

## **PS1F01**

### **First- and second-person pronoun comprehension in autistic and nonautistic children**

Jonet Artis; New York University  
Rhiannon Luyster; Emerson College  
Lily Carroll; New York University  
Angela He; Hong Kong Baptist University  
Sudha Arunachalam; New York University

Autistic children are more likely than nonautistic children to produce personal pronoun errors. However, we know less about their comprehension of personal pronouns. This study examines their comprehension of personal pronouns within an experimental design. The children completed an activity focused on demonstrating comprehension of the first-person pronoun “my”, and second person pronoun “your”, both when it referred to the child and when it referred to someone else. Our findings indicate that both nonautistic and autistic children demonstrate an understanding of the first-person “my” pronoun and second-person “your” pronoun when it refers to the child. Both groups struggled more with “your” when it did not refer to themselves; however, while nonautistic children still performed above chance in this condition, autistic children were at chance. Thus, this study parallels prior work, highlighting similarities between the two groups and suggesting that autistic children have all-around lower rates of success but not categorical differences in pronoun knowledge. This study was funded by NIH R01 DC017131.

## **PS1F02**

### **Nature of vocabulary change following Language and Literacy Together intervention**

Cecilia Perez; University of California, Irvine  
Prarthana Shivabasappa; New Mexico State University  
Alejandro Granados Vargas; University of California, Irvine  
Molly Leachman; University of California, Irvine  
Jiali Wang; University of California, Irvine  
Lisa Bedore; Temple University  
Elizabeth Peña; University of California, Irvine

This study investigated the changes in the vocabulary use of Spanish-English bilingual first graders after a Spanish language intervention that focused on the connection between language and literacy. Ten participants were analyzed pre- and post-intervention, with three English and three Spanish narratives produced based on the Test of Narrative Language protocol. The data was analyzed using repeated measures ANOVA, evaluating core words, Tier 1, 2, and 3 words, cognates, and internal state terms as dependent variables. The results showed that the participants produced more unique core words, Tier 1 words, and cognates post-intervention, with a greater use of these word types in Spanish than in English. However, the total use of these forms did not increase. The participants also produced a greater variety of internal state terms post-intervention. These findings demonstrate the importance of conveying meaning in language interventions for bilingual children with risk for DLD as it can help leverage qualitative changes in their vocabulary use during and after the intervention.

Funding Information: National Institute on Deafness and Other Communication Disorders (1R21DC011126-01)

### **PS1F03**

#### **Examining the Complex Syntax of Second-Grade Teachers**

Mary Kate Buchheit; Vanderbilt University

C. Melanie Schuele; Vanderbilt University

The purpose of this study was to describe the complex syntax in second-grade teachers' instructional input and explore the relations between complex syntax input and (1) teacher academic vocabulary, (2) classroom socioeconomic status (SES), and (3) instructional subject. Fifteen teachers' transcripts were selected from Wanzek et al. (2021)'s extant database which included multiple 15-minute language samples per teacher across the school year and subject areas. Instances of complex syntax were identified and coded for type (Schuele, 2009). Teachers had similar proportion and density of complex syntax in English language arts (ELA) and math. The mean proportion of utterances that included complex syntax was 0.27. Neither teacher academic vocabulary nor classroom SES correlated with teachers' complex syntax proportion and density. Teachers had a higher proportion of infinitival clauses in math compared to ELA. There were no differences in complex syntax variables between fall and spring. The results provide a picture of teachers' complex syntax input that may be important to children's language development in early elementary school, particularly for children with linguistic vulnerabilities. Funding: the Institute of Education Sciences, (R305A170203).

### **PS1F04**

#### **Parent Training using EMBRACE Intelligent Tutoring System to Teach Question-Asking during Shared Book Reading in Latino Families**

Sindhu Chennupati; Arizona State University

M. Adelaida Restrepo; University of South Florida

Arthur Glenberg; Arizona State University

Erin Walker; University of Pittsburgh

Christopher Blais; Arizona State University

Ligia Gómez Franco; Ball State University

**Purpose:** The Parent - Enhanced Moved by Reading to Accelerate Comprehension in English (Parent EMBRACE) program was developed to offer a bilingual parent-training literacy intervention for Latino families. The goals were to 1) examine the effectiveness of the EMBRACE system at teaching parents to improve the quantity and quality of their question-asking and 2) examine how parental interactions predict children's reading attitude.

**Methods:** Twenty-one participants were randomized into two groups: a control group (n=13) and a parent-training group (n=8). Shared reading behaviors were analyzed using video-recorded reading sessions. Group differences were explored using analyses of covariance. Reading attitude was measured using the Elementary Reading Attitude Survey (ERAS). The relationship between parent interactions and reading attitudes was explored through regression.

**Results:** Results indicate parents in the experimental group asked more questions to their children and asked a greater variety of questions. Children demonstrated a nonlinear relationship with reading attitude, increasing positive attitude to a threshold of about 10 parent interactions, and then decreasing.

**Conclusion:** Overall, the Parent-EMBRACE tool demonstrates promise as a culturally responsive literacy intervention for Latino children.

NSF grant (Award: 1917636)

## **PS1F05**

### **Bilingualism, Language Ability, and Variability Effects in Children's Word-Learning**

Kimberly Crespo; Boston University

Margarita Kaushanskaya; University of Wisconsin-Madison

Research has shown that children can discover relationships between words and meanings in ambiguous scenarios by aggregating co-occurring statistics over time – a process termed cross-situational word learning (CSWL). In the present study, we examined whether length of bilingual experience and language ability would contribute to CSWL performance under low and high variability conditions in a group of Spanish-English bilingual school-aged children. Results revealed graded effects of bilingualism and language ability on CSWL performance under conditions of increased variability. In a high variability condition, word-learning performance significantly increased as children's length of bilingual experience and language skills increased. Input variability did not influence word-learning performance for children with greater levels of bilingual experience. However, for children with higher levels of language ability, input variability improved word-learning performance. Together, these results suggest that variation in the learner and variation in the input interact and modulate lexical learning in children. This research was supported by National Institutes of Health Grants R01 DC016015, U54 HD090256 and F31 DC019025.

## **PS1F06**

### **Working Towards Consistent Terminology in Preschool Speech-Language Pathology**

Alison Csercsics; The University of Western Ontario

Lisa Archibald; The University of Western Ontario

BJ Cunningham; The University of Western Ontario

This quality improvement project used a web-based knowledge translation intervention to address the inconsistent use of clinical terminology in one large preschool speech-language pathology program. Barriers and facilitators to the consistent use of clinical labels were identified using the Diffusion of Innovations Theory, and this knowledge was used to develop components of the web-based intervention. More than 500 speech-language pathologists (SLPs) reviewed a 1-hour webinar, participated in live question and answer sessions, and received resources to support practice change. Managers were engaged in virtual meetings and served as practice change leaders. Changes in SLPs' understanding and use of clinical labels was evaluated using surveys that were administered pre-training, immediately post-training, and following a 3-month pilot period. This research is currently in progress, and analyses are ongoing. Results will be available in April 2023. Results are expected to inform future research and support ongoing initiatives to establish consistent use of clinical labels in the field. Funding for this work was funded by the Ontario Ministry of Children, Community and Social Services.

## **PS1F07**

### **Parental self-efficacy in relation to parents' history of language-based learning difficulties and children's shared reading exposure**

Kelsey Davison; Boston University

Alyssa Boucher; Boston University

Jennifer Zuk; Boston University

Reduced shared reading has been documented in many families of parent(s) with language-based learning disabilities (LBLD), yet it remains unknown whether parental history of LBLD is

associated with parental self-efficacy in language/literacy-related parenting tasks. This study examined whether parental self-efficacy is associated with parental LBLD history and children's shared reading exposure. 124 parents of preschoolers completed the Adult Reading History Questionnaire as a proxy for LBLD history, as well as demographic, self-efficacy, and shared reading measures in a one-time survey. We observed a negative association between parental LBLD history and self-efficacy (i.e., LBLD linked with lower self-efficacy), and positive associations between self-efficacy and shared reading. Although reduced self-efficacy ratings were reported among parents with versus without a history of LBLD, subgroup analyses revealed that associations between self-efficacy and shared reading were driven by parents without a history of LBLD. Findings are the first to link LBLD history with parental self-efficacy, but further suggest potential resiliency among some parents with LBLD history in enriching shared reading interactions despite reduced self-efficacy overall. This work is supported by Boston University.

## **PS1F08**

### **Defining Language Disorders in Public Schools**

Tim DeLuca; MGH IHP

Katharine Radville; MGH IHP

Danika Pfeiffer; Towson University

Tiffany Hogan; MGH IHP

Interprofessional practice requires regular communication between professionals from different disciplines using shared terminology. Within schools, many professionals are tasked with addressing the needs of children with DLD and/or dyslexia. Currently, we have limited information as to (1) how different school-based professionals define language-based disorders, (2) how those clinical definitions align with research definitions, and (3) how one's definition of a language-based disorder correlates with one's knowledge of best practices. In the present mixed-methods study, we analyzed 286 definitions of language disorder provided by school-based professionals on the Interprofessional Collaboration in Education (ICEd) survey using a summative content analysis process. We also conducted a correlation analysis to explore the relationship between definitions of language disorders and knowledge of best practices. The present work has implications for generating shared terminology between professional groups and researchers to improve collaborative practices and to narrow the research to practice gap.

## **PS1F09**

### **Constructing the Language and Working Memory Token Test**

Niloufar Dezfuly; University of Western Ontario

Lisa Archibald; University of Western Ontario

Theresa Pham; University of Western Ontario

Working memory and linguistic knowledge support language performance in different ways. To understand the relationship between working memory and linguistic knowledge, we need an assessment tool that is sensitive to either working memory or linguistic knowledge effects on language performance. To address this issue, we modified the Token Test. The Token Test involves increasingly long commands to point to shapes of different sizes and colours or follow more linguistically complex commands. It was originally used to assess comprehension. In this study, created items were designed to systematically impose a load on working memory, and linguistic knowledge, respectively. In the linguistic section, eight levels of linguistic structures were designed based on the number of words, clauses, syntactic variation, sentence function, and

developmental level. In the working memory section, seven corresponding levels of sentence length manipulations were built. Items were composed based on the age of acquisition, word frequency and concreteness, and presented a semantic variation to some extent. The Language and Working Memory Token Test has the potential to differentiate between language performance supported by working memory vs. language knowledge.

### **PS1F10**

#### **Functional and structural neural abnormalities in children with developmental language disorders**

Jordanna A. Kruse; Boys Town National Research Hospital

Nichole M. Eden; Boys Town National Research Hospital

Karla K. McGregor; Boys Town National Research Hospital

Gaelle Doucet; Boys Town National Research Hospital

Developmental language disorder (DLD) affects the acquisition and use of language, and its underlying neural mechanisms are still largely unknown. The aim of this study was to investigate functional and structural brain mechanisms and their associations with narrative language ability in children ages 7-12 with and without DLD. To do so, we recruited 41 participants (21 Typically Developing (TD): mean(SD) age=9.35(1.71) years, 11 males; 20 DLD: age=9.59(1.58) years, 11 males). Participants completed the Test of Narrative Language to measure narrative language skills as well as structural and resting-state Magnetic Resonance Imaging sequences. Structurally, DLD participants showed more grey matter in lateral and medial frontal regions than TD. In contrast, at the functional level, DLD participants had lower resting-state functional connectivity (RSFC) than TD from the left middle frontal gyrus to bilateral parietal regions. The present findings provide evidence for structural and functional abnormalities largely in the frontal cortex in children with DLD, particularly reduction in RSFC despite higher grey matter volume compared to TD. This project was partially funded by NIGMS (P20GM144641), NIDCD (2R01DC011742-06) and BTNRH pilot funds.

### **PS1F11**

#### **Evaluating Type of Social Communication Assessment and Autistic Children's Irritability**

Hannah Fipp-Rosenfield; Northwestern University

Rachel Levy; Northwestern University

Megan Roberts; Northwestern University

Increased irritability is associated with lower social communication skills in autistic children. Many norm-referenced assessments use probes to elicit children's social communication. However, challenging probes may frustrate children and inadvertently elicit irritability. We examined whether a) social communication assessment type (norm-referenced vs. naturalistic) impacted autistic children's irritability, and b) irritability was associated with social communication scores. Autistic children (n=114) completed the Communication and Symbolic Behavior Scales (CSBS; norm-referenced) and a caregiver-child interaction (CCX; naturalistic). Child irritability was scored on both assessments. Child irritability during the CSBS was significantly higher than during the CCX ( $V = 4892$ ,  $p < 0.001$ ,  $r = 0.68$ ). Higher irritability was associated with lower CSBS social communication scores ( $B = -0.05$ ,  $p = 0.02$ ), but not CCX scores ( $B = 0.02$ ,  $p = 0.42$ ; Theil's  $F = 4.37$ ,  $p = 0.04$ ). Our findings suggest that the CSBS may exacerbate irritability, negatively affecting social communication scores. Evaluating the associations between assessment type and irritability considers autistic children's lived

experiences during assessments and can support clinicians in obtaining a more representative measure of social communication.

This study was funded by the National Institute of Health (R01DC014709, NCT02632773).

## **PS1F12**

### **Language Acquisition in Multilingual Arabic-English Speaking Families: Differences in Parent Input**

Samantha Ghali; University of Kansas

Mabel Rice; University of Kansas

Little is known about the language acquisition trajectories of multilingual families who speak various dialects (i.e., variants; Khamis Dakwar, Froud, & Gordon, 2012). The aim of this study was to investigate the role of parent-caregiver input in multilingual language contexts, with items specific to Arabic morphology (Pew Research Center, 2016; Versteegh, 2014). Arabic serves as an excellent test case for language acquisition research because children are raised proficient in at least one spoken variant and upon entry to formal education, must learn a mutually unintelligible variant--Modern Standard Arabic (Eviatar & Ibrahim, 2014; Ryding, 1991; Saiegh-Haddad, 2003). A parent-caregiver questionnaire was developed specific to language acquisition in multilingual Arabic-English speaking families in the Midwest. Preliminary analyses using descriptive and inferential statistics revealed significant differences between mothers' and fathers' ratings pertaining to their children's language acquisition trajectories.

## **PS1F13 WITHDRAWN**

### **The Production of Inflectional Morphology by Turkish-Speaking Children with DLD and Their Typically Developing Peers: The Role of Morphophonology**

Selçuk Güven; University of Montreal

**Purpose:** In this study, we examined the verb and noun morphology system of Turkish-speaking preschoolers with developmental language disorder (DLD) and compared their use to that of two groups of typically developing (TD) children.

**Method:** We report data from a total of 80 monolingual children -- 40 children with DLD, 20 typically developing age-matched children and 20 younger MLU-matched children. Language samples obtained from the children served as the source of the data.

**Results:** The children with DLD were less accurate in their use of verb and noun suffixes than both the younger and the age-matched TD children. The most frequent error types included use of bare stems and omission of the suffix. Irregular morphophonology was the best predictor of the children's level of accuracy.

**Conclusion:** These results suggest that even when a language appears to provide significant learning advantages for inflectional morphology, DLD children do not succeed in closing the gap. The complex interplay of morphology and phonology in Turkish appears to be the major obstacle for children with DLD acquiring this agglutinative language.

## **PS1F14**

### **Investigating the Feasibility of the See and Say Sequence**

Emily Harrington; University of Illinois Urbana-Champaign

Pamela Hadley; University of Illinois Urbana-Champaign

The current study evaluated the feasibility of a brief caregiver-implemented intervention called the See and Say Sequence. Fourteen caregivers with toddlers aged 15-24 months participated in

the intervention—a single session ranging in length from 16-26 minutes. Caregivers were taught to use responsive labeling and responsive toy talk in back-and-forth interactions with their toddlers. Caregivers used the See and Say Sequence significantly more following intervention ( $t(13)=5.25, p<.001$ ). As a result, caregivers significantly increased responsive utterances containing single word nouns ( $t(13)=9.28, p<.001$ ) and nouns as sentence subjects ( $t(13)=7.54, p<.001$ ) during a play interaction with their toddler. Caregivers also decreased their total number of utterances, specifically utterances that were not responsive and did not contain linguistic targets. This resulted in substantial changes in the composition of caregiver utterances. The findings indicate that the See and Say Sequence is a feasible approach for altering caregiver input in a brief amount of time and support future evaluation of the See and Say Sequence as a low-intensity option for early intervention service delivery. Support: University of Illinois Urbana-Champaign Graduate College

### **PS1F15**

#### **Audiovisual Speech, but not Talker Variability, Supports Word Learning in Noise in Adults**

Jasenia Hartman; Duke University

Jenny Saffran; University of Wisconsin-Madison

Ruth Litovsky; University of Wisconsin-Madison

Word learning requires learners to form robust representations of how a word sounds. Most learning environments are noisy which imposes a challenge for listeners to perceive the sounds within the words. In quiet, both talker variability and audiovisual speech have been shown, separately, to help learners form well-defined lexical categories. However, less is known of whether these benefits extend to a noisy situation or whether they work synergistically. This study sought to examine the combined effects of talker variability and audiovisual speech on word learning in noise.

48 adults learned 8 novel word-objects with a two-talker babble noise. Participants were randomly assigned to either the single-talker or multiple-talker condition. Half of the words were presented acoustically, whereas the other half were presented audiovisually. Novel word learning was then probed in quiet with a novel talker using a two-alternative forced-choice task.

Results reveal that audiovisual speech significantly improves word learning in noise for adults, particularly in the presence of talker variability. This finding provides insight into how listeners form word representations in noisy settings.

Funding: Diversity Supplement Award (parent grant:5R01DC016839)

### **PS1F16**

#### **Does a child's dialect affect teachers' ratings of language and literacy skills?**

Alison Hendricks; University at Buffalo

Franchesca Arcy; University at Buffalo

Developmental language disorder (DLD) affects 7-9% of children and yet many school-age children with DLD are not identified. Accurate identification of DLD is particularly problematic among students from culturally and linguistically diverse (CLD) backgrounds both due to linguistic biases on many standardized language measures and biases within society more generally which may make referrals for language evaluation less reliable. Previous studies, which relied on teacher perceptions of dialect use, suggested that teachers rate language and

literacy skills lower for students who they think speak African American English. In this study, 41 teachers provided ratings of student language and literacy skills for 96 school-age students and students completed standardized measures of dialect use and language ability. Results showed that while teacher ratings were lower for students with DLD, they were also lower for students based on the students' dialect. This suggests that teacher ratings should be interpreted with caution, and teachers may require additional training in linguistic diversity. Overall, these findings highlight the importance of understanding the factors that contribute to teacher assessments of student language and literacy ability.

### **PS1F17**

#### **Perspectives of Speech-Language Pathologists on Assessing English Learners' Language Performance**

Michelle Hernandez; University of Houston

Katrina Fulcher-Rood; SUNY Buffalo State

Anny Castilla-Earls; University of Houston

**Purpose:**?The purpose of this study was to investigate the assessment practices used by school-based speech-language pathologists (SLPs) working with bilingual children.?

**Method:** Structured open phone interviews were conducted with twenty-four school-based SLPs employed across the United States. The participants were asked questions regarding the assessment tools they used to examine the language performance of bilingual students, their rationale for choosing those assessment tools, and how they determined if a bilingual student qualified for school-based speech-language services.?

**Results:**?Results show that SLPs used a combination of formal and informal measures to make diagnostic decisions regarding bilingual students. The SLPs reported using standardized assessments due to district regulations and informal measures, including parent interviews/surveys, observations, and language sampling to determine the child's functional communication skills. In addition, SLPs discussed concerns related to using standardized testing when assessing bilingual students.

**Conclusions:**?Bilingual SLPs reported using varied informal measures to make diagnostic decisions when working with bilingual children. This is in contrast to the practices reported by monolingual SPLs who tend to rely on standardized testing when working with monolingual children.

### **PS1F18**

#### **Recruitment procedures and results across two clinical trials for children with developmental language disorder**

Lindsey Hiebert; University of Delaware

Samantha Weatherford; University of Delaware

Amanda Owen Van Horne; University of Delaware

Participant recruitment is difficult for any clinical trial, but this difficulty is increased when the disorder has limited public awareness, as with Developmental Language Disorder (DLD). This study followed recruitment procedures for two virtual randomized controlled trials involving children with DLD over one year. Multiple recruitment methods were used. The paid recruitment agency yielded the highest count of contacts (N = 1137) and consented participants (N = 215) however, only 67 qualified with DLD. The most accurate referrals came from SLPs, but these were rare (31 contacts, 11 qualified). Caregivers described their children as having difficulty with language, speech sounds, literacy, fluency, and pragmatics. Most of these concerns did not



show a relationship between a diagnosis of DLD and the terms used, although children with literacy concerns were least likely to qualify. This indicates that caregivers are not able to accurately identify DLD in their child further hampering recruitment efforts. Common language and public awareness of DLD would enhance the success of participant recruitment for federally funded trials.

Funding sources: NSF/ECR1661166 (McGregor PI); NIH/R01DC018276 (Owen Van Horne PI)

### **PS1F19**

#### **After is easier: How linguistic timing impacts verb learning in preschoolers with DLD**

Sabrina Horvath; Medical University of South Carolina

Abstract: Subtle changes to the learning environment can have a significant impact on toddlers' success (or failure) in learning novel verbs. This study considers whether the sequencing of a verb and its referent action impacts verb-learning for toddlers with developmental language disorder (DLD). Eight preschoolers (M = 5.08 years) were introduced to pairs of novel verbs in eight trials (e.g., "The girl can ziff the box;" "The boy can lorp the shoe,"). In half of trials, the verb was introduced before the referent action was displayed, and in the other half of trials the verb was introduced after the referent action had been viewed. Children were first asked to recall each action by pointing; then, they were asked to generalize the novel verbs to a new agents. Results indicate that children were more successful when the linguistic label came after its referent action, irrespective of the type of meaning encoded by the verb. Funding: T32DC000030.

### **PS1F20**

#### **Early Intervention Speech-Language Pathologists' Knowledge, Beliefs, and Practices Surrounding Culturally and Linguistically Responsive Assessment Practices for Dual Language Learners**

Rebecca Jarzynski; Northern Illinois University; University of Wisconsin-Eau Claire  
Milijana Buac; Northern Illinois University

Speech-language pathologists (SLPs), including those who work in early intervention (EI), consistently report feeling underprepared to assess dual language learners (DLLs). Further, gaps between SLP beliefs and actual practices related to assessing DLLs have been found in pediatric settings such as outpatient clinics and schools. However, the state of EI SLPs' beliefs, knowledge, and practices related to DLLs referred to early intervention programs is not known. Survey methodology was utilized to gather information related to EI SLPs beliefs, knowledge, practices and EI SLPs backgrounds and current practice settings. Participants were provided with a case scenario of a DLL referred to EI and asked to outline their assessment procedures. Responses were coded based on 7 a-priori best practice guidelines. Participants included 134 EI SLPs. Participants reported strong agreement for each of seven best practices for assessing DLLs, but gaps between these beliefs and actual practices emerged. Results also revealed gaps in knowledge related to assessing DLL toddlers and relationships between EI SLP backgrounds and practice settings and knowledge and practices. Funding was provided by Northern Illinois University's Health Sciences Research Award

### **PS1F21**

#### **Parent-implemented communication intervention (PICT) for deaf/hard of hearing (DHH) toddlers: A randomized control trial**

Maranda Jones; Northwestern University

Aaron Kaat; Northwestern University

Megan Roberts; Northwestern University

**Rationale:** Despite the fact that deaf/hard of hearing (DHH) children are making greater gains in communication and language outcomes than ever before, variability in long-term language outcomes for DHH children remains. In order to maximize language outcomes, it is essential to develop and evaluate effective early interventions for DHH toddlers. **Methods:** The current project is the first large-scale randomized control trial of a parent-implemented communication intervention (PICT) designed for DHH toddlers (between 12 and 18 months). We plan to evaluate the effect of the intervention on parent use of communication support strategies and child communication outcomes. Further, we will explore mediators of intervention effects on child communication outcomes. **Results:** Results of the current trial are forthcoming. **Conclusions:** The forthcoming results are expected to have significant implications on the understanding of early interventions for DHH toddlers, an area where there is currently a striking paucity of research. The study was funded by the National Institutes of Health (R01DC016877).

## **PS1F22**

### **Poor comprehender or DLD?: Identification and intervention for children with comprehension difficulties**

Katrina Kelso; University of Western Ontario

Anne Whitworth; University of Tasmania

Suze Leitão; Curtin University

Comprehension is the fundamental goal of reading, yet comprehension problems are often hidden and go undetected in school age children, even in some who could be considered to meet the criteria for DLD. The purpose of this research was to identify poor comprehenders and profile their oral and written language and cognitive skills to guide the provision of targeted intervention. A vocabulary and higher-level language intervention were piloted to explore their effectiveness in improving the targeted skills and generalization to improvement on tests of reading comprehension. Unexpectedly, only two of the 17 participants who completed the detailed profiling were found to have difficulty with lower-level comprehension tasks (vocabulary and grammar), while the remaining 15 had difficulty only with higher-level language tasks. On the interventions developed, gains were made on tasks that assessed skills targeted in the intervention, with some generalization to improvement on a standardized reading comprehension measure, albeit limited. The findings provide promising preliminary evidence that targeted intervention can be effective in improving both listening and reading comprehension.

This research was completed on a PhD scholarship.

## **PS1F23**

### **Communicative Participation during the COVID-19 Pandemic: Considerations for Multilingual Jamaican Preschoolers**

Leslie Kokotek; University of Cincinnati

Karla Washington; University of Toronto; University of Cincinnati; New York University

The Focus on the Outcomes of Communication Under Six (FOCUS) is a valuable tool for understanding children's communicative participation (CP) and has been shown to have good psychometric properties for use with a broad range of multilingual Jamaican preschoolers.

However, despite the applicability of the FOCUS, there was limited information available about the CP of multilingual children, especially those who speak an understudied language pair, even before the COVID-19 pandemic. This paucity of information is one of the multifaceted reasons why multilingual children are at an increased risk for misdiagnosis. The pandemic, which disrupted traditional forms of communication and interaction, further complicated this issue leading to a greater need for innovative approaches for understanding children's CP in daily activities prior to and during the pandemic. This study offers additional insights for characterizing communicative participation for children with and without communication impairments during the pandemic. Interestingly, results indicate that the pandemic may not have had a negative impact on the overall CP of Jamaican children with communication impairments, underscoring the need to better understand important resiliency factors within the Jamaican community.

### **PS1F24**

#### **The role of social skills in improving respeto for Latine autistic children**

Siddhi Patel; University of Texas at Dallas

Erin Kosloski; University of Texas at Dallas

Kaitlyn Kidd; University of Texas at Dallas

Cristina Rangel-Uribe; University of Texas at Dallas

Pamela Rollins; University of Texas at Dallas

Respeto is an important cultural value that greatly influences parenting practices in the Latine community. Latine parents guide their children with calm, kind authority, and children in turn respond with affiliative obedience (CAO). Affiliative obedience requires social understanding, which is challenging for autistic children; thus, Latine autistic children may struggle to respond to their parents with CAO. Twenty-four Latine autistic children and their parents were randomly assigned to receive Pathways Intervention or Services as Usual (SAU). Standardized assessments and parent-child interaction videos were conducted at baseline and post intervention. Results revealed that (a) children's social skills related to CAO at baseline, and (b) children in Pathways had higher CAO post-intervention compared to their SAU counterparts. These findings highlight the importance of culturally sensitive social interventions like Pathways, as they improve social understanding in autistic children and thereby support Latine parents in instilling respeto in their autistic children. This research was supported by the Texas Higher Education Coordinating Board's (THECB) Autism Grants Program (Grants # 20476 and 22974). The opinions expressed do not necessarily represent the opinions of the THECB.

### **PS1F25**

#### **Validation of the Mediated Learning Observation Instrument Among Children With and Without Developmental Language Disorder in Dynamic Assessment**

Joseph Hin Yan Lam; School of Education, University of California Irvine

Maria Resendiz; Department of Communication Disorders, College of Health Professions, Texas State University

Lisa Bedore; Department of Communication Sciences and Disorders, Temple University

Ron Gillam; Communicative Disorders and Deaf Education, Utah State University

Elizabeth Peña; School of Education, University of California Irvine

Previous research shows that mediated learning observation (MLO) significantly predicts language ability. However, validation work is needed to investigate the internal structure and consistency. The study examined the factor structure, validity, and reliability of the MLO

instrument in dynamic language assessment in children. Participants were 224 children (40 first and second-grade English-speaking children and 184 Spanish-English bilingual kindergarteners; 188 typically developing children and 36 children with developmental language disorder [DLD]) completed a 30-minute individual mediated learning session on narrative production.

Exploratory and confirmatory factor analyses, and reliability analysis were conducted to establish the factor structure, reliability and discriminant validity. A three-factor model was suggested across kindergarten and school-age samples, across both typically developing and DLD subgroups. The final MLO comprises three subscales: (1) cognitive factor (5 items), (2) learning anticipation (3 items), and (3) learning engagement (3 items). The validated and reliable MLO can provide additional information to dynamic assessment of language and help clinicians to design individualized intervention approaches based on the ratings.

Funding: R01DC007439 (Peña)

## **PS1F26**

### **Syntactic Growth in Adolescent Boys with Fragile X Syndrome and Down Syndrome: A Longitudinal Study**

Jamie Linert; University of Minnesota

Lizbeth Finestack; University of Minnesota

Leonard Abbeduto; University of California-Davis

Despite literature documenting the language profiles of fragile X syndrome (FXS) and Down syndrome (DS), little is known about how language ability in these syndromes changes with age. This is especially true for the adolescent years. The current study addresses this gap by investigating language change in adolescents (aged 10-16 years) with FXS or DS over the course of four years. We document change in syntactic abilities using standardized language assessments and mean length of utterance from language samples. We used linear mixed effects regression models to compare growth patterns between groups. The results have implications for identifying effective assessment and treatment approaches to continue to improve communication skills in young people with FXS or DS.

This research was supported by National Institute of Child Health and Human Development (Grants: R01HD024356, P50HD103526).

## **PS1F27**

### **Examining family language practices and attitudes towards code-switching among Spanish-speaking parents of children with and without disabilities**

Ada Lopez Gonzalez; University of Massachusetts-Amherst

Megan Gross; University of Massachusetts-Amherst

Considering families' experiences, beliefs, and other factors influencing their language practices is crucial to shaping individualized recommendations for supporting children's communication and guiding future research. Qualitative and quantitative data were analyzed to answer the following research questions: (1) What are parents' perspectives on code-switching (CS)? (2) Do parents' CS practices differ depending on their regional background and the disability status of their children? Semi-structured interviews were conducted using open-ended questions to understand parents' lived experiences with CS. Quantitative data from a questionnaire and a language exposure interview were used to address research question 2. Preliminary results from the qualitative interviews with parents of children with disabilities showed that parents from the Caribbean tended to use more CS themselves and have a more accepting attitude towards CS than parents from Central America. Preliminary questionnaire data showed inconsistent patterns

across the regional backgrounds and diagnostic groups in how parents respond to CS from their children. These results underscore the importance of taking time to understand families' practices to provide individualized recommendations. [Funding: Ph.D. Fellowship, Public Service Endowment Grant, faculty start-up funds]

## **PS1F28**

### **Autistic and non-autistic children differentially affected by disruptions in verbal probabilistic input**

Janine Mathee-Scott; University of Wisconsin-Madison

Kathryn Prescott; University of Wisconsin-Madison

Ron Pomper; Boys Town National Research Hospital

Jenny Saffran; University of Wisconsin-Madison

Susan Ellis Weismer; University of Wisconsin-Madison

Recent theoretical accounts suggest that differences in the processing of probabilistic events underlie differences in the core and associated traits of autism spectrum disorder (ASD). These accounts hypothesize that autistic individuals are differentially impacted by disruptions in probabilistic input, known as hyperplasticity of learning, characterized by an overweighting of novel predictive relationships above cumulative input. Differences in prediction have primarily been examined in nonverbal, visual contexts. The present study examined autistic and neurotypical (NT) children's ability to generate predictions based on verbal cues and adjust to changes in predictive relationships in an eyegaze paradigm. Children were trained and tested on an indexical auditory-visual cue wherein speaker gender predicted the location of a reward. After 12 trials, the cue-reward contingency switched. Findings indicate that autistic children predicted reward locations more accurately than cognitively matched NT peers and demonstrated anticipation both pre- and post-contingency switch (e.g., demonstrated hyperplasticity), whereas NT children were disrupted by the change in contingency. This work was supported by: NIDCD R01 DC017974 (MPIs: Ellis Weismer & Saffran) and NIDCD F31 DC020902 (PI: Mathée-Scott).

## **PS1F29**

### **Comparative Study of Preschool Children's Engagement in Parent-Child Conversations: Reminiscing and Co-Construction of a Story Outshine Shared Book Reading**

Trelani Milburn-Chapman; University of Alberta

We compared the linguistic quality of parent-child conversations during three contexts of interaction: shared book reading, reminiscing a shared past event, and co-constructing a story known to both. Examiners met with 72 parent-child dyads (Mean child age = 52.94, SD=3.75; females=42) on two consecutive days. Day 1: they read a fictional story together and engaged in reminiscing about a shared celebration. Day 2: they worked together to retell and talk about the story they read the previous day. Findings indicated that parents showed greater agency than the children during the shared book reading but the children showed significantly higher engagement and use of richer language during the other two contexts. The children used significantly greater elaboration, lexical diversity, subordination (embedded clauses), and use of specified vocabulary during reminiscing and story co-construction compared to shared book reading. These findings have implications for speech-language pathologists to promote additional forms of parent-child conversation.

Social Sciences and Humanities Research Council of Canada

## **PS1F30**

### **Is there a Relationship Between Cognitive & Linguistic Abilities and the Variation in Language? The case of Subject Pronoun Expression in Spanish-speaking Children**

Pedro Antonio Ortiz Ramírez; The Ohio State University

John Grinstead; The Ohio State University

Michelle Zúñiga Espinosa; Universidad Nacional Autónoma de México

The present work analyzes the relationship between variation in language and cognitive & linguistic abilities. Specifically, the expression of overt Subject Personal Pronouns (SPP) in children's Spanish. Previous work found that while adults tend to produce overt SPP in switch-reference contexts, young infants prefer null SPP instead in those exact same contexts which has been speculated to be due to their low Working Memory Capacity (WMC).

To test what cognitive and linguistic abilities predict SPP usage, 82 typically-developing, monolingual Spanish-speaking children completed nine linguistic & cognitive assessments. Two main analysis were carried out: a mixed effects logistic regression to corroborate previous findings from the literature, and a Pearson correlation to test whether cognitive & linguistic abilities predict SPP expression.

Results indicate that even though WMC did not play a role in SPP expression in switch-reference contexts, there was a correlation between 3rd person singular and a child's inhibition and syntactic abilities. I speculate the implications of non-linguistic cognition, morphosyntax and the constraints predicting SPP expression as a possible route related to the children's capacity to take other people into account.

## **PS1F32**

### **Varying Syntax to Enhance Verb-Focused Intervention for 30-Month-Olds with Language Delay: A Concurrent Multiple Baseline Design**

Katrina Nicholas; California State University, East Bay

Tobie Grierson; California State University, East Bay

Priscilla Helen; California State University, East Bay

Chelsea Miller; California State University, East Bay

Amanda Owen Van Horne; University of Delaware

Rationale: We sought to determine if children with language delay (LD) would learn verbs (spill) when presented with varying argument structure ("The woman is spilling the milk/The milk is spilling"; milk = patient or theme). Typically-developing children learn verbs more robustly when presented with alternating arguments (Scott & Fisher, 2009) than with a single argument structure. Children with LD learn language treatment targets better with greater input variability (Alt et al., 2020) and children with developmental language delay (DLD) learn better with complexity (Owen Van Horne et al., 2017).

Methods: Three toddlers with expressive LD (30-32 months) participated in a verb-focused intervention using a concurrent multiple baseline design. Participants were shown action videos accompanied by sentences with varied argument structure for each target verb. To assess learning pre- and post-treatment, participants were asked to demonstrate actions corresponding to each verb.

Results: Visual inspection and Tau analyses reveal significant post-treatment gains of target verbs.

Conclusion: Syntactic variability of treatment targets facilitates verb-learning for toddlers with language delay.

Funding Source: ASHA Advancing Academic-Research Career (AARC) Award to first and last author

### **PS1F33**

#### **Dimensionality of Oral Language in Bilingual 6th Grade Children**

M. Adelaida Restrepo; University of South Florida

Kristie Calvin; East Tennessee State University

Marilyn Thompson; Arizona State University

Shelley Gray; Arizona State University

Kate Cain; Lancaster University

Mindy Bridges; University of Kansas Medical Center

Rob Davies; Lancaster University

Jinxiang Hu; University of Kansas Medical Center

Margeaux Ciruolo; Arizona State University

We examined the dimensionality of oral language in Spanish-English bilingual 6th-grade children. Research indicates that oral language in bilingual children is multidimensional (LARRC, 2015). However, dimensionality may differ by age and the measures used. Few studies have included pragmatic skills or studied the structure of oral language in Spanish-English bilingual adolescents. We conduct confirmatory factor analyses (CFAs) on a sample of 95 bilingual 6th-grade children to test oral language models with one to four (grammar, vocabulary, listening comprehension, and pragmatics) underlying factors, as well as bifactor and hierarchical models that include a general factor. In addition, we test two models with language-specific factors. Model parameters and appropriate fit statistics, including chi-square difference tests for nested models, are presented to aid in judging the adequacy of alternative models. The study is preregistered, and the data are collected and cleaned.

### **PS1F34**

#### **Receptive Vocabulary Development in Bilingual Children with and without Developmental Language Disorder**

Juliana Ronderos; Boston University

Anny Castilla-Earls; University of Houston

Much has been investigated about bilingual vocabulary development, yet little is known about vocabulary trajectories in bilingual children with developmental language disorder (DLD). This study examined receptive vocabulary trajectories of Spanish and English at 3 time points over 2 years in 100 Spanish-English bilingual school-age children with and without DLD and the impact of maternal education and language(s) spoken at home on these trajectories. We used multilevel modeling to examine growth curves of standard scores in receptive vocabulary and the home environment factors that predicted their growth. Results reveal that Spanish receptive vocabulary scores remained stable while English scores increased rapidly during this period. Children with DLD performed significantly lower than typical peers in both languages. Speaking English and Spanish at home significantly negatively impacted Spanish receptive vocabulary but not English. In contrast, higher maternal education significantly predicted English scores but not Spanish scores. Results from this study provide evidence of vocabulary growth in bilingual children and the differential impact of home environmental factors on the child's languages.

This research study was supported by NIH K23DC015835 awarded to Anny Castilla-Earls.

### **PS1F35**

#### **The type and complexity of recodes in parent–child interactions in children with Down syndrome**

Claudia Schabes; University of Wisconsin-Madison, Waisman Center

Marianne Elmquist; Waisman Center

Alyssa Ewell; University of Wisconsin-Madison, Waisman Center

Emily Lorang; Michigan State University

Audra Sterling; University of Wisconsin-Madison, Waisman Center

Recodes, which occur when an adult linguistically translates the child’s previous communicative bid, can be used to support language learning in young children with Down syndrome (DS).

Despite being a commonly taught strategy in parent coaching models, little is known about how recodes are employed in naturalistic environments by mothers and fathers of children with DS.

We examined the type, complexity, and duration of recodes. Type encapsulated children’s mode of communication that prompted the recode, while complexity captured the grammatical and semantic information delivered. The length of parent’s and child’s utterances were recorded for duration. Fifteen 2–5 year old children with DS participated in separate free play sessions with their mothers and fathers in their homes. The recordings were coded using ProCoderDV™. To compare mothers’ and fathers’ recodes, we used effect sizes (Hedges  $g$ ) and confidence intervals. We will discuss the findings’ implications on recode use and the broader context of parent coaching families with DS.

Funding: P30HD03352 (Chang), T32 DC005359, P50HD105353, a Vilas Life Cycle Award, and start-up funds from the University of Wisconsin–Madison.

### **PS1F36**

#### **Processing load and verb learning in an online study with autistic and non-autistic preschoolers**

Vishakha Shukla; NYU

Rhiannon Luyster; Emerson College

Sudha Arunachalam; NYU

Linguistic contexts play an important role in learning novel words. In this study we investigated how autistic and non-autistic preschoolers learn novel verbs when presented with unmodified nouns (‘the ball is kradding’) vs. modified nouns (‘the round ball is kradding’). Previous work has shown that non-autistic children learn novel verbs more easily with unmodified nouns than with modified nouns. We aimed to (a) replicate this finding in a videoconferencing setup and (b) investigate whether autistic children showed a similar pattern. Children saw novel actions and heard novel verb labels in either unmodified or modified noun contexts. They were tested on the novel verb meanings and their eye gaze was taken as an indicator of learning. Preliminary analyses revealed that non-autistic children preferred the target in the unmodified condition compared to the modified condition, but for the autistic group, vocabulary size played a role. Thus, we replicated existing findings for non-autistic children and found a similar but complex pattern for autistic children, with a role for their language level.

Funding: NIH R01DC016592

### **PS1F37**



## **Measuring Inhibitory Control and Reading Comprehension in School-Age Urban African American Children**

Carla Stanford; University of California Irvine

Katherine Rhodes; University of California Irvine

Julie Washington; University of California Irvine

Measuring Inhibitory Control and Reading Comprehension in School-age African American Children

Carla B. Stanford, Katherine T. Rhodes, & Julie A. Washington

Rationale: Executive Function(EF) skills are processes that regulate thoughts and actions and are linked to skilled reading. For African American(AA) children who speak African American English (AAE), learning General American English(GAE) to decode may interfere with reading growth. EF's role in skilled reading for these children is unclear and understudied. Specifically, the role of inhibitory control, which is selecting the desired response over the natural response, is unknown. This study examines the relationship between reading comprehension and inhibitory control in AA children who speak AAE.

Methods: 142 AA children in second through fifth grades were administered language assessments and an EF measure. Multiple regression models were utilized for analysis.

Results: Inhibitory control did not have a significant relation to passage comprehension. Dialect density significantly impacted passage comprehension for high dialect speakers.

Conclusion: We do not understand the relation between EF and reading comprehension for AA children who are dense speakers of AAE.

The NICHD grant 1R24HDO7545-01 supported this research.

### **PS1F38**

#### **Identifying Key Language?Research Priorities in Autistic?Children According to Parents: A?Brief Survey**

Jesica Sykes; LSU

Taylor Hale; LSU

Eileen Haebig; LSU

The lack of involvement of the autistic community and its stakeholders in autism research has led to a call to action. Currently, autism researchers have limited knowledge about stakeholders' priorities for research. The current study aimed to bridge the disconnect between current autism research and the recent neurodiversity movement.? We surveyed the views of parents of autistic children about language research. Twenty-five participants completed an online survey that included 15 different categories of language research topics. Participants used a slider to rank each item based on importance on a scale of 0 to 100. Next, each participant selected their top three research priorities. The results indicated that parents highly valued research focusing on how autistic children learn new words, follow directions, respond to questions (language comprehension), and echolalia. A significant portion of the extent autism literature covers these topics; however, future studies should prioritize examining the stakeholders' highly ranked topics. Furthermore, future work should consider implementing community-based research strategies while engaging in research on the topics prioritized by the stakeholders within the autistic community.

Funding Source: LSU Start-Up Funds

### **PS1F39**

## **The association between parental language switching and the language outcomes of children with Developmental Language Disorder**

Merel van Witteloostuijn; Utrecht University

Elise de Bree; Utrecht University, Royal Auris Group

Elma Blom; Utrecht University, Arctic University of Norway

Switching between languages is common in multilingual communication. Yet, the potential consequences of switching for children with Developmental Language Disorder (DLD) are unknown. Although studies of children with typical development suggest that the effect may be small, the effect could be amplified in children with DLD because of their problems with language uptake/processing. This study investigates parental language switching and its relationship with language outcomes in three- to six-year-old multilingual children with DLD in the Netherlands. We measure parental language switching through a parental questionnaire (Q-BEx; De Cat et al., 2022) and the LENA™ recording device that is used to make day-long recordings in the home environment. We distinguish between the type (between or within speakers) and direction (Dutch to other language or vice versa) of switching and explore relationships with receptive vocabulary and grammatical abilities in Dutch. The findings will be informative for professionals working with DLD and will aid better support for multilingual families on language use at home.

This research is funded by the Netherlands Organization for Scientific Research (NWO; personal Vici grant to Elma Blom, VI.C.191.042).

### **PS1F40**

#### **Tutorial on a “gold standard” protocol for bilingual assessment and identification of DLD**

Danyang Wang; University of California - Irvine

Alexander Choi-Tucci; University of California - Irvine

Anita Mendez-Perez; ELLAS Consulting

Ronald B. Gilliam; Utah State University

Lisa Bedore; Temple University

Elizabeth D. Peña; University of California - Irvine

This study introduces a protocol-based approach to bilingual language assessment and identification of DLD in the absence of an established gold standard measure. Three experienced bilingual SLPs reviewed Spanish-English bilingual children’s assessment data and rated their language ability using a multidimensional scale (0-5). Data included a combination of direct (language tasks) and indirect measures (parent/teacher survey) in both languages. Each rater independently rated the child’s performance in morphosyntax, semantics, and narratives, and assigned a summary rating considering performance across domains and languages. A diagnosis of DLD was made if the child received a summary rating of  $\geq 2$  from at least two raters. A total of 166 children were rated following this protocol, and 21 children were identified as having DLD. Inter-rater agreement was high across different rating items (ICC values ranged from .83 to .90). We hope to provide a framework for clinicians and researchers to assess language proficiency and identify DLD in bilingual populations for which a reference standard is not available.

Funding: R01DC007439 (Peña)

### **PS1F41**

#### **The Impact of SES on Kindergartner’s Fast Mapping across Grammatical Categories**

Brian Weiler; Western Kentucky University

The impact of socioeconomic status (SES) on children's fast mapping of novel words is unclear. This study examined whether SES group differences in fast-mapping performance may be related to the grammatical category of the novel word. Kindergartners from high poverty, very-high poverty, and mid-low poverty schools were compared on fast mapping items from the QUILS (Golinkoff et al., 2017). Significant SES group differences were found for verbs and adjectives, but not nouns. Children from very-high poverty schools scored significantly lower than peers from the mid-low poverty and high poverty schools. Results suggest that an SES influence on fast mapping extends to verbs and adjectives but not necessarily nouns. Fast mapping tasks specific to noun learning may carry potential for kindergarten language assessment that minimizes potential bias from SES. Research support provided by a Kentucky Biomedical Research Infrastructure Network grant awarded to the author and funded by the National Institute of General Medical Sciences (NIH-NIGMS; 8P20GM103436).