

ISHA 2025
Detailed Poster Schedule

Overall Disclosure: Speakers have provided biographical information that is important when determining what bias might exist in a presentation. For instance, it might include who the speaker works for or what organizations they are a part of professionally or personally. Additional financial or nonfinancial information may be included if it may be relevant to the materials, opinions, or research presented.

All posters will be added together across both days of the conference. Since ASHA only awards CEs in 30-minute increments, you can only receive CEs for each *set* of posters you attend. Attendees must attend each poster for 15 minutes in order to receive ASHA CEs.

Examples

You attend 3 posters on Thursday and 5 posters on Friday = 8 posters = .2 CEs

You attend 1 poster on Thursday and 4 posters on Friday = 5 posters = .1 CE

Thursday October 2, 12:30-1pm

Emma Mueller, BS Bhavana Bhat, MA-SLP Thushani Munasinghe, BSc (Hons)-SLP Hayo Terband, PhD, Speech Sensorimotor Development Lab, Department of Communication Sciences and Disorders, University of Iowa	Community-Oriented Service for Comprehensive Assessment of Speech Sound Disorders in Children: Development/Implementation of a Sustainable Model Diagnosis and treatment planning of Speech Sound Disorders (SSDs) in children is a challenging task that requires extensive assessment of speech and related capacities. The reality, however, is that Speech-Language Pathologists often do not have time or resources for the necessary comprehensive assessment (CA). Also, access to services may be limited. In this presentation, we report on a project set up to provide free CA for children with SSD in the local community through its implementation in an educational setting. We will elaborate on the CA process, analysis and reporting, illustrated with case examples. Experiences– positives, challenges, and pitfalls regarding client expectations and CA administration, processing, and reporting in an educational setting– will be discussed with the audience.
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Participant Outcomes	<p>Explain the importance and benefits of a comprehensive assessment of speech and related skills in children with speech sound</p> <p>Interpret results from a comprehensive assessment of children with speech sound disorder in terms of a profile of underlying strengths and weaknesses</p> <p>Outline how a community-oriented model that facilitates comprehensive assessment can be implemented in an educational setting</p>
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Bio and Disclosures	<p>Emma Mueller, BS is an MA-SLP student and the lab manager of the Speech Sensorimotor Development lab at the University of Iowa who coordinates data collection with participants and lab members, assists in data collection, and coordinates data processing for this project.</p> <p>Bhavana Bhat, MA-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project. Her research focuses on somatosensory perception in children with speech sound disorders particularly in childhood apraxia of speech. She aims to determine whether individual differences in behavioral performance on somatosensory perception tasks correlate with variation in tongue shape complexity and speech production.</p> <p>Thushani Munasinghe, BSc (Hons)-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project.</p> <p>Hayo Terband, PhD is Assistant Professor in the Department of Communication Sciences and Disorders and director of the Speech Sensorimotor Development Lab at the University of Iowa overseeing this project. His research focuses on the mechanisms behind the different manifestations of developmental Speech Sound Disorders; in particular Childhood Apraxia of Speech. Long-term goals of his research include the implementation of a process-oriented method for diagnostics and individually tailored treatment planning of childhood speech-language disorders in a user-friendly computer-based clinical instrument.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>
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Maddie Usher, BA Mallorie Jacobson, BA Adam Haut, BA	Comparing In-Person and Remote Testing of Adult Neurogenic Tests: Findings and Recommendations
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Paige Peterson, BA University of Northern Iowa	Our research explores whether assessments for adult neurogenic communication disorders yield comparable results when administered in-person and remotely. Two adult participants completed five standardized tests in both settings. Minor adjustments and technical issues were noted during remote sessions, but overall scores remained consistent. Findings support the reliability of remote testing and offer practical adaptation strategies for Speech-Language Pathologists using telepractice.
Participant Outcomes	Compare the outcomes of in-person tests and remote tests for adult neurogenic clients. List barriers that may arise during remote testing. Apply adjustments to neurogenic assessments when performing them remotely.
Bio and Disclosures	Maddie is a 3rd semester graduate student at the University of Northern Iowa, working to receive her Master's degree in Speech Language Pathology. Maddie earned her Bachelor's degree in Communication Science and Disorders at the University of Northern Iowa. Mallorie is a 3rd semester graduate student at the University of Northern Iowa, working to receive her Master's degree in Speech Language Pathology. Mallorie earned her Bachelor's degree in Communication Science and Disorders at the University of Northern Iowa. Adam is a 3rd semester graduate student at the University of Northern Iowa, working to receive his Master's degree in Speech Language Pathology. Adam earned his Bachelor's degree in Linguistics at Iowa State University. Paige is a 3rd semester graduate student at the University of Northern Iowa, working to receive her Master's degree in Speech Language Pathology. Paige earned her Bachelor's degree in Communication Science and Disorders at the University of Northern Iowa. The authors have no relevant financial or nonfinancial disclosures to report.

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Jenny Brodell, MA CCC-SLP	Graduate Student Clinician Skill Retention of Naturalistic Developmental Behavioral Intervention (NDBI) Techniques
Lindsey Nichol, MA CCC-SLP Erin Dorsey, BS Morgan Linneweh University of Iowa	Project ImPACT (Improving Parents as Communication Teachers) is a parent-mediated intervention for young autistic children and those with related social communication delays. This intervention program teaches parents a variety of strategies to support development of social, communication, imitation, and play skills using a Naturalistic Developmental Behavioral Intervention (NDBI) framework. Graduate student clinicians at the University of Iowa participate directly in this program as parent educators. They also employ skills taught in individual and small group sessions with young autistic children. In this session, we will briefly introduce NDBIs, provide an overview of Project ImPACT, discuss evidence-based feedback and clinical education strategies to support clinical skill acquisition in graduate students. We will present survey data regarding student perception of retention of skills learned, as well as on-going use of intervention strategies.
Participant Outcomes	<p>Outline the framework behind Project ImPACT, a Naturalistic Developmental Behavioral Intervention (NDBI).</p> <p>Identify 2 evidence-based feedback strategies to support clinical skill acquisition in graduate students.</p> <p>Identify two different student perspectives of skill retention and use over time.</p>
Bio and Disclosures	<p>Jenny Brodell, M.A., CCC-SLP is a Clinical Assistant Professor at the University of Iowa in the Department of Communication Sciences and Disorders. She currently specializes in clinical supervision and evaluation and treatment in the areas of autism and pediatric speech and language disorders. Jenny has extensive experience in the area of autism. She participates in interdisciplinary autism diagnostic clinics, social and life skills groups, and parent education programming to support communication development. She also has experience in preschool programming for autistic individuals. Jenny is the president for the Autism Society of Iowa, and the American Speech-Language Hearing Association (ASHA) State Advocate for Reimbursement for the state of Iowa.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>

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<p>Abigail Bentz, B.S.</p> <p>Eun Kyung Jeon, AuD, PhD.</p> <p>University of Iowa</p>	<p>Comprehensive Inventory and Clinical Application of Current Tinnitus Management Strategies for Adults</p> <p>Tinnitus, the perception of sound without an external stimulus, affects approximately 15% of adults and presents with diverse causes, characteristics, and degrees of severity. Due to its subjective nature and complex etiology—ranging from hearing loss and ototoxic medications to trauma—diagnosing and managing tinnitus remains challenging. This capstone project aimed to develop a comprehensive inventory of current tinnitus management strategies to support audiologists in clinical practice. It reviews the classification and evaluation of tinnitus, highlighting the importance of thorough case history, audiologic testing, and validated self-report measures. Management approaches are categorized into well-established (e.g., hearing aids, cochlear implants, CBT, TRT, TAT) and emerging interventions (e.g., bimodal stimulation, neuromodulation, biofeedback, hypnotherapy). Additionally, insights were gained from facilitating a monthly tinnitus education and support group, emphasizing the importance of empathy and patient-centered care. The findings underscore the need for individualized treatment planning and continued research into long-term outcomes and mechanisms of tinnitus to guide evidence-based practice.</p>
<p>Participant Outcomes</p>	<p>Identify common and emerging management strategies for adults with tinnitus.</p> <p>Recognize the importance of individualized, patient-centered care in tinnitus management.</p> <p>Discuss the clinical value of support groups and interdisciplinary approaches in enhancing tinnitus care.</p>

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Bio and Disclosures	<p>Abigail Bentz, B.S., is a fourth-year Doctor of Audiology student at the University of Iowa. She received her Bachelor of Science in Communication Sciences and Disorders at the University of Wisconsin - Eau Claire. Her clinical and research interests include auditory evoked potentials, vestibular evaluation, and tinnitus evaluation and management.</p> <p>Dr. Eun Kyung “Julie” Jeon, Au.D./Ph.D., serves as a clinical assistant professor at the University of Iowa. Her expertise includes aural (re)habilitation, cochlear implants (CI), auditory processing disorders, and tinnitus evaluation and management. Dr. Jeon collaborates with the UIHC CI team and major CI manufacturers to facilitate support groups with graduate audiology students. She initiated tinnitus education sessions at local senior centers, providing benefits to participants and offering early training opportunities to audiology students. Dr. Jeon also serves on Iowa’s EHDI Advisory Board and reviews graduate student scholarships and travel awards for ASHA conventions. Furthermore, she participates as a program committee member for CI conferences of the American Cochlear Alliance and serves as a mentoring committee officer for the Asia Pacific Society of Speech-Language-Hearing.</p> <p>The presenters have no relevant financial or non-financial disclosures to report.</p>
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Hannah Krejci, B.A.	A Survey About Augmentative and Alternative Communication in the Classroom
Whitney Martin, B.A.	<p>This research project explored the use of augmentative and alternative communication (AAC) and modeling AAC within a classroom setting. Method: A survey was sent out to school speech-language pathologists. Twenty-seven responses were submitted back to researchers. Results: Participants reported a range of AAC being used in the classrooms and that modeling the use of AAC was beneficial. However, barriers were mentioned, such as time constraints for training and collaboration and access to training resources. Conclusion: While continued research is needed, support for more time, collaboration, and additional training appears to be helpful. Overall, modeling was seen as beneficial but barriers were listed that interfered with the occurrence of modeling.</p>
Evette Edmister Ph.D., CCC-SLP	
University of Northern Iowa	

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Participant Outcomes	<p>Identify three benefits of modeling the use of augmentative and alternative communication</p> <p>List three barriers that could interfere with modeling augmentative and alternative communication within the classroom</p> <p>Explain three resources that participants noted as beneficial regarding modeling augmentative and alternative communication</p>
Bio and Disclosures	<p>Hannah Krejci received her B.A. in Communication Sciences and Disorders from the University of Northern Iowa in 2024. She is now currently completing her Masters degree at the University of Northern Iowa. After graduating in December of 2025, she plans to complete her Clinical Fellowship Year in a clinical or school pediatric setting.</p> <p>Whitney received her B.A. in Communication Sciences and Disorders from the University of Northern Iowa in 2024. She is now currently completing her Masters degree at the University of Northern Iowa. After graduating in December of 2025, she plans on working for the Central Rivers Area Education Agency.</p> <p>Evette is an Associate Professor in the Department of Communication Sciences and Disorders at the University of Northern Iowa (UNI). Her research interests focus on Augmentative and Alternative Communication (AAC), literacy skills for those using AAC, and Assistive Technology (AT)/AAC supports for maintaining daily activities with a focus on those activities requiring communication. Evette has worked with individuals across the lifespan and in a range of settings including school, hospital, private home, and clinical settings, in Iowa and Kansas.</p> <p>The authors have no financial or nonfinancial disclosures to report.</p>

Sydney Burke, BA Cora B. Anderson, BA Jenna Zeal, BA Jaimie L. Gilbert, Ph.D., CCC-A	<p>Prosodic Features and Intelligibility in Foreign-Accented English</p> <p>This research examines the prosodic features of a subset of talkers in the Multi-talker Corpus of Foreign Accented English (MCFAE) speaking selected sentences from the Speech Perception in Noise (SPIN) test. By analyzing these patterns, the study aims to contribute to a better understanding of how prosodic variation affects listeners' ability to comprehend accented speech, with implications for both</p>
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University of Northern Iowa	speech perception research and practical applications for improving communication in the presence of language differences.
Participant Outcomes	<p>Identify the importance of the role prosodic features plays on the measure of intelligibility of Foreign-Accented English.</p> <p>Compare how variations in prosody among Foreign-Accented English affect intelligibility among listeners.</p> <p>Identify key prosodic features that influence intelligibility in Foreign-Accented English.</p>
Bio and Disclosures	<p>Sydney graduated from the University of Northern Iowa with a Bachelor's degree in Communication Sciences and Disorders in 2024. Sydney is currently a graduate student at the University of Northern Iowa in the speech-language pathology program.</p> <p>Cora Anderson graduated from the University of Northern Iowa with a B.A. in Communication Sciences and Disorders with a minor in Educational Studies in May 2024. Cora is currently a graduate student in the Speech-Language Pathology program at the University of Northern Iowa and will graduate in May of 2026.</p> <p>Jenna graduated from the University of Northern Iowa with a Bachelor's degree in Communication Sciences and Disorders in 2024. Jenna is currently a graduate student at the University of Northern Iowa in the speech-language pathology program with the plan of graduating in the spring of 2026.</p> <p>Jaimie L. Gilbert, PhD, CCC-A, is an associate professor in the Department of Communication Sciences and Disorders at the University of Northern Iowa. She received a B.A. in Communicative Disorders and in Linguistics from the University of Wisconsin and an M.A. and a Ph.D. in Speech and Hearing Sciences (Audiology) from the University of Illinois. Dr. Gilbert completed a post-doctoral fellowship in the Department of Psychological and Brain Sciences at Indiana University. Her research interests include auditory-visual integration and talker variation in speech perception.</p> <p>The authors have no relevant financial or nonfinancial relationships to disclose.</p>

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<p>Anya McArtor</p> <p>Elizabeth Stangl</p> <p>Kjersten Branscome</p> <p>Todd Ricketts</p> <p>Yu-Hsiang Wu</p> <p>University of Iowa</p>	<p>Do Hearing Aid Orientation Styles Matter?</p> <p>Hearing aid (HA) skills are crucial for successful HA and patient outcomes. Traditionally, audiologists provide orientation, but often users don't retain all essential information. Additionally, over-the-counter (OTC) models rely on self-teaching, raising questions about skill retention. Furthermore, It's also unclear whether HA technology level (high-end vs. low-end) affects learning, given the complexity of advanced devices. This study was part of a larger randomized clinical trial. Participants were adults aged 55-85 years of age with mild-to-moderate hearing loss and no prior HA experience. Participants were randomly assigned to one of six groups, representing all combinations of the three service models (AUD, OTC+, and OTC) and two technology levels (high-end and low-end). HA skills were assessed using the Practical Hearing Aid Skills Test—Revised (PHAST-R) at 7 weeks post-fitting. Among 245 participants (mean age 67.7), those in the AUD and OTC+ groups scored significantly higher on the PHAST-R than the OTC group, indicating better HA skill retention. No difference was found between the AUD and OTC+ groups. HA technology level and its interaction with service model had no significant impact on scores. First-time HA users learned essential skills more effectively with audiologist support. The similar outcomes between AUD and OTC+ groups suggest even limited in-person guidance improves OTC success.</p>
<p>Participant Outcomes</p>	<p>Identify the importance of hearing aid orientation as orientation creates more skilled and satisfied hearing aid users.</p> <p>Contrast hearing aid delivery services (AUD, OTC+, and OTC) and their effect on the users outcomes.</p>
<p>Bio and Disclosures</p>	<p>Anya is an undergrad student in the Department of Communication Sciences and Disorders at the University of Iowa.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>

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Katherine Pribyl, B.A.	Adapting Audiological Management and Counseling with Patients from Culturally Diverse Backgrounds
Elizabeth Walker, CCC-A/SLP	<p>The United States is a multilingual, multiethnic, and multicultural country; therefore, we must consider the sociocultural backgrounds of the patients that we treat to provide them with the best care possible. The primary aim in this poster is to inform professionals about sociocultural considerations of multilingual patients within the context of the case study of a woman from Kosovo. We will briefly describe the political history of Kosovo, as well as the correlating implications of Kosovar healthcare and education systems. We will describe the cultural context alongside the patient's case history to emphasize the importance of understanding the patient's culture to more appropriately counsel. Additionally, we will consider recommendations for treatment of the patient's hearing loss.</p>
Charlotte Hilker, CFY	
Stephanie Fleckenstein, CCC-A	
University of Iowa	
Participant Outcomes	<p>List factors that may change treatment of individuals from cultures that differ from their own</p> <p>Identify the importance of taking cultural backgrounds into treatment consideration</p> <p>Compare Kosovo and United States healthcare systems</p>

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Bio and Disclosures	<p>Katherine Pribyl is a Doctor of Audiology student at the University of Iowa, where she earned her B.A. in Speech and Hearing Sciences with a minor in Spanish. As a Project IDEAS Fellow and research assistant in the Clinical Linguistics and Disparities Lab, her research interests lie in expanding audiological access to individuals who do not speak English as their primary language.</p> <p>Elizabeth Walker is an associate professor at the University of Iowa.</p> <p>Charlotte Hilker is an alumna of the US Fulbright Program (Kosovo). In Spring 2025, she taught an international practicum course where masters students traveled to Kosovo to serve children and adults with communication disorders. Currently, she works as a research associate in the Psycholinguistics Lab at the University of Iowa and is a clinical fellow at Mercy Medical Center in Cedar Rapids, IA. She earned an M.A. in Speech-Language Pathology at the University of Iowa.</p> <p>Stephanie Fleckenstein is a clinical associate professor and Director of Clinical Education in Audiology at the University of Iowa. She provides clinical instruction of graduate students in diagnostic audiology, aural (re)habilitation, hearing loss prevention, and culturally responsive practice in the University Clinic as well as the community Free Medical Clinic. She teaches Clinic Orientation, Advanced Clinical Practice, and Business Practice courses. Stephanie is an active member of ASHA, AAA, and Iowa Speech and Hearing Association.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>
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Thursday October 2, 5-5:30pm

Lyvia Hulsbrink	Home Language Proficiency in Multilingual Learners
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<p>Philip Combiths, CCC-SLP</p> <p>University of Iowa</p>	<p>For multilingual children, sufficient proficiency in each of their languages is necessary to support their home and school communication environments. Furthermore, converging evidence indicates that multilingual learners reach the highest levels of language abilities in English when their home language develops simultaneously through use and support at home (Sparks et al., 2023). In this community-engaged research study, we collaborated with the preschool programs at the Neighborhood Centers of Johnson County to collect caregiver and interpreter reports of language environment and language ability, and to complete language samples and nonword repetition tasks with multilingual learners (N = 98; age range = 2;11–4;10) across four preschool classrooms. We analyzed the relationships between environmental factors (e.g., language use at home, age of English exposure), child-internal characteristics (e.g., nonword repetition/language processing score), and reported home language abilities. Results revealed earlier exposure to English associated with lower reported MLU, grammaticality, comprehension and vocabulary size in the home language but no significant relationship with language processing. Additionally, interpreters and caregivers were most consistent in ratings of home language MLU, followed by grammaticality, and vocabulary ($p < 0.001$), but not comprehension or intelligibility. These findings highlight the need to support home language abilities in multilingual learners and attest that interpreters can provide reliable estimates of certain aspects of child language ability in the home language.</p>
<p>Participant Outcomes</p>	<p>Identify reliable caregiver and interpreter-reported measures of language ability.</p> <p>Compare sources of individual differences in multilingual language development.</p> <p>Apply the use of language questionnaires to collect data on home language development, with and without support from interpreters.</p>

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Bio and Disclosures	<p>Lyvia Hulsbrink, is currently a senior year at the University of Iowa. My major is Speech and Hearing Sciences. A few things I am involved with here at Iowa are the CLD lab, NSSLHA, A Moment of Magic, intramural sports, and more! After I graduate in the spring, my plan is to go onto get my Masters Degree and hopefully become a medical SLP. I hope to work with people of all ages and backgrounds!</p> <p>The authors have no relevant financial or nonfinancial relationships to disclose.</p>
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Olivia Clothier	Speech Measures as Early Markers of Cognitive Decline in Parkinson's Disease
Piper Steburg	<p>Early cognitive decline can be difficult to identify due to the lack of sensitive functional biomarkers that offer a comprehensive view of cognitive health. This can hinder clinicians from initiating or adjusting treatments at the optimal time. For individuals with Parkinson's disease (PD), early identification of cognitive decline may enhance quality of life and support well-reasoned decisions about pharmacological, surgical, and behavioral interventions. Speech has long been recognized as a sensitive marker of cognitive change because it relies on the integration of multiple domains, including attention, memory, executive function, and language. Speech changes are often among the earliest and most salient signs of neurodegenerative disease, and offer a non-invasive, functionally relevant window into cognitive status.</p>
Ella Pignotti	
Emma Woodford	
Deepthi Crasta, BASLP, MSc. SLP	
University of Iowa	

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Participant Outcomes	<p>Identify key speech metrics that are associated with early cognitive changes in individuals with Parkinson's disease.</p> <p>Define the clinical importance of using routine speech tasks to enhance early detection and intervention for cognitive decline in Parkinson's disease.</p> <p>List how speech measures can serve as sensitive and non-invasive indicators of cognitive health.</p>
Bio and Disclosures	<p>Olivia Clothier is a junior at the University of Iowa pursuing a Bachelors degree in Speech-Language Pathology.</p> <p>Piper Steburg is currently an undergraduate at the University of Iowa majoring in Speech and Hearing Science and minoring in ASL and Linguistics.</p> <p>Ella Pignotti is currently a senior at the University of Iowa majoring in Communication and Science Disorders.</p> <p>Emma Woodford is a sophomore at the University of Iowa. She is studying to become a Speech-Language Pathologist and is committed to doing research in the SPeak lab at Iowa.</p> <p>Deepthi Crasta is a PhD student at the University of Iowa in the Department of Communication Sciences and Disorders.</p> <p>The authors have no relevant financial or nonfinancial relationships to disclose.</p>

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Isabella Iampaglia	Systematic Review about Adults with Developmental Language Disorder
Charlotte Hilker	<p>To date, children have been the primary focus of research about developmental language disorders (DLD). Beyond adolescence, there is limited understanding of how DLD presents and impacts adults in areas such as work, home, and daily life. To explore what is currently known and where gaps remain, we conducted a scoping review of research about DLD in adults. We predicted that existing articles underrepresent this population, and that there is still more important research to be uncovered. We did a double-blind screening of 3,756 article titles and abstracts. Inclusion criteria for title and abstract were: title or abstract include a term referring to adults and DLD, and abstract describes a research study with a methods section. Existing research about DLD has primarily focused on infancy through adolescence. There is a lack of studies involving adults. Our poster will review themes in existing research on adults with DLD and highlight specific areas requiring further research and why these areas are necessary for clinical and scientific understanding.</p>
Kristi Hendrickson	
Alicia Buttner	
Hope Lancaster	
Participant Outcomes	<p>Identify the gaps in research about adults with DLD</p> <p>Explain the motivation behind expanding research about adults with DLD</p> <p>Summarize the key findings from existing research about adults with DLD</p>

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Bio and Disclosures	<p>Isabella Lampaglia is an undergraduate student at the University of Iowa, majoring in Speech and Hearing Science and Music. She is interested in how the brain processes language, and how language disorders in children affect them in their adult lives.</p> <p>Charlotte Hilker is a research associate for the Psycholinguistics Lab at the University of Iowa. Her primary research focuses on international needs in speech-language pathology.</p> <p>Kristi Hendrickson is an associate professor in the Department of Communication Sciences and Disorders at the University of Iowa. Kristi Hendrickson's primary research focuses on how listeners and readers recognize spoken and written words, how they attach words to meaning, and how they use words earlier in a sentence to predict upcoming words.</p> <p>Alicia is a research lab manager at Boys Town National Research Hospital. She has a diverse work experience in various research and academic roles.</p> <p>Hope is a researcher at Boys Town National Research Hospital. Her primary interest is in language and literacy development and disorders. She uses a variety of methodological & statistical tools to (1) examine behavioral and genetic overlaps between speech, language, and literacy disorders and (2) understand language and literacy development in multiple populations, such as cleft palate.</p> <p>The authors have no relevant financial or nonfinancial relationships to disclose.</p>
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<p>Joan C. Komp, BS</p> <p>Eun Kyung Jeon, Ph.D., Au.D.</p> <p>University of Iowa</p>	<p>Questionnaires-based assessments are essential in pediatric audiology, offering valuable insights into children's functional auditory behavior that go beyond the audiogram. These tools play a critical role in identifying concerns, documenting progress, validating benefit from amplification or hearing assistive technologies, and guiding follow-up care. Despite the wide range of validated questionnaires available for various age groups—from infancy through adolescence—many clinicians lack time or resources to locate and select appropriate tools for routine use. Additionally, important listening challenges such as listening fatigue, access to spoken language in noise, and social-emotional impacts of hearing loss are not always addressed comprehensively in current clinical protocols. This project aims to create an organized, user-friendly index of widely used pediatric audiology questionnaires, categorized by age group, purpose, administration method, and target domains (e.g., hearing difficulties, attention, listening effort, classroom sound access). Our goal is to promote greater integration of these validated tools into routine clinical care by making them easier to locate, understand, and administer. We also invite feedback from clinicians to enhance the utility and accessibility of this resource for busy pediatric audiology practices.</p>
<p>Participant Outcomes</p>	<p>Identify commonly used and validated questionnaires for assessing pediatric hearing and listening challenges.</p> <p>Outline how a structured index of questionnaires can support efficient clinical decision-making and follow-up care in pediatric audiology.</p>

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Bio and Disclosures	<p>Lindsey Perkins, B.A. is a current second-year Doctor of Audiology student studying at the University of Iowa. She earned her bachelor's degree in Speech and Hearing Science with a minor in American Sign Language Studies from the Ohio State University in May 2024. Lindsey has worked as a teaching assistant in the Psychology department this past spring semester, and she will be a teaching assistant for Hearing Loss and Audiometry this fall. Her research interests include aural rehabilitation, hearing loss prevention, and clinical audiology.</p> <p>Joan C. Komp, B.S. is a second-year Au.D. student studying at the University of Iowa. She earned her bachelor's degree in microbiology with a minor in Emerging Global Disease at Iowa State University in May 2023. Joan has worked as a teaching assistant in the Communication Sciences and Disorders department this past year and will be a teaching assistant for the Rhetoric department this fall. Her research interests include public health and clinical audiology.</p> <p>Eun Kyung "Julie" Jeon, Ph.D., Au.D., is a Clinical Associate Professor at the University of Iowa. She provides clinical education and supervision in diagnostic audiology, aural (re)habilitation, tinnitus management, and cochlear implants (CI). She has served on the Iowa EHDI Advisory Board and the program committee for the American Cochlear Implant Alliance, and currently holds leadership roles within the Asia Pacific Society of Speech-Language-Hearing.</p> <p>The authors have no relevant financial or nonfinancial relationships to disclose.</p>
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Camryn McIlravy	Oral Somatosensory Feedback and Articulator Awareness Training in Children with Speech Sound Disorders
Thushani Munasinghe, BSc (Hons)-SLP	

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Emma Mueller Bhavana Bhat, MA-SLP Hayo Terband, PhD University of Iowa	Children with Speech Sound Disorders (SSDs) often present with reduced accuracy in articulator placement. This has been hypothesized to stem from impairments in somatosensory feedback, although the exact role of oral somatosensory processing in speech motor breakdowns is less understood. Current studies on somatosensory feedback focus on static assessment and the participant's current level of knowledge and abilities. However, a dynamic assessment approach could give insight into children's learning potential of somatosensory awareness. This study aims to examine the effects of articulator awareness training and feedback on oral stereognosis and tongue localization in children with and without SSD. Twenty children aged 5-8, ten with SSD and ten typically developing children, are being recruited to participate in a pre-/post-test design study involving tongue region identification and shape discrimination using 3D-printed tongue depressors. The experimental condition will be an articulator training task pairing textured stimuli with both visual and verbal feedback. Accuracy will be recorded for both pre- and post-phases to evaluate somatosensory abilities before and after training. The goal of this research is to gain a better understanding of children's learning capabilities in relation to stimulability of somatosensory treatment. Clinically, these findings could help identify children who need somatosensory-focused intervention and include articulator awareness training in individualized treatment plans.
Participant Outcomes	<p>Define the role of somatosensory feedback in speech sound disorders (SSDs) and how impairments in oral somatosensation can impact articulator placement accuracy.</p> <p>Analyze pre- and post-test outcomes to determine the effectiveness of somatosensory-based intervention strategies, such as oral stereognosis and tongue localization training, in children with SSD compared to typically developing peers.</p> <p>Apply knowledge from the study to suggest how articulator awareness training could be integrated into clinical treatment plans for children with SSD.</p>

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Bio and Disclosures	<p>Camryn McIlravy, is a BA (honors) student at the Speech Sensorimotor Development lab, University of Iowa. She leads in data collection, processing, and analysis for this project. The current presentation is part of her honors thesis project for her BA in Speech and Hearing Science at the Department of Communication Sciences and Disorders, University of Iowa.</p> <p>Thushani Munasinghe, BSc (Hons)-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project.</p> <p>Emma Mueller, BS is an MA-SLP student and the lab manager of the Speech Sensorimotor Development lab at the University of Iowa who coordinates data collection with participants and lab members, assists in data collection, and coordinates data processing for this project.</p> <p>Bhavana Bhat, MA-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project. Her research focuses on somatosensory perception in children with speech sound disorders particularly in childhood apraxia of speech. She aims to determine whether individual differences in behavioral performance on somatosensory perception tasks correlate with variation in tongue shape complexity and speech production.</p> <p>Hayo Terband, PhD is Assistant Professor in the Department of Communication Sciences and Disorders and director of the Speech Sensorimotor Development Lab at the University of Iowa overseeing this project. His research focuses on the mechanisms behind the different manifestations of developmental Speech Sound Disorders; in particular Childhood Apraxia of Speech. Long-term goals of his research include the implementation of a process-oriented method for diagnostics and individually tailored treatment planning of childhood</p>
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	<p>speech-language disorders in a user-friendly computer-based clinical instrument.</p> <p>The authors have no relevant financial or nonfinancial relationships to disclose.</p>
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Piper Steburg	Defining Visual Analog Scale Cut-Offs for Dysarthria Severity: A Sensitivity and Specificity Evaluation
Olivia Clothier	
Morgan Linneweh	<p>The results indicate that VASs are effective in identifying moderate and severe dysarthria across speech dimensions. For mild dysarthria however, specificity was consistently lower, indicating a higher rate of false positives. Although slow rate achieved perfect sensitivity across all severity levels, the low specificity for mild cases suggests that this feature may be overidentified in typical speech. Similarly, while articulatory imprecision showed strong sensitivity for mild dysarthria, specificity was limited, further highlighting challenges in distinguishing subtle articulatory impairments as representing typical speech versus mild dysarthria. The implications of these findings and future work will be discussed in detail during the presentation.</p>
Deepthi S. D. Crasta; BASLP, MSc. SLP	
Mili Kuruvilla-Dugdale; PhD	
University of Iowa	

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Participant Outcomes	<p>Explain the Visual Analog Scales (VASs) and how they enable quantitative evaluation of dysarthria severity.</p> <p>Identify specific VAS cut-off scores that distinguish between dysarthria severity levels across overall severity, imprecision, and speech rate.</p> <p>Apply established VAS cut-offs to improve the accuracy of dysarthria assessment and enhance communication in clinical and research contexts.</p>
Bio and Disclosures	<p>Piper Steburg is a third-year undergraduate student pursuing a degree in Speech and Hearing Science at the University of Iowa.</p> <p>Morgan Linneweh is an undergraduate student at the University of Iowa.</p> <p>Mili Kuruvilla-Dugdale is an Associate Professor at the University of Iowa, and she directs the Speech Perception and Kinematics Lab.</p> <p>The authors have no relevant financial or nonfinancial relationships to disclose.</p>

Heaven Ross	Beyond Prediction: Ultrasound assessment of Pre-Treatment Tongue Shape Complexity to Tailor Intervention in Childhood Apraxia of Speech
Bhavana Bhat, MA-SLP	
Emma Mueller	

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<p>Thushani Munasinghe, BSc (Hons)-SLP</p> <p>Hayo Terband, PhD</p> <p>University of Iowa</p>	<p>Childhood Apraxia of Speech (CAS) is a complex speech sound disorder that challenges clinicians with both diagnosis and treatment planning. Traditional methods of assessment can fail to detect articulatory deficits, in particular phenomena like undifferentiated tongue gestures. The purpose of this study is to evaluate whether pre-treatment ultrasound imaging, a way to visualize tongue movements in real time, can inform more individualized interventions for children with CAS. Building on previous work that aims to predict treatment outcomes, this study moves forward by using pre-treatment assessment data to inform and guide therapy decisions. Four children (ages 5- 8) will be recruited to participate in a pilot study comprising a matched-pairs, non-randomized crossover design. Pre-treatment, ultrasound imaging will be used to analyze tongue shape complexity. This ultrasound data will be used to guide individualized therapy planning for the experimental condition, rather than relying solely on perceptual judgment. This approach enables clinicians to target speech goals that better align with the individual child's existing articulatory capabilities, rendering intervention more effective and efficient.</p>
<p>Participant Outcomes</p>	<p>List the limitations of traditional assessment methods in diagnosing Childhood Apraxia of Speech (CAS) and the potential benefits of incorporating ultrasound imaging in clinical practice.</p> <p>Apply knowledge of ultrasound imaging techniques to identify articulatory features, such as tongue shape complexity, that can inform individualized treatment planning for children with CAS.</p> <p>Analyze how pre-treatment ultrasound data can improve clinical decision-making and enhance the effectiveness of speech interventions compared to traditional perceptual approaches.</p>

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Bio and Disclosures	<p>Heaven leads in data collection, processing, analysis for this project. The current presentation is part of her honors thesis project for her BA in Speech and Hearing Science at the Department of Communication Sciences and Disorders, University of Iowa.</p> <p>Bhavana coordinates data analysis and assists in data collection for this project. Her research focuses on somatosensory perception in children with speech sound disorders particularly in childhood apraxia of speech. She aims to determine whether individual differences in behavioral performance on somatosensory perception tasks correlate with variation in tongue shape complexity and speech production.</p> <p>Emma coordinates data collection with participants and lab members, assists in data collection, and coordinates data processing for this project.</p> <p>Thushani coordinates data analysis and assists in data collection for this project.</p> <p>Hayo's research focuses on the mechanisms behind the different manifestations of developmental Speech Sound Disorders; in particular Childhood Apraxia of Speech. Long-term goals of his research include the implementation of a process-oriented method for diagnostics and individually tailored treatment planning of childhood speech-language disorders in a user-friendly computer-based clinical instrument.</p> <p>The authors have no relevant financial or nonfinancial relationships to disclose.</p>
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Olivia Goodyear, BA	Understanding and Applying Wideband Tympanometry in Clinical Practice
Jayda Herrera, BA	<p>Wideband tympanometry (WBT)—also known as wideband acoustic immittance—was introduced in the 1990s and represents the latest evolution in middle-ear assessment, expanding beyond traditional 226 Hz tympanometry. It measures absorbance across a wide frequency spectrum (typically 226 Hz to 8 kHz) while varying ear-canal pressure, providing enhanced sensitivity to conditions such as otitis media, otosclerosis, ossicular disruption, and superior semicircular canal dehiscence. However, despite its publication nearly three decades ago, it remains underrepresented in AuD training and infrequently incorporated into routine clinical evaluations. In our clinic, we utilize Interacoustics Titan and GSI TympStar systems, which produce wideband absorbance and compliance metrics benchmarked against normative datasets. This poster will introduce the principles of WBT, explain how it works, and highlight its clinical benefits and limitations. Our goal is to increase awareness and understanding among audiologists who may be more familiar with conventional tympanometry, while also encouraging discussion and feedback from clinicians who have already implemented WBT in their practice. We hope to foster a collaborative dialogue about how this technology can enhance diagnostic accuracy in various patient populations.</p>
Eun Kyung Jeon, Au.D., Ph.D.	
University of Iowa	
Participant Outcomes	<p>Outline the basic principles and measurement procedures of wideband tympanometry (WBT).</p> <p>Compare wideband tympanometry with traditional 226 Hz tympanometry in terms of diagnostic capabilities and clinical applications.</p> <p>Outline how to perform wideband tympanometry using the GSI TympStar and Interacoustics Titan systems.</p>

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Bio and Disclosures	<p>Olivia Goodyear is a current 2nd year Doctor of Audiology student at the University of Iowa. She received her Bachelor of Arts in Speech and Hearing Sciences with a minor in music from Iowa in December of 2023. Olivia has been a Graduate Research Assistant in the Pediatric Audiology and Language Lab for the last five years under Dr. Elizabeth Walker. This past school year, she began work as the University of Iowa Speech, Language, and Hearing Clinic's Office Assistant. She serves as a Co-Fundraising Chair for the University of Iowa's Student Academy of Audiology. Olivia loves working with both the pediatric and adult populations in our clinic.</p> <p>Jayda Herrera is a current 2nd year Doctor of Audiology student at the University of Iowa. She received her Bachelor of Arts in Speech and Hearing Sciences in May of 2024 from the University of Iowa. Jayda was a teaching assistant for Hearing Loss and Audiometry this past fall semester. She has an interest in acoustic immittance, cochlear implants, and medical audiology.</p> <p>Eun Kyung "Julie" Jeon, Ph.D., Au.D., is a Clinical Associate Professor at the University of Iowa. She provides clinical education and supervision in diagnostic audiology, aural (re)habilitation, tinnitus management, and cochlear implants (CI). She has served on the Iowa EHDI Advisory Board and the program committee for the American Cochlear Implant Alliance, and currently holds leadership roles within the Asia Pacific Society of Speech-Language-Hearing.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>
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Friday October 3, 9:30-10:30a

Wren Repko, B.A.	Strategies and Resources for Communication Partners for Children Using AAC
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<p>Patricia Martin, B.A.</p> <p>Dr. Evette Edmister, Ph.D., CCC-SLP</p> <p>University of Northern Iowa</p>	<p>This project focused on creating materials that would be helpful for parents, caregivers, and teachers to model Augmentative and Alternative Communication (AAC) in school or home based settings for children who use AAC. Method: The materials created for this project, will follow the framework and be part of a larger project. This project focused on creating additional examples of evidence based strategies to encourage language development. Specifically one set of activities will target modeling two to three word combinations such as “go up”, “go down”, “do like”, “do not like”, “more help”, and “I help you” within school or home based activities. New activities were also added to past created word sets with a focus on creating activities helpful for families and teachers in Zambia. Results: Activities and scripts for example activities were created. Directions and tips were made in writing and within two - three minute video clip demonstrations. Conclusion: During the presentation attendees will have an opportunity to review materials created for this project. Next steps for implementation of more examples of core words and information about ideas for communication partners’ generalization will also be discussed.</p>
<p>Participant Outcomes</p>	<p>Identify an everyday activity and two possible core words that could be modeled during activity.</p> <p>Outline how modeling the AAC device symbols could be paired with language development strategies</p> <p>Summarize one way to adjust activities and vocabulary usage to support different environments to best support the child.</p>

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Bio and Disclosures	<p>Wren Repko received their B.A. in Communication Sciences and Disorders from the University of Northern Iowa in 2024. They are now currently completing their Masters degree at the University of Northern Iowa. After graduating in December of 2025, they plan on working across the lifespan.</p> <p>Patricia received her B.A. in Communication Sciences and disorders from the University of Northern Iowa in 2023. She is now currently completing her Masters degree at the University of Northern Iowa. After graduating in December of 2025, she plans on working in pediatrics in early intervention.</p> <p>Evette Edmister, Ph.D., CCC-SLP is an Associate Professor in the Department of Communication Sciences and Disorders at the University of Northern Iowa (UNI). Her research interests focus on Augmentative and Alternative Communication (AAC), literacy skills for those using AAC, and Assistive Technology (AT)/AAC supports for maintaining daily activities with a focus on those activities requiring communication. Evette has worked with individuals across the lifespan and in a range of settings including school, hospital, private home, and clinical settings, in Iowa and Kansas.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>
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Claire Tow, BA	Acoustic and Perceptual Measures of Stop Consonant Production in Neurodegenerative Disease
Hannah Erickson	
Grace Miller	

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<p>Megan Schulte</p> <p>Sarah Diehl, PhD., CCC-SLP</p> <p>University of Northern Iowa</p>	<p>Voice onset time (VOT) is an important perceptual cue for stop consonant voicing, which may undergo changes in speakers with neurodegenerative disease. Previous research has investigated VOT in speakers with Parkinson's disease (PD) and Huntington's disease (HD; Forrest et al., 1989; Hertrich & Ackermann, 1994; Johansson et al., 2022; Kouba et al., 2022) but few studies have assessed the relationship between VOT and listeners' perception of stop consonant voicing. The present study investigated VOT, fundamental frequency, and vowel duration in speakers with PD and HD. Listeners perceptually rated stop consonants on a voiced-voiceless continuum to assess perceptual accuracy and gain insight on the potential presence of secondary acoustic cues for stop consonant voicing in speakers with neurodegenerative disease.</p>
<p>Participant Outcomes</p>	<p>Define voice onset time</p> <p>List characteristics of voice onset time in neurodegenerative</p> <p>Interpret the role of voice onset time and secondary acoustic cues in stop consonant perception</p>

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Bio and Disclosures	<p>Claire Tow is a second-year Speech-Language Pathology graduate student at the University of Northern Iowa. Her research interests include motor speech disorders, acoustic analysis, perception of dysarthric speech, and communicative participation in individuals with neurodegenerative disease.</p> <p>Hannah Erickson is a senior in the undergraduate Communication Sciences & Disorders program at the University of Northern Iowa. She has a strong interest in supporting individuals with dementia and brain injuries, focusing on preserving communication, cognitive function, and quality of life, while promoting dignity through all stages of life.</p> <p>Grace Miller is a senior studying Communication Sciences and Disorders at the University of Northern Iowa.</p> <p>Megan Schulte is finishing her first year in the Speech-Language Pathology graduate program at the University of Northern Iowa. She is interested in working with adults, specifically those with neurodegenerative disorders.</p> <p>Sarah Diehl is a certified speech-language pathologist and assistant professor at the University of Northern Iowa. Her research interests include the interaction between speech, language, and cognitive deficits associated with brain injury, Huntington's disease, and other neurodegenerative conditions. She also has interests in augmentative and alternative communication for individuals with complex communication needs and limb motor impairment.</p> <p>The authors have no relevant financial or nonfinancial relationships to disclose.</p>
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Allison B. Keeler, BA	Correlation Between Stress and Hours Worked for Speech-Language Pathology Graduate Students
Lisabeth D. Fiser, BA	<p>This research sought to discuss if there is a correlation between perceived stress and the amount of hours worked for a full-time speech-language pathology (SLP) graduate student. SLP graduate students from Iowa, Minnesota, and Nebraska Universities were asked to fill out a survey with the Perceived Stress Questionnaire. Participants included 55 graduate SLP students. No significant correlation was found, however, descriptive data collected will benefit future research and understanding of SLP graduate student stress.</p>
Lauren E. Kumsher, BA	
Jaimie L. Gilbert, Ph.D., CCC-A	
University of Northern Iowa	
Participant Outcomes	<p>Identify the relationship between perceived stress levels and the employment status of speech-language pathology graduate students.</p> <p>Compare perceived stress levels of SLP students by job type and the number of hours worked per week.</p> <p>Apply how working as a full-time speech-language pathology graduate student may impact student wellness.</p>

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Bio and Disclosures	<p>Allison B. Keeler is a speech-language pathology graduate student at the University of Northern Iowa. She completed her bachelor's degree in Communication Sciences and Disorders in May of 2024.</p> <p>Lisabeth D. Fiser is a speech-language pathology graduate student at the University of Northern Iowa. She completed her bachelor's degree in Communication Sciences and Disorders in May of 2024.</p> <p>Lauren E. Wirtz is a speech-language pathology graduate student at the University of Northern Iowa. She completed her bachelor's degree in Communication Sciences and Disorders in May of 2024.</p> <p>Jaimie L. Gilbert, PhD, CCC-A, is an associate professor in the Department of Communication Sciences and Disorders at the University of Northern Iowa. She received a B.A. in Communicative Disorders and in Linguistics from the University of Wisconsin and an M.A. and a Ph.D. in Speech and Hearing Sciences (Audiology) from the University of Illinois. Dr. Gilbert completed a post-doctoral fellowship in the Department of Psychological and Brain Sciences at Indiana University. Her research interests include auditory-visual integration and talker variation in speech perception.</p> <p>The authors do not have any relevant financial or nonfinancial disclosures to report.</p>
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Parker Hagemann	Normative cVEMP Response Characteristics in Normal-Hearing Young Adults
Eun Kyung Jeon, Ph.D., Au.D	

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	<p>Cervical Vestibular Evoked Myogenic Potentials (cVEMPs) are short-latency electromyogenic responses recorded from the sternocleidomastoid (SCM) muscles in response to acoustic stimulation. They reflect the integrity of the saccule, inferior vestibular nerve, and associated central pathways, offering a non-invasive method to assess otolith function. This study aimed to establish normative cVEMP response characteristics in normal-hearing adults. The total number of participants in the normal-hearing will be 15. So far, cVEMPs were recorded bilaterally in six normal-hearing participants (N = 6; (1 Male, 5 Females; mean age = 23 years) using 500 Hz tone bursts. The mean P1 latency was 14.60 ± 1.00 ms (right) and 14.90 ± 0.86 ms (left), and N1 latency was 21.10 ± 1.87 ms (right) and 21.20 ± 1.47 ms (left). Mean corrected P1 amplitudes were 20.76 ± 4.66 μV (right) and 23.60 ± 6.04 μV (left), with a corrected asymmetry ratio of $11.68 \pm 8.73\%$. Interaural latency differences were minimal (P1 latency difference = 0.97 ± 0.38 ms; N1 latency difference = 1.10 ± 0.63 ms). These normative data may serve as a clinical reference for identifying abnormal cVEMP responses in patients with vestibular disorders such as vestibular neuritis, Meniere's disease, superior canal dehiscence, vestibular schwannoma, and single sided deafness, thereby aiding differential diagnosis and monitoring of vestibular function over time.</p>
Participant Outcomes	<p>Outline how to record cVEMP.</p> <p>Summarize typical characteristic of cVEMP recordings in normal hearing young adults.</p> <p>List the clinical implications of cVEMP for people with vestibular deficits.</p>

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Bio and Disclosures	<p>Parker is a second Year Graduate Student Clinician in Doctoral of Audiology Program at the University of Iowa. Her research interests are in single sided deafness and how CVEMP records relate to further advancements in related conditions and disorders. Current research assistant in the Cochlear Implant Electrophysiology lab and a teaching assistant at the University of Iowa in the Psychology department.</p> <p>Eun Kyung "Julie" Jeon, Ph.D., Au.D., is a Clinical Assistant Professor at the University of Iowa, specializing in aural (re)habilitation, tinnitus management, and cochlear implants (CI). Her research interests focus on enhancing outcomes for people with hearing loss. She has served on the Iowa EHDI Advisory Board and the program committee for the American Cochlear Implant Alliance. Additionally, she holds leadership roles within the Asia Pacific Society of Speech-Language-Hearing.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>
<p>Hayo Terband, PhD - Speech Sensorimotor Development Lab, University of Iowa</p> <p>Hae Sun Kim, PhD, MT-BC – Music Therapy, School of Music, University of Iowa</p> <p>Mirjam van Tellingen, MA-SLP – Rehabilitation Center 'Revalidatie Friesland', Beetsterzwaag, The Netherlands & Center for Language and Cognition;</p>	<p>Using Music to Cue Gestural Timing in American English: Speech-Music Therapy in the Treatment of Childhood Apraxia of Speech</p>

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<p>Research School for Behavioral and Cognitive Neurosciences (BCN), University of Groningen, Groningen, The Netherlands</p> <p>Joost Hurkmans, PhD – Rehabilitation Center 'Revalidatie Friesland', Beetsterzwaag, The Netherlands</p> <p>Ben Maassen, PhD and Roel Jonkers, PhD</p> <p>Center for Language and Cognition; Research School for Behavioral and Cognitive Neurosciences (BCN), University of Groningen, Groningen, The Netherlands</p>	<p>Speech-Music Therapy for Aphasia is a rate-rhythm control type intervention combining speech therapy and music therapy that is applied in the treatment of Childhood Apraxia of Speech with positive results. In this presentation we show how intricate similarities in hierarchical structures between speech and music provide the opportunity to create compositions that naturally support the orchestration of speech movements. Both speech and music are built up from small elements (gestures or segments; notes) that combine to form larger elements (words; motives). These larger elements are further combined in structures to convey meaning, such as sentences and melodies, and in both speech and music an extra layer of meaning is expressed through prosody or phrasing. We will show how the overlap can be exploited at the levels of inter- and intra-gestural coupling, the coordination between individual articulators that form the orchestration of speech movements; based on concrete examples of the phasing relationships of speech gestures in consonant clusters in American English.</p>
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Participant Outcomes	<p>Define Speech-Music Therapy for Aphasia (SMTA), identify the different stages in the therapy routine, and describe which aspects of speech-motor planning and programming it can support in children with Childhood Apraxia of Speech (CAS).</p> <p>Analyze the structural parallels between speech and music to identify how these can be systematically leveraged in the design of target stimuli for intervention in CAS.</p> <p>Apply principles of inter- and intra-gestural coupling to create or evaluate therapeutic compositions that facilitate speech gesture coordination in consonant clusters.</p>
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Bio and Disclosures	<p>Hayo Terband, PhD is Assistant Professor in the Department of Communication Sciences and Disorders and director of the Speech Sensorimotor Development Lab at the University of Iowa overseeing this project. His research focuses on the mechanisms behind the different manifestations of developmental Speech Sound Disorders; in particular Childhood Apraxia of Speech. Long-term goals of his research include the implementation of a process-oriented method for diagnostics and individually tailored treatment planning of childhood speech-language disorders in a user-friendly computer-based clinical instrument.</p> <p>Hae Sun Kim, PhD, MT-BC is an Assistant Professor of Music Therapy in the School of Music at the University of Iowa. Her research focuses on music perception and therapy, particularly for individuals with communication disorders, hearing health and hearing preservation in musicians, and music therapy education and training.</p> <p>Mirjam van Tellingen, MA-SLP is Speech-Language Pathologist and PhD candidate at the Rehabilitation Center 'Revalidatie Friesland', Beetsterzwaag, The Netherlands & the Center for Language and Cognition; Research School for Behavioral and Cognitive Neurosciences (BCN), University of Groningen, Groningen, The Netherlands.</p> <p>Joost Hurkmans, PhD is Staff member Research, Innovation and Education at the Rehabilitation Center 'Revalidatie Friesland', Beetsterzwaag, The Netherlands.</p> <p>Ben Maassen, PhD is Professor Emeritus of Speech-Language-Literacy Disorders & Clinical Neuropsychologist at Center for Language and Cognition; Research School for Behavioral and Cognitive Neurosciences (BCN), University of Groningen, Groningen, The Netherlands.</p>
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	<p>Roel Jonkers, PhD is Professor Neurolinguistics & Vice dean Faculty of Arts at the Center for Language and Cognition; Research School for Behavioral and Cognitive Neurosciences (BCN), University of Groningen, Groningen, The Netherlands.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>
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Morgan Linneweh	Who Gets to Judge? Rethinking the Exclusion of Non-Native Speakers from Evaluating Dysarthria
Dahlia Cukierkorn	<p>Auditory-perceptual assessment must be more accessible and scalable to serve the linguistically diverse population in the U.S. In the current study, we sought to systematically compare perceptual ratings of hypokinetic dysarthria from native American English speakers to those from nonnative speakers. A second aim was to explore native language-specific differences in perceptual ratings between listeners who speak American English, East Asian English (e.g., Mandarin and Korean English), South Asian English (e.g., Indian English), and Spanish English.</p>
Ethan Kutlu, PhD	
Mili Kuruvilla-Dugdale, PhD	
Participant Outcomes	<p>1. Explain the rationale for including bi/multilingual listeners in auditory-perceptual studies for dysarthria. 2. Compare similarities and differences in speech ratings between monolingual, native speakers of American English and nonnative speakers of American English. 3. Identify the impact of regional dialect and geographic background in listener ratings.</p>

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Bio and Disclosures	<p>Morgan Linneweh is a second-year graduate student pursuing a Master's degree in Speech-Language Pathology at the University of Iowa. She earned her Bachelor's degree in 2024 from the University of Missouri.</p> <p>Dahlia Cukierkorn is a second-year graduate student at the University of Iowa, where she is pursuing a Master's degree in Speech-Language Pathology along with a certificate in multiculturalism. She earned her Bachelor's degree from the University of Missouri in 2024.</p> <p>Dr. Kutlu is a psycholinguist whose work focuses on the perceptual and social experiences of linguistically diverse individuals, exploring their underlying neural and behavioral mechanisms. His research investigates how speech perception is shaped by ecological factors (e.g., attitudes toward language variation), personal social network diversity, and individual factors (e.g., experience with different languages, aging, hearing status).</p> <p>Mili Kuruvilla-Dugdale is an Associate Professor at the University of Iowa, and she directs the Speech Perception and Kinematics Lab. Her research focuses on improving foundational knowledge about speech physiology in neurodegenerative diseases, with the goal of developing more sensitive assessments. A second line of her research is aimed at developing optimal auditory-perceptual scaling methods for dysarthria assessment that are grounded in psychophysical principles and have strong psychometric properties. Dr. Kuruvilla-Dugdale and her collaborators are also developing innovative systems to accurately track tongue dysfunction and build personalized electronic voices for individuals with progressive speech loss. Her work is funded by the National Institute on Deafness and Other Communication Disorders and the American Speech-Language-Hearing Foundation. She has published over 40 papers in leading scientific outlets and has presented her work at premier international and national conferences.</p>
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Keegan Nissen, AA	Language Outcomes in Children with Unilateral Hearing Loss
Beth Walker, PhD, CCC-SLP/A	Over 5 million children in the United States are estimated to have unilateral hearing loss (UHL), which is defined as a mild to profound hearing loss in one ear and typical hearing in the opposite ear. Despite the prevalence of UHL, few studies have focused on this population, as it is often assumed that the presence of one typical hearing ear will lead to fewer challenges compared to bilateral hearing loss. The current study compared language outcomes in children with UHL to children with bilateral hearing loss and children with typical hearing. Data were collected in a prospective longitudinal design with participating children recruited from Iowa, Nebraska, and North Carolina. The sample consisted of 14 children with UHL matched with 14 children with bilateral hearing loss. They were matched on age, sex, maternal education level, and pure-tone average. A sample of 117 typical hearing children was also included as local norms. The data generated in the current study will help to provide evidence to support individualized treatment options for children with UHL that are not currently feasible due to limited evidence.
University of Iowa	
Nicole Corbin, Boys Town National Research Hospital, AuD, PhD, CCC-A	
Participant Outcomes	Compare language outcomes for children with unilateral hearing loss to children with bilateral hearing loss.
Bio and Disclosures	Keegan Nissen is an undergraduate student at the University of Iowa. Beth Walker is an Associate Professor at the University of Iowa. Nicole Corbin is a research scientist at Boys Town National Research Hospital.

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Part of this research was funded by an NIH grant.

Claire Halverson, BA	Congenital Cytomegalovirus and Childhood Hearing Loss Education and Family Support Strategies
Karsyn Rush, BA	<p>Congenital cytomegalovirus (cCMV) is a common viral infection passed from mother to baby during pregnancy and is the leading non-genetic cause of childhood sensorineural hearing loss. While cCMV can impact multiple organ systems, this educational initiative focuses specifically on the hearing-related outcomes of cCMV. Hearing loss associated with cCMV is highly variable—ranging from stable to progressive, late-onset, or fluctuating—making consistent monitoring and early intervention essential. To support families, we developed a visually engaging, family-centered booklet featuring ten pediatric case examples that illustrate different hearing loss trajectories and management strategies, including hearing aids, cochlear implants, and hearing assistive technologies. The booklet includes simplified explanations of audiologic testing, diagnostic timelines, and resources for intervention and family support. This work was recently presented at the Iowa EHDI Webinar (May 2025), where feedback emphasized the value of adding hearing monitoring timelines and highlighting additional developmental areas potentially affected by cCMV. These updates are being incorporated to further enhance the booklet’s relevance and empower families to make informed decisions that promote optimal hearing and language outcomes.</p>
Madeline McCarville, BA	
Miranda Becker, BA	
Eun Kyung "Julie" Jeon, PhD., AuD., CCC-A	
University of Iowa	
Participant Outcomes	<p>Outline the variable patterns of hearing loss associated with congenital cytomegalovirus (cCMV) and explain their implications for early identification and intervention.</p> <p>Identify key components of effective family-centered educational tools designed to support hearing monitoring, amplification decisions, and long-term audiologic management in children with cCMV.</p>

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Bio and Disclosures	<p>Claire is a 2nd year Doctor of Audiology student at the University of Iowa. Her clinical interests include pediatric audiology, cochlear implants, and electrophysiology. She is currently doing research in the Hearing Aid and Aging Research Laboratory under the direction of Dr. Yu-Hsiang Wu, M.D., Ph.D. Her capstone project will explore how hearing aid consumers use different decision-making models to decide which hearing aid to purchase. Additionally, she works as an audiology assistant at a private practice.</p> <p>Karsyn is a third-year Doctor of Audiology (Au.D.) graduate student at the University of Iowa. She currently serves as a research assistant with the Human Auditory and Neuroscience Group, mentored by Dr. Inyong Choi (Ph.D.). Her capstone project explores using electroencephalographic (EEG) data to enhance and refine over-the-counter (OTC) hearing aid programming, aiming to boost patient satisfaction and access to quality healthcare. Karsyn's clinical interests span the entire lifespan, with a particular focus on pediatrics, and she aspires to become a clinical instructor. Additionally, she contributes to the University of Iowa's Communication Sciences and Disorders department as a teaching assistant and works as a newborn hearing screener at the University of Iowa Hospitals and Clinics.</p> <p>Madeline McCarville is a third-year Doctor of Audiology graduate student at the University of Iowa. She graduated from the University of Iowa in May 2023 with a Bachelor of Arts Degree in Speech and Hearing Science. Madeline is currently working with Kellsie Busho, AuD, on her capstone project which explores educating pharmacists on over-the-counter hearing aids to provide better access to them and improve their outcomes in the future. Clinically, Madeline is passionate about working with hearing aids and cochlear implants for both children and adult populations.</p> <p>Miranda is a third-year Doctor of Audiology graduate student at the University of Iowa. She graduated from the University of Iowa in May 2023 with a Bachelor of Arts Degree in Speech and Hearing Science. Miranda is a research assistant in the Human Auditory and</p>
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	<p>Neuroscience Group with specific interest in selective attention training in cochlear implant users to improve speech perception in noise. Clinically, she is passionate about serving individuals of all ages with varying degrees of hearing loss. She hopes to work as a cochlear implant and hearing aid audiologist following graduation.</p> <p>Eun Kyung "Julie" Jeon, Ph.D., Au.D., is a Clinical Assistant Professor at the University of Iowa, specializing in aural (re)habilitation, tinnitus management, and cochlear implants (CI). Her research interests focus on enhancing outcomes for people with hearing loss. She has served on the Iowa EHDI Advisory Board and the program committee for the American Cochlear Implant Alliance. Additionally, she holds leadership roles within the Asia Pacific Society of Speech-Language-Hearing.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>
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Thushani Munasinghe, BSc (Hons)-SLP, PhD student	Speech Perception in Children with Speech Sound Disorders: A Systematic Review
Bhavana Bhat, MA-SLP, PhD student	Speech perception refers to the mapping of the incoming acoustic signal to meaningful neural representations and involves the auditory discrimination and identification of sounds, syllables, and words. As such, speech perception is thought to play a role in speech sound disorder (SSD). It remains unclear, however, whether speech perception deficits are a core part of SSD, or affects/interacts with speech production without being fundamentally impaired. The aim of the present study was to clarify the exact role of speech perception in SSD through a systematic review of the recent literature. We searched four electronic databases, yielding 1,009 citations between 2017 and 2025. 46 unique papers remained after duplicate removal, title-abstract screening, and full-text review. We will synthesize these studies to (1) compare the perception skills of children with SSD and typically developing children, (2) investigate the role of perception in the speech production in SSD, and (3) identify the implications of updated evidence for clinical assessment and intervention practices for children with SSD. This synthesis will establish the state-of-the-art
Hayo Terband, PhD	

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University of Iowa	regarding speech perception in children with SSD to inform future research and clinical practice. We are currently analyzing data; detailed results will be available at the conference.
Participant Outcomes	<p>Summarize recent research findings on speech perception abilities in children with Speech Sound Disorder (SSD) compared to typically developing peers.</p> <p>Outline the relationship between speech perception and speech production in children with SSD, based on evidence from the systematic review.</p> <p>Identify evidence-informed strategies for clinical assessment and intervention that consider the role of speech perception in SSD.</p>
Bio and Disclosures	<p>Thushani Munasinghe, BSc (Hons)-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project.</p> <p>Bhavana Bhat, MA-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project.</p> <p>Hayo Terband, PhD is Assistant Professor in the Department of Communication Sciences and Disorders and director of the Speech Sensorimotor Development Lab at the University of Iowa overseeing this project. His research focuses on the mechanisms behind the different manifestations of developmental Speech Sound Disorders; in particular Childhood Apraxia of Speech. Long-term goals of his research include the implementation of a process-oriented method for diagnostics and individually tailored treatment planning of childhood speech-language disorders in a user-friendly computer-based clinical instrument.</p>

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	The authors do not have any relevant financial or nonfinancial relationships to report.
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Haley Copenhaver	Morphosyntactic Skills in Children who are Deaf or Hard of Hearing: A Systematic Review
Elizabeth Walker, CCC-A/SLP	<p>Since the early 2000s, there is a new generation of children who are deaf or hard of hearing who have access to early identification and intervention with enhanced hearing technologies. Consequently, there is a need to review the current evidence to guide therapeutic practices. Research suggests that morphology and syntax are areas of particular vulnerability in children with mild to profound hearing loss. This poster presents qualitative findings from a systematic review of studies published after 2000 on morphosyntactic skills in children who are deaf or hard of hearing compared to their peers with typical hearing. Results from this review will provide insight into factors that drive variation in morphosyntax and future directions in research on this domain of language.</p>
M. Cole Callen	
University of Iowa	
Participant Outcomes	<p>Contrast morphosyntax in children who are deaf or hard of hearing and children with normal hearing.</p> <p>Outline the potential underlying mechanisms driving individual differences in language delay in children who are deaf or hard of hearing.</p> <p>Identify the current state of evidence in measures of morphology and syntax for children who are deaf or hard of hearing.</p>

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Bio and Disclosures	<p>Haley Copenhaver is a second-year graduate student in the Speech-Language Pathology program at the University of Iowa. Her current research focuses on language development in children who are deaf and hard of hearing. Haley has completed clinical placements in pediatric and adult settings and is interested in specializing in craniofacial anomalies. Haley is passionate about advocating for children with communication differences and contributing to evidence-based practices in the field.</p> <p>Elizabeth Walker is an associate professor at the University of Iowa.</p> <p>Cole Callen is a developmental linguist with interdisciplinary doctoral and postdoctoral training in (socio)linguistics, cognitive psychology, and communication disorders. His research focuses on language—especially, grammatical—development in various populations, particularly Spanish-speaking bilingual and monolingual children. He is interested in how insights from cross-linguistic comparisons, psycholinguistics and sociolinguistics can inform and enhance approaches to language and communication disorders in underserved populations. He has published on topics in child language development and bilingualism in adulthood.</p>
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Madelynn Williams-Kane B.S. M.Ed.	Rural-Urban Disparities in Proximity of Pediatric Hearing Aid Fittings to Prescriptive Targets
Ryan McCreery Ph.D.	<p>The aim of this presentation is to examine the proximity of hearing aid fittings to prescriptive targets in children from rural and non-rural areas of the United States. Two hundred ninety-seven children with hearing loss (HL) who had been fitted with hearing aids participated. Audiologists conducted real ear measures during study visits. The outcome of interest, proximity of fitting to prescriptive targets, was the average root-mean-square (RMS) error of the hearing aid fitting compared with Desired Sensation Level (DSL) prescriptive targets at 500, 1000, 2000, and 4000 Hz. Results indicated that rural children with HL were at risk for suboptimal hearing aid fittings. Implications for optimizing amplification and long-term developmental outcomes for children with HL will be discussed.</p>
Jacob Oleson Ph.D.	

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University of Iowa	
Participant Outcomes	Identify key factors that influence the proximity of hearing aid fittings to prescriptive targets in children who are deaf or hard of hearing. Compare the accuracy of hearing aid fittings among children from rural, micropolitan, and metropolitan areas using RMS error values. Summarize the implications of suboptimal hearing aid fittings on long-term developmental outcomes in rural children with hearing loss.
Bio and Disclosures	Maddie is currently a second year Doctor of Audiology student at the University of Iowa. She received her bachelor's degree in Deaf Education from Illinois State University, and Masters of Special Education from Greenville University. Prior to beginning her studies in Iowa, Maddie worked as a Teacher for Deaf for many year. The authors have no relevant financial or nonfinancial disclosures to report.

Ellie Caylor, B.A.	Adventures in Voice: Student Clinicians' Perspectives on a Pediatric Voice Therapy Protocol
Camille Doty, B.A.	Voice disorders affect approximately 6.7% of children between the ages of 4 and 12, yet research suggests that a significant number of affected children do not receive appropriate treatment. One contributing factor may be a lack of awareness regarding available pediatric therapeutic services. Adventures in Voice is a structured, evidence-based therapy protocol for children that integrates and builds upon the core techniques of Resonant Voice Therapy. It is designed to meet the needs of pediatric voice clients through play-based activities that emphasize the development of a strong, clear, and healthy voice. As student clinicians at the University of Iowa Speech, Language, and Hearing Clinic, we implemented this program with two pediatric clients and experienced how the protocol supports engagement and learning. This presentation describes the core components of the Adventures in Voice protocol and includes reflections from student clinicians', including protocol implementation, client participation, skill generalization, and caregiver involvement. This poster is particularly relevant for clinicians who work with pediatric clients and seek to incorporate voice therapy into their clinical practice.
Xin Gao, B.S.	
Morgan Hujda, B.A.	
A. Louise Pinkerton, MM, MA, CCC-SLP	

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Participant Outcomes	<p>Explain the main goal of the protocol and identify at least one way to adapt its activities to fit different clinical situations.</p> <p>Describe an “easy voice” and a “scratchy voice” as used in the protocol.</p> <p>Demonstrate child-friendly vocal hygiene techniques, such as using “loud body” instead of increasing vocal intensity.</p>
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Bio and Disclosures	<p>Ellie Caylor, B.A., is a graduate student clinician in the M.S. SLP Program at the University of Iowa. She is passionate about supporting communication across the lifespan and has clinical experience working with a wide range of populations, including voice disorders.</p> <p>Camille Doty is a graduate student clinician in the M.S. SLP program at the University of Iowa. She has experience working with individuals across the lifespan and is committed to delivering client-centered, evidence-based care. Her current clinical rotation includes work with gender-affirming voice clients and pediatric voice disorders.</p> <p>Xin Gao, B.S., is a graduate student clinician in the Master of Science in Speech-Language Pathology program at the University of Iowa. She is actively involved in clinical practice and research focused on supporting individuals with communication disorders.</p> <p>Morgan Hujda, B.A., is a second-year graduate student clinician in the M.S. SLP Program at the University of Iowa. She is committed to providing speech and language services to individuals of all ages and has growing clinical experience supporting diverse client populations.</p> <p>Louise Pinkerton, M.M., M.A., CCC-SLP is a Clinical Assistant Professor at the University of Iowa and a speech-language pathologist with the University Iowa Health Care She specializes in voice and upper airway disorders across the lifespan, performance voice disorders, and gender affirming voice care. Louise supervises graduate students and clinical fellows in acute and outpatient health care settings, as well as at the University of Iowa Speech, Language, and Hearing Clinic. She is an active presenter at conferences and is the Continuing Education Administrator for the Pan American Vocology Association.</p>
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	Dr. Pinkerton is trained in Adventures in Voice and has a preference for using this protocol. She also owns Louise Pinkerton Voice Services. The authors do not have any other relevant financial or nonfinancial relationships to disclose.
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Bhavana Bhat, MA-SLP	Development and Validation of a Novel Nonword Task to Assess Speech Accuracy in Children with Speech Sound Disorders
Emma Mueller, BS	In this presentation, we report on the development and piloting of a novel nonword imitation (NWI) task aimed at addressing these limitations. The task features 18 nonwords that vary in syllable length, structure, consonant clusters, and lexical stress and are representative of AE phonology. We piloted the novel NWI task in 12 typically developing (TD) children and 12 children with SSD, from which we additionally collected data on picture naming (PN; DEAP) and parent-reported intelligibility (Intelligibility in Context Scale; ICS). Preliminary results from 8 children per group showed significant main effects of Group (TD vs. CAS; $p = .007$) and Task (NWI vs. PN; $p = 0.044$) indicating that the NWI task is sensitive enough to capture differences between groups and differences between tasks. This general trend of lower segmental accuracy in the NWI compared to the PN task holds for both consonants and vowels, except for consonant production in children with SSD. Furthermore, the preliminary analyses showed a pattern of stronger correlations with the ICS scores for the NWI as compared to the PN task.
Saloni Upadhyay, M.A., CF-SLP	
Thushani Munasinghe, BSc (Hons)-SLP	
Hayo Terband, PhD	
University of Iowa	

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Participant Outcomes	<p>Explain the importance of nonword tasks in identifying underlying deficits in children with speech sound disorders.</p> <p>Interpret the performance of children with speech sound disorders on nonword tasks, both quantitatively and qualitatively, and compare it to that of typically developing children.</p> <p>Describe the design and features of the nonword stimuli and how they support the assessment of speech production in children.</p>
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Bio and Disclosures	<p>Bhavana Bhat, MA-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project. Her research focuses on somatosensory perception in children with speech sound disorders particularly in childhood apraxia of speech. She aims to determine whether individual differences in behavioral performance on somatosensory perception tasks correlate with variation in tongue shape complexity and speech production.</p> <p>Emma Mueller, BS is an MA-SLP student and the lab manager of the Speech Sensorimotor Development lab at the University of Iowa who coordinates data collection with participants and lab members, assists in data collection, and coordinates data processing for this project.</p> <p>Saloni Upadhyay, M.A., CF-SLP, is a graduate of the Masters in Speech Language Pathology program at the University of Iowa. She currently works as a Speech-Language Pathology Clinical Fellow at Olea Pediatric Therapy in New Hope, Minnesota. She contributed to the development of the task and coordinated and assisted in data collection.</p> <p>Thushani Munasinghe, BSc (Hons)-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project.</p> <p>Hayo Terband, PhD is Assistant Professor in the Department of Communication Sciences and Disorders and director of the Speech Sensorimotor Development Lab at the University of Iowa overseeing this project. His research focuses on the mechanisms behind the different manifestations of developmental Speech Sound Disorders; in particular Childhood Apraxia of Speech. Long-term goals of his research include the implementation of a process-oriented method for diagnostics and individually tailored treatment planning of childhood</p>
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	speech-language disorders in a user-friendly computer-based clinical instrument.
	The authors have no relevant financial or nonfinancial relationships to disclose.

Friday October 3, 3-3:30p

Emma Mueller, BS	Sensory Profiles in Children with Speech Sound Disorders
Sophia Chesney	Research shows that children with speech sound disorder (SSD) form a heterogeneous group varying in symptom severity, proximal causes, and speech error characteristics. However, little research has been conducted on the sensory processing patterns of children with SSD and how these are related to their speech production. In this presentation, we report preliminary evidence regarding the sensory profiles of children with SSD as compared to typically developing children and discuss how these are related to their speech characteristics. Data collection is in progress using the Sensory Profile-2, which is a standardized, norm-referenced caregiver questionnaire that assesses the child's sensory response in different daily life situations. Preliminary results from 22 children with diagnosed or suspected SSD suggest that children with SSD may have increased sensory needs, potentially impacting the children's performance on other outcome measures in research studies. Furthermore, understanding how sensory processing deviances can affect the child's behavior might inform clinicians for therapy planning and administration, maximizing treatment progression.
Bhavana Bhat, MA-SLP	
Thushani Munasinghe, BSc (Hons)-SLP	
Hayo Terband, PhD	
Speech Sensorimotor Development Lab, Department of Communication Sciences and Disorders, University of Iowa	

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Participant Outcomes	<p>Explain the role of sensory processing in child development and the potential impact of sensory patterns on speech production in children with SSD.</p> <p>Identify the components and purpose of the Sensory Profile-2 and how it is used to assess sensory processing in children.</p> <p>Evaluate the implications of sensory processing differences for the diagnosis, treatment, and support of children with SSD in both research and clinical settings.</p>
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Bio and Disclosures	<p>Emma Mueller, BS is an MA-SLP student and the lab manager of the Speech Sensorimotor Development lab at the University of Iowa who coordinates data collection with participants and lab members, assists in data collection, and coordinates data processing for this project.</p> <p>Sophia Chesney, is a BA student at the Speech Sensorimotor Development lab, University of Iowa who assists in data collection, processing, and analysis for this project.</p> <p>Bhavana Bhat, MA-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project. Her research focuses on somatosensory perception in children with speech sound disorders particularly in childhood apraxia of speech. She aims to determine whether individual differences in behavioral performance on somatosensory perception tasks correlate with variation in tongue shape complexity and speech production.</p> <p>Thushani Munasinghe, BSc (Hons)-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project.</p> <p>Hayo Terband, PhD is Assistant Professor in the Department of Communication Sciences and Disorders and director of the Speech Sensorimotor Development Lab at the University of Iowa overseeing this project. His research focuses on the mechanisms behind the different manifestations of developmental Speech Sound Disorders; in particular Childhood Apraxia of Speech. Long-term goals of his research include the implementation of a process-oriented method for diagnostics and individually tailored treatment planning of childhood speech-language disorders in a user-friendly computer-based clinical instrument.</p>
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	The authors have no relevant financial or nonfinancial disclosures to report.
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Shelby Bergquist, BA	Learning Modulars to Study Executive Functions in the Harvard Center for the Developing Child
Sarah Braden, BA	<p>This research project explores the intertwined development of executive function skills and language in children, emphasizing how early experiences and supportive environments shape these abilities. Drawing extensively from the Harvard Center on the Developing Child, the study analyzes resources and modules designed to foster working memory, inhibitory control, and cognitive flexibility—key skills essential to academic achievement and emotional regulation. It highlights the profound impact of social, medical, and environmental factors on language development and how these, in turn, influence cognitive growth. The paper reviews the effectiveness of Harvard’s modular interventions, recommending their practical strategies for parents, educators, and caregivers, while also suggesting improvements to enhance accessibility and inclusivity. Ultimately, the research underscores the vital role of early intervention and calls for continued exploration to refine tools that support children’s cognitive and self-regulation capacities across diverse developmental contexts.</p>
Lauren Buechel, BA	
Lexi Moon, BA	
Dharma Tripp, BA	
University of Northern Iowa	
Participant Outcomes	<p>Identify the core executive function skills—working memory, inhibitory control, and cognitive flexibility—and explain their relationship to early language development.</p> <p>Outline the social, medical, and environmental factors that influence language disorders and describe their impact on executive functioning in children.</p> <p>Apply evidence-based strategies from the Harvard Center on the Developing Child to design developmentally appropriate activities that support executive function skill growth in diverse settings.</p>

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Bio and Disclosures	<p>Shelby obtained a bachelors in Communication Sciences and Disorders from the University of Northern Iowa, Spring 2024. Graduate student in the Speech-Language Pathology program at the University of Northern Iowa, graduating in Spring 2026 with M.A.</p> <p>Sarah is a student in the Speech-Language Pathology program at the University of Northern Iowa, anticipated graduation with M.A. in Spring 2026. Obtained a bachelors degree at the University of Northern Iowa in Communication Sciences and Disorders in the Spring of 2024.</p> <p>Lauren is a graduate student in the Speech-Language Pathology program at the University of Northern Iowa, with anticipated graduation (M.A.) in Spring 2026. Earned a Bachelor of Arts in Speech and Hearing Science from the University of Iowa in Spring 2024.</p> <p>Lexi Moon graduated from University of Northern Iowa in Spring 2023. Speech-Language Pathology Graduate Student at the University of Northern Iowa, Graduating Spring 2026 with M.A.</p> <p>Dharma is a graduate student in the Speech-Language Pathology program at the University of Northern Iowa, anticipated graduation with M.A. in Spring 2026. Obtained a bachelor's degree at the University of Iowa in Speech and Hearing Science in the Spring of 2024.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>
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Bhavana Bhat, MA-SLP	Lingual Somatosensory Abilities and Speech Motor Control in Typical Adults
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<p>Emma Mueller, BS</p> <p>Thushani Munasinghe, BSc(Hons)-SLP</p> <p>Hayo Terband, PhD</p> <p>Speech Sensorimotor Development Lab, University of Iowa</p>	<p>The act of speaking relies heavily on somatosensory information, specifically, proprioception (the sense of bodily position) and tactile sensation (the sense of touch; Kent, 2024). Previous studies have linked several aspects of proprioceptive and tactile sensation to speech production using methods such as orofacial skin stretch (Ito & Ostry, 2012) and jaw perturbations (Ghosh et al., 2010; Gritsyk et al., 2021). However, methods for assessing lingual somatosensory abilities remain limited. This study aimed to test and validate two novel somatosensory tasks in 20 monolingual American English speakers (10 females, 10 males, ages 19 to 45): a) an oral stereognosis discrimination (OSD) task, which assessed lingual proprioceptive and tactile acuity, and b) a force pressure matching (FPM) task, which assessed lingual sensorimotor integration. Additionally, participants completed the Adult Sensory Profile (ASP) questionnaire to evaluate self-reported sensitivity across multiple sensory domains and underwent ultrasound tongue imaging to assess speech motor control of the tongue. FPM results showed significant individual differences on target pressure matching ($p < .001$) and significant gender differences in maximum force ($p < .001$). OSD thresholds varied among participants, with no age or gender differences. Notably, OSD scores negatively correlated with ASP touch sensitivity scores ($r = -0.52$, $p = .023$), suggesting that lower tactile sensitivity relates to reduced lingual sensory discrimination acuity. Analysis is ongoing to examine links between somatosensory measures and measures of tongue motor control. These findings support the use of OSD and FPM tasks as sensitive tools for identifying individual differences in somatosensory processing and can serve as reference data for future studies on lingual somatosensory abilities in populations with speech disorders.</p>
<p>Participant Outcomes</p>	<p>Explain the concepts of somatosensory acuity and -feedback and their role in speech motor control.</p> <p>Interpret research findings related to somatosensory mechanisms in speech motor control, with a focus on behavioral tasks and normative data.</p>

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Bio and Disclosures	<p>Bhavana Bhat, MA-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project. Her research focuses on somatosensory perception in children with speech sound disorders particularly in childhood apraxia of speech. She aims to determine whether individual differences in behavioral performance on somatosensory perception tasks correlate with variation in tongue shape complexity and speech production.</p> <p>Emma Mueller, BS is an MA-SLP student and the lab manager of the Speech Sensorimotor Development lab at the University of Iowa who coordinates data collection with participants and lab members, assists in data collection, and coordinates data processing for this project.</p> <p>Thushani Munasinghe, BSc(Hons)-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project.</p> <p>Hayo Terband, PhD is Assistant Professor in the Department of Communication Sciences and Disorders and director of the Speech Sensorimotor Development Lab at the University of Iowa overseeing this project. His research focuses on the mechanisms behind the different manifestations of developmental Speech Sound Disorders; in particular Childhood Apraxia of Speech. Long-term goals of his research include the implementation of a process-oriented method for diagnostics and individually tailored treatment planning of childhood speech-language disorders in a user-friendly computer-based clinical instrument.</p> <p>The authors have no relevant financial or nonfinancial disclosures to report.</p>
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Kelsey Klassen	Comparison of Reading motivation and Reading Comprehension in Adolescents with Varying Hearing Statuses
Kelsey Eichbauer	<p>Reading motivation consists of several aspects, including intrinsic motivation, extrinsic motivation, and competence and self-efficacy but there are limited data on reading motivation in adolescents who are hard of hearing (HH). The aim of the current study was twofold: 1) to compare reading motivation as a function of grade, hearing status, sex, and maternal educational level, and 2) to determine how reading motivation accounts for variance in reading comprehension skills in adolescents who are HH or have TH. We used the Motivation for Reading Questionnaire (MRQ) to assess reading motivation in 169 adolescents with mild to profound bilateral hearing loss and 87 adolescents with typical hearing, ranging in age from 12-19 years. Participants were also tested on a full battery of standardized reading and language measures. Females had significantly higher scores in all three aspects of reading motivation compared to males. There were no statistically significant differences in reading motivation for grade, maternal educational level, or hearing status. There was a significant interaction between maternal educational level and hearing status in reading competency and self-efficacy, in that adolescents who were HH who had mothers with post-grad education showed lower scores in perceived reading competency compared to adolescents with TH who had mothers with post-grad education. Intrinsic and competence in reading motivation significantly contributed unique variance to overall reading comprehension scores in adolescents who were HH but not adolescents with TH. Thus, certain aspects of motivation to read may have a larger effect on reading comprehension in adolescents who are HH relative to their hearing peers, which has implications for intervention with this population.</p>
Emma Rose, M.A., CCC-SLP	
Elizabeth Walker PhD, CCC-SLP/A	
University of Iowa	
Paige Wilson M.A., CCC-SLP, Boys Town	
Participant Outcomes	<p>Identify reading motivation as a function of grade, hearing status, sex, and maternal educational level</p> <p>Outline how reading motivation accounts for variance in reading comprehension skills in adolescents who are HH or have TH.</p>

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Bio and Disclosures	<p>Kelsey Klassen is an undergraduate student at the University of Iowa.</p> <p>Kelsey Eichbauer is an undergraduate student at the University of Iowa.</p> <p>Emma Rose is a research scientist at the University of Iowa.</p> <p>Paige Wilson is a research scientist at Boys Town Research Hospital.</p> <p>Elizabeth Walker is an Associate Professor and Director of Undergraduate Studies at the University of Iowa</p> <p>Part of this research was funded by an NIH grant.</p>
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Caroline Henning, BA, University of Iowa	Wide but Shallow, Narrow and Deep: Evaluating Iowa's Medicaid Provider Networks in Pediatric Audiology
Caitlin Sapp, AuD, PhD, CCC-A, UNC Hospitals Department of Audiology	<p>Medicaid plays a critical role in pediatric hearing healthcare, yet audiologist participation remains inconsistent, even within states that provide hearing aid coverage. This study focuses on Iowa, where "coverage is insufficient if there are no providers who elect to participate in state Medicaid programs" (Limb et al., 2010). An analysis of audiologist participation, provider density, and geographic distribution reveals that families may face significant barriers to care, despite coverage mandates. These gaps in access delay early intervention and contribute to disparities in hearing health outcomes. Findings from this research can inform strategies to strengthen Medicaid provider networks and ensure more equitable access for children with hearing loss in Iowa.</p>
Kristen Ponturiero, AuD, CCC-A, UNC Hospitals Audiology at Meadowmont	

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Elizabeth Walker, PhD, CCC-SLP/A, University of Iowa	
Participant Outcomes	<p>Compare the “wide but shallow” and “narrow and deep” Medicaid models and their impact on pediatric hearing healthcare access.</p> <p>Outline Medicaid provider participation trends to identify geographic gaps in pediatric audiology services.</p> <p>Detail how provider density affects hearing aid access and list solutions to reduce barriers for children with hearing loss.</p>
Bio and Disclosures	<p>Caroline Henning is a first-year Doctor of Audiology student at the University of Iowa. She earned her Bachelor of Arts in Communication Science and Disorders from the University of Pittsburgh.</p> <p>Caroline, Caitilin, Kristen, and Elizabeth received an ASHA research grant for this project.</p>

Madelynn Williams-Kane B.S. M.Ed.	Rural-Urban Disparities in Proximity of Pediatric Hearing Aid Fittings to Prescriptive Targets
Ryan McCreery, Ph.D.	<p>The aim of this presentation is to examine the proximity of hearing aid fittings to prescriptive targets in children from rural and non-rural areas of the United States. Two hundred ninety-seven children with hearing loss (HL) who had been fitted with hearing aids participated. Audiologists conducted real ear measures during study visits. The outcome of interest, proximity of fitting to prescriptive targets, was the average root-mean-square (RMS) error of the hearing aid fitting compared with Desired Sensation Level (DSL) prescriptive targets at 500, 1000, 2000, and 4000 Hz. Results indicated that rural children with HL were at risk for suboptimal hearing aid fittings. Implications for optimizing amplification and long-term developmental outcomes for children with HL will be discussed.</p>
Jacob Oleson, Ph.D.	
University of Iowa	

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Participant Outcomes	<p>Identify key factors that influence the proximity of hearing aid fittings to prescriptive targets in children who are deaf or hard of hearing.</p> <p>Compare the accuracy of hearing aid fittings among children from rural, micropolitan, and metropolitan areas using RMS error values.</p> <p>Summarize the implications of suboptimal hearing aid fittings on long-term developmental outcomes in rural children with hearing loss.</p>
Bio and Disclosures	<p>Maddie is currently a second year Doctor of Audiology student at the University of Iowa. She received her bachelor's degree in Deaf Education from Illinois State University, and Masters of Special Education from Greenville University. Prior to beginning her studies in Iowa, Maddie worked as a Teacher for Deaf for many year.</p> <p>The authors do not have any relevant financial or nonfinancial relationships to report.</p>

<p>Brinn Johnson</p> <p>Emma Ward</p> <p>Bhavana Bhat, MA-SLP</p> <p>Thushani Munasinghe, BSc (Hons)-SLP</p> <p>Emma Mueller, BS</p> <p>Hayo Terband, PhD</p>	<p>Intrinsic fundamental frequency of vowels in children with Speech Sound Disorders</p>
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Speech Sensorimotor Development Lab, University of Iowa	<p>Childhood Apraxia of Speech (CAS) is a pediatric Speech Sound Disorder (SSD) marked by difficulties in planning and programming speech movements resulting in effortful speech with impaired intelligibility. A main characteristic is errors and inconsistency in vowel production. Intrinsic fundamental frequency (IF0) is an inherent property of vowels where high/close vowels (/i, u/) are produced with a higher fundamental frequency than low/open vowels (/æ, ɑ/). IF0 reflects combined biomechanical effects and a deliberate effort from speakers to enhance phonological contrastiveness. IF0 is a salient cue influencing vowel perception particularly in languages with crowded vowel inventories like American English. Literature on IF0 in children is sparse and IF0 has not yet been studied in children with CAS in American English. This study seeks to investigate IF0 in children with CAS compared to children with Phonological Disorder (PD) and children with typical development (TD). Data collection is ongoing. Thus far, 29 children aged between 4 and 8 years-old have participated in the study (CAS: n = 9, 1 female, 8 male; PD: n = 12, 4 female, 8 male; TD: n = 8, 2 female, 6 male) and have been administered a standardized picture naming test (DEAP). Fundamental frequency in productions of the four corner vowels (/i, u, æ, ɑ/) with primary word stress is compared across groups. Data analysis is currently ongoing; detailed results will be available at the convention. Our long-term goal is to get a better insight into vowel production in children with SSD as to establish the involvement of phonological vs. motor processes. The results will provide a foundation for clinicians choosing therapeutic targets to improve intelligibility.</p>
Participant Outcomes	<p>Describe the concept of Intrinsic Fundamental Frequency (IF₀) and its role in vowel production and perception.</p> <p>Analyze differences in IF0 patterns across children with CAS, PD, and typical development (TD), and evaluate how these patterns may reflect underlying motor versus phonological deficits.</p> <p>Discuss how findings about IF0 can inform clinical approaches for assessing and treating children with Speech Sound Disorders.</p>

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Bio and Disclosures	<p>Brinn Johnson is a BA student at the Speech Sensorimotor Development lab, University of Iowa who assists in data collection and processing, and leads data analysis for this project. The current work is part of her ICRU Summer Research Fellowship at the Department of Communication Sciences and Disorders, University of Iowa. Emma Ward is a BA student at the Speech Sensorimotor Development lab, University of Iowa who assists in data collection, processing, and analysis for this project.</p> <p>Emma Ward is a BA student at the Speech Sensorimotor Development lab, University of Iowa who assists in data collection, processing, and analysis for this project.</p> <p>Bhavana Bhat, MA-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project. Her research focuses on somatosensory perception in children with speech sound disorders particularly in childhood apraxia of speech. She aims to determine whether individual differences in behavioral performance on somatosensory perception tasks correlate with variation in tongue shape complexity and speech production.</p> <p>Thushani Munasinghe, BSc (Hons)-SLP is a PhD student at the Speech Sensorimotor Development lab, University of Iowa. She coordinates data analysis and assists in data collection for this project.</p> <p>Emma Mueller, BS is an MA-SLP student and the lab manager of the Speech Sensorimotor Development lab at the University of Iowa who coordinates data collection with participants and lab members, assists in data collection, and coordinates data processing for this project.</p> <p>Hayo Terband, PhD is Assistant Professor in the Department of Communication Sciences and Disorders and director of the Speech Sensorimotor Development Lab at the University of Iowa overseeing this project. His research focuses on the mechanisms behind the different manifestations of developmental Speech Sound Disorders; in particular Childhood Apraxia of Speech. Long-term goals of his research include the implementation of a process-oriented method for diagnostics and individually tailored treatment planning of childhood speech-language disorders in a user-friendly computer-based clinical instrument.</p>
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	The authors have no relevant financial or nonfinancial relationships to disclose.
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