2024 Research Day Program

Schedule

Time	Event	Location(s)
12:15	*Set-up for PhD Student Presentations*	*G100*
12:45	Welcome	G100
12:50	Second-Year PhD Student Presentations	G100
1:30	First-Year PhD Student Presentations	G100
2:00	*Set-up and Transition*	--
2:15	Technical Sessions	G100, G010, G030, 2020
3:15	*Transition*	--
3:30	Refreshments	G100 lobby
4:00	Closing	G100

Ph.D. Student Presentations (G100)

Influence of Intro to Autism Module on Knowledge and Causal Attribution

Jean Jarrett (Mentor: Steinbrenner)

As the prevalence of autism increases, educators are serving increasing numbers of autistic students in schools. With this increase, there is a need for professional development resources to prepare educators to best support autistic students. The Autism Focused Intervention Resources and Modules (AFIRM) website offers a series of online, self-paced learning modules available at no cost to users. One of the AFIRM modules, the Intro to Autism Module, is aimed at increasing knowledge of the core characteristics of autism and helping educators reframe their initial reactions to the behaviors of autistic students. Studies have identified professional development practices that are more effective than didactic training; however, cost, accessibility, and feasibility are important factors in considering relative benefit. This presentation will include preliminary data from (N=1,334) special educators and paraeducators about the impact of the module on knowledge and perceptions of behaviors (causal attribution), as well as the influence of occupation and age range of students served

Are verb inflection errors unique to agrammatism?

Soomin Kim (Mentors: Haley & Jacks)

In English, agrammatism, associated with damage in Broca's area, features simple utterances and misuse, especially omission of grammatical morphemes. People with Broca's aphasia, characterized by agrammatism and apraxia of speech (AOS), struggle particularly with verb inflections denoting tense, form, or subject number. This study investigates whether verb inflection errors are specific to agrammatism by comparing error rates at the discourse level among people with and without Broca's aphasia, and with and without AOS. We analyzed verbatim transcripts of a Cinderella story retelling task performed by 45 people with chronic left hemisphere stroke. Their aphasia severity ranged from minimal to moderate (mean aphasia quotient=75.3/100). Grammatical errors were annotated at the morpheme level as omissions, substitutions, or additions. Based on the Western Aphasia Battery, 11 participants had Broca's aphasia. The presence of AOS was determined by word-level phonemic paraphasia rate, distortion rate, and word syllable duration; eight participants had AOS. The Kruskal-Wallis test showed no significant differences in verb inflection error rates across the groups based on aphasia type (p=.10) or speech diagnosis (p=.72). These results indicate that verb inflection errors are not confined to specific types of aphasia or speech diagnoses, indicating they may not be unique to agrammatism.

Developmental Trajectories of Echolalic Expression in Autism

Mags McAllister (Mentor: Harrop)

Echolalia, the repetition of heard words or phrases, occurs often in the early language development of all children, but many autistic individuals continue to express echolalia into later childhood and adulthood. Research identifying the inter and intrapersonal functions of echolalia has led to a reduction in interventions designed to mitigate echolalia. In the wake of this improvement, there remains a dearth of research on the developmental trajectories of echolalia in autistic children. This project proposes to use observational coding of parent-child dyadic interactions to quantify echolalia in a sample of 4-8-year-old children who were seen four times across two years. Echolalia characteristics, timing and exactness of repetition will be coded along with parent response to echo. In line with previous cross-sectional research, autistic children who use flexible phrase speech are expected to express decreased rates of echolalia over time while autistic children who use single word or phrase speech are expected to express maintained or increased rates of echolalia over time. Non-autistic control children are expected to exhibit decreased echolalia over time.

Rural Realities: Diagnostic Pathways and Service Engagement for Young Autistic Children

Lillian Woolf (Mentor: Steinbrenner)

This study investigates the influence of rurality on the diagnostic experience and engagement in services for young children (age 12-60 months) diagnosed with or have an increased likelihood for autism. This is a secondary analysis of demographic data provided by the Following Language growth in Autism at Home (FLASH) study (N=289). Rurality will be coded using the CDC NCHS Urban-Rural Classification scheme which categorizes areas in the United States by population density and urbanization. Regression analysis will explore rurality in relation to four variables: age of diagnosis, professionals responsible for diagnosis, enrollment in services, and duration of engagement in services. Expected disparities include delayed diagnosis, reliance on general practitioners, lower enrollment rates in services, and shorter service duration for rural children due to barriers such as access to specialized healthcare and logistical difficulties. Potential challenges to the study include the adequacy of the current sample size for drawing generalizable conclusions, alongside potential biases in recruitment, such as the risk of overlooking specific geographic regions or demographic groups. By examining these factors, the study aims to provide insights into the disparities faced by families residing in rural areas in diagnostic experience and effective service engagement for young autistic children.

Technical session 1 (G100; Haley)

Virtual Reality as a Vehicle for Vestibular Rehab Therapy: A Systematic Review

Sarah Bayer, Rachel Faga, Hoopie Ball

Virtual reality continues to expand and evolve with technology, serving even as an adjunct tool to traditional rehabilitation therapies for peripheral vestibular dysfunction in some clinical settings. Currently, the research on this topic remains limited, but several clinical-application-focused Randomized Control Trials look to address the question of how virtual-reality based vestibular therapies improve patient outcomes as compared to traditional rehabilitation methods. This systematic review aims to critically consider five RCTs, providing insight on the efficacy, need for more research, and clinical significance of virtual reality therapies for peripheral vestibular dysfunction. Each RCT underwent a quality appraisal and a review of methods, statistically significant outcomes, and limitations. From the evaluated sources, it stands that virtual reality therapies provide benefit to patients with peripheral vestibular dysfunction, though larger studies with more standardized/comparable outcome measures are needed.

Transcranial Direct Current Stimulation (tDCS): A Potential Treatment for Adults with Post-Stroke Dysphagia

Tatiyana Johnson, Mariam Alhadad, Ashley Blair Ward

Post-stroke dysphagia is characterized by difficulty swallowing following a stroke, and has a high incidence rate of up to 80% in stroke patients (Martino et al., 2005). Post-stroke dysphagia is a serious complication that can lead to malnutrition, aspiration pneumonia, and other life-threatening issues, which poses a significant impact on quality of life. We critically evaluated randomized control trials, systematic reviews, and meta-analyses. This evidence-based practice review presentation examines the effectiveness of transcranial direct current stimulation (tDCS) in improving swallowing function in adults with post-stroke dysphagia. tDCS involves the application of mild electrical currents to the scalp to modulate brain activity, with the specific aim of enhancing neuroplasticity and restructuring neural networks related to swallowing. Existing research indicates tDCS as a potential intervention for dysphagia, including post-stroke dysphagia, showing positive outcomes in stroke survivors. This presentation seeks to provide insights into the potential of tDCS in managing swallowing difficulties post-stroke and contribute to ongoing discussions regarding its clinical implementation. However, further research involving high-quality, large-scale trials are needed to better establish the efficacy, optimal stimulation parameters, and long-term benefits of this non-invasive brain stimulation technique.

Speech Recognition Outcomes in Adult Cochlear Implant Recipients with Single-Sided Deafness

Brooke Taylor, Caroline Paroby, Casey Martin

Single-sided deafness is characterized by a severe to profound hearing loss in the affected ear and normal to near normal hearing in the contralateral ear. Previous to 2019, the treatment options available clinically included traditional amplification devices such as CROS systems and bone conduction devices. These devices route incoming auditory signal(s) to the normal hearing ear, limiting the amount of perceived benefit for localization and speech perception in complex listening environments. In 2019, the FDA expanded indications to include cochlear implants (CIs) as a clinical treatment consideration for adults diagnosed with single-sided deafness (SSD). Current research evaluates the efficacy of CIs in cases of SSD in improving speech perception and localization via binaural benefits. We used three key search terms across three databases to identify research articles assessing speech perception outcomes in SSD patients who underwent ipsilateral cochlear implantation. Articles assessing pediatric patients, asymmetric and/or bilateral hearing loss, outcomes with bilateral CIs, or articles without preoperative and postoperative speech recognition scores were excluded from our data collection. After examining objective results as well as subjective data measuring patient benefit across 4 studies, we found that cochlear implantation in cases of SSD generally improves speech recognition in quiet and increases patient perceived benefit.

Effects of Deep Brain Stimulation on Speech Outcomes in Parkinson's Disease

Kennedy Wilkins, Manaal Ahmed, Ayah Idlibi

Deep Brain Stimulation (DBS) has been shown to be an effective treatment for the motor, cognitive, and affective symptoms of Parkinson's Disease (PD). Its effects on speech outcomes, however, have been widely varied. The objective of this study was to compile and examine the current existing research on the effects of DBS on speech outcomes in individuals with PD. Studies were found using a variation of the following terms: Parkinson's Disease, Deep Brain Stimulation, and Speech Intelligibility. After searching four databases, six studies (three cohort studies, two quasi-experimental studies, and one systematic review) were selected to be reviewed. Majority of studies reviewed showed that DBS had no significant outcomes on speech intelligibility. There were minor indications that DBS could impact speech negatively in acute parameters. Overall, results indicate that DBS is not an effective treatment option for improving speech intelligibility. Heterogeneity in findings suggest a need for further exploration of this topic.

Technical Session 2 (G010; Jacks)

Reducing Barriers and Increasing Facilitators to Services for Speakers of Less Commonly Taught Languages

Erika Knorr & Chavely Gonzalez-Ramirez (Domby)

The Foreign Language and Area Studies (FLAS) fellowship provides recipients the opportunity to learn about less commonly taught languages and cultures of communities living in the United States, in order to support their needs. As recipients of this scholarship, Chavely and Erika have conducted extensive research under the supervision of Professor Lisa Domby about the speech-language pathology practice in Latin America/Caribbean and Asia, respectively. For their technical talk, they aim to share their research on the K'iche' and Japanese-speaking communities who live in the United States. They will identify where these communities are predominantly located in the United States, efforts to preserve the languages, and frequent access to care barriers that they face. Furthermore, they will offer insight into the count of K'iche' and Japanese-speaking SLPs, challenges and responsibilities encountered by SLPs when serving K'iche' and Japanese-speaking populations, and possible strategies for monolingual and bilingual professionals who seek to deliver culturally appropriate care.

Evaluating Psychometric Properties of Existing Bilingual Aphasia Assessments for Adults

Tina Soukhanouvong & Abigail Smith

Background: Globally, there are 13.7 million individuals who have a stroke per year, about a third of which present with aphasia symptoms. The high prevalence of aphasia post-stroke and the large number of bilingual/multilingual individuals make it necessary to have appropriate diagnostic tools to address this population. Research Question: Our research presentation aims to examine the psychometric properties (e.g., reliability, validity) of existing diagnostic/assessment tools for bilingual adults with aphasia. Process: Using key search terms (e.g., psychometrics, validity, bilingual, multilingual), the search was conducted through the databases CINAHL, PubMed, PubMed Central, and Embase and performed a quality appraisal of five articles using the LEGEND Evidence Evaluation Tools & Resources. Findings: Limited research attempting to establish normative data for bilingual assessments confirmed that psychometrics are not available for the majority of bilingual and non-English populations. Conclusions: Our findings indicate that existing bilingual and monolingual aphasia test batteries translated into other languages have yet to be standardized for clinical application, leaving a dearth of appropriate diagnostic tools for assessing bilingual adults with aphasia. Recommendations: Standardized aphasia assessments should be used with caution and/or supplemental materials with bilingual patients, because of their lack of supportive evidence.

Ol' Timers: The Efficacy of Music Therapy on Alzheimer's

Alexander, Markowitz, Susanne Thomas, Andrea Buttine

This presentation is a meta-analysis of music-mediated therapies and treatments currently used with individuals with Alzheimer's disease (AD) and dementia. Research suggests that music-based therapies, including music listening, live music performance, and instrument playing, to name a few, may complement pharmacological therapies presently used for AD. We asked how these music-mediated therapies and treatments influenced quality of life (QoL) outcomes, such as emotional well-being, agitation, and social discourse, in individuals with AD. Our process involved gathering articles across five databases, narrowing the number of articles from 21 to 7, critically appraising seven articles according to JBI standards, and ranking these articles for quality. Based on our findings and analysis of the available research, it is our conclusion that music-mediated therapies, when applied consistently, are beneficial in improving QoL outcomes for individuals with AD in the short term. Further research as to the duration of treatment, type of music therapy, and overall neuroprotective effectiveness is required.

A Review of Current Communication Partner Interventions for People with Primary Progressive Aphasia

Julia Sultana, Megan Robinson, Ryan Downey

Primary progressive aphasia (PPA) is a type of dementia characterized predominantly by impairments in speech and language. With growing bodies of research on communication partner training in stroke aphasia, there has been increasing interest in the role of functional communication interventions for people with PPA. This study aimed to review the current clinical evidence-based practice for communication partner interventions for people with primary progressive aphasia and their caregivers. A systematic search of databases identified 6 studies published between 2017 and 2023. Articles underwent quality appraisal and review by at least 2 independent reviewers using JBI critical appraisal tools. Results across the 6 studies demonstrated the positive impacts of caregiver intervention in PPA. Several pilot programs consisting of support groups and group education showed improvements in communication and quality of life outcomes for the person with PPA and their caregiver. While these programs exist, functional communication interventions for PPA are still being standardized. From the evidence-based practice review, we developed an educational handout for speech therapy clinics to better inform clinicians of the benefits of caregiver intervention in PPA, current best practice for communication training, and the promise of the Better Conversations program.

Effects of Personal Technology Use on Social Skills of Adolescents Diagnosed with Autism Spectrum Disorder

Mallory Williams, Kalindi Vaswani

Personal technology is commonplace among adolescents in today’s world and their social skills have been formed by the popularity of its use. This includes adolescents diagnosed with autism. The authors wanted to learn more about the impacts that personal technology use may have on the social skills of autistic adolescents. A critical evidence-based review of the available literature was conducted to explore how adolescents diagnosed with autism spectrum disorder use personal technology differently than their typically developing peers. Three different databases were searched with appropriate search terms. Ten articles were retrieved and five of those articles were excluded. Articles were excluded if they examined treatment methods or causative factors of autism. Five articles were reviewed with three being designated as questionable quality and two being designated as high quality. In summary, the authors found that personal technology use can have both negative and positive impacts on the social skills of adolescents diagnosed with autism. Using personal technology to access social media may have a positive impact on the social skills of adolescents diagnosed with autism spectrum disorder. Excessively engaging in solitary activities on personal technology may lead to a decrease in the social skills of adolescents diagnosed with autism.

Technical Session 3 (G030; Drouin)

Insight into Family Perspectives: Bridging the Gap between Counseling and Adherence to Early Intervention Services

Talia Mango, Cheyanne Waller

This presentation will review anecdotal evidence from peer-reviewed research that has assessed parents' perspectives throughout the diagnosis and management of childhood hearing loss. The themes extracted from the research investigate what factors influence the willingness of the families of children with hearing loss to participate in early intervention services. Current JCIH guidelines describe a standard of care for the early management of hearing loss in infants and young children. Timely access to hearing loss management after a failed newborn hearing screening is paramount to limit the effects of undermanaged early hearing loss on language, developmental, and educational outcomes for children. The goal of this presentation is to highlight the disconnect between clinical counseling on early intervention services following the diagnosis of hearing loss and how effectively parents of children with hearing loss comprehend and implement this information.

Thematic Synthesis of Parental Perspectives Relating to Newborn Hearing Screenings

Penelope Franklin & Emily Jedlowski

Current Joint Committee on Infant Hearing (JCIH) guidelines detail a timeline of standards for the early management of hearing loss in infants, beginning with newborn hearing screening by 1 month of age. Timely access to care after a failed newborn hearing screening is crucial to minimize the impact of undermanaged early hearing loss on speech-language, developmental, and educational outcomes for children. Understanding the array of factors influencing parental perspectives on newborn hearing screenings (NBHS) is critical for healthcare providers and policymakers in designing effective screening programs and support services. Despite over two decades of program implementation, there is limited peer-reviewed research looking at what features of NBHS implementation influence parental perspectives. This aim of this study is to identify shared factors affecting parents' perspectives and comprehension of programs for newborn hearing screenings by reviewing current data from six peer-reviewed journal articles using validated qualitative research evaluation tools. Common themes extrapolated from the data include downplaying of hearing screening results and the effect of early education and support on parent awareness. These results suggest a necessity for further investigation into how terminology and the methods utilized to communicate the outcomes of newborn hearing screenings impact follow-up actions and parental viewpoints.

Assessing Audiology Access: Exploring the Barriers to Early Hearing Healthcare for North Carolina Families

Grace Rowland, Courtney Greene, Alana Epstein

Current JCIH guidelines describe a standard of care for the early management of hearing loss in infants and young children. Timely access to care after a failed newborn hearing screening is paramount to limit the effects of undermanaged early hearing loss on language, developmental, and educational outcomes for children. Families can face significant barriers in timely access to care. The identification of these barriers is crucial for improving the accessibility of audiology for families of children with hearing loss and research is currently limited in these areas. Drawing from the experience of both North Carolina (NC) families and audiologists, this project aims to identify barriers families experience when trying to access hearing care while also identifying perceptual discrepancies between providers and families. This project is led by three LEND trainees in the Doctor of Audiology program at UNC Chapel Hill, with mentoring provided by UNC faculty. Data will be collected by survey distribution in collaboration with the CARE Project, NC EHDI Parent Support Team and North Carolina audiologists. Using the survey, we aim to identify the discrepancies of barrier perception of hearing healthcare; the process between identifying hearing loss and receiving hearing assistance, as well as primary resources utilized by families of children with hearing loss. Our goal is that this analysis will inform families and providers on the discrepancies in barrier and quality of care perception to accurately address the needs of families and improve access. This information could allow providers to better assist caregivers when seeking resources and identify areas lacking systemic healthcare support to promote quality audiological care in North Carolina for children with hearing loss.

Exploring Dialogic Reading's Influence on Children's Expressive Language Development

Mallory Baird, Carolyn Javadi, Mary Kathryn Phelps

Dialogic book reading, or otherwise known as interactive shared reading, is a common intervention used to improve early literacy and language skills. This intervention encourages the reader to be responsive and interactive with the child during reading, often including prompting, recasts, expansions, and open-ended questions. This clinical review aimed to discover how parent-led dialogic book reading impacted expressive language in typically developing children ages 2;0 to 6;0. These various randomized control trials examined how children’s expressive language changed after the implementation of dialogic book reading intervention, using various forms of measurement. Most of the articles found that dialogic book reading positively impacted typically developing children’s expressive language, but these differences were not determined to be of statistical significance in many of the articles. Other research regarding the efficacy of this intervention in other populations (i.e. bilingual children, children with language impairment) and in other domains of language needs to be examined. For typically developing children, this intervention has not been shown to significantly affect their expressive language. Despite these findings, dialogic book reading can be recommended for other benefits such as increasing reader engagement and promoting literacy in the home.

Exploring the Impact of Home-Based Practices on Early Literacy in Rural Communities: A Review

Haley Guiley, Bethany Waddey, Molly Whiteman

The review will analyze 4 recent studies focusing on interventions that can be implemented in the home and their effectiveness. The effectiveness of these practices will be evaluated based on their impact on key literacy components such as receptive language, phonological awareness, and vocabulary development.

By synthesizing the current research, the project will include a presentation tool for professionals to use when educating family and community members of rural areas on supporting children's early literacy development.
This clinical evidence-based practice review investigates current research on the influence of home-based practices on literacy development in children from rural communities through kindergarten. This review of research explores how parents and caregivers can leverage readily available resources within the home environment to foster literacy skills in young children. A search of various databases was completed using the terms literacy, home-based, caregiver, preschool, elementary, kindergarten, rural and isolated. Research articles were excluded that were outside of the country and more than 10 years old. Critical appraisals were completed on remaining articles using appropriate appraisal tools to determine the quality of articles.

Technical session 4 (2020; Steinbrenner)

Comparison of healing outcomes between laser versus scalpel techniques for frenectomies among pediatric populations

Ryan Moore, Faith Jones, Delaney Orr

Background: Children with ankyloglossia (tongue tie) or tied maxillary frenum (lip tie) may experience impacts on speech production and feeding outcomes. To overcome this condition, frenectomy procedures utilizing a conventional scalpel or a laser technique are performed to remove these ties. Aim: The present research aims to review the current literature that exists to determine which type of frenectomy procedure (scalpel frenectomy or laser-based frenectomy) is better in terms of healing outcomes. Methods: A clinical evidence-based review was conducted to extract current data that exists and determine which method of frenectomy procedure is best for healing outcomes. Research chosen underwent specific inclusion criteria and quality appraisal to determine its relevance and caliber for use in this review.
Conclusion: The current literature suggests that healing outcomes, as defined by the need for suturing, amount of bleeding, and patient self-reported post-operative pain, may be better in laser-based frenectomies than frenectomies performed with conventional scalpel.

A Review of Outcomes in Children Post-Frenectomy with and without Orofacial Myofunctional Therapy

Danielle Caiola, Amber Herrera, Ellen Pruss

Ankyloglossia is a condition that occurs when the frenulum from the bottom of the mouth attached to the tongue is shorter or tighter than normal. This can restrict the movement of the tongue. This restriction can have negative effects on an individual's ability to breastfeed and develop speech. The objective of this project is to determine the outcome of using or not using orofacial myofunctional therapy techniques after an individual undergoes a frenectomy as a child. PubMed, ProQuest, and Google Scholar databases were searched for articles matching the terms surrounding post-frenectomy treatment in children. This search resulted in eight articles that discussed the outcomes of children post-frenectomy with and without myofunctional exercises post-operation, contained the necessary criteria, and was appraised using JBI quality appraisal tools. Based on the articles reviewed it was determined that there were better outcomes in an individual's ability to breastfeed and ability to make sounds post frenectomy when orofacial myofunctional therapy exercises were used as the surgeon recommended. The samples in these articles may not be representative of the larger population of individuals who receive frenectomies. Further research is needed to verify the results that using orofacial myofunctional therapy has a higher efficacy than doing no therapy post-frenectomy.

Isabella Diaz, Kirsten Fong, Nicole Mitchell

An Evidence-Based Practice Review of the Impact of Treatment on Children with ARFID

In recent years, approximately 13 to 22% of children aged 3 to 11 were reported as "picky eaters". Based on this statistic and the addition of Avoidant-Restrictive Food Intake Disorder (ARFID) to the DSM-V in 2013, an evidence-based practice review was deemed appropriate to determine the impact of treatment on children diagnosed with ARFID. Using various related search terms within two different search engines, the literature review was narrowed to four articles based on predetermined inclusion and exclusion criteria. Three different interventions (intensive multidisciplinary intervention, cognitive-behavioral therapy, and the Feeling-Body Investigators-ARFID) were researched, finding each ARFID treatment effective, albeit with limitations. A prominent limitation that continues to pose problems is the lack of research surrounding ARFID, due to its recent acknowledgment within the medical field. Although these intervention methods were found to be promising, it is recommended that more research be conducted to strengthen the validity and reliability of each intervention in order to treat those diagnosed with ARFID with greater confidence.

Grace Raphun, Carly Hodges, Amanda Foss

Social Participation and Quality of Life of Adolescent, Teen, and Young Adult AAC Users

We created our research question of "What are the effects of AAC use on adolescent, teen, and young adult social participation and overall quality of life?" The use of AAC with individuals who have complex communication needs can help individuals increase independence within vocational and community activities, support feelings of social belonging, and increase social participation. Our group was interested in determining how AAC affects the social participation and quality of life of individuals with complex communication needs. We used databases including EBSCO Host, CINAHL, and Education Full Text. We used the JPI Critical Appraisal Tool to determine the quality of evidence within the research. We started at 16 studies, narrowed down to 10 studies, and then narrowed again to 9 studies. From our findings, we can confidently state that AAC positively affects social participation and quality of life of individuals with complex communication needs. Effective strategies including peer communicator interactions, adult initiation, prompting, and Video Scene Displays lead to increase in social participation and quality of life. There is collective research that supports an increase in social participation and quality of life when AAC and multimodal methods of communication are encouraged.

Enhancing Communication: The Impact of Caregiver AAC Interventions on Children with Complex Communication Needs

Emily Herbst, Mackenzie Leavitt, Monet Lescow

The purpose of this evidence-based review project was to determine the impact of parent/caregiver-incorporated Augmentative Alternative Communication (AAC) interventions on the communication skills of children with complex communication needs. For this project, the research team reviewed PubMED, ERIC, and CINAHL Plus with full text using search terms related to “children”, “parents”, “AAC”, “intervention”, and “complex communication needs”. The team included research published after 2000 with populations of children between the ages of 3 and 10 years with complex communication needs and their caregivers, who implemented the AAC interventions. Seven articles met the team’s inclusion criteria and were quality appraised. The majority of the articles reviewed were single-subject or case-study designs and used naturalistic AAC caregiver interventions. The dependent variables reviewed for this project were AAC user communicative outcomes following caregiver intervention. Communicative measures differed depending on intervention, including but not limited to turn-taking and manding. Across the seven studies, findings revealed significant increases in these communication rates following caregiver AAC intervention. This project emphasized the importance of including and educating parents/caregivers of children with complex communication needs on AAC in order to maximize their children’s communicative abilities.