

Poster Session #1 – Friday, May 31 at 8:30 a.m. Community Terrace

PS1F01

Executive Function Skills and Input Variability in Children's Cross-Situational Word Learning

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Gabriela Rushi; Boston University

In the present study, we examined the role of executive function (EF) skills in cross-situational word-learning (CSWL) performance under low and high input variability conditions. Forty-four English-monolingual children ages 5 – 9 completed two CSWL tasks and the Dimensional Change Card Sort task (DCCS). Performance on the DCCS was used to index shifting, inhibition, and monitoring skills. Results revealed that older children demonstrated higher likelihoods of learning novel words than younger children. Children were also more likely to learn novel words in the Low Variability Condition than the High Variability Condition. Model results also revealed that children with robust monitoring skills were more adept at learning novel words than children with weaker monitoring skills. Our findings align with previous work demonstrating age effects and variability effects in children's CSWL. The results also indicate that EF may be implicated in resolving referential ambiguity, even when input variability is low. Taken together, our results are in line with emerging evidence that explicit mechanisms may complement implicit statistical learning processes in CSWL. This research was supported by startup funds awarded to Kimberly Crespo.

PS1F02

Complex Syntax, Morphosyntax, and Productivity in Expository Discourse, Narrative Retell, and Conversational Language Sample Contexts in Preschool Age Children who are Deaf and Hard of Hearing

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

Language sample analysis is regarded as an informative clinical tool since it assesses language skills in ecologically valid contexts. However, there is a lack of clinical guidance for speech-language pathologists on how the elicitation context impacts language productions for children who are deaf and hard of hearing (DHH). The purpose of this project is to examine how elicitation context impacts complex syntax, morphosyntax, and productivity in preschool age children who are DHH compared to peers. Secondary data from 69 4-year-old children who are DHH and their age-matched and language-matched peers are analyzed to determine the effects of elicitation context and group on complex syntax attempts (CSa), mean length utterance in morphemes (MLUm), and number of utterances. Results show that, after accounting for the proportion of utterances per elicitation context, all groups produce utterances with greater MLUm values and make a higher proportion of CSa in expository discourse and narrative retell contexts compared to conversational ones. Implications for clinical assessment planning are discussed. Funding was provided by the NIH-NIDCD (T32-DC000013 to Chatterjee; R01DC017173 to Werfel and Lund; R03DC014535 to Werfel).

PS1F03

Spanish-English bilingual preschoolers' code-mixed responses based on ability, frequency, and accuracy

Kai Greene; CSU Dominguez Hills

Casey Taliencich-Klinger; Our Lady of the Lake University

Code-mixing allows for bilinguals to alternate from one language to another at the word level. Based on a larger study that examined Spanish-English bilingual language development in school-age populations, over 600 bilingual preschoolers (M = 65.45 months) completed an oral language screening battery consisting of morphological and semantic test items in both languages. Based on overall performance, participants were divided into at-risk or low-risk ability groups. On the semantic screeners, 265 participants code-mixed on at least one test item in English or in Spanish. This study's initial analyses examined participants' code-mixing responses based on ability (at-risk or low-risk), code mix (CM) frequency (high code-mixer or low code-mixer), and CM accuracy (correct or incorrect responses). Findings indicate that Spanish or English dominance was not a significant predictor of code-mixing accuracy. Parallel results were similar in that participants in the low-risk category tended to code-mix with more accuracy when compared to the high-risk group. Findings demonstrate that code-mixing requires a specific degree of linguistic competence in both languages and serves as a beneficial educational lexical strategy for preschoolers.

PS1F04

In Search of an NWR task for Child Speakers of AAE

Janet L. McDonald; LSU

Christy Wynn Moland; LSU

Janna B. Oetting; LSU

Rationale: The nonword repetition (NWR) task of Dollaghan and Campbell (1998) has been shown to be related to children's nonmainstream form (NMF) densities. In search of a better task, we compared the Dollaghan and Campbell task to two others to see if they could distinguish DLD and TD children without showing effects for the children's NMF densities. Methods: 38 AAE-speaking children (DLD = 16; TD = 22) in kindergarten or 1st grade were given three established NWR tasks (Chiat & Polišenská, 2016; Dollaghan & Campbell, 1998; Shriberg et al., 2009). NMF density was measured by the DELV-ST (Seymour et al., 2018). Results: NWR performance was correlated to NMF density for the Dollaghan and Campbell and the Chiat tasks but not for the Shriberg task. DLD and TD groups differed on all three tasks for the kindergartners, and for the Dollaghan and Campbell for first graders. Conclusions: None of the NWR tasks was able to distinguish the DLD and TD groups at both grades while also being unrelated to the children's NMF densities. Funding: NIDCD grant RDC020434A

PS1F05

Visual Artificial Grammar Learning in Children with Developmental Language Disorder

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Lauren Baron; MGH Institute of Health Professions

Kelsey Black; MGH Institute of Health Professions
Asiya Gul; MGH Institute of Health Professions
Annika Schafer; MGH Institute of Health Professions
Yael Arbel; MGH Institute of Health Professions

Children with Developmental Language Disorder (DLD) often demonstrate impairments in grammar, which is typically acquired via implicit learning. The purpose of this study was to evaluate implicit grammar learning in school-age children (8:0 – 12:0) with and without DLD by employing a visual Artificial Grammar Learning (AGL) task. Participants were exposed to an amount of repeated patterns governed by an underlying finite structure during the learning phase. The subsequent testing phase required them to judge whether new patterns were grammatical or not. Behavioral measures revealed overall poorer performance among children with DLD compared to their typically developing (TD) peers, with neither group showing significant reliance on surface features, or the similarity to training exemplars. Event-Related Potentials (ERPs) time-locked to the completion point of each sequence were examined. A late-parietal P600 component was observed in both groups. DLD group elicited a comparatively later onset but a larger P600 activity.

This work was funded by NIDCD R01DC018295.

PS1F06

Error-Monitoring in Children with Developmental Language Disorder

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Asiya Gul; MGH Institute of Health Professions
Ziyi Cao; MGH Institute of Health Professions
Yael Arbel; MGH Institute of Health Professions

This research focuses on error-monitoring in children with Developmental Language Disorder (DLD), a neurodevelopmental condition affecting approximately 7% of children. While various aspects of language learning in DLD have been explored, error-monitoring remains understudied. Drawing parallels from research on dyslexia and ADHD, which revealed reduced neural responses to errors, this study aims to characterize the error-monitoring system in DLD using behavioral and electrophysiological indicators.

Age-matched groups of children with and without DLD completed a Flanker task while their electrical brain activity was measured using EEG. Initial analyses revealed significant performance differences, including accuracy and reaction time variations between cohorts. Planned analyses will delve into behavioral and neurophysiological error-monitoring indicators and the relationship between them. This research has implications for developing more effective interventions that consider the unique error-monitoring profile in children with DLD.

This work was funded by NIDCD R01DC018295 awarded to Yael Arbel and NIDCD F32DC020095 awarded to Lauren Baron.

PS1F07

Evaluating the Convergent Validity and Relative Difficulty of a New Measure of Social Communication with an Established Measure of Social Problem Solving

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Gerard Poll; Miami University
William Boone; Miami University
Sophie Seculov; Miami University
Brooke Harmon; Miami University
Samrawit Getachew; Miami University
Janis Petru; Elmhurst University

This study evaluated the convergent validity of a new measure of adolescent social communication, the Transition Pragmatics Interview (TPI). An important component of social communication in adolescence is social problem solving. Examinee ability measured by the TPI was compared to ability measured by an established measure of social problem solving, the Interpersonal Negotiation Strategy Interview (INS; Selman et al., 1986). There were 31 participants of varied ability in the study, age 14-21. Rasch analysis was used to derive examinee and item difficulty measures. To meet the assumption of unidimensionality for Rasch analysis, INS responses related to adult interactions and peer interactions were separated. TPI examinee measures were moderately correlated with INS examinee measures for both peer ($r = .52$) and adult scales ($r = .57$). INS items were more difficult than TPI items. The data support the validity of the TPI as a measure of an overlapping but not identical construct as the INS. Few participants provided the most advanced social problem solving approaches for the INS, making it more difficult for examinees to attain the highest score on INS items. Supported by the NIDCD, R15DC020521

PS1F08

Can Retrieval Practice Facilitate Verb Learning at the Sentence Level? A Study of Children with Developmental Language Disorder and Their Same-Age Peers

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Sharon Christ; Purdue University
Justin Kueser; Boys Town National Research Hospital
Kaitlyn Fischer; Purdue University

Children with developmental language disorder have special difficulties learning and using verbs. In this study we determined whether these children's verb learning could be facilitated through spaced retrieval practice. Four- and five-year-old children with DLD and their same-age peers learned novel verbs in transitive sentence contexts. Half of the words were assigned to a repeated study condition and half to a spaced retrieval condition. The novel verbs in the two conditions were matched on the number of exposures during study trials and differed only on whether retrieval opportunities were provided. Learning occurred over two sessions and recall was tested immediately after the second session and one week later. The children recalled more novel words in the spaced retrieval condition than in the repeated study condition. In addition, for those novel verbs that were successfully recalled, the children were able to use the verbs in

sentences with agents and patients that had not been included during the learning period. These findings suggest that spaced retrieval practice might be incorporated successfully into broader language intervention activities.

Funding Source: R01 DC014708

PS1F09

The Relationship Between Joint Engagement and Social Complexity of Language in Young Autistic Children

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Pamela Rollins; The University of Texas at Dallas

Expressive language constitutes an important outcome for autistic children. However, commonly used measures rarely capture to what degree children's language is socially motivated. In this study, 47 young autistic children and their parents participated in naturalistic play sessions. Videos were coded for engagement states, and child language was transcribed and coded for high (e.g., commenting) or low (e.g., requesting) social motivation. Preliminary analysis with 22 participants revealed that children talked most during Object Engagement and their mean length of utterance was positively correlated (approaching significance) with time spent in Lower Coordinated Joint Engagement. We hypothesize that: (a) additional significant relationships will emerge upon analyzing the full sample; and (b) time spent in social engagement states will predict the proportion of child utterances which are highly socially motivated. Such findings could illuminate which engagement states provide the best opportunity for autistic children to communicate socially and help shape optimal interventions. This research was supported by the Texas Higher Education Coordinating Board's (THECB) Autism Grants Program (Grants 20476, 27509). Opinions expressed do not necessarily represent those of the THECB.?

PS1F10

Verbs are stronger predictors than nouns in accounting for grammatical outcomes in Mandarin-speaking children with cochlear implants

Ling-Yu Guo; University at Buffalo

Lei Xu; Shandong ENT Hospital, China

Jianfen Luo; Shandong ENT Hospital, China

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Jinming Li; Shandong ENT Hospital, China

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Huei-Mei Liu; National Taiwan Normal University

Developing grammatical skills is challenging for children with CIs. Hadley (2020) developed a sentence-focused framework to promote grammatical learning that targeted early verb lexicon as a critical step for later grammatical development. One prediction was that verbs would be a stronger predictor than nouns in accounting for subsequent grammatical outcomes. Here, we tested this prediction in Mandarin-speaking children with CIs by examining how well noun/verb sizes and diversity accounted for later grammatical complexity in these children.

Participants were 34 Mandarin-speaking children with CIs. At 12 months after CI activation, noun and verb sizes were computed from a parent checklist. Noun and verb diversity

were computed from language samples. At 24 months after CI activation, grammatical complexity scores were computed from another parent checklist.

Verb size at 12 months after CI activation was a stronger predictor than noun size in accounting for grammatical complexity at 24 months after CI activation. Verb diversity was also a stronger predictor than noun diversity in accounting for grammatical complexity. Findings suggested the sentence-focused framework can be applied to Mandarin-speaking children with CIs.

Funding Source: Faculty Grants for Global and International Research, University at Buffalo

PS1F11

Feasibility of an Implicit Derivational Morpheme Recasting Intervention for Young Children with Impaired Language

Rebecca Burton; University of Arizona

Elena Plante; University of Arizona

Rebecca Vance; University of Arizona

Research regarding grammatical morpheme use has utilized both explicit and implicit learning approaches, while interventions targeting derivational morphology have yet to explore implicit learning. Unlike grammatical morphemes, derivational morphemes can change a word's function (e.g. noun to verb) and meaning (e.g. subscribe vs. unsubscribe). These derivational morphemes are important to learning academic vocabulary, reading, and spelling. This study examined the feasibility of adapting an implicit treatment approach, Enhanced Conversational Recasting, to promote derivational morpheme use in young children with impaired language. This study utilized a replicated single-subject multiple baseline design with five children between the ages of 5 years 4 months and 6 years 11 months. All participants responded to the intervention, producing their target derivational morpheme both during treatment and in generalization probes. Notably, 4 out of 5 children learned more than one derivational morpheme during the five-week treatment study. This study demonstrates that implicit methods may be used to teach derivational morphology at young ages.

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PS1F12

Lived experiences of children who were late to talk and their families

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Heidi Mettler; University of Arizona

Mary Alt; University of Arizona

The goals of this project were to learn more about the lived experiences of children who were late to talk and their families, as well as to better understand the functional and social effects of having a late-talker in the family and the later outcomes of being a previously identified late talker.

To date, we have individually interviewed 7 children ages 4 to 8 years who were identified as late talkers when they were younger. For the interview procedures, we used questions and procedures adapted from McCormack et al.'s (2022) drawing talking protocol and the SPAA-C (McLeod, 2004). We conducted a focus group to co-develop questions for our individual

interviews with adult family members. We plan to conduct 12 adult interviews in upcoming months. Once interviews are completed, we will use thematic analysis to identify recurring themes within and across the child and adult interviews.

Although our analyses are not complete, our results will be one of the first systematic examinations of the lived experiences of children who were late to talk and their families.

This project is funded by an NIH TALK initiative supplement 3R01DC015642-06A1S1.

PS1F13

Participatory Help-Giving Practices: Implementation Science on Family-Centered AAC Intervention

John Kim; University of California, Berkeley

This pilot study analyzed the perspectives of graduate student clinicians and caregivers on the outcomes of “participatory help-giving practices” in augmentative and alternative communication (AAC) intervention sessions. This specific AAC intervention model situates both family members and clinicians to co-construct AAC assessment, treatment, and progress monitoring in an iterative process. This qualitative study aimed to analyze whether family members can support AAC intervention in the home via the participatory help-giving intervention model (Dunst & Trivette, 2009). Both graduate student clinicians and families are interviewed after 12 weeks of on-campus AAC clinic sessions. Reoccurring themes and elements are established and stratified via thematic analysis. Data are also validated via triangulation of literature review reflection of participatory help-giving practices, clinical artifacts (e.g., therapy plan and SOAP notes, progress reports), and individual interviews of graduate student clinicians and families. Our anticipated outcome is to observe the initial results of the participatory help-giving intervention model concerning (a) the value of the family in AAC intervention and (b) building capacity for family members to support AAC independently.

PS1F14

Language Change in Spanish-English Bilingual Children across Different Education Programs

Joseph Hin Yan Lam; University of California Irvine

Priscilla C.S. Fung; University of California Irvine

Lisa Bedore; Temple University

Elizabeth Peña; University of California Irvine

Ronald Gillam; Utah State University

The current study examined the relationship between bilingual programs and oral language performance in Spanish-English children longitudinally from kindergarten to first grade. Examining changes in raw scores can help understand the performance difference of the children, while standard scores can reflect the degree of change compared to the normed sample. 165 Spanish-English bilingual children were assessed using a standardized bilingual language assessment in both kindergarten and Grade 1. Participants were from three different policy bilingual programs, including late exit bilingual education (n = 52), early exit bilingual education (n = 73), and English-only education with bilingual support (n = 40). No significant difference in

change in standard scores on Spanish semantics, English semantics, and morphosyntax. A significant difference was found in the change in standard score on Spanish morphosyntax between language programs, $F(2, 157) = 3.75, p = .03$. Post-hoc analysis showed children from late-exit bilingual programs had significantly higher changes in standard scores in Spanish morphosyntax to English-only program with bilingual support. The current study provides evidence to support bilingual education programs in early childhood.

Funding: R01DC007439 (Peña)

PS1F15

Writing Self-efficacy in Secondary Students of Various Levels of Language Proficiencies

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Young-Suk Kim; University of California, Irvine

This study addresses a critical gap in investigating writing self-efficacy in secondary students across different English proficiency levels. The study also aims to explore the relation between writing self-efficacy and various dimensions of writing quality argumentative writing in history. The study includes 360 students from 6th to 11th grade. For data analysis, we ran MANCOVA models on all writing self-efficacy measures by English Learner (EL) status. Post-hoc analysis was conducted. To understand the relations between writing self-efficacy and writing quality, Structural Equation Models were fitted. Results indicated that ELs had lower writing self-efficacy in revision. In addition, writing self-efficacy is significantly related to evidence use, language use, and historical thinking dimensions of writing quality, not the idea/ structure dimension. The study highlights the differential writing self-efficacy of students with different levels of English proficiency. Furthermore, students' writing self-efficacy is related to their abilities to use language and disciplinary-specific writing skills rather than ideas and the overall structure of their writing. The study has implications in writing instruction for various learners and assessment of writing self-efficacy.

Funding: R305C190007 (Carol B. Olson)

PS1F16

Slight differences with similar language profiles in individuals with Smith-Magenis Syndrome (SMS) due to a genetic deletion versus a mutation of the RAI1 gene

Christine Brennan; University of Colorado Boulder

Smith-Magenis syndrome (SMS) is a genetically linked developmental disorder associated with impaired language. Approximately 90% of those with SMS have a genetic deletion within chromosome 17p11.2 and 10% have a mutation of the RAI1 gene.

Rationale: No previous comparisons of those with the deletion versus the mutation have focused on language/communication. This study aimed to determine (1) if there were genetic differences in language/communication between groups and (2) the importance of the RAI1 gene in language development.

Methods: Data from 33 children with SMS (23 with the deletion and 10 with the RAI1 mutation) from the International SMS Patient Registry were analyzed. Analyses focused on mode of communication, language, and literacy.

Results: All language and communication variables showed similar results with slight differences between groups and a slight advantage for those with the RAI1 variant form of SMS.

Conclusions: The similarity between groups is consistent with previous hypotheses that haploinsufficiency of the RAI1 gene is responsible for the SMS phenotype and confirms that the RAI1 gene is critical for language development.

There are no funding sources to report.

PS1F17

Examining the Role of Language Proficiency on Code-Switching Behavior in Bilingual Children with and without Developmental Language Disorder

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Anny Castilla-Earls; University of Houston

This study explores the relationship between language proficiency and code-switching (CS) in Spanish-English bilingual children with and without developmental language disorder (DLD) over a period of two years. The participants were on average 5;11 years old at the onset of the study and included children with (n = 43) and without DLD (n = 57). Story generation and story retelling tasks were used to elicit language samples in English and Spanish. Regression analyses reveal a significant negative relationship between CS frequency and receptive vocabulary scores in both languages. Moreover, DLD did not emerge as a significant predictor for specific CS types at distinct time points. These findings contribute to ongoing debate on the relationship between language proficiency and CS. This research is supported by the National Institutes on Deafness and Other Communication Disorders, Award Number K23DC015835 granted to Anny Castilla-Earls.

PS1F18

Examining measures of early syntactic knowledge in late-talking toddlers

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Elizabeth Norton; Northwestern University

Lauren Wakschlag; Northwestern University

Pamela Hadley; University of Illinois Urbana Champaign

This study examined how measures of early syntactic ability differentiated late talkers with elevated risk for developmental language disorder from toddlers with transient early language delays. Late talkers with a persistent language delay (LT-P; n=21), late talkers with a transient language delay (LT-T; n=23), and toddlers with typically developing language (TD; n=60) were classified on prior history of language delay and mean length of utterance from a caregiver-child sample between 30-38 months. Three measures were computed from a structured priming task: the primed Index of Productive Syntax-CLAN (pIPSyn-C) primed unaccusative verb diversity, and primed subject diversity with unaccusative verbs (e.g., leaf fall, ball roll). ROC curves demonstrated that the pIPSyn-C provided good group classification accuracy between the LT-P and TD groups as well as the LT-P and LT-T groups. In contrast, unaccusative verb and subject diversity measures had only fair classification accuracy between the groups. Implications for developing diagnostically sensitive measures of elevated risk for DLD, and empirical support for theories of language knowledge in late-talking toddlers will be discussed.

NIDCD R01DC016273 PIs: Norton & Wakschlag.

PS1F19

Mismatch of text complexity in grade-school curricula and standardized language assessments

Melissa Hill; University of Iowa

Stewart McCauley; University of Iowa

Language in the school-age years is assumed to develop largely from exposure to increasingly complex language at school. However, the language students are exposed to may not be as complex as assumed or align with the language tested on clinical language assessments. If language in curricula is less complex than that of assessments, students have fewer opportunities to learn tested linguistic concepts and structures. This study aims to explore this through corpus analysis of textbooks and assessments.

Elementary textbooks and clinical language assessments were analyzed for micro/macrolinguistic complexity. Complexity measures were compared across curricular texts and assessments, as well as grade level and subjects.

Initial analyses show that textbooks have higher syntactic complexity, lexical complexity, and lower readability. Textbooks and assessments do not differ significantly on cohesion measures. Assessments are more narrative-like compared to textbooks.

Assessments and textbooks are not linguistically congruent; reading comprehension on an assessment may be less difficult than that of curricular texts, emphasizing the need for educators to facilitate curricula comprehension, as well as speech-language intervention as needed.

The authors have no financial interests to disclose.

PS1F20

Rhotic Productions by Spanish-English Bilingual Children

Olivia Berther; University of Iowa

Christine Shea; University of Iowa

Carlos Irizarry-Pérez; University of New Mexico

Philip Combiths; University of Iowa

This study examines rhotic productions of two Spanish-English bilingual children (ages 6;11 and 7;5) with suspected phonological delay, aiming to add insight into the acquisition and development of these later-developing phonemes across two languages in school-age bilingual children. Participants completed single-word elicitation probes in English and Spanish.

Productions of target rhotics were transcribed and analyzed for phonetic, phonological, and acoustic characteristics. Results are discussed as they relate to the representation of bilingual phonological systems, cross-linguistic transfer, and implications of speech-language assessment.

This research was funded by the National Institutes of Health, NIDCD F31DC017697 and the University of Iowa Office of Undergraduate Research.

PS1F21

The Development of Lateral Inhibition in Spoken Word Recognition

Ege Gur; University of Iowa

Jaime Klein-Packard; University of Iowa

Abby Fergus; Princeton University
Bob McMurray; University of Iowa

Word recognition is supported by a competition process in which words that partially match the input are activated and compete for recognition. Recent work has shown that adolescents with Developmental Language Disorder (DLD) do not fully resolve this competition, likely due to deficiency in inhibition among words (lateral inhibition). It is not yet clear how this develops. Two experiments investigated the development of lateral inhibition using a variant of the visual world paradigm. Experiment 1 compared adults (N=40), older children (11-12) (N=46), and younger children (7-9) (N=234). Adults demonstrated robust inhibition ($d=0.76$), with marginal evidence in older children. There was a small but significant effect in the younger group ($d=0.13$) due to the large sample. Experiment 2 asked if these weaker effects were due to the younger listeners' failure to activate competitors, or if competitors were active but simply not inhibiting the target. It found robust competitor activation even in younger children, suggesting the weaker effects may derive from true inhibition differences. Implications for DLD are discussed.

This work was supported by the National Institutes of Health Grant DC 0008089.

PS1F22

Socioeconomic and Personal Well-being in Adults With and Without Early DLD

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Philip Combiths; University of Iowa
Si On Yoon; New York University
Lindsey Carter; University of Iowa
Emily Zrostlik; University of Iowa
Stewart McCauley; University of Iowa
Kristi Hendrickson; University of Iowa

This study reports findings from the Iowa Trajectories of Language Disorders (ITOLD) study concerning the educational, economic, and life satisfaction in individuals who have been followed for 30 years beginning when they were in kindergarten. These individuals completed a questionnaire concerning these features of their life. These responses showed that the individuals diagnosed with developmental language disorder (DLD) in kindergarten, as a group, had lower education, household incomes, and ratings of life satisfaction. The DLD group showed greater variability than those with typical language in kindergarten suggesting that other important variables serve as moderators of the effects of DLD.

PS1F23

Associations between prelinguistic communication and vocalization development in preverbal toddlers with autism

Olivia Boorom; University of Kansas
Jena McDaniel; Vanderbilt University School of Medicine
Suzanne Martell; University of Kansas
Lucy Cochrane; Vanderbilt University School of Medicine
Audrey Southerland; Georgia Institute of Technology

Agata Rozga; Georgia Institute of Technology
Nancy Brady; University of Kansas

This study examines the relationship between prelinguistic communication skills and vocal development in young children with autism. As part of an ongoing longitudinal study of language development in preverbal toddlers with autism, participants were given a battery of social communication, play, and receptive and expressive language assessments at an initial assessment and again 3 months later. We specifically asked whether children's receptive language and/or social communication at the initial visit predicted their stage of vocalization development, both concurrently and at the follow up visit (i.e., precanonical syllables, canonical syllables, or single words). Current data (n = 26) show significant positive associations between a child's receptive language abilities and their vocalization stage, and between social communication skills and vocalization stage concurrently. Neither receptive language nor social communication skills were significantly predictive of children advancing to the next vocalization stage. Given the importance of vocalization development for future language skills in autism, continued research into how prelinguistic skills support vocal development will provide greater understanding of different profiles of language development in autism. This work is funded by NIDCD R01DC020048.

PS1F24

Exploring the Language Experiences of Black, African American English Speakers in the California Bay Area

Karina Saechao; University of Kansas
Mabel Rice; University of Kansas

African American English (AAE) is one of the most widely used and extensively studied varieties of English. Over 80% of Black people speak AAE. Despite extensive literature on professional's (e.g. teachers, SLPs) perceptions of people who speak AAE, a gap in the literature is Black people's own perceptions of their AAE use and experiences. This study addresses these gaps utilizing a newly developed questionnaire that inquires about the background and language experiences of Black, AAE speakers in the California Bay Area (CABA) (N=40). Black, adult (18-85), long-term residents of the CABA were recruited. The authors designed a novel questionnaire to investigate these research questions: In what ways does perceived frequency of use of African American English versus General American English vary by age? gender? setting? communication partners? The significance of this study is to further our understanding of the language use patterns and experiences of the generations of Black parents and grandparents who are AAE speakers in the CABA. This investigation was supported by the University of Kansas College of Liberal Arts & Sciences Research Excellence Initiative.

PS1F25

Communication Across the School Day: A Nation-Wide Survey of Teachers' Perspectives and Self-Rated Knowledge of Developmental Language Disorder

Brittany Ciullo; University of Massachusetts Amherst
Jill Hoover; University of Massachusetts Amherst

Developmental Language Disorder (DLD), a highly prevalent condition, significantly impacts a child's classroom performance and engagement with the educational environment.

Unfortunately, due to a lack of public awareness and understanding, DLD is often undiagnosed and misunderstood in schools. To investigate teachers' knowledge and perceptions of DLD, a survey was conducted to assess teachers' self-rated knowledge of DLD and its educational impact. Results indicate that the term DLD was unfamiliar to many teachers, which may contribute to classroom teachers' low self-ratings of their ability to recognize students with DLD. Nevertheless, teachers understood many aspects of language difficulties and classroom accommodations. A relationship was found between the teacher's current role (e.g., classroom teacher, special education teacher) and self-rated knowledge of DLD. Several misconceptions of DLD were also reported. Understanding teachers' knowledge and self-ratings regarding DLD has important implications for collaborations between teachers and speech-language pathologists and ultimately ensuring that students with DLD receive the support they need in the educational environment.

This work was supported by a University of Massachusetts Amherst School of Public Health and Health Sciences Dean's Doctoral Fellowship.

PS1F26 WITHDRAWN

Down Syndrome, Language, and Executive Function: Investigating Group Strengths in Interference Suppression

Rebecca Stachowicz; University of Massachusetts Amherst

Jill Hoover; University of Massachusetts Amherst

Audra Sterling; University of Wisconsin-Madison

Amy Banasik; University of Wisconsin-Madison

Brittany Ciullo; University of Massachusetts Amherst

Claudia Schabes; University of Wisconsin-Madison

Past research has shown that children with Down Syndrome, when matched on mental age to typically developing children, show no significant differences in performance on non-verbal inference suppression tasks such as the fish Flanker task. We looked at executive function task results for 20 children with Down syndrome and 50 typically developing children, matching on non-verbal intelligence and MLU. Parent reports of executive functioning (measured by the BRIEF parent rating scale) are also considered. The present study will add to a growing conversation around Down Syndrome and executive function, specifically group strengths on interference suppression tasks, with the novel addition of MLU as a matching variable. This study was funded by a multi-site NIH grant (R01 DC 019092) awarded to the University of Massachusetts Amherst, PI: Jill Hoover, and the University of Wisconsin-Madison, PI: Audra Sterling.

PS1F27

Interventionist and child use of verbs varying in difficulty within a grammatical language intervention

Elizabeth Ancel; University of Minnesota

Miriam Kornelis; University of Minnesota

HaeJi Lee; University of Minnesota

Lizbeth Finestack; University of Minnesota

The variation of verb difficulty in input is an important component of grammatical language intervention for children with Developmental Language Disorder (DLD). To implement verb variability in practice, we conducted grammatical language intervention sessions designed to elicit 24 unique target verbs varying in difficulty based on their frequency of use and phonological complexity. However, the actual use of target verbs included in the story retell and play activities varied when the interventionist modified verbs or when the child spontaneously produced a non-target verb. In this study, we analyzed transcriptions of intervention sessions with 4-9-year-olds to compare the interventionists' and children's adherence to the prescribed usage of verbs varying in difficulty, thus demonstrating the feasibility of including verbs of varying difficulty in different activities. We also compared the verb characteristics? frequency and phonological complexity? of the child's spontaneously produced non-target verbs to the verbs modeled by the interventionist to determine whether they substituted target verbs with more familiar and easier-to-produce verbs. This research is funded by NIDCD 1R01DC019374-01.

PS1F28

A preliminary study of self-reported quality of life in developmental language disorder

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Rationale. Developmental language disorder (DLD) is a prevalent neurodevelopmental condition characterized by primary deficits in language and lifelong challenges in wellbeing. This preliminary study begins to characterize self-reported quality of life and relevant factors in DLD. **Methods.** We administered a language assessment to determine DLD status (n = 5) and included a neurotypical comparison group (n = 20). Additional measures were: grammaticality judgement; self-reported quality of life; self- and parent- report of risk factors.

Results. The DLD group did not report poorer quality of life than NT individuals.

Grammaticality judgement performance was differentially associated with happiness, ability to be oneself, and degree of sensory barriers and support in the environment in DLD relative to NT individuals. Risk factors including nonverbal ability and health history were associated with barriers to happiness and educational experiences.

Conclusions. Preliminary findings suggest a role for individual differences in a key area of language weakness, morphosyntax, in self-reported quality of life to a greater degree than DLD status. Nonverbal skills and health risk factors were also associated with wellbeing in DLD.

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PS1F29

The Relationship Between IQ and Lexical Measures in School-age Children with Williams Syndrome

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Williams Syndrome (WS) is a neurodevelopmental genetic disorder characterized by a deletion of about 28 genes on one copy of chromosome 7. Of interest to scientists is the uneven neuropsychological profile where a pattern of strengths and weaknesses in cognitive abilities exists and has become a distinguishing feature of WS. Language use has been considered a

relative strength within the WS population. This strength is not ubiquitous on all language measures, as individuals with WS perform poorly on standardized language tests. In this study, the relationship between FSIQ and seven lexical measures were investigated. Language samples from fourteen school-age children with WS between 7 to 14 years-old were collected. Language samples were transcribed and entered into a web-based lexical complexity analyzer. A positive correlation with FSIQ was found for Number of Different Words but six other lexical variables did not reach statistical significance. The relative strength in speech production is once again observed, regardless of FSIQ. When children with WS are allowed to speak freely, they express language at a rate not indicative of their overall IQ level (NIH-NINDS P50NS22343).

PS1F30

Analyzing Emotive and Cognitive Word Use in the Narratives of School-Age Children with SLI

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Children with language impairments struggle to use vocabulary in the same ways as their TD peers. For children with language impairments, mastering abstract words (i.e., emotion and cognition words) is crucial as these concepts not only enrich their vocabulary but also play a pivotal role in enhancing the depth and quality of their narratives, offering a window into their cognitive and emotional development. Analyzing abstract words can provide insight into whether word choice contributes to narrative quality in an oral language sample. The present study analyzed the use of abstract words in the oral narratives of school-age children with language impairments compared to their TD peers. Transcribed oral narratives from the Gillam dataset in the Child Language Data Exchange System (CHILDES) were selected for secondary data analysis. Quantitative results revealed statistically significant differences between children with SLI and their TD peers in the number of abstract words used as well as overall lexical diversity. Qualitative analysis revealed themes that related to word choice between language function groups. Research and clinical implications will be described.

PS1F31

Children draw talking: A comparison of preschoolers who are TD and those with DLD

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Rationale: Drawings offer a child-friendly way to include children as active participants in their care. This study examines how Jamaican Creole (JC)-English speaking children with typical development (TD) and those with developmental language disorder (DLD) express their communication experiences through drawings.

Methods: JC-English speaking children aged 4-to-5-years who were TD (n=5) or DLD (n=5) completed drawing sessions and the Speech Activity and Participation Assessment of Children (SPAA-C) visual Likert-type scale (happy/in-the-middle/sad/another feeling/don't know) in both

languages. Children's drawings were qualitatively analyzed for themes and focal-points. Ratings on the SPAA-C were analyzed.

Results: The most frequently-coded themes varied between TD and DLD groups. TD children's drawings more often expressed talking to family/friends and being happy while talking. Using the SPAA-C, TD children specifically named their feelings about their talking (e.g., happy, bored, shy) whereas children with DLD limited the feelings reported (e.g., happy, don't know).

Implications: Using drawing supports our understanding of children's communication experiences across developmental profiles, while also empowering active participation in assessment activities. This work was supported in part by endowment gift funds and an NIH grant (1R21DC018170).

PS1F32

A modest proposal for selecting a gold standard for developmental language disorder

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Currently, there is no agreed-upon gold standard for identifying cases of DLD or method for arriving at one. Convergence with a majority of other existing references standards represents one potential criterion worth consideration. Five commonly used DLD reference standards, the CELF-4, converging clinical markers, receiving services, parental concern, and MLU were used to explore the nature of convergence among standards within a community-based study sample of K-1st grade students. Fifty-one of the 111 participants were identified as positive for DLD by at least one standard, while only four cases were identified by all standards. The CCC-2 showed the highest overlap with other standards but failed to identify seven cases that met criteria for three or four other standards. Receiving services and MLU showed the least overlap. The CELF-4 failed to identify only one case that met criteria for three other standards, suggesting an omnibus language test may be the best option for this age group. However, limited convergence across all five standards suggests additional refinements are required and may involve clinical algorithms based on multiple measures Funding source: NIDCD R01DC011023.

PS1F33

Narrative Macrostructure in Children with Fetal Alcohol Spectrum Disorders: Comparison to Autism

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Rationale. Children with fetal alcohol spectrum disorders (FASD) experience many challenges with communication, including discourse. Very little is known about narrative macrostructure in children with FASD, despite its utility for revealing strengths and weaknesses among children with a variety of sources of language impairment, including autism spectrum disorder (ASD).

Methods. Children with FASD (n = 23; 5 - 9 years old) and ASD (n = 17; 5 - 11 years old) provided narrative language samples, which were transcribed using SALT software and coded using Narrative Scoring Scheme (NSS). Participant groups were matched on age, nonverbal IQ, and mean length of utterance (MLU).

Results. Participants with FASD or ASD did not differ in narrative macrostructure performance. Within groups, narrative microstructure (e.g., MLU) was positively correlated with total NSS macrostructure scores.

Conclusions. The current findings point to shared correlates of narrative macrostructure performance in children with FASD and ASD.

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PS1F34

Investigating Narrative Skills using questions: An insight into Macro and Micro structures of Language.

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Narratives, crucial for academic success, encompass macrostructure (organization of story elements) and microstructure (linguistic sophistication) elements. Children with Developmental Language Disorder and other learning disabilities often struggle with narrative skills. Previous research has primarily reported inclusion and improvements in macro- rather than microstructure elements. Priming questions have been found to impact macro- but not microstructure generation, although the questions have often focused on macrostructure elements. In this study, 7-to-8 year old children (n=22) generated a story after answering no questions, macroelement-focused questions, or microelement-focused questions. Results showed an improvement in narratives after questions were asked. Preliminary results are suggestive of an effect of question type with macrostructure questions leading to greater inclusion of macrostructure elements in story production and microstructure questions leading to greater inclusion of microstructure elements. The findings indicate that narrative generation of microstructure elements may require specific intervention or priming to show change.

PS1F35

Parent-mediated word learning in bilingual parent-child dyads

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Parents use different methods to teach their children new words (e.g., labeling or pointing). Bilingual parents must also navigate language choice when teaching their children novel words. There have been few examinations of the behaviors of parent-child dyads during naturalistic word learning activities. We examined bilingual Spanish-English parents' and children's

language use, novel word labeling, and pointing in a semi-naturalistic novel word learning activity. Parent-child dyads participated in a ten-minute coloring activity in which parents were instructed to teach their children three novel words. Interactions were video-recorded and later transcribed. We coded each utterance for parents' and children's language use (i.e., English, Spanish, codeswitched), novel word production, and pointing. Preliminary findings suggest parents and children use more English than Spanish or codeswitched utterances. Parents label the novel words and point more times per transcript than their children. This study provides insights into bilingual word-learning strategies and children's behavior.

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PS1F36

Understanding parents' beliefs about language acquisition in culturally and linguistically diverse, low socioeconomic communities

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A common assumption in studies of parental language input to children is that parents from low socioeconomic environments (SEE) provide less input to their children than parents from higher SEE, a gap in input assumed to be a causal factor leading to children from low SEE having fewer vocabulary words. There are two important gaps in the empirical evidence. One is the report of low SEE parents themselves regarding how language is used in the home and the second is reports from both parental sources i.e., mothers and fathers. This study addresses these gaps using a newly developed questionnaire that measures parental perspectives on language acquisition, comparing mothers' and fathers' responses (n = 29). Parents were recruited from community-based Head Start programs enrolling children from households with low-income levels. The new questionnaire revealed mothers and fathers are similar in beliefs about patterns of interaction with their children at home. Further, the study provides considerations for measurement standards in culturally linguistically diverse populations. This investigation was supported by the University of Kansas College of Liberal Arts & Sciences Research Excellence Initiative.

PS1F37

A comparison of conversational turn-taking during parent-child and examiner-child conversations among autistic boys and boys with FXS+ASD

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Conversation skills are essential for social and educational outcomes. Challenges in pragmatic language, including conversational skills, are common among autistic individuals and individuals with fragile X syndrome (FXS). The familiarity of conversation partners can influence autistic individuals and individuals with FXS's expressive language during conversations. However, the extent to which they differ in their turn-taking abilities during conversations with familiar and unfamiliar partners is unknown. This study used naturalistic language samples collected during two separate 10-minute conversation tasks: one with a familiar partner (i.e., mother) and one with an unfamiliar partner (i.e., examiner). Participants included 14 autistic boys and 14 boys

with FXS+autism between ages 9 and 18, who were matched on chronological age and autistic traits. Results were analyzed in terms of number of turns, mean turn length in utterances, mean turn length in words, and percentage response to questions. The implications of the study will be discussed.

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PS1F38

Narrative Macrostructure and Executive Functioning in Adolescents with Down Syndrome

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Individuals with Down syndrome (DS) are impacted by intellectual disability and impaired language abilities. Though narrative production is cited as a strength in DS, we see large variability through within-group analyses. A possible explanation for differences in narrative production in DS is executive functioning (EF). In this exploratory study, we examined the relationship between narrative productions and EF in nine adolescents with DS. Our secondary question was to look at the relationship between experimental (Flanker, Local-Global, and Corsi) and parent-reported (BRIEF-2) EF measures. Narrative macrostructure was operationalized with an adapted Narrative Scoring Scheme (NSS). We used Spearman's rank correlations to explore the relationship between EF and narratives, and Fisher's z-scores to assess differences between parent-reported and experimental EF measures. The implications for research and clinical practice will be discussed.

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PS1F39

The Influence of Length and Context on Reliability of Language Sample Measures for Deaf and Hard of Hearing Children

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Language sample analysis is a naturalistic and ecologically valid method for assessing a child's language skills, and it may be particularly beneficial for DHH children to supplement standardized assessments that often overlook their language needs. However, speech-language pathologists report lack of time as the primary barrier to implementing language sampling in their practice. The belief that children need time to become comfortable before demonstrating representative language skills (i.e., a "warm-up" period) further extends the process.

This study explores the effects of language sample length on the reliability of four spoken language measures for DHH children. The findings suggest that across three language contexts, samples ranging from 1-7 minutes achieve adequate reliability compared to 12-minute samples.

Mean length of utterance was particularly reliable in sample lengths as short as 1 minute for play and conversation. Similar patterns of reliability were found in segments derived from the beginning and end of samples, suggesting that a “warm-up” period is not necessary. These considerations may increase efficiency, making language sample analysis more feasible in research and clinical settings. This project is supported by ED/H325D220072.

PS1F40

Iterative Cycles of Design Research in the Co-Design of a Spoken Language Assessment Tool for Teachers of the d/Deaf and/or Hard of Hearing

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Curriculum-based assessment tools are needed in order to foster the language and literacy development of d/Deaf and/or Hard of Hearing (DHH) students, but are often lacking. Following the co-design and initial development of an assessment with four components (vocabulary, morphological awareness, sentential syntax, and discourse), piloting took place and feedback was provided by end-users. In this phase of the project, participants provided feedback based on piloting of the assessment prototype. Feedback was provided via focus groups, interviews, and completion of a Qualtrics form, and was used to implement iterative cycles of revisions, directing development of the assessment tool. Feedback was provided for each of the four components, and for the tool as a whole, and focused on the content and nature of the tool and its ease of use. This directed iterative revisions and further piloting, resulting in a more effective assessment tool. Revisions of the assessment tool are nearing completion and the tool will be ready for implementation into wider practice in the coming months. Funding provided by Social Studies and Humanities Research Council of Canada #890-2017-0072.