealed that our coding scale was able to capture significant changes in intentional communication over about four months in the context of an intervention. These results provide support for using this tool to measure change in intentional communication in infants at elevated likelihood of autism. The study from which this data was used was funded by an NIH NICHD grant (R21HD091547-02).

PS3S18

Mean length of utterance and Index of productive syntax in toddlers: correlating the two measures

Klára Matiasovitsová; Faculty of Arts, Charles University

Petra Cechová; Faculty of Arts, Charles University

Filip Smolík; Faculty of Arts, Charles University

Jakub Sláma; Faculty of Arts, Charles University

Jolana Kohoutková; Faculty of Arts, Charles University

Kamila Homolková; Faculty of Arts, Charles University

The study examined the use of MLU and IPSyn in Czech including their validity against test-based measures of vocabulary and grammar comprehension. We developed a Czech version of IPSyn and we compared the scores with MLU in syllables, morphemes, and words in the same transcripts. We used a corpus of 110 children recorded at two time points: 2;6 and 4;11. The different MLU measures correlated closely (r 's > 0,97). We found strong correlations between MLU and IPSyn in both time points (0.88 and 0.77). In regression analyses, MLU and IPSyn in 2;6 years had a significant unique effect on the later scores of these measures ($\beta = 0.35$ and 0.37, respectively). For IPSyn, the vocabulary test showed a unique predictive effect above the factors of other predictors ($\beta = 0.26$). Our results confirm that MLU in words is an adequate measure. IPSyn is a valid measure since it predicts itself in time with a vocabulary measure as a unique predictor and it also correlates closely with MLU.

Faculty of Arts, Charles University, IGRA CU, CZ.02.2.69/0.0/0.0/19

PS3S20

Language Performance on the Preschool Language Scale-5 among Children Enrolled in Head Start Programs

Alexandria Sanchez; University of New Mexico

Cathy Qi; University of New Mexico

Language skills provide the foundation for cognitive, social, behavioral, and literacy development. Early identification of language delays during the preschool years is critical so that appropriate interventions are delivered to stimulate language development. However, accurate identification of language delays in young children from low-income families and culturally and linguistically diverse backgrounds is complicated by the uneven quality and quantity of language

acquisition in the preschool years, and by the inherent limitations of standardized language instruments for use with this population. The purpose of the study was to examine the language performance of preschool children enrolled in Head Start programs. Trained research assistants administered the Preschool Language Scale-5 (PLS-5) individually to 279 children in Head Start centers. Results indicated that children performed significantly below the expected means for their ages on the PLS-5 Auditory Comprehension, Expressive Communication and Total Language scores. Girls scored significantly higher than boys. There was no significant difference between Auditory Comprehension and Expressive communication scores. Implications will be discussed.

PS3S21

Language Choice and Repairing Communication Breakdown by Bilingual Children with Different Language Abilities

Madeline Hoffses; University of Massachusetts Amherst

Ada López González; University of Massachusetts Amherst

Megan Gross; University of Massachusetts Amherst

The current project examines how bilingual children with a variety of language abilities interact with monolingual conversation partners and address communication breakdowns associated with language mismatch. Our past work using a scripted confederate dialogue task found that bilingual children with Developmental Language Disorder (DLD) were more likely than their typically developing peers to respond in English when addressed in Spanish, even after accounting for Spanish proficiency. However, a key limitation was that they received no feedback that their partner did not understand. In the current project, children who responded in the opposite language received either subtle (“No sé” [I don’t know]) or explicit (“Sólo hablo español” [I only speak Spanish]) feedback and an opportunity to rephrase. Their response patterns (e.g., switching languages to facilitate understanding) are considered relative to diagnostic status (TD, DLD, autism), language proficiency, metalinguistic awareness, and theory of mind. Implications for intervention practices with bilingual children are discussed.

[UMass Amherst faculty start-up funds; Spaulding-Smith Fellowship]

PS3S22

Language Alignment in Bilingual Parent-Child Interactions

Caitlyn Slawny; University of Wisconsin-Madison

Emma Libersky; University of Wisconsin-Madison

Margarita Kaushanskaya; University of Wisconsin-Madison

In conversation, bilingual children must choose what language to use. In the current study we asked: in spontaneous conversations, do bilingual children respond to bilingual adults in the same language, and do children with weaker language skills have more difficulty aligning their language choice? Forty-five Spanish-English bilingual parent-child dyads participated in a 10-minute video-recorded play-based activity. Children’s language abilities ranged from clinically low (Developmental Language Disorder, DLD) to typical. Conversational turns for parents and children were coded as English, Spanish, or code-switched (mixed use of English and Spanish). Children’s utterances were then coded for alignment as matching or mismatching the parent’s language. We examined the effects of parent language choice, and children’s language skills and

language dominance on alignment. Overall, children showed good alignment with parent language choice, independent of language ability. However, English-dominant children were more likely to align with their parents. Together, these findings suggest that young bilingual children align to the language choice of their parents, but language dominance plays a strong role in language choice.

Funding: R01DC016015-04

PS3S23

Influences of autism spectrum disorder and sex in the formation of children's preschool language networks

Regina Fasano; University of Miami

Laura Vitale; University of Miami

Daniel Messinger; University of Miami

Lynn Perry; University of Miami

Autism spectrum disorder (ASD) causes deficits in communication and social interaction. Because ASD is more prevalent in boys than girls, questions remain about the differences in language and social interactions between girls and boys with ASD and their typically developing (TD) peers. This study compared the language and social interactions in preschool classroom language networks of girls and boys with ASD and TD peers. We tracked language and social interactions of 77 preschoolers in ASD-inclusive classrooms to know when and with whom children interacted, and how interaction differed between girls and boys with and without ASD. We looked at how group (ASD/TD) and sex affected children's centrality to language networks and how assessed language abilities related to centrality (cotalk with peers). Results suggested ASD-related group differences in social communication that varied by sex. Additionally, girls' and boys' centrality may be differentially associated with ASD status and language abilities. Objective research in the real-world context of classrooms may lead to important insights of differences between girls and boys with ASD that are relevant for diagnosis and intervention.

Funding: IES/The Spencer Foundation

PS3S24

Influence of Language Sampling Context on Sentence Diversity in AAE-Speaking Preschoolers

Maura Moyle; Marquette University

John Heilmann; University of Wisconsin-Milwaukee

Denise Finneran; University of Oklahoma

Abigail Dobbins; Marquette University

Accurately assessing children who speak African American English (AAE) can be challenging for speech-language pathologists. A measure of sentence diversity based on narrative language samples collected from AAE-speaking preschoolers has shown promise as a valid, dialect-neutral index of expressive language skills. The goal of this study was to examine the influence of language sampling context on sentence diversity. Specifically, we examined sentence diversity within narrative, conversational, and play-based language samples collected from low-income AAE-speaking preschoolers. The current study found that narrative language samples were associated with higher levels of sentence diversity (i.e., unique subject-verb combinations) than

conversational or play-based language samples. The findings suggest that sentence diversity is significantly influenced by language sampling context; therefore, its validity as a language measure may depend on the complexity of language elicited from the child. Clinical implications, limitations of the current study and future research will be discussed. This research was supported by the US Department of Education, Office of Elementary and Secondary Education, Early Reading First Program [Grant S359B08008], the United Way of Greater Milwaukee, and the Greater Milwaukee Foundation.

PS3S25

How we Measure Change Matters: Considering Proximity and Boundness of Outcomes when Evaluating the Effectiveness of Caregiver-Implemented Communication Interventions

Marianne Elmquist; University of Wisconsin - Madison

Andrea Ford; University of Minnesota - Twin Cities

Kirstin Kuchler; University of Minnesota - Twin Cities

Betul Cakir-Dilek; University of Minnesota - Twin Cities

Sarah Jane Brown; University of Minnesota - Twin Cities

Amy Riegelman; University of Minnesota - Twin Cities

Scott Marsalis; University of Minnesota - Twin Cities

Lizbeth Finestack; University of Minnesota - Twin Cities

Caregiver-implemented communication (CIC) interventions are commonly used to support and enhance children's language learning environments. They have strong empirical support as an effective approach to improve child language outcomes. However, how we measure change is rarely considered when considering intervention effectiveness. The end goal of communication interventions is to have cascading effects on outcomes that are distal and generalizable from the intervention context, yet outcomes used to evaluate intervention effectiveness tend to be proximal and context-bound to the intervention setting. We conducted a review of the literature on CIC interventions for children with language-impairments under the age of 48-months and evaluated intervention effectiveness considering the proximity and boundness of outcomes. Sixty studies met inclusion criteria, and we will use logistic regression with clustered bootstrapping to determine the probability of observing a treatment effect based on the proximity and boundness of caregiver and child communication outcomes. We will discuss results in terms of improving future intervention research and implications for current practice.

Funding Source: T32 DC005359, P50HD105353

PS3S28

Efficacy of International Tele-Practice Parent-Training for High Functioning Chinese Children with Autism Spectrum Disorders

Yao Chen; The University of Texas at Austin

Ying Hao; University of Mississippi

Li Zheng; Nanjing Normal University

Autism Spectrum Disorders (ASD) is highly prevalent, with 1 in 44 children (Maenner et al., 2021). While there is a high demand for speech-language services, resources are scarce for most

Chinese families of children with ASD (e.g. Huang et al., 2013). This calls for more services for these families. Tele-practice has been emerging as an effective approach to deliver services to families of children with ASD, which helps bridge the gaps of the shortage of clinicians and geographical distance (Pickard et al., 2016). When tele-practice is used in a different culture, its efficacy needs validation. In this study, we conducted a pilot study on the efficacy of an international tele-practice parent training program with a multiple-baseline single-subject design among four Chinese families of children with ASD who were diagnosed as high functioning. Three of the four caregivers demonstrated steady progress in strategy implementation during the intervention period and maintained the progress during follow-up. Two of the four children demonstrated progress in mean length of utterance and the other two children demonstrated progress in their number of different words.

PS3S29

Effects of Animated Versus Static Stories on Narrative Retell Quality: A Twin Perspective

Kolbee Tibbets; Idaho State University

Abigail Willis; Idaho State University

Diane Ogiela; Idaho State University

Rationale: Narrative language samples are an important part of language assessment and intervention for children with language disorders. It is unclear whether animated elicitation stimuli, in the absence of a linguistic model, can improve the quality of narrative microstructure and macrostructure in school-age children.

Method: Two typically developing 10-year-old identical twin girls viewed four short wordless stories in animated and static conditions that were counter-balanced across the participants and stories, allowing for a well-controlled case study comparison. They re-told the stories, which were recorded, transcribed, coded, and scored for macrostructure and microstructure elements. The data were compared within and across participants.

Results and Conclusions: Overall, the participants produced comparable narratives in both conditions. However, notable differences included more mental verbs and more elaboration of noun phrases in the narratives elicited by animated stimuli. This suggests that animation may support inferencing about characters thoughts and support the production of greater detail. Further study of the effect of animation, with and without linguistic models, on the quality of narrative retell would be beneficial.

Funding: Idaho State University Graduate Student Summer Research Grant.

PS3S30

Investigating the Roles of Anxiety and Communication Partner in Language Use in Fragile X Syndrome and Autism Spectrum Disorder

Emily Lorang; University of Wisconsin - Madison, Waisman Center

Audra Sterling; University of Wisconsin - Madison, Waisman Center

Boys with fragile X syndrome (FXS) and many autistic boys demonstrate deficits in grammar and vocabulary skills in addition to social communication deficits. Both autism spectrum disorder (ASD) and FXS are also associated with elevated anxiety symptoms. Anxiety symptoms may impact communication skills, particularly during social interactions with unfamiliar communication partners. In this study, we examined whether expressive language differed

between interactions with familiar vs. unfamiliar communication partners, and whether anxiety and/or ASD symptoms were associated with expressive language during these interactions. Boys with FXS and autistic boys ages nine to 18 years participated in two conversational language samples including one with a familiar conversation partner (i.e., their mother) and one with an unfamiliar partner (i.e., a study examiner). We also measured child anxiety and ASD symptoms. Data collection is ongoing. Preliminary findings suggest a significant association between anxiety and expressive language during conversations with unfamiliar but not familiar communication partners in boys with FXS. Speech-language pathologists may need to consider underlying anxiety and communication partner when assessing expressive language. Funding: K23DC016639 (Sterling), F31DC018716 (Lorang), CAPCSD (Lorang), and P50HD105353 (Chang).

PS3S31

Does Visual Aid Composition Influence Performance on a Narrative Production Task?

Emily Matula; New York University

Christina Reuterskiöld; Linköping University

Visual aids are often used to support language production in individuals with communication disorders (e.g., Finestack, 2012), although evidence is inconsistent (e.g., Boudreau, 2008). How individuals utilize visual information during narrative production tasks, and whether it supports language production in the way it was intended, is not yet well known. In this study, adults with and without autism spectrum disorder (ASD) viewed picture scenes that varied in terms of background detail (present, absent) and described them out loud while their gaze behavior was recorded, following Norbury (2014). Background detail in picture scenes increased the frequency of background references and decreased proportion of looks to the main event without a change in main event identification accuracy for all participants. It appears that the amount of visual detail in a picture scene influences narrative content. Results can inform assessment procedures and evaluation methods. This research was supported by a Doctoral Research and Travel Grant from New York University Steinhardt School of Education, Culture, and Human Development.

PS3S32

Does Movement Capture the Attention of Preschool Children with Developmental Language Disorder During Word Learning?

Yara Aljahlan; Alfaisal University

Tammie Spaulding; University of Connecticut

Given the attentional shifting weaknesses in children with developmental language disorder (DLD), it is important to understand what they naturally attend to when engaged in language acquisition. We investigated what visual features of novel objects capture the attention of preschool children with DLD during an early process of word learning, fast mapping. The results suggest that, unlike their typical language peers, the DLD group exhibited an attentional tendency towards movement when initially exposed to novel word-novel referent pairings. If movement increases the saliency of the referent for children with DLD, this can potentially be used therapeutically to draw their attention to relevant environmental referents to enable successful word-referent pairings. This work was funded by the Saudi Arabian Cultural Mission to the United States.

PS3S33

Disciplinary Crossroads in Identifying Developmental Language Disorder in Canada

Lisa Archibald; Western University

Cassandra Kuyvenhoven; Western University

The Disciplinary Crossroads study sought to better understand the views, perspectives, and current practices of psychologists and speech-language pathologists on childhood language disorders, specifically focusing on the identification of developmental language disorder (DLD). In Canada, speech-language pathologists (SLPs) and psychologists identify children with language disorders but employ different criteria and terms. Although shaped by regional differences, the lack of consistency and intersection of practice was found to create tensions between the groups. Across Canada, SLPs and psychologists recognized how their practice overlapped, and acknowledged the need to collaborate to better identify and serve children with language disorders. Our preliminary analyses show how regional policies and practices have affected this collaboration, with a view to making recommendations on how to achieve positive practice change. The study employed a qualitative, grounded theory framework to reveal the tensions between SLPs and psychologists across Canadian provinces. A total of 13 focus groups in Alberta, British Columbia, Manitoba, Ontario, and Québec were conducted in both French (2) and English (11). The study was funded by Social Sciences and Humanities Research Council (SSHRC) Connections grant.

PS3S34

Dialect Effects on Spoken Language Comprehension in Children who speak African American English

Arynn Byrd; University of Maryland, College Park

Yi Ting Huang; University of Maryland, College Park

Jan Edwards; University of Maryland, College Park

Children who speak African American English (AAE) are less likely than similar-age peers who speak Mainstream American English (MAE) to use inflectional morphology (e.g., verbal -s) when interpreting MAE sentences. However, it remains unclear whether these differences would be observed if the inflectional marker was a more salient whole syllable. This study investigates group differences in how AAE- and MAE-speaking children use "was" and "were", a more perceptually salient feature, to interpret sentences in MAE. Sixty participants, ages 7:0-9:12, who were identified as MAE or AAE speakers, heard sentences in MAE that had an unambiguous (e.g., Jeremiah) or ambiguous (Carolyn May) subject. Ambiguous sentences could only be disambiguated by attending to the verb (was vs. were), which signifies a plurality contrast in MAE only. AAE-speaking children were less likely than MAE speakers to use the MAE contrast between "was"/"were" when interpreting ambiguous MAE sentences. These results suggest that, regardless of perceptual saliency, contrastive morphological features between AAE and MAE impact how children who speak AAE process sentences in MAE. [Supported by NSF grant #1449815 awarded to Colin Philips.]

PS3S35

Cross-Racial/Ethnic Differences in the Gesture Rates of Parents of Autistic Children

Adrienne De Froy; The University of Texas at Dallas

Pamela Rosenthal Rollins; The University of Texas at Dallas

As child development researchers, it is important to understand how parents and children from different racial/ethnic backgrounds interact with—and communicate with—each other. Parent gestures produced during parent-child interactions are related to concurrent and later child outcomes and are thus of particular interest. However, little research has been conducted with families from non-White backgrounds, particularly in the autism community. This study analyzes the gesture production of parents of young autistic children produced during naturalistic interactions. Participants were 139 parents of a young autistic child who participated in one of two larger randomized control trials analyzing an early autism intervention. Parent gestures were transcribed from 10-minute video recorded naturalistic parent-child interactions. Results indicated South Asian parents gestured significantly more than Black/African American and White (but not Hispanic) parents. Our findings underscore the importance of conducting autism research with non-White participants and analyzing findings within a culturally aware framework. This work was supported by a grant from the Texas Higher Education Coordinating Board's Autism Grants Program (Dr. Pamela Rosenthal Rollins, PI).

PS3S36

Cross-Lagged Relations Between Bilingual Children's Vocabulary, Semantics, and Morphosyntax Across Three Age Groups

Jissel Anaya; University of Virginia

Nahar Albudoor; Gallaudet University

Joseph Hin Yan Lam; University of California, Irvine

Elizabeth Peña; University of California, Irvine

Lisa Bedore; Temple University

Bilingual children's performance in one linguistic domain is generally positively linked to their performance in other linguistic domains, but less is known about the associations between domains over time. This study sought to determine the directional influences between Spanish-English bilingual children's performance on three linguistic domains—vocabulary, semantics, and morphosyntax—over two annual time points. Participants were 264 Spanish-English bilingual children with typical language development. There were three age groups, K-1st graders, 2nd-3rd graders, and 4th-5th graders. Cross-lagged panel analyses were used to measure the strength and direction of the associations between domains across the two time points. Results demonstrated both within- and across-domain relations over time, but there were variations in the presence and magnitude of effects between languages and age groups. These findings provide evidence for how intra- and cross-domain linguistic bootstrapping may occur among bilingual children at different age levels. This research was supported by the National Institute on Deafness and Other Communication Disorders grant R01 DC010366.

PS3S37

Comparing the Effect of High vs. Low Contextual Support on Word Learning in Children with DLD

Suzanne Adlof; University of South Carolina
Dawna Duff; University of Pittsburgh
Taylor Bryant; University of South Carolina
Anna Ehrhorn; University of South Carolina
Alexis Mitchell; University of South Carolina
Maalavika Rangunathan; University of Pittsburgh

Rationale: Research on word learning in children with developmental language disorder (DLD) has identified greater difficulties with encoding of new words than retention, but most of these studies involve word learning in situations with low levels of contextual support. This study investigates how contextual information affects word learning and retention in school-aged children with DLD.

Method: Second-grade students with DLD were taught novel words in experimental word learning tasks in two instructional conditions: low-context (rote) and high-context (within a cartoon narrative). Both conditions provided explicit instruction of word forms and definitions, and the same number of repeated exposures and spaced practice opportunities. We assessed word learning with recall and recognition tasks following instruction (encoding) and one week later (retention).

Results: Within-subject analyses will examine word learning differences between conditions (low vs. high context), testing phases (encoding, retention), and their interaction.

Conclusion: Previously, research has focused on low-context instruction in DLD. We will contrast low- vs. high-context instruction and relate findings to word learning theories and implications for vocabulary instruction for children with DLD.

This study is part of Project WORD, funded by the NIH - NIDCD, #5R01DC017156-03.

PS3S38

Comparing Measures from Computer-Administered and Examiner-Administered Narrative Retells in Spanish: A Pilot Study

John Heilmann; UW-Milwaukee

Denise Finneran; University of Oklahoma Health Sciences Center

Maura Moyle; Marquette University

Narrative language sample analysis (LSA) is a recommended best practice for the assessment of monolingual and bilingual children. With business-as-usual narrative LSA, examiners are actively involved in all aspects of the elicitation. Software advancements have shown multiple benefits of computer-administered language assessments, some of which may be beneficial for narrative assessments, particularly for bilingual children. Our goal was to test the feasibility of computer-administered narrative retells in bilingual children. Ten English-Spanish bilingual children, kindergarten to fourth grade, completed narrative retells in two conditions: examiner-administered and computer-administered. Strong correlations were observed for four of five narrative measures. A series of repeated measures Analysis of Variance equations revealed no significant differences across the two conditions. Elicitation method accounted for less than six percent of the variance in each of the measures. This study motivates further research to test the clinical effectiveness of computer-elicited assessments within clinical practice.

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PS3S39

Acoustic Differences in the Babble of Low Risk Infants and Infants with Neurogenetic Disorders

Erica Hill; Purdue University

Lily Berlstein; Purdue University

Lisa Hamrick; Purdue University

Brigette L. Kelleher; Purdue University

Amanda Seidl; Purdue University

The development of canonical babble has long been of interest to researchers because the time at which infants attain canonical babbling (producing 15% consonant-vowel syllables) has been associated with later language outcomes. Specifically, the late onset of the canonical babbling stage has been found to be an early indicator of a later diagnosis of a speech or language disorder. However, canonical babble may be a less sensitive measure for children with neurogenetic disorders who often produce language at the floor of standardized measures and may consistently produce low canonical babbling ratios across early development. It is unclear if these associations will apply in children who have language delays secondary to genetic disorders and other known causes of atypical development. Thus, it is helpful to examine potentially more sensitive measures such as the acoustics of early vocalizations for these children. Here, we examine the acoustics of early canonical and non-canonical vocalizations of children with and without a variety of neurogenetic disorders to explore whether acoustic differences between canonical and non-canonical syllables in early production are equally present in both groups.

PS3S40

A Longitudinal Study of Code-Switching in English-Instructed Spanish-English Bilingual Children

Molly Gasior; Missouri State University

Lindsey Hiebert; Missouri State University

Raúl Rojas; The University of Texas at Dallas

RATIONALE: Bilingual individuals are a growing population in the U.S., and these individuals may engage in code-switching. The current literature has inconsistencies surrounding code-switching its change over time, and its potential relationship to language attrition. This study's purpose is to track change in code-switching in English and Spanish narrative retell language samples in English-instructed bilingual children across 6 semesters.

METHOD: Thirty-seven Spanish-English bilingual preschoolers provided narrative samples. Code-switching (words in the non-target language) was marked to analyze percentage of code-switched words over time.

RESULTS: Paired sample t-tests and effect sizes estimated in each language revealed non-significant changes and small effect sizes. Code-switching in English decreased after the first year and code-switching in Spanish varied across waves.

CONCLUSIONS: Although bilingual children did not experience a significant change in code-switching within each language, the percentage of code-switching was vastly different between languages. The systematic input of English in school may have influenced a shift from more Spanish use to more English.

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PS3S41

A Helping Hand: Gesture Acts as a Compensatory Mechanism During Narrative Retell in Former Late Talkers

Murielle Standley; Northwestern University

Miriam Novack; Northwestern University

Philip Curtis; Northwestern University

Magda Slowakiewicz; Northwestern University

Abigail Holthaus; Northwestern University

Adriana Weisleder; Northwestern University

Narrative skills are an important component of language development. Additionally, the type of gestures children use during storytelling have been linked to the structure of their narratives. Specifically, the use of character-viewpoint gestures (in which the gesturer takes on a first-person view of the character with their hands/body) predicts better-structured narratives in typically developing children, but this has not been examined in children who experienced language delays (“Late Talkers”). The current study investigates gesture use, gesture type, and gesture viewpoint during a wordless cartoon narrative retell task in former Late Talkers (LTs) and Typical Talkers (TTs) at age 4. Participants watched silent cartoon videos during a study conducted on Zoom and were asked to retell the story. We found that former LTs gestured more than TTs. Additionally, former LTs differed in the use of gesture type from their TT peers, and we found no group difference for viewpoint gesture uses. Findings suggest that gesture continues to serve as a compensatory mechanism in language production for former LTs but may also reflect differences in narrative construction.

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PS3S43

A Cross-Cultural Comparison of Mother-Child Interactions during Joint Book Reading

Yingshan Huang; University of South Alabama

Brenda Beverly; University of South Alabama

Victoria Henbest; University of South Alabama

This investigation was a cross-cultural comparison in quantity and quality of maternal interactive behaviors during joint book reading (JBR). Ten Chinese mothers from Fuzhou City, China and 10 U.S. mothers video recorded themselves reading two storybooks, one provided by investigators and one home book, to their typically developing four-year olds. Videotapes were transcribed in the respective languages and analyzed using investigator-developed codes. Results revealed Chinese mothers had a higher percentage of extra-textual talk (talk in addition to the book text) than American mothers. Attention to print (i.e., English letters or Chinese characters) was uncommon among mothers in both groups. Instead, mothers primarily described story content. Only Chinese mothers elaborated on the story moral. Chinese mothers had more frequent use of question prompts, explanations, directives, and elaborations compared to American mothers. These strategies fit a “question-give-answer” pattern. Whether this directive

style is optimally supportive for language development of Chinese preschoolers needs future investigation. Generalization is limited by sample size and within culture variation; however, understanding JBR as a culturally valid context can support emerging speech-language services in mainland China.