

= 0.12-0.36). The most favorable reliability was observed in Craft Story 21 Recall – Delayed (ICC = 0.77), Letter Fluency (C, F, and L) (ICC = 0.74), Multilingual Naming Test (MINT) (ICC = 0.75), and Benson Complex Figure – Delayed (ICC = 0.79).

Conclusions: Even after accounting for the inherent limitations of this study (e.g., significant lapse of time between testing intervals), our findings suggest that the UDS v3.0 teleNP battery shows only modest relationships with its in-person counterpart. Particular caution should be used when interpreting measures showing questionable reliability, though we encourage further investigation of remote vs. in-person testing under more controlled conditions.

Categories: Teleneuropsychology/ Technology

Keyword 1: teleneuropsychology

Keyword 2: mild cognitive impairment

Keyword 3: dementia - Alzheimer's disease

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98 On Combining In-Person and Remote National Alzheimer's Coordinating Center (NACC) Uniform Data Set (UDS) data

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Objective: Although remote neuropsychological assessments have become increasingly common, current research on the reliability and validity of scores obtained from remote at-home assessments are sparse. No studies have examined remote at-home administration of the National Alzheimer's Coordinating Center (NACC) Uniform Data Set (UDS) even though this battery is being used to track over 45,000 participants over time. This study aimed to determine whether remote UDS scores can be combined with in-person data by assessing whether rates of score changes over time (i.e., reliability) differed by modality and whether remote and in-person scores converge (i.e., validity).

Participants and Methods: Data for UDS visits conducted from 09/2005 to 12/2021 from 43

Alzheimer's Disease Research Centers were examined. We identified 311 participants (254 cognitively unimpaired, 7 impaired – not mild cognitive impairment, 25 mild cognitive impairment, 25 dementia) who completed 2 remote UDS visits 0.868 years apart (SD = 0.200 years). First, initial remote scores were correlated with most recent in-person scores. Second, we examined whether rates of change differed between remote and in-person assessments. Repeated-measure one-way ANOVA were used to compare rates calculated from the same individual from remote versus in-person assessments. We additionally identified a demographically- and visit-number-matched group of 311 participants with in-person UDS visits given that all remote visits occurred after in-person visits; one-way ANOVAs were used to compare remote rates to rates from in-person assessments from the matched in-person group. Finally, accuracy of remote scores were assessed by quantifying the difference between the actual remote scores and predicted scores based on repeated in-person assessments. These residual values were then divided by the maximum score to form error rates.

Results: Remote UDS score on MoCA-blind, Craft story immediate and delayed recall, digits forward, digits backward, phonemic fluency (F, L, F + L), and semantic fluency (animals, vegetables, animals + vegetables) were all highly correlated (all p s < 0.001) with scores obtained from preceding in-person assessments. At the group level, within-subject comparisons between remote and in-person rates of change were not significantly different for 7/11 tests; between-subject comparisons were not significantly different for 10/11 tests. Vegetable fluency had slightly reduced rates of change with remote assessment compared to in-person assessments. Critically, remote scores were consistent with predicted scores based on the trajectory of each subject's in-person assessments with group mean error rates ranging from 0.7% (Craft Delayed Recall) to 3.9% (Phonemic fluency – F).

Conclusions: Our results demonstrate adequate reliability and convergent validity for remotely administered verbally based tests from the NACC UDS battery. Importantly, our findings provide some support for combining remote and in-person scores for studies that transitioned to remote testing due to COVID-19. However, future research is needed for tests with visual stimuli that assess visual memory, visuospatial function, and aspects of executive function.

Categories: Teleneuropsychology/ Technology

Keyword 1: teleneuropsychology

Keyword 2: neuropsychological assessment

Keyword 3: test reliability

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Lifetime Achievement Award in Research Presentation

Speaker: Vicki Anderson

Is research only about the science? A career studying early brain insult

4:30 - 5:25pm

Thursday, 2nd February, 2023

Pacific Ballroom E

Abstract:

The research landscape has changed dramatically over recent decades with the ever-growing opportunities facilitated by increasingly sophisticated technologies and statistical approaches, and complexity of governance and funding requirements, coupled with a relatively recent acknowledgement of the need to consider the impact of what we study and whether it addresses concerns that are shared by patients and consumers.

Over the past 20 years, the Melbourne Children's Brain and Mind team has followed children from the time of their brain injury as they have moved from infancy and childhood, through adolescence and into adulthood. With a backdrop of the myriad of changes in research approaches, over the life of this study, this presentation will describe the challenges and findings generated from our work and consider how key research questions have changed, whether the work has been impactful at a scientific and if it has impacted the outcomes of brain injury survivors.

Finally, given the critical importance of researchers, at any stage of their career, in the successful conduct of programs such as ours, learnings regarding ingredients supporting successful research careers will also be explored.

5 min. break

5:25 - 5:30pm

Thursday, 2nd February, 2023

Plenary B: The Pons is a Significant Neural Correlate of Affective Processing

Presenter: Tatia M.C. Lee

5:30 - 6:30pm

Thursday, 2nd February, 2023

Pacific Ballroom A

Abstract & Learning Objectives:

Research on the role of the Pons in affective processing has been scarce. Recent animal work has shown that the direct projection from the eyes to the dorsal raphe nucleus modulates affective behaviours. Our previous human work has confirmed a functionally analogous pathway between the optic chiasm and the Pons, which facilitates the processing of negative affective information. Our other studies have further identified that the Pons (1) works with the distributed corticolimbic system to shape an individual's affective states and reactivity and (2) responds to short-term meditation training to modulate affective processing. These findings offer significant insight into the role of the Pons in affective processing and regulatory mechanisms.

Upon conclusion of this course, learners will be able to:

1. Discuss the functional roles of the pons in affective processing
2. Recognize that the pons is a significant neural correlate of affective processing
3. List major neural correlates of the affective processing network

Student Liaison Committee (SLC) Student Social Event

8:00 - 9:30pm

Thursday, 2nd February, 2023