

52nd Clinical Aphasiology Conference 2023



**Atlantic City, NJ, USA
May 30th-June 3rd, 2023**

Conference Abstracts

Wednesday, May 31, 2023

NIDCD Research Symposium in Clinical Aphasiology (RSCA) Keynote Lecture: 9:00-10:00 AM
“Achieving Health Equity in Stroke Care: A Learning Healthcare System Approach”

Anjail Sharrief, MD, MPH, Associate Professor of Neurology and Director of Stroke Prevention for the Institute of Stroke and Cerebrovascular Disease, UTHealth Houston

Racial and ethnic disparities in stroke care exist across the stroke care continuum. Adverse social determinants of health explain some of these disparities, however, stroke systems of care do not adequately assess or address social factors that impact patient outcomes. In this talk, an overview of disparities across the stroke care continuum will be discussed and examples of adverse social determinants of health that impact stroke outcomes will be provided. An example of a health-equity centered learning healthcare system for addressing stroke care inequities will be presented.

NIDCD RSCA Invited Platform: 10:45-11:30 AM

“Advancing Hearing Health Equity for Older Adults: Lessons from the HEARS RCT”

Carrie Nieman, MD, MPH, Johns Hopkins Otolaryngology

Effective behavioral interventions and associated trials reflect the complexity and context of the communities with which they are tailored and the behaviors they seek to address. Community-engaged methodology can serve to capture these complexities and is an established approach within public health, particularly when focused on understanding and addressing health inequities. Within hearing care, significant disparities persist despite the highly prevalent nature of age-related hearing loss and relatively few hearing-related trials include representation that reflects the diversity of the U.S. population. Novel approaches are needed to increase the diversity of participants within hearing-related research along with expanded models for delivering hearing care. This presentation will provide an introduction to hearing care disparities among older Americans along with community-engaged approaches to advancing hearing care and supporting research.

Wednesday, May 31, 2023

Platform Session 1: 1:20-2:50 PM

Participation of People with Aphasia in Research and Social Determinants of Health

Moderator: Nichol Castro

1:20-1:50 PM: “Increasing Interest in and participation of people with aphasia (PWA) in aphasia research”

Julie Schlesinger¹, Angelique Cauthorn¹, Leslie Vnenchak², H. Branch Coslett², Nadine Martin¹

1. Temple University, Philadelphia, PA, USA

2. University of Pennsylvania, Philadelphia, PA, USA

Participation in research studies is a way for people with aphasia (PWA) to potentially improve their language abilities; however, few PWA are aware of these opportunities. The Aphasia Resource Collaboration Hub (ARCH) was formed to increase awareness of resources available to PWA, including opportunities to participate in research. This report reviews strategies ARCH used to increase knowledge of and participation in aphasia research and offers a plan to continue or modify those strategies moving forward.

1:50-2:20 PM: "In or out? Acute-phase aphasia education can increase interest in future research participation"

Denise Harvey¹, Haley Dresang², Leslie Vnenchak³, Peter Twigg³, Roy Hamilton³

1. *University of Pennsylvania, Philadelphia, PA, USA*
2. *University of Wisconsin, Madison, WI, USA*
3. *University of Pennsylvania, Philadelphia, PA, USA*

Early access to aphasia education and research opportunities is limited. This preliminary evidence examines if framing study participation with default options increases initial interest in clinical trial participation. Persons with acute stroke aphasia were told that 1) study participation is standard of care at Penn Medicine (opt-out) or 2) they could elect to be contacted when eligible for the trial (opt-in). All subjects received educational materials and were asked about their initial interest in the trial. Initial interest was higher in the opt-out vs. opt-in group. Providing aphasia education and research resources with default options acutely may increase later research interest.

2:20-2:50 PM: "Social determinants of health and poststroke communication difficulties in Hispanic and non-Hispanic white adults" (NIDCD RSCA Fellow)

**Manuel Marte, David Adesso, Swathi Kiran, Boston University, Boston, MA, USA*

Social determinants of health (SDOH) play a role in shaping the trajectory of poststroke outcomes. Disparities in SDOH by ethnicity have been linked to disparities in certain outcomes between poststroke non-Hispanic white and Hispanic populations, but how they influence poststroke communication difficulties is unknown. Using population-level survey data, this cross-sectional retrospective cohort study examines (i) disparities in SDOH within each ethnic group, (ii) the impact of ethnicity on SDOH, (iii), the effect of SDOH on the presence of communication difficulties, and (iv) the causal role of SDOH in mediating the probability of experiencing communication difficulties.

Wednesday, May 31, 2023

Platform Session 2: 3:15-4:45 PM

Treatment Targets and Outcomes That Matter

Moderator: Reva Zimmerman

3:15-3:45 PM "Effects of elicitation method and native language on functionally relevant item selection"

Dallin Bailey¹ & Esther Barahona Wilkes²

1. *Brigham Young University, Provo, UT, USA*
2. *North Alabama Medical Center, Florence, AL, USA*

Selection of functionally and personally relevant target items for anomia therapy is crucially important, but often overlooked. Approaches vary and clear empirically based guidance is lacking. We surveyed monolingual Spanish and English speakers and bilinguals. Survey questions elicited word lists and language samples representing two different elicitation methods (the blank canvas, and responses to functional communication scenarios). Analysis indicated significant differences between approaches and language groups. The results have implications for more strategic anomia target selection to potentially improve patient motivation and therapy impact.

3:45-4:15 PM "Clinicians' experiences selecting anomia treatment probes"

Olivia Hawes¹ & Nichol Castro²

1. *The State University of New York, Buffalo, NY, USA*
2. *University at Buffalo, Buffalo, NY, USA*

Anomia treatment is commonly provided to clients by speech-language pathologists (SLPs). We sought to understand how SLPs select the word probes used in anomia treatment. Through interviews and an online survey, our results indicate that there are several factors and barriers that impact SLPs' selection of treatment probes, including time, resources, knowledge, and client preferences. The results of this survey will inform future efforts to bridge one of the research-practice gaps in our field.

4:15-4:45 PM "What are the most important outcomes for people with Primary Progressive Aphasia? An international perspective"

Anna Volkmer & Chris Hardy, University College London, London, England, UK

Speech-language pathologists have developed a number of interventions to support people living with Primary Progressive Aphasia (PPA). Yet, research examining the effectiveness of these interventions has used a variety of different outcomes. This study aimed to identify the most important outcomes for people with PPA and their families. Employing the Nominal Group Technique, speech-language researchers across 12 countries ran meetings with people with PPA, and their family members, asking their opinion on the most important outcomes for them. Items generated in each country were aggregated to produce a list of prioritised outcomes. Both people with PPA and their family members identified 'getting the words out', 'having conversations' and 'speaking fluently' as the top three outcomes.

Poster Session 1: NIDCD Fellows (see page 11): 4:45-6:15 PM

Thursday, June 1, 2023

VIRTUAL ROUNDTABLE

7:30-8:15 AM; 8:15-9:00 AM: "Self-disclosure of aphasia from the perspectives of people with aphasia, clinicians, and communication partners: Preliminary evidence and future directions"

Jennifer Mack¹, Taryn Malcolm², & Aviva Lerman³

¹University of Massachusetts, Amherst, MA, USA, ²Mercy College, USA, New York, NY, USA, ³Hadassah Academic College, Jerusalem, Israel

This roundtable session will focus on self-disclosure of aphasia. We will each provide a brief overview of our recent research on this topic, from the perspectives of people with aphasia (Taryn Malcolm), SLPs (Aviva Lerman), and unfamiliar communication partners (Jennifer Mack). We will facilitate an interactive virtual discussion in which discussants will be encouraged to share their perspectives on self-disclosure of aphasia and identify research priorities in this area. Topics will include cross-cultural differences in self-disclosure and clinical practices supporting self-disclosure (e.g., collaborative development of self-disclosure statements or scripts).

Thursday, June 1, 2023

9:00-10:00 AM: CAC Invited Keynote Address:

"Promoting a socially-responsive and intersectional LPAA perspective in ethnically and socially diverse aphasia populations: Rationale, Challenges, and Strategies"

Jose G. Centeno, PhD, CCC-SLP, Rutgers University

The COVID-19 pandemic highlighted persisting disproportionate health inequities in the country despite extensive financial support to improve health care. As the population steadily becomes older and more diverse, high vulnerability to cardiovascular complications in ethnically diverse geriatric populations compels us to explore transformative healthcare strategies that would assist to minimize healthcare disparities. This presentation will discuss the rationale and theoretical bases of a framework to leverage

principles of the influential LPAA perspective with transformative community-driven strategies grounded in the intersectional life-course experiences of older adults with post-stroke aphasia from minoritized racial groups and their caregivers.

Thursday, June 1, 2023

Platform Session 3: 12:55-2:2 PM

Sociocultural and Linguistic Diversity in Aphasia

Moderator: Stephanie Grasso

12:55-1:25 PM: "Diagnostic instruments for Spanish-English bilingual speakers with aphasia: moving forward from current realities"

Yasmeen Farooqi-Shah, Miriam Hwang Carlos, Camila Lopez, Marcia Morales, Da Yeon Choi, University of Maryland, College Park, MD, USA

This study addresses the need for accurate language assessment of Spanish-English bilingual speakers with aphasia. We conducted a scoping literature review of current practices, and identified significant psychometric weaknesses in commonly used assessments for bilingual speakers. We are currently norming newly developed assessments that aim to efficiently diagnose aphasia and identify a client's lexico-semantic and morphosyntactic profile specifically for Spanish-English speakers. The newly developed assessment will be analyzed for item difficulty and cut-off scores that yield optimal sensitivity and specificity for aphasia diagnosis based on proficiency and English education.

1:25-1:55 PM: "Is bilingualism related to delayed onset and cognitive-linguistic change in mild cognitive impairment? Evidence from verbal fluency tasks"

Claudia Penaloza¹, Laura Casas², Inmaculada Rico², Nuria Rojo², Jordi Gascón², Jaume Campdelacreu², Ramón Reñé²

1. *University of Barcelona, Barcelona, Spain*

2. *Hospital Universitari de Bellvitge, Barcelona, Spain*

Bilingualism has been related to delayed Alzheimer's disease onset. Yet, evidence about such benefits on mild cognitive impairment (MCI) is limited and inconsistent. We compared 15 bilinguals and 16 monolinguals with MCI on (i) age of cognitive complaint onset, age at first neurology visit and age at MCI diagnosis, and (ii) performance on verbal fluency tasks at initial assessment, 6 months and 1 year. We found no significant differences between groups in age of onset or longitudinal changes on verbal fluency performance while keeping groups comparable on age, education, cognitive reserve and global baseline cognition. Bilingualism may not confer significant benefits in MCI onset or course.

1:55-2:25 PM: "Management of Stroke and Post-Stroke Aphasia in Low- and Middle-Income African Countries: A Scoping Review" (NIDCD RSCA Fellow platform; VIRTUAL)

Keren Kankam, Laura Murray, Danielle Glista, Marie Savundranayagam, Mawukoenya Theresa Sedzro, Selina Teti, University of Western Ontario, London, Ontario, Canada

To improve on the quality of life of stroke survivors and their families, it is recommended to provide stroke management services, including post-stroke aphasia care. However, stroke management services in low- and middle-income African countries (LMIAC) are coupled with challenges, with the few existing resources focused on physiotherapy services. Through a scoping review approach, databases were searched for studies conducted in LMIAC on stroke and post-stroke aphasia management. Results of the 58 included studies identified challenges facing stroke care in LMIAC, but most importantly, the need to improve on post-stroke aphasia care.

Thursday, June 1, 2023

Platform Session 4: 2:40-3:40 PM

Brain Imaging

Moderator: Erin Meier

2:40-3:10 PM: "Baseline variability of dynamic functional connectivity predicts treatment-induced functional reorganization of the language network in post-stroke aphasia recovery" (NIDCD RSCA Fellow Platform)

Isaac Falconer & Swathi Kiran, Boston University, Boston, MA, USA

Previously, we have found that temporal variability (TV) of dynamic functional connectivity (dFC) in the language network is predictive of treatment response in post-stroke aphasia¹. We hypothesize that TV is related to mechanisms underlying functional network plasticity. To test our hypothesis, we investigated the relationship between baseline TV and treatment-induced changes in static FC. We found that higher baseline TV predicted greater increases in small-worldness of brain region clusters, supporting our hypothesis. Advances in our understanding of the mechanisms studied here have the potential to lead to new and more targeted therapies aimed at facilitating adaptive plasticity.

3:10-3:40 PM: "Evaluating neural correlates of narrative production in individuals with and without aphasia via functional near-infrared spectroscopy (fNIRS)" - (VIRTUAL)

Emily Braun, Erin Carpenter, Yuanyuan Gao, Manuel Marte, Meryem Yücel, David Boas, Swathi Kiran, Boston University, Boston, MA, USA

This study used functional near-infrared spectroscopy (fNIRS) to evaluate narrative production in 14 individuals with chronic post-stroke aphasia and 14 age-matched control participants. Participants were asked to provide 15-second summaries of short narrative videos or to count aloud from one to fifteen after watching short non-narrative videos in two 14-minute experimental runs. Results demonstrated differentiation between the two tasks and the two groups in oxygenated hemoglobin (HbO). Results suggest that fNIRS may be a feasible tool for evaluating cortical activity during functional communication in individuals with post-stroke aphasia.

Poster Session 2 (see page 12): 3:45-5:15 PM

Thursday, June 1, 2023

Platform Session 5: 5:45-7:45 PM

Cognitive-Linguistic Factors in Aphasia

Moderator: Dirk Den-Ouden

5:45-6:15 PM: "High word complexity predicts low production accuracy in left hemisphere stroke survivors: Preliminary results from the Motor Speech Examination-99"

Adam Jacks¹, Lorelei Johnson², Soomin Kim¹, Marcia Rodriguez¹, Kimberly Welsh², Tami Guerrier², Mark Hirsch², J. George Thomas², Katarina Haley¹

1. *University of North Carolina, Chapel Hill, NC, USA*

2. *Carolinas Rehabilitation, Charlotte, NC, USA*

Recent work found a strong inverse relationship between complexity and accuracy in left hemisphere stroke survivors using a traditional motor speech examination. We describe a new 99-word test with a broad range of complexity and report preliminary results in stroke survivors and neurotypical controls. Median word accuracy was 100% in neurotypical and 97% in stroke participants (IQR 80-99%). Linear

regression analysis in stroke participants with speech errors showed a robust inverse relationship between word complexity and accuracy. In a larger sample, these results will help us design a brief yet sensitive word assessment for clinical applications.

6:15-6:45 PM: "Measuring the effect of phonological similarity on priming and relatedness judgments in persons with aphasia"

Nichol Castro, University at Buffalo, Buffalo, NY, USA

This study tested the amount of phonological similarity between word-pairs to understand how spreading activation influences language processing, and perhaps anomia response generalization, in people with aphasia (PWA). Two PWA completed an implicit priming task and a relatedness judgment task, where word-pairs differed in similarity defined by phonological distance (1 to 5). Contrary to prediction, participants showed no reliable effect of phonological distance on the priming task, but did demonstrate an expected effect on the relatedness judgment task. These interim results point to disrupted processing impairments in aphasia, which may impact response generalization in anomia treatment.

6:45-7:15 PM: "The bidirectional relationship between inner speech and cognitive control ability in aphasia"

Mackenzie Fama¹, Joshua McCall², Andrew DeMarco², Peter Turkeltaub²

1. *The George Washington University, Washington, DC, USA*

2. *Georgetown University Medical Center, Washington, DC, USA*

There is growing evidence that non-linguistic cognitive impairments can occur in individuals with aphasia. We investigated this link between language and cognitive impairments by examining inner speech and cognitive control ability in 59 adults with aphasia. Participants showed varying abilities in inner speech and in three forms of cognitive control: semantic control, phonological control, and domain-general task-switching ability. We found that certain measures of inner speech related significantly to phonological control, but not semantic control. Inner speech also related to task-switching ability, but only when picture stimuli evoked obvious verbal labels.

7:15-7:45 PM: "Are personal and reflexive pronouns dissociated in agrammatic comprehension? An individual participant meta-analysis with clinical implications" (NIDCD Fellow platform; VIRTUAL)

Loubna Elouardi¹, Yasmeen Faroqi-Shah¹, Mohamed Yeou²

1. *University of Maryland, College Park, MD, USA*

2. *Chouaib Doukkali University, El Jadida, Morocco*

The Discourse-linking hypothesis predicts that personal pronouns will be more impaired than reflexive pronouns in agrammatism. To evaluate this hypothesis, the study analyzed individual patient data from studies examining the personal-reflexive pronoun dissociation in agrammatism. Fourteen studies met study inclusion criteria. For each participant, individual accuracy scores for the comprehension of personal and reflexive pronouns were extracted. Data were analyzed using the Dissocs_ES.EXE program. Findings indicated that the majority of PWAA had no deficit in the comprehension of personal and reflexive pronouns. As a result, they did not support the D-linking hypothesis.

Friday, June 2, 2023

Platform Session 6: 9:30-11:30 AM

Treatment of Aphasia

Moderator: Adam Jacks

9:30-10:00 AM: "The Benefit of strengthening phonological skill in aphasia/alexia/agraphia"

Pelagie Beeson¹, Kindle Rising², Esther Kim¹, Chelsea Bayley¹, Christine Shultz¹, Steven Rapcsak¹

1. University of Arizona, Tucson, AZ, USA

2. University of Alberta, Edmonton, Alberta, Canada

Damage to left the perisylvian language network is the most common cause of aphasia and results in marked impairment of underlying phonological processing skills. In this case series (n = 47), we implemented a treatment sequence designed to strengthen these skills by re-training sound-letter correspondences and phonological manipulation tasks. Direct treatment effects included significant improvement of phonological skills. Participants also improved reading and writing of single-words and paragraphs, as well as lexical retrieval and overall language performance. Thus, there was impressive functional benefit of strengthening underlying phonological skills.

10:00-10:30 AM: "ECoLoGiC-Tx: Pilot data for a new conversation-level intervention targeting language and communication in people with moderate to severe aphasia."

Marion Leaman¹ & Lisa A. Edmonds²

1. University of Kansas Medical Center, Kansas City, KS, USA

2. Columbia University, New York, NY, USA

People with aphasia want intervention impacting everyday conversation. Interventions using spontaneous conversation usually focus on communication strategies. Interventions focusing on language in conversation usually use structured conversation. We hypothesize that language gains may be generalizable to everyday spontaneous conversation if the intervention closely resembles the desired outcome. Thus, we developed ECoLoGiC-Tx, a treatment with a guiding framework to flexibly address language in unstructured, participant-driven conversation. We report results for 4 people with moderate to severe aphasia; each demonstrated improvement on tests, monologue tasks, and unstructured conversation.

10:30-11:00 AM: "M-MAT- META: Evaluating the efficacy of a hybrid metacognitive-language treatment for individuals with fluent aphasia."

Amanda Wadams & Jennifer Mozeiko, University of Connecticut, Storrs, CT, USA

Despite increasing recognition of concomitant cognitive impairments in people with aphasia (PWA), evidenced-based treatment integrating both language and cognitive tasks does not exist. In this single subject, multiple baseline design, we integrated an evidenced-based language treatment (M-MAT) with metacognitive strategies for two individuals with Wernicke's aphasia. Increased language function was demonstrated by an increase of more than 10 points on WAB-R AQ. Results of executive function testing varied within and between tests. A hybrid metacognitive-language treatment may be efficacious for individuals with fluent aphasia, but further research needs to be completed.

11:00-11:30 AM: "Can tDCS combined with executive function training enhance functional communication in severe aphasia?" (VIRTUAL)

Francesca Pisano¹, Alessio Manfredini¹, Andrea Castellano², Carlo Caltagirone³, Paola Marangolo¹

1. University Federico II, Naples, Italy

2. University La Sapienza, Rome, Italy

3. IRCCS Santa Lucia Foundation, Rome, Italy

New approaches in aphasia rehabilitation have highlighted the usefulness of executive functions trainings for language recovery in persons with severe aphasia (PWSA). Twenty chronic PWSA underwent ten days of transcranial direct current stimulation (tDCS) (20 min, 2 mA) over the right dorsolateral prefrontal cortex (DLPFC). Two tDCS conditions were considered: anodal and sham combined with four executive function trainings. After anodal tDCS, a greater improvement in executive function tasks and functional communication was found compared to the sham condition. This evidence further emphasizes the effectiveness of tDCS for functional communication recovery in severe aphasia.

Saturday, June 3, 2023

Platform Session 7: 8:45-10:45 AM

Perspectives of Persons with Aphasia

Moderator: Aimee Dietz

8:45-9:15 AM: "Aphasia and literacy: Insights from stroke survivors with aphasia"

Elizabeth Madden & Erin Bush, Florida State University, Tallahassee, FL, USA

Reading and spelling are essential language skills, especially in today's society that relies on written communication through email, texting, and social media. Many individuals with aphasia struggle to participate in literacy-dependent activities. Despite this, reading and spelling needs of individuals with aphasia are often not understood or prioritized in therapy. To better inform treatment and support person-centered care, this study highlights perspectives of individuals with aphasia regarding their reading and spelling habits, preferences, and goals before and after stroke. Implications for further research and clinical practice will be discussed.

9:15-9:45 AM: "Competing Noises": How background noise impacts the communication experiences of people with mild to moderate aphasia"

Tyson Harmon¹, Riley Robertson², Christopher Dromey¹

1. *Brigham Young University, Provo, UT, USA*

2. *Jordan School District, West Jordan, UT, USA*

In addition to impaired language, many people with aphasia (PWA) experience attention deficits. Everyday communication situations are often attentionally demanding, including noisy environments. To explore the subjective experiences of PWA when communicating in noise, we asked 11 PWA and 11 controls to retell stories in silent and various background noise conditions and then rate their effort and stress and participate in a semi-structured interview. Combined quantitative and qualitative findings revealed greater effort and stress when communicating in noise compared with silence, which led to processing difficulty, fatigue, and feeling overwhelmed and frustrated for PWA but not controls.

9:45-10:15 AM: "Subjective language complaints versus objective language performance in memory clinic patients" (VIRTUAL)

Svetlana Malyutina¹, Alina Zabolotskaia¹, Victor Savilov², Timur Syunyakov², Marat Kurmyshev², Elena Kurmysheva², Irina Lobanova¹, Natalia Osipova², Olga Karpenko², Alisa Andryuschenko²

1. *HSE University, Moscow, Russia*

2. *Mental Health Clinic No. 1 named after N.A. Alexeev, Moscow, Russia*

Subjective cognitive complaints are a criterion for diagnosing mild cognitive impairment. However, in the memory domain, they do not always accurately predict objective performance. The present study was one of the first to address whether the discrepancy between subjective complaints and objective performance would hold in the language domain. In 176 memory clinic patients, only two out of four language performance measures were associated with subjective language complaints. Three language performance measures were associated with greater relative severity of language compared to memory complaints, calling for clinical assessment of relative complaint severity across cognitive domains.

10:15-10:45 AM: "Picturing quality of life: Perspectives of individuals living with neurogenic communication disorders" (VIRTUAL)

Jacqueline Hinckley¹, Erin Bush², Katie Strong³

1. *Nova Southeastern University, Fort Lauderdale, FL, USA*

2. *Florida State University, Tallahassee, FL, USA*
3. *Central Michigan University, Mount Pleasant, MI, USA*

People living with neurogenic communication disorders are rarely involved as collaborators in the development of measures of quality of life or impact measures. Photovoice is a participatory research method that engages participants into sharing their life experience via their own self-curated photographs (Wang & Burris, 2017). The purpose of this study was to gather the perspectives of people with cognitive-communication impairment and aphasia on quality of life. Participants curated their own photos and created themes for a final collaborative display of their photos. The results lead to a discussion of how stakeholders should be included as co-developers of quality of life measures.

Saturday, June 3, 2023

Platform Session 8: 11:00 AM-12:00 PM

Discourse Part 1: Diagnostic Utility of Discourse Measures

Moderator: Jessica Richardson

11:00-11:30 AM: "Picture description may be better for diagnosis and capturing change in language performance for those above the WAB-R diagnostic cutoff"

Voss Neal, Lisa Bunker, Argye Hillis, Johns Hopkins University, Baltimore, MD, USA

The Western Aphasia Battery-Revised (WAB-R) is a common diagnostic test and outcome measure for poststroke aphasia but may misclassify persons with very mild aphasia as nonaphasic. Discourse measures like the Modern Cookie Theft task (MCT) may better identify less salient deficits. We compared 68 participants with acute left hemisphere ischemic stroke, who completed the WAB-R and MCT at two time points, to a cohort of 50 controls. Participants deemed nonaphasic by the WAB-R scored below controls across many MCT measures and had similar trajectories of recovery to those with aphasia, supporting use of the MCT as a diagnostic tool and outcome measure in cases of very mild aphasia.

11:30 AM-12:00 PM: "Word frequency in discourse is useful for diagnosing variants of primary progressive aphasia"

Katarina Haley¹, Adam Jacks¹, Soomin Kim¹, Jessica Richardson², Maya Henry³

1. *University of North Carolina, Chapel Hill, NC, USA*
2. *University of New Mexico, Albuquerque, NM, UNSA*
3. *University of Texas, Austin, TX, USA*

Behavioral criteria for differential diagnosis of PPA subtypes include early word retrieval problems in semantic and logopenic variants and relative preservation in the nonfluent variant. We developed an automated process for estimating spoken word frequency from discourse transcriptions and conducted a retrospective study to determine whether values differentiated among clinical variants based on a retelling of the Cinderella story. Results showed that word frequency was significantly elevated in the semantic and logopenic variants but not in the nonfluent variant and that confrontation naming scores predicted word frequency in discourse.

Saturday, June 3, 2023

Platform Session 9: 1:15-2:15 PM

Discourse Part 2: Discourse and Treatment

Moderator: Jessica Richardson

1:15-1:45 PM: "Effect of recursive self-feedback on spoken language performance in nonfluent aphasia: A replication study" (NIDCD RSCA Fellow platform)

Gerald Imaezue, Ofer Tchernichovski, Loraine Obler, Mira Goral, CUNY, New York, NY, USA

Persons with nonfluent aphasia (PWNA) benefit from aphasia therapy that uses their self-feedback with guidance from speech language pathologists. However, it is unclear to what extent PWNA can improve their spoken language performance using only their own feedback. Here, we examined the effects of a recursive self-feedback (RSF) training on PWNA spoken language performance. Four PWNA received two counterbalanced mobile-based interventions: (1) RSF training vs. (2) External feedback training. They used each intervention for 2 hours per session, 14 sessions across 2-3 weeks. Preliminary findings suggest that PWNA can improve their performance through RSF training without external feedback.

1:45-2:15 PM: "Narrative discourse measures as predictors of response to naming intervention in aphasia"

Dirk Den Ouden¹, Sigfus Kristinsson¹, Leo Bonilha², Greg Hickok³, Argye Hillis⁴, Chris Rorden¹, Brielle Stark⁵, Julius Fridriksson¹

1. University of South Carolina, Columbia, SC, USA

2. Emory University, Atlanta, GA, USA

3. University of California, Irvine, CA, USA

4. Johns Hopkins University, Baltimore, MD, USA

5. Indiana University, Bloomington, IN, USA

We tested the predictive value of baseline narrative-discourse measures for treatment response after naming intervention in 96 speakers with aphasia, as part of a larger clinical trial. Results show that discourse measures reflecting lexical and pragmatic content, as well as utterance complexity, may contribute to a prognostic model of naming treatment response. The study also shows that phonologically-focused treatment, using phonological cueing in various forms, has a stronger positive effect on narrative-discourse speech rate and syntactic complexity than semantic treatment. We will discuss these findings in greater detail.

Poster session 3 (see page 15): 2:20-3:50 PM

Saturday, June 3, 2023

Platform Session 10: 3:55-5:55 PM

Cognitive-Communication Deficits in Other Populations

Moderator: TBD

3:55-4:25 PM: "Perception and expression of emotion in TBI: Identification of emotion, recognition of emotional ambiguity, and emotional verbal fluency" (VIRTUAL)

Natalie Czimskey, The University of Texas, Austin, TX, USA

This study evaluated differences in emotion perception and expression between 12 individuals with TBI and 24 individuals without TBI. Three tasks were utilized: 1) emotion identification in 34 congruous and 66 incongruous emotional sentences, 2) identification of ambiguity in emotion in 34 congruous and 66 incongruous emotional sentences, and 3) verbal fluency with emotion category generation. Participants without brain injury demonstrated increased accuracy in emotion identification and emotional ambiguity identification. Participants without brain injury generated more responses in all verbal fluency categories. Clinical implications are discussed.

4:25-4:55 PM: "Language performance in speakers with progressive supranuclear palsy"
Heather Clark, Julie Stierwalt, Farwa Ali, Hugo Botha, Jennifer Whitwell, Keith Josephs, Mayo Clinic, Rochester, Minnesota

The current study adds to the understanding of language function in 43 individuals with progressive supranuclear palsy (PSP) by reporting performance on four language measures. Thirty-eight participants (88% of the sample) demonstrated impaired performance on at least one language measure, with only 3 participants (7%) demonstrating impaired performance on all four language measures. Performance on a common aphasia battery was less prone to disruption compared to measures that targeted comprehension of grammatically complex language structure. These findings support the incorporation of measures beyond standard aphasia batteries to describe language performance in PSP.

4:55-5:25 PM: "Incidence of theory of mind deficits after acute right hemisphere stroke"
Tatiana Schnur¹ & Margaret Blake²
1. *Baylor College of Medicine, Houston, TX, USA*
2. *University of Houston, Houston, TX, USA*

The human ability to infer other people's knowledge and beliefs, known as 'theory of mind' (ToM) is an essential component of social interactions. We assessed the incidence of ToM deficits in 24 participants with acute right hemisphere (RH) stroke. Over 50% of acute RH stroke participants had a deficit in at least one form of ToM that was not attributable to deficits in attention, working memory, or task complexity. Clinically it will be important to determine the pattern and time course of recovery of ToM. If these deficits persist, early identification and treatment will reduce the overall impact on communication and socialization and long-term aspects of quality of life.

5:25-5:55 PM: "Moment-to-moment fluctuations in sustained attention in individuals with traumatic brain injury"
Kelly Marinick, Donald A. Robin, Amy Ramage, Joanna Gyory, University of New Hampshire, Durham, NH, USA

We examined moment-to-moment fluctuations in reaction time (RT) using a measure of entropy (i.e., lack of predictability; chaos), Complexity Invariant Distance "CID" during a visual sustained attention task with varying levels of complexity. We tested the hypothesis that TBI resulted in poorer predictability given the randomness of fluctuations in sustained attention. We also demonstrated that TBI results in mental fatigue over time. Results supported out hypothesis demonstrating that people with TBI have increased system-level entropy (random fluctuations) compared to non-brain injured participants. This increase in entropy was apparent with higher levels of complexity.

Poster Session 1: NIDCD Research Symposium in Clinical Aphasiology

Wednesday, May 31, 2023

1. Connecting second language morphological theory to aphasia rehabilitation

Andrew Collins¹, Nichol Castro²

¹University of Kansas, Lawrence, KA, USA, ²University at Buffalo, Buffalo, NY, USA

Significant similarities can be seen between second language learning and aphasia recovery. Errors associated with both groups, such as with inflectional morphology (e.g. agreement of number and gender), may share similar sources (i.e. storage or access-based deficits). To test this, we developed an observational case study of morphosyntax for people with aphasia whose native language is Spanish, a language with more complex morphology than English. Our analysis of participants' behavioral data is underway and is expected to shed light on whether deficits to storage or access are responsible for morphosyntactic errors. These findings may be used to inform aphasia rehabilitation practices.

2. Interpreting treatment-induced changes in resting-state functional connectivity in post-stroke aphasia: A systematic review

Louisa Suting & Jennifer Mozeiko

University of Connecticut, Storrs, CT, USA

Resting-state fMRI (RS-fMRI) is emerging for use in people with post-stroke aphasia to monitor change following speech and language therapy (SLT). Our systematic review includes 11 studies, 7 of which were published in the past 5 years. Most studies demonstrated an increase in both intra- and interhemispheric connectivity correlating with behavioral gains. The results established the utility of using resting state fMRI (RS-fMRI) in monitoring brain changes as a result of SLT. Future applications include using RS-fMRI to personalize therapy for post-stroke aphasia.

3. Social determinants of naming among persons with aphasia

Elizabeth Evans, Molly Jacobs, & Charles Ellis

University of Florida, Gainesville, FL, USA

Scholarly pursuit of neurological explanations for differences in naming performance among persons with aphasia has often overlooked the social determinants of health (SDOH). This study examines the correlation between score on the Boston Naming Test (BNT) and these underlying factors. Age, family size, and higher income were associated with higher BNT scores while Blacks and higher education were associated with lower BNT scores. Findings support existing research showing that higher income and social support are associated with improved outcomes. In addition, poorer performance by Blacks and those with higher education suggests that unobserved SDOH likely play a role in naming impairment.

4. Care-partner reported measure of conversation difficulties and their impacts: Preliminary validation in Primary Progressive Aphasia

Haylie Santos¹, Emily Rogalski², & Angela Roberts¹

¹University of Western Ontario, ²Northwestern University

Speech-language pathology lacks a measure of conversation difficulties and their impacts validated in Primary Progressive Aphasia (PPA). The Perception of Conversation Index-Dementia of the Alzheimer's Type (PCI-DAT), validated in Alzheimer's dementia, measures conversation difficulties, communication strategies, and their psychosocial impacts. We aimed to evaluate factor structure and construct validity of the PCI-DAT in PPA. Results revealed a 3-factor structure in PPA. We found strong convergent validity for subscales 1, 4, and 5. A majority (89%) of the items were interpreted as having good 'fit' in PPA. The results validate the PCI-DAT's use as a functional measure in interventions.

5. Heterogeneity in response to delay conditions in aphasia: Effects of response delay on accuracy vary relative to task

Matthew Sayers, Grace Riley, & Nadine Martin
Temple University, Philadelphia, PA

Response delays in language tasks have various effects on accuracy for people with aphasia: some improve, some worsen, and some have no change relative to immediate response conditions. We compared immediate and delayed naming and repetition in 32 people with aphasia to determine if effects of response delay on accuracy vary relative to task. Forty percent of our sample had different responses to delay conditions in naming and repetition despite similar input phonological abilities. Individual deficit profiles varied. In general naming tended to improve in delay conditions, while repetition worsened. We offer an account of these trends in the framework of the Interactive Activation model.

6. Exploring the attentional blink in aphasia using pupillometry

Christina Sen^{1,2} & JoAnn Silkes¹
¹San Diego State University, ²University of California, San Diego

Research suggests that people with aphasia often also have domain-general problems with cognitive mechanisms that support language, though it is unclear how these impairments are connected. We explored whether people with aphasia show deficits in attentional switching using an attentional blink paradigm with linguistic and non-linguistic stimuli. We also used pupillometry to explore whether pupil response correlates to behavioral response and how participants expend processing effort throughout the attentional blink task. The data show that, compared to controls, people with aphasia do have impairments in attentional switching, a mechanism that we suggest plays a role in lexical access.

7. Altered cortical tracking of phrases: An EEG investigation of aphasic comprehension

M. Blake Rafferty¹, Tim Saltuklaroglu², Kevin Reilly², Eun Jin Paek², Steffanie Barber², & Devin M. Casenhiser²
¹New Mexico State University, ²University of Tennessee Health Science Center

In this EEG study, we used cortical tracking of phrasal information--alongside a battery of cognitive-linguistic assessments--to evaluate several competing explanations for the sentence comprehension difficulties experienced by individuals with aphasia. Results provide evidence in favor of memory-related accounts of comprehension, while also highlighting the potential utility of cortical tracking as a candidate biomarker for assessing post-stroke language function.

8. Dual-tasking in individuals with post-stroke aphasia: A scoping review

Lara Suarez, Lauren Bislick, & Nicole Dawson
University of Central Florida

Little is known about how a stroke and co-occurring language impairment may impact the ability to allocate cognitive resources, particularly in dual-task conditions. The purpose of this scoping review was to describe the current literature regarding dual-task and aphasia. A full search of Google Scholar, PubMed, and ScienceDirect identified publications on the topic. The resource allocation model appears to be the primary model being used to explain dual-tasking deficits in individuals with aphasia. More research comparing deficits of different dual-task paradigms is needed to understand the role of attention in language deficits present in individuals with aphasia.

9. Semantics, phonology, and resting-state connectivity in aphasia

Victoria Diedrichs¹, David Osher¹, Xueliang J. Pan¹, Brielle C. Stark², Julius Fridriksson³, Dirk-Bart den Ouden³, Chris Rorden³, Roger Newman-Norlund³, & Stacy Harnish¹
¹The Ohio State University, ²Indiana University, ³University of South Carolina

The left inferior frontal gyrus (LIFG), often damaged in people with aphasia (PWA), may be functionally organized. Anterior LIFG (aLIFG) has been associated with semantics; posterior (pLIFG) with phonology. However, the extent to which damage to these regions may influence linguistic deficits or reorganization in PWA remains unclear. We used multiple linear regression to examine the influence of lesion load to aLIFG and pLIFG on semantic and phonological measures as well as right hemisphere resting-state functional connectivity. The aLIFG and pLIFG did not individually explain variance in these measures, but alternative possibilities, implications, and future directions are discussed.

10. Self-administered computer-based treatment for anomia in semantic variant primary progressive aphasia: A single-case experimental design

Gary Robinaugh¹, Maya Henry¹, Rob Cavanaugh², & Stephanie Grasso¹

¹University of Texas at Austin, Austin, TX, USA, ²University of Pittsburgh, Pittsburgh, PA, USA

The purpose of this study was to investigate the utility of a self-administered naming treatment for a participant with semantic variant PPA (svPPA) and a history of TBI. The participant used an adaptive learning software to practice 60 words. We evaluated treatment effects, generalization, and maintenance through 12 months post-treatment using Bayesian generalized mixed-effects models. A gain of 36 words was attributable to treatment and there was a gradual decline in accuracy during the follow-up period. Generalization to untrained words was not observed. Results support the use of self-administered naming treatments for people with svPPA, including those with concomitant TBI.

Poster Session 2

Thursday, June 1, 2023

1. A pilot study of a gesture training without speech to improve word production

Jungmoon Hyun¹, & Jennifer Deme²

¹Hunter College, New York, NY, USA, ²Renewal Rehab, Racine, WI, USA

In aging process, word retrieval declines early, whereas gestures remain relatively intact. Despite this age-related difference, studies have reported close relationships between gestures and language production (Ferguson et al., 2012). However, it remains unclear whether a training focused on gesture generation without speech will improve word production and cognitive flexibility. After three weeks of training, the training group performed better on Alternative Uses test and Semantic Fluency test compared to the non-training group. These results suggest this gesture exploration training may stimulate underlying common cognitive functions between word production and flexible thinking.

2. Relating social networks to depression in chronic aphasia

Lisa Johnson, Lindsay Gilchrist, Natalie Busby, & Julius Fridriksson

University of South Carolina, Columbia, SC, USA

The social impact of having a stroke can be extensive, leaving stroke survivors with a vulnerable social network due to reduced social involvement and strain in the family unit. The present study evaluated the composition of the social networks of 48 individuals with chronic aphasia and investigated factors associated with these measures as well as any impact on quality of life and/or perceived social and familial support. Individuals with depression tended to name more alters in their network, but their alters are less interconnected. Finally, the degree of interconnected alters was positively associated with family support scores.

3. The effects of multimodal communication treatment with discourse in people with chronic aphasia

Hyejin Park¹, Elizabeth Peeler¹, Elizabeth Burklow¹, & Sarah Wallace²

¹University of Mississippi, University, MS, USA, ²University of Pittsburgh, Pittsburgh, PA, USA

This study expands upon the Multimodal Communication Treatment by incorporating a discourse task and group interaction to evaluate the treatment effects on improving the switching modality skills of people with aphasia. Two participants with chronic aphasia showed minimum effects of the treatment to accurately communicate object items in structured and unstructured tasks, possibly due to the ceiling effects and personal mood changes. However, one participant showed increased use of a communication book in both structured and unstructured tasks. We discussed the potential benefits of the treatment and suggested a revision to be more intensive and directly target word production in discourse.

4. Effectiveness of tDCS as an adjuvant to aphasia treatment following stroke: Evidence from systematic reviews and meta-analyses

Anastasia Raymer & Rachel Johnson

Old Dominion University, Norfolk, VA, USA

Dozens of studies have examined transcranial direct current stimulation (tDCS) effects for aphasia. We identified 16SRs of tDCS studies of post-stroke aphasia, nine that included meta-analysis (MA) to quantify results. We extracted findings and rated SR quality using AMSTAR2 (Shea et al., 2017). AMSTAR2 scores indicated that nine of the reviews, all MAs, were conducted with rigor. Conclusions varied across SRs depending on which original studies were included and how results of left and right anodal and cathodal stimulation were combined. With refinement of the technique, recent summaries have shown positive effects of tDCS for naming outcomes beyond behavioral treatment alone.

5. Differentiating sentence comprehension deficits in logopenic & nonfluent primary progressive aphasia variants

Suravi Sarkar, Denise Harvey, Leslie Vnenchak, Olu Faseyitan, Taylor Phillips, Kayla Alznauer, Rishi Vas, & Roy Hamilton

University of Pennsylvania, Philadelphia, PA, USA

Primary progressive aphasia is a neurodegenerative disease of language with variants including deficits in either word-finding (lvPPA) or grammar (naPPA). More research is needed to determine how working memory and grammatical complexity contribute to variant-specific comprehension deficits. We tested grammatical comprehension of different sentence types in lvPPA and naPPA participants presented in written and spoken modalities. Individuals with naPPA performed better than those with lvPPA with the spoken modality, which places greater demands on working memory, when compared with the written modality. This study emphasizes taking working memory into account when measuring comprehension.

6. Oral reading prosody in persons with aphasia

Jordan Lins & Kimberly Smith

University of South Alabama, Mobile, AL, USA

Research on oral reading prosody has shown that, for developmental readers, sufficient reading prosody supports reading comprehension. For persons with aphasia and alexia (PWA), reading prosody has been characterized exclusively for oral sentence reading. These studies have reported mixed results, with some demonstrating PWA are unable to utilize prosody to convey linguistic meaning in a manner similar to controls. Considering the impact prosody appears to have on the reading comprehension of both developmental and skilled readers, development of a line of research to acoustically characterize oral paragraph reading prosody in PWA would be beneficial.

7. Neural correlates of connected speech in acute post-stroke aphasia using an auditory-perceptual approach

Marianne Casilio, Katherine Bryan, Anna V Kasdan, Jillian L Entrup, Sarah M Schneck, Caitlin F Onuscheck, Deborah F Levy, Maysaa Rahman, Michael de Riesthal, & Stephen M Wilson

Vanderbilt University, Nashville, TN, USA

Although deficits in connected speech are ubiquitous in aphasia, there remains little understanding about which brain regions are associated with impairment. To address this gap in the literature, audiovisual connected speech samples from 100 participants with aphasia in the acute post-stroke period were extracted and reviewed using a validated auditory-perceptual assessment approach that yields scores on four profiles of impairment. Clinical neuroimaging was also obtained, and lesions were delineated. Lesion-symptom mapping analyses revealed overlapping yet distinct correlates across the language network that aligned with both neoclassical and contemporary views of aphasia.

8. Proxy ratings of observed stress in persons with aphasia and observer self-reported perceived stress

Hannah Griffey & Jacqueline Laures-Gore

Georgia State University, Atlanta, GA, USA

Proxy reports are commonly used for people with aphasia to compensate for linguistic impairments. This study explores the use of proxy ratings of observed stress in PWA. Stress is commonly observed in PWA and linked to depression and poor rehabilitation outcomes. Additionally, linguistic characteristics of aphasia may be mistaken for verbal indicators of stress which could affect communication and trigger stress contagion. 55 observers provided proxy stress ratings for PWA. Findings show poor validity in proxy ratings of stress, an overestimation of stress levels in PWA, lack of correlation between proxy ratings and observer empathy, and the presence of possible observer stress contagion.

9. The adaptation of aphasia rehabilitation for culturally and linguistically diverse populations: collaborating with interpreters
Chelsea Larkman, Miranda Rose, & Lucette Lanyon
La Trobe University, Melbourne, Australia

With international migration & global aging, post-stroke services are experiencing an increase in the number of culturally and linguistically diverse (CALD) clients with aphasia. There is a growing requirement for SLPs to work with interpreters to meet the needs of their diverse caseloads, yet little has been heard directly from interpreters in the literature. A series of qualitative studies are in progress to better understand & improve how aphasia rehabilitation is provided to people from CALD backgrounds. The preliminary results from in-depth, semi-structured interviews with interpreters will be presented, describing their experience of working with SLPs to provide aphasia rehabilitation.

10. What in the world? The effect of elicitation prompts on formulaic (automatic) language usage in individuals with fluent and non-fluent aphasia
Sarah Thomas & Cathy Torrington Eaton
The University of Texas Health Science Center, San Antonio, TX, USA

Formulaic language refers to recognizable, stereotyped utterances stored and retrieved from memory as distinguished from novel speech production. The present study explored the interaction between aphasia subtype, formulaic language usage, and elicitation prompt. For 219 individuals, spontaneous language transcripts from Aphasiabank were analyzed across four aphasia subtypes and four language contexts (Cinderella retell, stroke narrative, speech status, and important event). Results demonstrated unique formulaic language patterns according to language context and aphasia subtype. Study findings have implications for both assessment and treatment for individuals with aphasia.

11. The effects of stimulus modality on assessments of semantic knowledge in different variants of primary progressive aphasia
Kayla Alznauer, Denise Harvey, Leslie Vnenchak, Olu Faseyitan, Suravi Sarkar, Taylor Phillips, Rishi Vas, & Roy Hamilton
University of Pennsylvania, Philadelphia, PA, USA

Primary progressive aphasia (PPA) is a neurodegenerative disease characterized by a gradual loss of various language abilities, which differs across three subtypes: logopenic (lvPPA), nonfluent (naPPA), and semantic (svPPA). More research is needed to promote an early differentiation between subtypes. We examined semantic knowledge in PPA participants using picture and written modalities. SvPPA performed significantly worse on the written modality compared to the picture modality and compared to the other subtypes' performance on the written modality. We infer that lexical-to-semantic mapping is affected early in svPPA, and written modalities should be used to distinguish between subtypes.

12. Developing communication partner training for customer service providers: An exploratory look at stakeholder perspectives
Sarah Schneck¹, Edna Babbitt², Elissa Larkin², & Leora Cherney²
¹Northwestern University Feinberg School of Medicine, Chicago, IL, USA, ²Shirley Ryan AbilityLab, Chicago, IL, USA

Communication partner training (CPT) has extensive evidence to support its use in many contexts. However, it is not clear how to best facilitate implementation of CPT in business environments. This study is an exploratory look at data collected for a larger study that aims to develop CPT modules for customer service providers. In focus groups or interviews, 33 stakeholders (individuals with communication disabilities and business community members) shared experiences and suggestions for developing CPT modules. Stakeholder comments from focus groups and interviews were reviewed and categorized. Results from this study will inform the development of CPT modules for customer service providers.

13. Agrammatism translator: Support application for people with aphasia

*Francesca Guynn, Dallin Bailey, Forrest Burton, David Wingate, Tyson Harmon, & Grant Pitt
Brigham Young University, Provo, UT, USA*

The need for effective communicative devices both for daily needs and practice after aphasia onset continues to be great. The expanding world of artificial intelligence has an interesting potential in the arena of technological communicative helps. The study tests the newfound AGPT-3 program for its usability and reports on the feedback of participants. It uses Automated Speech Recognition to create utterance predictions from detected speech output. Findings suggest that AGPT-3 may be a useful study tool and bridge the gap between people with aphasia and their communication partners.

14. Measuring real-world talk time and locations of people with aphasia using wearable technology

Leora Cherney¹, Laura Kinsey¹, Xinchun Ni², John Rogers²

¹Shirley Ryan AbilityLab, Chicago, IL, USA, ²Northwestern University, Chicago, IL, USA

This study investigated the use of non-invasive wearable technology to measure talk time and locations of people with aphasia using a laryngeal sensor and GPS tracker, respectively. Data were collected for a total of 30 days from 12 individuals with aphasia. Mean talk time per hour was 59.2 seconds (SD = 39.5). Participants were tracked at an average of 1.7 GPS locations daily (range 1-4). Per semi-structured interviews with participants and care partners, wearable devices were relatively comfortable to wear and easy to use. The use of wearable technology offers new ways to measure generalization of therapeutic interventions to real-world scenarios.

15. Factors influencing measurement of speech production characteristics in acquired apraxia of speech (AOS)

¹Kate Nealon, ²Lauren Bislick, ³Lisa A. Edmonds

¹Kean University, ²University of Central Florida, ³Teachers College, Columbia University

Apraxia of speech and aphasia often co-occur, making the identification and qualification of speech characteristics used to differentially diagnose AOS challenging for clinicians and researchers. Assessment relies upon perceptual observation by SLPs which may be influenced by many factors including education, training, caseloads etc. The utilization of the Apraxia of Speech Rating Scale (ASRS) may support diagnosis, but the stimuli used have been variable. This study investigates the reliability of clinical perceptions, rationales, and ASRS ratings as they relate to a diagnostic assessment of AOS and/or dysarthria when using consistent stimuli (WAB-R spoken language) and measures (ASRS).

16. Validity and reliability of the word-level semantic and phonological N400 response in persons with aphasia

Sarah Grace Dalton¹, Mark Lavelle², Janet Adams², Jim Cavanagh², & Jessica Richardson²

¹Marquette University, Milwaukee, WI, USA, ²University of New Mexico, Albuquerque, NM, USA

The N400 shows promise as a biomarker for PWAs; however, its validity and reliability with PWAs is unknown. Our aims in this project were to characterize the validity and reliability of the N400 elicited using single-word semantic and phonological stimuli in healthy controls and individuals with chronic aphasia. Despite the presence of the stroke-induced brain lesion, these tasks elicited complex N400s in PWAs, similar to controls. In general, condition-specific amplitudes have greater reliability, and N400 variables have higher reliability among controls. Further development of tasks and procedures that can be completed by participants across the severity spectrum is needed.

17. An evaluation of self-reported stress levels in persons with aphasia during a feedback-based learning task

Kristen Nunn, Yael Arbel, & Sofia Vallila-Rohter

MGH Institute of Health Professions, Boston, MA, USA

Stress due to negative feedback is used to justify the selection of non-feedback-based aphasia treatments despite limited empirical evidence showing the feedback increases stress. We aimed to characterize the

relationship between feedback, stress, and learning in people with aphasia (PWA) during a learning task. At the group level, there was no significant change in self-reported stress; however, at the individual level, several distinct patterns of stress emerged. There was no relationship between stress and learning. Understanding variables that influence stress may inform the design of treatments which meet the psychosocial needs of PWA yet do not sacrifice key treatment ingredients.

18. Use of transcranial direct current stimulation in an intensive comprehensive aphasia program: Preliminary evidence from language, communication, and quality of life outcomes

Elizabeth Galletta¹, Jessica Feinman¹, Mary Reilly¹, & Amy Vogel-Eyny²

¹NYU Langone Health, New York, NY, USA, ²Hunter College, New York, NY, USA,

This presentation will illustrate the use of clinical transcranial direct current stimulation (tDCS) with behavioral speech-language treatment in an Intensive Comprehensive Aphasia Program (ICAP). Outcome measures for two people with aphasia (PWA) were reviewed. The aim of this review was to determine the feasibility, tolerability, and efficacy of implementing clinical tDCS in an ICAP. Participant data as well as personal experiences of PWA who used clinical tDCS in an ICAP will be reported.

19. Feasibility of a collaborative clinical trial intervention among speech and language pathologists in acute inpatient rehabilitation

*Jacqueline Seidler, Pranav Midhe Ramkumar, Leslie Vnenchak, Roy Hamilton & Kelly Sloane
University of Pennsylvania, Philadelphia, PA, USA*

Cognitive impairment is a common consequence of stroke, affecting up to 90% of stroke survivors. The first days to weeks after stroke represent a period of clinical recovery, reflecting underlying neuroplastic rebuilding of neuronal networks. However, most clinical trials for neurorehabilitation occur in the chronic period, likely because of the logistical barriers of conducting such trials in acute inpatient rehabilitation setting. Here, we present feasibility data from a clinical trial that is being conducted at the Pennsylvania Institute for Rehabilitation Medicine among patients with recent stroke and resulting cognitive impairment. We have enrolled 18 participants with 13 completing the

20. Knowledge and perspectives on mental health—What do people with aphasia and their care-partners know and think about access to mental health services?

Jessica Obermeyer¹, Kate Kelleher², Sena Crutchley¹, Sage Stalker¹, Maura Silverman³, & Leigh Odom²

¹University of North Carolina, Greensboro, NC, USA, ²Western Carolina University, Cullowhee, NC, USA,

³Triangle Aphasia Project, Cary, NC, USA

People with aphasia (PWA) and their care partners (CPs) often experience changes in mental health post-stroke. The purpose of this study was to examine PWA and CP's experiences with and access to mental health services with the goal of identifying barriers and potential methods to facilitate access. An aphasia-friendly survey and guided interview were used to collect data from 8 PWA and 8 CPs. Our findings revealed that PWA felt mental health services would have been most useful in the first three months and in the remainder of the first-year post-stroke. CPs felt that counseling would have been the most useful immediately post-stroke. Other insights will be discussed during the poster.

21. Inner speech in the daily lives of people with aphasia

Julianne Alexander, Tessa Hedrick, & Brielle Stark

Indiana University, Bloomington, IN, USA

Inner speech in our daily lives likely contributes to several psychosocial factors of health, so we are motivated to investigate the frequency, contents, functions, and activities of inner speech in aphasia. We adapted the General Inner Speech Questionnaire and administered it three times, once per week. Persons with aphasia reported experiencing inner speech most of the instances that they were notified, and themes

of inner speech use were similar to what has been reported in young adults. These results support use of the adapted GISQ in aphasia research and suggest that the inner narrative is salient.

22. Verb-noun association effects on noun retrieval in sentence frames: Differences between people with non-fluent aphasia and healthy controls

Marta Korytkowska¹, Jean Marie Priscott², Nancy Eng¹, Peggy Conner¹, & Loraine Obler¹

¹CUNY, New York, NY, USA, ²Sacred Heart University, Fairfield, CT, USA

It is well documented that a verb can activate a semantic network. The current study investigated the role of linguistic information on single-word retrieval by manipulating semantic association between nouns and verbs. We hypothesized that associated verbs are more likely to prime naming of a pictured object than non-associated verbs. Thus, individuals should retrieve a target faster and more accurately in a high-association context. Findings for 20 healthy controls align with these predictions, whereas findings among a group of 12 participants with non-fluent aphasia do not. Rather, they reveal substantial variability in lexical retrieval processes.

23. Semantic Feature Analysis + metacognitive strategy training increases self-cueing and independent semantic feature generation in moments of anomia

Victoria Bolowsky¹, Lauren Brock², Kristen Nunn², William Evans³, & Sofia Vallila-Rohter²

¹Johns Hopkins University, Baltimore, MD, USA, ²MGH Institute of Health Professions, Boston, MA, USA,

³University of Pittsburgh, Pittsburgh, PA, USA

We present findings from a treatment study in which metacognitive strategy training was incorporated into Semantic Feature Analysis. We measured changes in participants' spontaneously correct responses, instances of successful circumlocution, instances of unsuccessful circumlocution, incorrect responses without circumlocution, and the number of semantic features produced during circumlocution. Outcomes measured changes in the hypothesized restitutive (word retrieval) and substitutive (use of circumlocution as a strategy in moments of anomia) targets of SFA. Results demonstrated restitutive and substitutive gains, and all participants demonstrated increased use of the SFA strategy.

24. Automating intended target identification for paraphasias in discourse using a large language model

Alexandra Salem¹, Mikala Fleegle², Robert Gale¹, Gerasimos Fergadiotis², & Steven Bedrick¹

¹Oregon Health & Science University, Portland, OR, USA, ²Portland State University

We predicted the intended target words of paraphasias in discourse using a machine learning based large language model (LLM). Data consisted of Cinderella story retelling transcripts from people with aphasia. Human transcribers determined the intended target of the paraphasias. We replaced paraphasias with a "blank" token and fine-tuned the LLM to fill in the blank with a predicted target, based on the rest of the story retelling. The model achieved 46.8% accuracy. It performed significantly better on targets with perfect human agreement and higher human confidence in target identification, and on paraphasias from participants with less severe or fluent aphasia.

25. Construct validation of the Verb Naming Test

Marianne Casilio¹, Gerasimos Fergadiotis², Sun-Joo Cho¹, Stacey Steel², Mikala Fleegle², Michael Walsh Dickey³, & William Hula⁴

¹Vanderbilt University Medical Center, Nashville, TN, USA, ²Portland State University, Portland, OR, USA,

³University of Pittsburgh, Pittsburgh, PA, USA, ⁴Pittsburgh Veterans Affairs Medical Center, Pittsburgh, PA, USA

The Verb Naming Test (VNT) has been shown to reliably measure a single latent construct using item response theory (IRT). Whether this construct aligns with morphosyntactic processing, as originally intended by the test's developers, remains unknown. Using an archival dataset of 107 individuals with aphasia, we fit three IRT models to investigate whether specific item and person covariates predicted item

response patterns. Covariates representing morphosyntactic processing were less strongly predictive than those representing lexical-semantic processing and aphasia severity, suggesting that the latent construct underlying the VNT is not primarily associated with morphosyntactic processing.

26. Language switching in bilingual individuals with aphasia: A scoping review

Brittany Zarta, Cristina Rocha, & Nichol Castro

University at Buffalo, Buffalo, NY, USA

Although research is increasingly focused on bilingual individuals with aphasia (BIWA), limited research exists on language switching (LS) in this population. This scoping review seeks to understand the literature on LS in BIWA. Articles were pulled from databases and are being filtered by a scoping review team. Our interim analyses indicate that discussions are just beginning to understand LS in BIWA. Common themes include small sample sizes, LS as a resource, and LS as a cognitive process interfering with language. The results demonstrate the need for further research on LS in BIWA, particularly related to understanding pre-morbid patterns to inform intervention.

27. Cerebellar neuromodulation in primary progressive aphasia

Rajani Sebastian, Becky Lammers, Sarah Cust, Ji Hyun Kim, Argye Hillis, & Donna Tippett

Johns Hopkins University School of Medicine, Baltimore, MD, USA

We investigated whether cerebellar stimulation to the right cerebellum combined with anomia therapy improves naming performance in individuals with primary progressive aphasia. In a randomized, double-blind, sham controlled, within-subject crossover trial, four participants took part in 2 intervention periods of 15 training sessions with cerebellar tDCS + anomia therapy and sham+ anomia therapy, separated by 2 months. In this preliminary analysis, we found that cerebellar tDCS with anomia therapy improved trained naming more than anomia therapy alone (sham). These preliminary results are quite promising and highlight the therapeutic potential of cerebellar tDCS to augment PPA treatment.

28. Increased social participation in a dyad versus singular therapy setting: A pilot study

Vanessa Kraut & Jacqueline Ann Stark

University of Vienna, Austria

The principles of experience-dependent neuroplasticity have been shown to play a crucial role in the provision of language therapy provided to persons with chronic aphasia (PWA), in particular intensity, dosage and repetition (Kleim and Jones, 2008). In the real world, providing the necessary amount of face-to-face therapy is rarely attainable. In this context, computer-assisted language therapy programs provide an easily accessible alternative. However, the question of the format arises: Do PWA benefit more in a single versus dyad setting? In this pilot study, the articulatory abilities of a person with Broca's aphasia were shown to benefit more in a dyad setting.

29. Core lexicon and MSSG analyses in persons with primary progressive aphasia

Jessica Richardson¹, Janet Adams², Honey Hubbard³, Maya Henry², Katarina Haley³, & Adam Jacks³

¹University of New Mexico, Albuquerque, NM, USA, ²University of Texas, Austin, TX, USA, ³University of North Carolina, Chapel Hill, NC, USA

Core lexicon (CoreLex) analysis is used to investigate the typicality of words in discourse. Little is known about the utility of CoreLex for persons with primary progressive aphasia (PWPPAs). Using Cinderella story retelling narrative samples, we examined CoreLex, and the relationship between CoreLex and macrostructural measures, in PWPPAs. CoreLex and macrostructural variables show promise for detection of PPA. Strong and significant correlations between CoreLex and macrostructural variables were present.

Poster Session 3

Saturday, June 3, 2023

1. “\$#IT happens”: A longitudinal comparison of psychosocial experiences during the pandemic as reported by individuals with aphasia

Rebecca Dublin & Rebecca Hunting Pompon
University of Delaware, Newark, DE, USA

This longitudinal project compared patient-reported outcome measure scores from before the pandemic to during the pandemic to inform our understanding of psychosocial variables (chronic stress, resilience, communicative participation) in individuals with aphasia (IWA). IWA reported significantly decreased stress during the pandemic. The second aim of this project used Likert scale appraisals and cognitive interviews to determine how IWA appraise and compare these psychosocial experiences. The quantitative data (e.g., Likert scale and change scores from two timepoints) was then compared to qualitative data from cognitive interviews completed during COVID-19 using thematic analysis.

2. The impact of a psychoeducational support group for individuals with primary progressive aphasia and family members: Preliminary results from a mixed methods study

Lisa Wauters¹, Karinne Berstis¹, Heather Dial², Melissa Flores³, Gary Robinaugh¹, Rachel Tessmer¹, Kristin Schaffer Mendez⁴, & Maya Henry¹

¹The University of Texas, Austin, TX, USA, ²University of Houston, Houston, TX, USA, ³University of Texas Health Science Center, San Antonio, TX, USA, ⁴University of St. Augustine for Health Sciences, Austin, TX, USA

The provision of psychoeducational support groups for persons with primary progressive aphasia (PWPPA) and their family members (FMPPA) aims to address the psychosocial impacts of PPA, but these groups are understudied compared to stroke-induced aphasia. Three cohorts of PWPPA and three cohorts of FMPPA participated in a virtual support group for eight meetings over four months. Responses on surveys at pre- and post-participation indicated increased ratings of PPA knowledge for PWPPA and FMPPA and increased ratings of support/self-care for FMPPA. Qualitative analysis of group feedback interviews at post-participation revealed themes that may inform development of future support groups.

3. Inner speech's role in treated naming recovery in aphasia

Brielle Stark, Julianne Alexander, Emma Stockrahm, Reagan Taylor, Peyton Nielsen, Tessa Hedrick, Prit Kaur, Bailey Barron, Bethany Yagoda, Olivia Thompson, & Sydney Perry
Indiana University, Bloomington, IN, USA

Inner speech (that little voice in our heads) has long been understood to have a relationship with verbal language, and has been shown to be relatively preserved in individuals with aphasia. The extent to which inner speech is a facilitator of naming recovery is largely untested. We examine inner speech's role in treated naming recovery, contrasting inner speech's role to that of overall aphasia and anomia severity. In our growing sample (N=15), we find that inner speech is a better predictor of treated naming outcomes than either aphasia or anomia severity. A clinical implication of this work is that assessing inner speech pre-intervention may help to identify stimutable treatment targets.

4. Exploring the acceptability of relationship-centered communication partner training: A mixed-method pilot investigation

Kathryn-Anne Pertab¹, Tyson Harmon¹, Jonathan Sandberg¹, & William Evans²

¹Brigham Young University, Provo, UT, USA, ²University of Pittsburgh, Pittsburgh, PA, USA

Previous research has revealed the psychosocial impacts of aphasia on couples. The present study investigated the acceptability of a pilot program: Relationship-Centered Communication Partner Training

for 3 PWA-spouse dyads. This program aims to support communication surrounding shifting partner roles and responsibilities, a leading cause of distress for couples impacted by aphasia. The program was designed to offer a meaningful context to practice communication strategies and to provide counseling regarding adjustment to life with aphasia. Preliminary findings revealed that couples found RC-CPT to be beneficial in supporting communication and addressing psychosocial impacts of aphasia.

5. Does timing of transcranial direct current stimulation (tDCS) relative to aphasia treatment impact outcomes?

*Leora Cherney, Rachel Hitch, Rosalind Hurwitz, & Sameer Ashaie
Shirley Ryan AbilityLab, Chicago, IL, USA*

This study examined the timing of tDCS relative to speech-language therapy (SLT). Twenty-five individuals with aphasia were randomized into 4 groups. Three groups received 20 minutes of 2mA cathodal tDCS to the left angular gyrus: prior to SLT, concurrent with SLT, or following SLT. One group received sham tDCS. All groups received 40 minutes of computer-based script-training. Participants received 15 sessions of tDCS/SLT over 3 weeks. Cathodal stimulation to the left angular gyrus improved script-training regardless of whether the stimulation was applied concurrent, before or after the script training. However, significant results occurred only when tDCS was concurrent with SLT.

6. Understanding word finding in older adults; Image naming norms across the age range
Sabine Heuer¹, Sara Pillay², Isabelle Banke², Jena Burton¹, Mackenzie Scheibel¹, & Priyanka Shah²
¹University of Wisconsin, Milwaukee, WI, USA, ²Medical College of Wisconsin, Milwaukee, WI, USA

Norms for image naming are precious resources when using visual stimuli in cognitive-linguistic research. There is a great need for norms for older adults to better characterize the cognitive-linguistic performance associated with healthy and impaired aging. Purpose of this study is to provide norms and response time measures for 40 adults 43-83 years of age and free of neurologic impairments for 600 photographs derived from the Bank of Standardized Stimuli (BOSS). The mean modal name agreement is 67%, while naming accuracy is 81.69%. Future clinical and research implications will be discussed.

7. AAC as a valid rehabilitation tool (rather than a last-ditch resort)
Aimee Dietz¹, Chitrali Mamlekar², Cassandra Stall³, Michelle Kryc⁴, Jennifer Vannest⁵, Thomas Maloney⁵, Krista Wilkinson⁶, Mekibib Altaye⁷, & Jerzy Szaflarski⁸
¹Georgia State University, Atlanta, GA, USA, ²Misericordia, Dallas, PA, USA, ³Lexington VA, Lexington, KY, USA, ⁴HealthOne, Denver, CO, USA, ⁵University of Cincinnati, Cincinnati, OH, USA, ⁶The Pennsylvania State University, State College, PA, USA, ⁷Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA, ⁸University of Alabama, Birmingham, AL, USA

After a plateau in response to usual care, augmentative and alternative communication (AAC) methods, are often employed to compensate for deficits; however, this approach assumes that the use of AAC precludes additional language recovery. Recent reports challenge this notion and support the idea that people with chronic aphasia can learn to use AAC to augment language recovery, while compensating for deficits according to the well-established principles of intersystemic reorganization. The aim of the presentation is to summarize data from a recent AAC intervention study, designed to evoke language recovery, while supporting communication, in people with chronic, post-stroke aphasia.

8. Pilot investigation of reading aloud response times and accuracy following a targeted treatment for alexia
Olga Boukrina¹, Elizabeth B. Madden², Nicole Giordano¹, Dima Karim¹, Monica Hruz¹, Ryan Staples³, & William W. Graves³
¹Kessler Foundation, West Orange, NJ, USA, ²Florida State University, Tallahassee, FL, USA, ³Rutgers University, Newark, NJ

Over 2,500,000 people in the US are currently living with aphasia, which impairs multiple aspects of language, including reading. Reading deficits in aphasia are prevalent and severely limit autonomy and reduce quality of life. There is currently no one standard approach to treating reading deficits, likely because of the variability in stroke lesion distribution leading to differences in cognitive sources of impairment. We investigated outcomes following a tailored reading treatment targeting primarily one information processing component (phonology or semantics). Improved reading accuracy was evident in 3 of 4 participants and trial response times reflected individual reading strategies.

9. Determination of language impairment in severe aphasia: The contributions of repetition, automatic speech and receptive language skills

Wendy Greenspan¹, Sonia Vieira², & Nadine Martin¹

¹Temple University, Philadelphia, PA, USA, ²University of Washington, Seattle, WA, USA

Language is a complex skill requiring multiple measures for a comprehensive and accurate assessment of language impairment especially in people with severe aphasia. In this qualitative study, we compare three assessment methods, the Temple Assessment of Language and Short-Term Memory in Aphasia, the Western Aphasia Battery-Revised, and a conversational speech sample. We look at how they inform aphasia severity ratings with a focus on repetition, automatic speech and receptive language. We discuss which measures correspond well in documenting strengths and weaknesses and which produce discrepant results. Suggestions for achieving a comprehensive and accurate evaluation aphasia are presented

10. Application of machine learning, natural language processing, and temporal response function modeling for differential diagnosis of primary progressive aphasia

Heather Dial, Lokesh Pugalenthi, Jessy Li, Maya Henry

The University of Texas, Austin, TX, USA

Diagnosis of primary progressive aphasia (PPA), which typically relies on time consuming behavioral testing, is challenging. Machine learning (ML) offers a potential alternative for PPA diagnosis. We recorded electroencephalography (EEG) responses to an audiobook in individuals with PPA and healthy controls. Temporal response function (TRF) modeling was used to derive regression weights that best mapped acoustic and linguistic features of the audiobook onto the EEG. Raw EEG and TRF weights were fed into ML models for PPA classification. We observed a range of classification performance across ML models (F1's from 53 to 85%). The results are promising and warrant further investigation.

11. Effects of group size in conversation treatment for individuals with aphasia: Replication and extension of a randomized controlled trial

Gayle DeDe¹, Elizabeth Hoover², Gretchen Szabo³, Vasha Kulkarni², Francine Kohen¹, Sarah Vitale², & Edwin Maas¹

¹Temple University, Philadelphia, PA, USA, ²Boston University, Boston, MA, USA, ³Adler Aphasia Center, Maywood, NJ, USA

A randomized controlled trial was used to examine effects of conversation treatment in individuals with aphasia. Participants were randomly assigned to a large group, dyad, or natural history control condition. The main effect of time was significant, but the effect seemed to be driven by the large group condition. Both treatment groups showed significant improvement on the CAT naming subtest, and the large group condition showed significant improvement on the CADL-3. Results provide qualified support for the view that conversation treatment benefits lWA, and that changes observed may vary as a function of group size.

12. Independent validation of a language mapping paradigm for adults with aphasia

Jeffrey Johnson¹, Alyesia Watkins², Michael Walsh Dickey², & William Hula¹

¹VA Pittsburgh Healthcare System, Pittsburgh, PA, USA, ²University of Pittsburgh, Pittsburgh, PA, USA

Functional MRI is often used to investigate language processing and treatment effects in people with aphasia (PWA). To overcome the limitations of some common fMRI tasks, Wilson and colleagues developed and tested a novel semantic language mapping task (Wilson et al., 2018). We independently evaluated the feasibility, validity, and reliability of this task in a novel sample of PWA. Subjects generally performed the task at an acceptable level. The task was associated with activation in expected language regions and was reasonably reproducible across multiple scans. In sum, our results underscore the validity of the task, though there may be opportunities to optimize its utility.

13. Written discourse in aphasia: A systematic review of treatment options

Jessica Obermeyer¹, Hana Kim², & Robert Wiley¹

¹University of North Carolina, Greensboro, NC, USA, ²University of South Florida, Tampa, FL, USA

Writing and typing have become essential for the completion of activities of daily living. However, there are a shortage of treatment approaches that address writing, especially at the discourse level for people with aphasia. In this study, a systematic review of discourse level writing treatments for aphasia (published after 2000) was completed with the goal of identifying available treatments, categorizing the type of approach/treatment task, and examining the discourse outcomes, measures and improvements. Six treatment studies were identified and categorized into technology aided, multi-modality and multi-level approaches. Study results and the quality of evidence will be discussed.

14. Click-evoked auditory brainstem response in primary progressive aphasia

Rachel Tessmer¹, Maansi Desai¹, G. Nike Gnanateja², Heather Dial³, & Maya Henry¹

¹University of Texas, Austin, TX, USA, ²University of Wisconsin, Madison, WI, USA, ³University of Houston, Houston, TX, USA

Individuals with primary progressive aphasia (PPA) exhibit auditory processing deficits, yet clear profiles of early auditory processing in each variant have yet to be established. We utilized EEG to assess subcortical auditory function in three variants of PPA by measuring the click-evoked auditory brainstem response. Individuals with nonfluent/agrammatic variant PPA showed the greatest latency delay in wave V of the response, which is thought to be affected by brainstem pathology. Establishing variant-specific profiles of auditory processing could assist with differential diagnosis and treatment modifications to manage auditory impairments in PPA.

15. Evaluation of lexical and activation priming components of a repetition treatment for word retrieval in aphasia

Nadine Martin¹, Robert Wiley², Julie Schlesinger¹, & Jessica Obermeyer²

¹Temple University, Philadelphia, PA, USA, ²University of North Carolina, Greensboro, NC, USA

Word processing impairments in aphasia are attributed to impairment of transmission and/or maintenance of activation. In this treatment study, we examined characteristics of these activation maintenance impairments in which accuracy declines when a response is delayed. We examined the stability of temporal deficits for each participant and found that for 4 out of 5 people, these were stable across multiple timepoints. We observed that the amount of variance in response accuracy attributable to the response delay declined for some after treatment, indicating improvement of their deficit. We also found evidence of both lexical priming and priming of activation maintenance.

16. Recovery in subacute aphasia associated with baseline white matter hyperintensities

Joseph Kang, Lisa Bunker, Melissa Stockbridge, & Argye Hillis

Johns Hopkins University, Baltimore, MD, USA

We examined the relationship between baseline white matter hyperintensities and pre-post changes in naming and content production for 41 participants with subacute poststroke aphasia from a randomized control trial of transcranial direct current stimulation (tDCS) plus computerized language treatment. We

used multivariable linear regression to examine change in naming accuracy and content units (CU) produced during picture description. Regression models show periventricular white matter hyperintensities is independently associated with recovery in naming (whole sample) and in CU production (active tDCS group).

17. Interplay of semantic plausibility and word order canonicity in sentence processing of people with aphasia using a verb-final language

Jee Eun Sung¹, Jimin Park¹, & Gayle DeDe²

¹Ewha Womans University, Seoul, South Korea, ²Temple University, Philadelphia, PA, USA

The current study manipulated the semantic plausibility between the object nouns of the verbs and nouns in adverbial phrases by varying the word order canonicity to examine how these two linguistic factors affect sentence comprehension deficits in PWA using a verb-final language. The non-canonical sentences under the semantically less plausible condition are the best predictors to differentiate PWA from controls, and the aphasia severity was predicted by the less plausible sentence types. Results indicate that the most complex conditions with the greatest demands on syntactic and semantic domains serve as the most critical items that are associated with aphasic symptoms.

18. Examining the relation between bilingualism and age of symptom onset in frontotemporal dementia

Stephanie Grasso¹, Jessica de Leon², Isabel Elaine Allen², Danielle P. Escueta², Yvette Vega², Malihe Eshghavi³, Christa Watson², Nina Dronkers⁴, Maria Luisa Gorno-Tempini², Maya L. Henry¹

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Bilingualism has been associated with a significant delay in symptom onset in Alzheimer's dementia; however, few studies have examined bilingualism's effects on cognitive reserve in frontotemporal dementia (FTD), a group of neurodegenerative syndromes that primarily affect behavior, executive functioning, and speech/language abilities. We performed a retrospective chart review of 308 patients, each diagnosed with one of the three main FTD variants. No significant differences in age at symptom onset between speaker groups were found within any of the FTD variants. The effects of bilingualism on cognitive reserve should be explored in future studies of socioculturally diverse FTD cohorts.

19. Formally assessing functional communication in persons with aphasia

Lauren Hammond & Dirk-Bart den Ouden

University of South Carolina, Columbia, SC, USA

Functional Communication is an integral aspect of improving quality of life and life participation in persons with aphasia. This skill of transmission and interaction of a personalized message facilitates and harbors intimate connection and independence. The aim of this abstract is to introduce a comprehensive and inclusive formal measure of functional communication assessed across real life scenarios and to review and discuss the insufficiencies within current functional communication measures.

20. Home-based transcranial direct current stimulation (tDCS) paired with personalized word retrieval intervention in primary progressive aphasia: A case study and clinical trial protocol

Eric McConathey, Amy Vogel-Eyny, Matthew Lustberg, Allan George, Giuseppina Pilloni, & Leigh Charvet
NYU Langone, New York, NY, USA

The current case study outlines a 20-session intervention using home-based and remotely-supervised transcranial direct current stimulation (tDCS) paired with personalized word retrieval training for an individual with logopenic variant primary progressive aphasia (lvPPA).

21. Neural correlates of expressive aprosodia following acute right hemisphere stroke

Isidora Diaz-Carr¹, Alexandra Zezinka Durfee¹, Ji Sook Ahn², Sona Patel², Argye Hillis¹, & Shannon M. Sheppard³

¹Johns Hopkins University, Baltimore, MD, USA, ²Seton Hall University, South Orange, NJ, USA, ³Chapman University, Irvine, CA, USA

This study examined the neural correlates of impaired emotional prosody production after acute right hemisphere stroke. Participants' emotional prosody productions were recorded and acoustically analyzed. Extracted and standardized acoustic values were entered in lesion-symptom mapping analyses to determine associations between lesioned structures and production of various prosodic characteristics. Damage to dorsal, subcortical, and white matter right hemisphere structures was associated with reduced or impaired prosodic variation compared to healthy controls. Lesion loci suggest conceptual, motoric, and cognitive subtypes of expressive aprosodia and inform models of prosody processing.

22. Bilingual primary progressive aphasia: A scoping review of assessment and treatment practices

Camille Wagner Rodriguez¹, Núria Colomer Montagut², Sonia-Karin Marqués Kiderle³, Raquel Sánchez-Valle², Miguel Ángel Santos Santos³, Stephanie Grasso¹

¹University of Texas at Austin, Austin, TX, USA, ²Hospital Clínic de Barcelona, Barcelona, Spain, ³Hospital de Sant Pau, Barcelona, Spain

This scoping review maps the current evidence for cognitive-linguistic assessment and speech-language treatment practices in bilingual primary progressive aphasia (PPA) and the operationalization of bilingualism in PPA. Of the 15 identified studies, 11 reported the results of assessments conducted in both languages. Two studies reported positive naming treatment outcomes. Thirteen studies included English-speaking participants, illustrating the linguistic bias of the field. Most studies reported age of acquisition, proficiency, and language use rather than an operational definition for bilingualism. Implications for equitable clinical practices with diverse PPA populations are discussed.

23. Narrative discourse performance in TBI: Does story comprehension predict story retelling?

Karen Le¹, Richard Feinn², & Carl Coelho¹

¹Veterans Affairs Connecticut Healthcare System, West Haven, CT

²Quinnipiac University, Hamden, CT, USA

The relationship between discourse comprehension and production has not been well-characterized in TBI, especially for spoken language. This study investigated the relationship between narrative discourse comprehension measures and production outcomes (story grammar, story completeness) in TBI. Correlational and regression analyses were performed using comprehension measures as predictors for production measures. There were moderate-to-large correlations between comprehension and production measures. Comprehension measures did not significantly predict story grammar but strongly predicted story completeness. The findings have both theoretical and clinical implications for discourse in TBI.

24. Executive function in people with aphasia: A scoping review

Jacqueline Watt & Tami Brancamp

University of Nevada, Reno

A scoping review was completed and aimed to assess the body of literature regarding executive function (EF) in people with aphasia (PWA) as well as review studies that discuss EF as a predictor of quality of life/health-related quality of life (QOL/HRQL). Forty-four studies were included in this review and were sorted into eight categories based on what was being examined. Many studies demonstrate that PWA have EF deficits; however, they are variable. Only two studies were identified that examined QOL/HRQL in PWA and how EF may be a predictor. EF abilities are being studied in PWA, but more information is needed to examine if it is a predictor of QOL.

25. Impact of main concept checklist length on sensitivity and specificity

Sarah Grace Dalton¹, & Jessica Richardson²

¹Marquette University, Milwaukee, WI, USA, ²University of New Mexico, Albuquerque, NM, USA

Main concept analysis (MCA) evaluates how well an individual communicates the gist, or essential elements, of a narrative and can be used to identify differences between healthy controls (HCs) and persons with aphasia (PWAs). The number of MCs identified for the Cinderella story retell may limit clinical feasibility. However, no studies have investigated whether shorter Cinderella MC lists have equivalent sensitivity and specificity. MCA demonstrates good discriminant validity between HCs and PWAs. All three lists had similar AUC values, indicating that a shorter (and even more clinically practicable) MC list may be used without sacrificing quality.

26. Characterizing the effects of script training in the three variants of primary progressive aphasia

Núria Montagut¹, Sergi Borrego¹, Jorge Herrero¹, Magdalena Castellví¹, Mircea Balasa¹, Albert Lladó¹, Stephanie Grasso², & Raquel Sánchez-Valle¹

¹Hospital Clínic, Barcelona, Spain, ²The University of Texas, Austin, TX, USA

Primary progressive aphasia (PPA) is a neurodegenerative disorder characterized by progressive worsening of speech and/or language. In this case series, a modified version of Video-Implemented Script Training for Aphasia was administered to thirteen individuals with PPA. Participants demonstrated significant improvement from pre- to post-treatment in production of scripted content, synonyms, keywords and global quality. Participants showed maintenance for trained production and synonyms at 3- and 6-months post-treatment but decline for keywords and global quality at 6-months post-treatment. Nevertheless, synonyms, keywords and global quality performance was significantly better at follow-up

27. Impact of elicitation task on discourse production in mild Alzheimer's disease

Katie Crenshaw¹, Eun Jin Paek², & Lynda Feenaughty¹

¹University of Memphis, Memphis, TN, USA, ²University of Tennessee Health Science Center, Memphis, TN, USA

This study examined how elicitation method affects discourse production in people with mild Alzheimer's disease (AD). We analyzed discourse samples of 38 individuals with mild AD and found that the story retell task, which is thought to be more cognitively demanding, is associated with decreased syntactic structure, lexical diversity, story coherence, and more irrelevant comments compared to the language output elicited by a picture description task. These findings suggest that elicitation methods can influence micro- and macrolinguistics output in this population and taking the cognitive demands of the task into consideration may be important for accurate assessment and treatment.

Virtual Poster Session

Friday, June 2, 2023

1. Error awareness and associated treatment gains in individuals with acquired apraxia of speech

Daniel Salomon, Shannon C. Mauszycki, & Julie Waumbaugh
The University of Utah, Salt Lake City, UT, USA

Structural equation modeling was employed to explore the relationship between error awareness (EA) and word production accuracy between treatment study phases in individuals with AOS and aphasia. A retrospective analysis of treatment probe data and EA performance from 20 participants was conducted. EA showed a high correlation ($r = 0.617$, $p < 0.05$) with change in word production accuracy between phases. A synergistic interaction between accuracy and EA was also demonstrated ($r = 0.015$, $p < 0.05$). Findings indicate that the ability to judge one's productions accurately enhances treatment gains across study phases as well as maintenance of those gains post-treatment.

2. An analysis of the effects of thrombolysis on language recovery after stroke

Sara Andreetta¹, Andrea Marini², Alina Menichelli³, Giovanni Furlanis⁴, Paola Caruso⁴, Marcello Naccarato⁴, & Paolo Manganotti⁴

¹University of Nova Gorica, Rožna Dolina, Slovenia, ²University of Udine, Udine, Italy, ³Rehabilitation Medicine, Department of Medical Sciences, Trieste, Italy, ⁴Clinic Unit of Neurology, Trieste, Italy

Evidence about the effects of thrombolytic treatment in language is still scarce. This study aims at evaluating spontaneous speech in 19 patients who received thrombolysis treatment and 17 who did not receive it. All patients were administered a picture description task twice: at admittance (T0) and after 48 hours (T1). Results didn't show significant differences in the between-group analyses. However, within-group analyses showed improvements at T1 in the experimental group, particularly in productivity and informativeness. This suggests the need of adopting a comprehensive methodology to assess language processing, and the potential benefits deriving from thrombolysis.

3. Grey matter structures and white matter pathways critical for language comprehension, production, and repetition

Olga Buivolova¹, Maria Ivanova², & Olga Dragoy¹

¹HSE University, Moscow, Russia, ²University of California, Berkeley, CA, USA

In this study, we aimed to specify the role of the grey matter regions and white matter pathways in the language processing. We assessed 86 PWA with the comprehensive language test and used voxel-based lesion-symptom mapping and indirect structural disconnection-symptom mapping to determine the neural correlates for language comprehension, production, and repetition. We found the crucial involvement of temporo-parietal regions and arcuate, inferior fronto-occipital and inferior longitudinal fasciculi to comprehension and repetition, As for production, only involvement of three segments of the arcuate fasciculus was found.

4. Different brain structures support learning of nouns and verbs: Evidence from primary progressive aphasia

Guillem Olivé¹, María F. Porto¹, Sonia-Karin Marqués Kiderle², Lucía Vaquero³, Claudia Peñaloza¹, Ignacio Illan-Gala², Alberto Lleó², Miguel Ángel Santos-Santos², & Antoni Rodríguez-Fornells¹

¹University of Barcelona, Barcelona, Spain, ²Hospital de Sant Pau, Barcelona, Spain, ³Complutense University, Madrid, Spain

Previous studies have proposed that processing and learning nouns and verbs are subserved by distinct neural regions. Here, we compared logopenic (lvPPA) or nonfluent (nfvPPA) Primary Progressive Aphasic (PPA) patients and healthy controls in their ability to learn novel nouns and verbs in a contextual learning

task. Results revealed a lower performance of lvPPA compared to both nvfPPA and older controls for noun learning, whereas both lvPPA and nvfPPA performed worse than older controls in verb learning. Based on the location of the brain atrophy sites of the different PPA variants, results support the involvement of the left temporoparietal regions in noun but not in verb-meaning learning.

5. Adaptation of the Cantonese version of comprehensive aphasia test in Hong Kong
Anthony Pak-Hin Kong, Suki Ka-Yu Tsang, Kiana Tsz-Kiu Tam, Nicole Yi-Ching Hui, & Joyce Nok-Ching Wong
The University of Hong Kong, Pok Fu Lam, Hong Kong

A validation study of the Cantonese version of Comprehensive Aphasia Test (Cant-CAT) and its second version containing the aphasia impact questionnaire is reported. This is an ongoing study that establishes its normative data and examines its psychometric properties. At present, about 100 healthy individuals and 50 chronic stroke survivors have completed Cant-CAT. Subtest cut-off scores were determined at the lowest 5th %tile of normal performance. Current results suggested that Cant-CAT could discriminate performance between speakers with and without aphasia and indicate aphasia severity. There were also good to excellent concurrent validity, inter/intra-rater, and test-retest reliabilities

6. Narrative production across variants of primary progressive aphasia: Evidence from Greek
Vasilina Spanou & Eleni Peristeri
Aristotle University, Thessaloniki, Greece

The aim of the present study was to assess the narrative production of 4 Greek-speaking patients with PPA (1 nvf, 1 lv-, 2 sv-PPA). Microstructural and macrostructural properties of each patient's narrative transcript were analyzed, focusing on syntactic complexity, types of subordination, and lexical diversity for microstructure, and theory-of-mind (ToM) internal state terms (ISTs) for macrostructure. Patients' working memory was also assessed. The narrative elicitation methods seemed to have an effect on the patients' narrative production skills, while scores for the nvf-PPA patient were the lowest, as compared to the other two variants.

7. Examining telehealth administration of a screening protocol for post-stroke aphasia: A validity and feasibility study
Selina Teti, Laura Murray, JB Orange, & Angela Roberts
University of Western Ontario, London, Ontario, Canada

The examination of telehealth assessments for people with post-stroke aphasia, particularly screening protocols, is limited. Twenty participants with previously diagnosed post-stroke aphasia completed telehealth administration of the Oxford Cognitive Screen (OCS) and the Frenchay Aphasia Screening Test (FAST). Aphasia was detected in sixteen participants. The OCS and FAST were highly correlated with a Spearman's Correlation Coefficient of 0.6. The feasibility of telehealth administration was rated positively among each participant. This telehealth screening protocol supports the development of a simple and quick way to identify people with language and/or extra-linguistic cognitive deficits.

8. How do we quantify connected speech fluency in aphasia? Evidence from a scoping review of post-stroke and progressive literatures
Claire Cordella, Lauren Di Filippo, Swathi Kiran
Boston University, Boston, MA, USA

In this scoping review, we evaluate similarities and differences in approaches used to quantify connected speech fluency in post-stroke aphasia (PSA) and primary progressive aphasia (PPA). We focus on identifying the (i) individual quantitative speech/language features reported; (ii) overarching featural categories (e.g., lexical, syntactic, rate/prosody); and (iii) level of significance of reported result to provide information on the consistency and utility of current quantification approaches within and across PSA and

PPA. Based on these results, we discuss barriers to clinical implementation of current approaches and highlight promising emergent trends.

9. Classification of Mandarin-speaking post-stroke aphasic patients: A cluster analysis of WAB data

Xinjia Qi, Hui Chang, Aitong Zhang

Shanghai Jiao Tong University, Shanghai, China

To examine the usefulness of classification criteria of WAB among recent Mandarin-speaking post-stroke aphasic patients, the current study collected the WAB data of 57 patients from a rehabilitation center in Shanghai in the past two years and examined the agreement between WAB classification results and statistical analysis. Four clusters were generated from the Q-type factor analysis, and the agreement was 29%. In the K-means cluster analysis procedure, the cluster number was set as ten and the agreement was 55%. Most of the data-driven clusters consist of various subtypes but with similarities in certain attributes. Each subtype could be found across these clusters, suggesting that the tr

10. Unbeknownst to the Montreal Cognitive Assessment, many adults with acquired neurological conditions report communicative challenges

Faith Stagge, Alyssa M. Lanzi, & Matthew L. Cohen

University of Delaware, Newark, DE, USA

Speech-language pathologists often use broad cognitive screening tools like the Montreal Cognitive Assessment (MoCA) to screen for or diagnose cognitive-communication disorders (Lanzi et al., 2022). This study quantifies the perceived communication effectiveness and participation of adults with acquired neurological conditions using patient-reported outcome measures and also explores how well MoCA scores align with those patient-reported communication weaknesses. The MoCA total score was not correlated with T-scores on the patient-reported measurements, and therefore of questionable validity for the screening or diagnosing of cognitive-communicative conditions.

11. A focus on Africa's stroke services through family caregivers' lens: A scoping review of qualitative evidence

Mawukoanya Theresa Sedzro¹, Laura Murray¹, Anna Garnett¹, Elysee Nouvet¹, Keren Kankam¹, & Peace Foadzomor²

¹University of Western Ontario, London, Ontario, Canada

²University of Health and Allied Sciences, Ho, Ghana

The global burden of stroke is increasing with almost 90% occurring in low- and middle-income countries including those in Africa. Despite the widespread prevalence of stroke, Africa's healthcare infrastructure remains inadequate, thereby shifting the majority of the burden to patients and their family. This scoping review examined the factors impacting the family caregivers of stroke patients in Africa including the determinants of their role assignment, challenges in performing the role, and coping strategies. It also provided insight into caregivers' perception and understanding of stroke outcomes and how this influences their approach to managing stroke in the family.

12. Characterizing phonological text alexia and agraphia in individuals with aphasia

Alyssa Sachs & Pélégie Beeson

University of Arizona, Tucson, AZ, USA

The impact of acquired phonological impairment has been well documented for single-word reading and spelling in aphasia, but few studies have characterized sentence-level performance. In this study, we demonstrated the co-occurrence of phonological text alexia and phonological text agraphia in individuals with left perisylvian damage. We also examined the relation between underlying cognitive processes and grammatical accuracy on structured sentences and self-generated spoken/written picture descriptions. Phonological skill was a significant predictor of morphological marker accuracy in sentence writing and grammatical well-formedness of sentences on both controlled and self-generated tasks.

13. Patient-informant agreement in reported activities and participation depends on aphasia severity

Courtney Jewell¹, Stacy Harnish¹, Alyssa M. Lanz², & Matthew L. Cohen²

¹The Ohio State University, Columbus, OH, USA, ²University of Delaware, Newark, DE, USA

Participation is proposed as an ultimate outcome in rehabilitation and often measured with self-reported outcome measures. People with aphasia (PWA) may rely on informants to supply ratings due to the severity of their impairment, but PWA-informant reports are often not interchangeable. To identify the influence of language severity on PWA-informant differences, 29 PWA-informant dyads completed a language assessment and three measures related to participation. Regression models explained 53-71% of the variance in difference scores ($p < .05$). Results suggest a greater need for caregiver education to foster closer communication about difficult-to-express thoughts related to participation.

14. Comparison of performance across handwritten and typed modalities in persons with aphasia

Jaime Lee¹, Laura Kinsey², Liam Shanahan², Tessa Lewis-Whitson¹, Leora Cherney²

¹James Madison University, Harrisonburg, VA, USA, ²Shirley Ryan Ability Lab, Chicago, IL, USA

Writing impairments in people with aphasia (PWA) have negative ramifications on participation. Handwriting and typing have different cognitive and motor demands, however questions remain as to whether performance in PWA varies based on modality. This poster compares written discourse production across handwritten and typed modalities in 52 participants with aphasia. For the total sample, there were no significant differences between the number of complete words, unique words, or subject verb productions in the typed modality versus handwritten modality. Patterns of performance for subgroups of participants with mild, moderate, and severe aphasia and clinical implications will be discussed.

15. Facilitating connection through participation: A study of the impact of therapy task on the rate of talk between people with aphasia during group therapy

Eleanor Gulick, Brent Archer, & Jason Whitfield

Bowling Green State University, Bowling Green, OH, USA

Cross-talk is a type of participation in group therapy that describes turns directed from one member with aphasia to another. Given that one of the benefits of group therapy is a social setting where peer interactions support the development of new social relationships, cross-talk may serve an important function in developing these relationships and improving the required communication skills. We analyzed group therapy sessions and identified the rate of cross-talk during four types of therapy activities. Linear mix modeling indicated that clinician decisions regarding what type of therapy activity to facilitate, and for how long, had an impact on how group members with aphasia interacted.

16. Depression in persons with aphasia: A systematic review

Mary Grace Zwillling¹, Amy Vogel-Eyny¹, JungMoon Hyun¹, Alicia Rowland², & Sameer Ashaie²

¹CUNY Hunter College, New York, NY, USA, ²Shirley Ryan AbilityLab, Chicago, IL, USA

Depression in people with aphasia (PWA) is often not assessed or treated clinically due to the language limitations of aphasia that restrict the use of most depression measures. Because of this, depression in this population may be underdiagnosed, despite the high prevalence of aphasia among stroke survivors. Thus, it is critical to investigate assessment measures that are available that can be used with people with aphasia to have a more accurate understanding of how depression impacts PWA. The present study analyzes and synthesizes current assessment methods used for depression in PWA and the extent to which such methods have been adapted to accommodate PWA.

17. The Context Adjustable Language Measure (CALM): A feasibility study

Kate Nealon¹ & Robert Marshall²

¹Kean University, Union, NJ, USA, ²University of Kentucky, Lexington, KY, USA

The Context Adjustable Language Measure (CALM) is a novel functional verbal communication measure for persons with aphasia (PWA). The CALM differs from published tests of functional communication by adjusting the wording of each item to make it salient and personally relevant. This study sought to provide objective evidence to support the feasibility of this procedure. Forty HC and 9 PWA were administered the CALM: half the test items adjusted/ half in generic form. Results revealed both HC and PWA groups produced significantly longer responses (MLU) and more content information units (CIU) for adjusted items than generic. Discussion highlights the potential benefits of this procedure.

18. Automated analysis of fluency behaviors in aphasia

David Fromm & Brian MacWhinney

Carnegie Mellon University, Pittsburgh, PA, USA

This study addresses the objective measurement of fluency in aphasia. A CLAN program, FLUCALC, was used to analyze four different discourse tasks from people with aphasia (PWA) and controls. Preliminary analyses from small pilot groups show larger proportions of sound fragments, phrase and word repetitions, phrase and word revisions, and filled pauses in the PWA group. Pause durations within and between utterances were also larger. In the final report, analyses of a larger groups will allow for statistical comparisons across discourse tasks and aphasia types. FLUCALC greatly increases the speed, efficiency, and reliability of measuring objective fluency behaviors in language samples.

19. Association between single-word reading and connected-text reading comprehension in persons with aphasia

Kimberly Smith & Jordan Lins

University of South Alabama, Mobile, AL, USA

Many studies have investigated oral single-word reading in persons with aphasia, however, few studies, have examined the association of oral single-word reading and reading comprehension of connected-texts. This is significant as comprehension is the goal of reading and single-word reading is often used for assessment. Pearson correlation was used to examine the association between single-word reading and connected-text reading comprehension for several measures. Significant associations were found depending on the word list. In particular, word lists targeting grammatical class, imageability/frequency, and morphology were more associated with comprehension than nonword reading.

20. Relationship of aphasia severity and anosognosia to inner speech perception in individuals with aphasia

Tessa Hedrick, Julianne Alexander, & Brielle Stark

Indiana University, Bloomington, IN, USA

Aphasia causes language impairments, but interestingly, some individuals with aphasia retain inner speech, at least at the single word level (e.g., during naming) 1,2. Inner speech can also take a narrative form, as a running monologue/dialogue throughout the day, which is what we empirically evaluate here for what we believe is the first time. Because of inner speech's relationship with language and self-awareness, our hypotheses is that inner speech preservation is inversely related to aphasia severity and anosognosia. We are interested in identifying who experiences inner speech, given inner speech's relationship with factors that have been noted to be important for aphasia recovery.

Virtual Roundtable

Virtual participants may register for one of two consecutive offerings of this session.

Thursday June 1, 2023

Self-disclosure of aphasia from the perspectives of people with aphasia, clinicians, and communication partners: Preliminary evidence and future directions (VIRTUAL)

Jennifer Mack¹, Taryn Malcolm², & Aviva Lerman³

¹University of Massachusetts, Amherst, MA, USA, ²Mercy College, USA, New York, NY, USA, ³Hadassah Academic College, Jerusalem, Israel

This roundtable session will focus on self-disclosure of aphasia. We will each provide a brief overview of our recent research on this topic, from the perspectives of people with aphasia (Taryn Malcolm), SLPs (Aviva Lerman), and unfamiliar communication partners (Jennifer Mack). We will facilitate an interactive virtual discussion in which discussants will be encouraged to share their perspectives on self-disclosure of aphasia and identify research priorities in this area. Topics will include cross-cultural differences in self-disclosure and clinical practices supporting self-disclosure (e.g., collaborative development of self-disclosure statements or scripts).

In-Person Roundtable Sessions

In person participants may register for any two 45-minute roundtable sessions.

Friday, June 2, 2023

1. We can walk the walk, but we don't talk the talk: A discussion on AAC implementation in subacute rehab
Aimee Dietz¹, Juhi Kidwai², & Chitrali Mamlekar³
¹Georgia State University, Atlanta, GA, USA, ²Southern Illinois University, Carbondale, IL, USA, ³Misericordia, Dallas, PA, USA

Location: Atlantic 4

Early in the rehabilitation process, physical deficits associated with stroke are promptly remedied with supports (e.g., wheelchairs) to ensure mobility when a person's ability to walk is limited. In stark contrast, people with aphasia are not typically provided augmentative and alternative communication (AAC) to ensure successful communication while their language is restricted until there is a plateau in response to usual care. The purpose of this roundtable is to (1) highlight these discrepancies and the subsequent adverse impact on the ability of people with aphasia to participate in their healthcare decision-making and (2) develop a workgroup to actively address these challenges.

2. Ecological momentary assessment in post-stroke aphasia: Pitfalls and promise
Erin Meier, Jack Hester, Ha Le, Leanna Ugent, Alexandra Reilly, Nathalie Mitchell, & Stephen Intille
Northeastern University, Boston, MA, USA

Location: Horizon Ballroom

Ecological momentary assessment (EMA) involves in-situ measurement of a behavior over time during everyday life. EMA has promise for capturing the impact of stroke on the lives of people with aphasia (PWA), yet EMA feasibility has not been thoroughly explored in PWA. In this roundtable, we will summarize prior EMA studies in stroke survivors, describe study design considerations for EMA studies in PWA, and discuss the benefits of and barriers to implementing EMA with PWA in research and clinical settings. Roundtable discussions will be interspersed with technology demonstrations and testimonials from PWA who participated in an ongoing study of smartwatch EMA of anomia.

3. Stroke and aphasia management in Africa: A discussion of current challenges and ways to move forward - **changed to VIRTUAL format**
Keren Kankam¹, Mawukoanya Theresa Sedzro¹, Abena Owusu Antwi², & Laura Murray¹

¹University of Western Ontario, London, Ontario, Canada, ²Korle-Bu Teaching Hospital, Accra, Ghana

Location: Attendee Hub

Stroke is an increasing public health concern in Africa. Due to limited resources, patients do not receive holistic care during any phase of stroke recovery. This roundtable discussion aims to overview the current status of management resources available to stroke patients and their families in Africa, with a focus on post-stroke aphasia care. Given the many challenges, including limited availability of speech-language

services, discussion will centre on approaches to move forward despite resource constraints to improve stroke and aphasia management for a better quality of life among those affected by stroke.

4. Treatment fidelity for a randomized controlled comparative effectiveness trial of two variants of Semantic Feature Analysis treatment for aphasia

Miranda Babiak¹, William Hula¹, Alyssa Autenreith¹, Mary Sears¹, Shannon Austermann Hula¹, Rob Cavanaugh², & Michael Walsh Dickey²

¹VA Pittsburgh Healthcare System, Pittsburgh, PA, USA, ²University of Pittsburgh, Pittsburgh, PA, USA

Location: Atlantic 8

Treatment fidelity, a key component of the design and conduct of intervention studies in aphasiology and healthcare generally, is defined as the strategies used to monitor and enhance the reliability and validity of behavioral interventions. The purpose of this paper is to describe the treatment fidelity procedures of an ongoing comparative effectiveness RCT of Semantic Feature Analysis, discuss the process by which these procedures were established, and provide an interim report of fidelity in treatment delivery. The discussion will focus on the balance between internal and external validity, especially as they relate to patient and clinician variability and autonomy.

5. Using & modifying restorative treatments for aphasia – clinician perspectives

Reva Zimmerman¹, Jessica Obermeyer², & Julie Schlesinger³, JoAnn Silkes⁴,

¹West Chester University, West Chester, PA, USA, ²University of North Carolina, Greensboro, NC, USA,

³Temple University, Philadelphia, PA, USA, ⁴San Diego State University, San Diego, CA, USA

Location: Atlantic 2

Aphasia researchers spend years developing and testing the efficacy of standardized, restitutive aphasia treatments. Practicing speech-language pathologists rely on treatment studies to inform their practice with people with aphasia; however, many standardized treatments are likely modified to meet the needs of clients and clinical settings while researchers have little insight into how and why treatments are altered. During this roundtable discussion, we will explore preliminary data from a clinician survey that provides much-needed information about the use and modification of standardized protocols, and the implications of these findings for aphasia research.

6. Generalization in aphasia treatment: Moving beyond “train and hope”

Jamie Mayer¹, Janet Patterson², Sarah Wallace³, Chaleece Sandberg⁴, Mary Purdy⁵, Laura Murray⁶, Jennifer Mozeiko⁷, & Elizabeth B. Madden⁸

¹Northern Illinois University, DeKalb, IL, USA, ²Veterans Affairs California Healthcare System, Martinez, CA, USA, ³University of Pittsburgh, Pittsburgh, PA, USA, ⁴The Pennsylvania State University, State College, PA, USA, ⁵Southern Connecticut State University, New Haven, CT, USA, ⁶University of Western Ontario, London, Ontario, Canada, ⁷University of Connecticut, Storrs, CT, USA, ⁸Florida State University, Tallahassee, FL, USA

Location: Atlantic Ballroom D

Generalization is a critical aspect of aphasia therapy. However, the terms and techniques for facilitation and measurement of generalization remain underspecified, leading to a lack of empirical support and clinical implementation. This roundtable discussion aims to (1) describe conceptualizations of generalization, (2) review and synthesize strategies that aim to foster generalization in both research and clinical contexts, (3) provide examples of how generalization principles may be embedded into behavioral treatment for persons with aphasia, and (4) engage roundtable participants in an intervention planning activity that incorporates generalization concepts and principles.

7. Patient-reported outcome measures: Is it about the difference?

Davetrina Gadson

Georgetown University, Washington, DC, USA

Location: Atlantic Ballroom A

Patient-reported outcome measures (PROM) capture the individual's perspective on values that are important to health-related quality of life (HRQL) without clinician interpretation. Given the racial disparities in clinician-reported outcomes, there is a need to understand communication impairments utilizing PROMs during the assessment process. The use of PROMs especially with Black SWA is necessary to understand the impact of the communication impairment on constructs related to burden, well-being, and social connectedness in stroke recovery. However, given the lack of normative data, is it always about the difference?

8. Examining ableism and aphasia through a health stigma and discrimination framework

Kristen Nunn¹, Victoria Bolowsky², & Ayelet Kershenbaum³

¹MGH Institute of Health Professions, Boston, MA, USA, ²Johns Hopkins University, Baltimore, MD, USA,

³Harvard University, Cambridge, MA, USA

Location: Atlantic Ballroom C

Ableism is the social prejudice against people with disabilities. For people with aphasia, ableism may manifest as discrimination stemming from the assumption that a language impairment makes one less competent. Such discrimination may contribute to social isolation and disempowerment, making it critical that clinicians and researchers work to disrupt ableist practices. This round table will provide an overview of a disability framework previously applied to stuttering; identify aphasia-specific examples of ableism and forms of ableism in aphasia treatment and research practice; and facilitate conversation around how clinicians and researchers can resist ableism within their practices.

9. ~~CANCELED~~ Promoting relearning in individuals with aphasia

Amy Ramage & Katelyn Lerner

University of New Hampshire, Durham, NH, USA

Rehabilitation for cognitive-language impairments following acquired brain injury requires relearning, as behavioral interventions train restorative or compensatory skills to improve performance. However, little is known about how the damaged brain relearns. We have learned about favorable brain-based biomarkers of recovery from acquired brain injury (ABI), but not how rehabilitation efforts lead to or enhance brain changes to result in recovery of function. Thus, a model of learning, both for neural and behavioral outcomes, is needed to inform approaches to rehabilitation and to optimize interventions.

10. Apragmatism: A diagnostic label for right hemisphere communication deficits

Alexandra Zezinka Durfee¹, Jamila Minga², Shannon M. Sheppard³, Melissa Johnson⁴, Ronelle Hewetson⁵, Petrea Cornwell⁵, & Margaret Blake⁶

¹Johns Hopkins Medicine, Baltimore, MD, USA, ²Duke University School of Medicine, Durham, NC, USA,

³Chapman University, Orange, CA, USA, ⁴Nazareth College, Rochester, NY, USA, ⁵Griffith University, Queensland, Australia, ⁶University of Houston, Houston, TX

Location: Atlantic 3

Communication changes are common following damage to the right hemisphere, but inconsistent and under-specified terms have been used to characterize such changes. Work by the International Right Hemisphere Collaborative has focused on systematically defining the term Apragmatism to label communication difficulties due to right hemisphere damage. In this roundtable, we will discuss common communication and cognitive changes following right hemisphere damage, the process for defining the term apragmatism for communication-specific deficits, why use of such a label would be beneficial, how to strengthen and disseminate use of the label, and various perspectives on the label defined thus far.

11. How can we improve access to recruitment and informed consent for people with aphasia?

Gretchen Szabo¹, Leslie Vnenchak², & Jacqueline Hinckley³

¹Adler Aphasia Center, Maywood, NJ, USA, ²University of Pennsylvania, Philadelphia, PA, USA, ³Nova Southeastern University, Fort Lauderdale, FL, USA

Location: Horizon Ballroom

The informed consent (IC) process, beginning with recruitment, is a critical component of research. Aphasia creates barriers to accessing the language-heavy IC process (Kagan & Kimelman, 1995). People with aphasia (PWA) are often excluded from stroke research (Brady et al., 2013; Shiggins, Ryan, et al., 2022). When PWA participate in research, it is unclear what strategies are used to support IC accessibility (Penn et al., 2008). The co-authors observed inconsistent use of available tools to support IC accessibility across research settings. Examples of and strategies for modifying IC for PWA will serve as a springboard to create shared knowledge and promote broader access to IC for PWA.

12. Precision medicine in aphasia therapy: Research that begins with clinical implementation in mind

Stacy Harnish¹ & JiYeon Lee²

¹The Ohio State University, Columbus, OH, USA, ²Purdue University, West Lafayette, IN, USA

Location: Atlantic 7

Clinicians are tasked with deciding which treatment techniques are best suited for a particular client, and how to modify treatments for feasibility during implementation. With few exceptions, research does little to provide guidance. The aims of the roundtable will be to 1) discuss the pros and cons of a shift in restorative treatment research toward guiding principles and their match with best candidates for response, based on profile of deficits and preserved abilities, as opposed to broad use of prescriptive or 'canned' treatments, and 2) generate principles and patient characteristics to study in future research.