

RNS ($M=49.75$ $SD=11.62$; $t(3)=-2.01$, $p = 0.069$). No significant differences were evident on seizure worry, energy/fatigue, medication effects, and social functioning domains of QoLiE-31 before and after RNS treatment.

Conclusions: These pilot study results suggest low levels of depression with this population post-RNS implantation. Additionally, there is preliminary evidence to suggest improved patient-rated cognitive functioning and overall quality of life. While this is a small study population, the results have important implications for patients with intractable epilepsy, even with those for whom surgical resection may not be possible. Future studies with large enough samples to examine moderating and mediating factors to mood and quality of life changes post-RNS will be important.

Categories: Neurostimulation/Neuromodulation

Keyword 1: neurostimulation

Keyword 2: epilepsy / seizure disorders - surgical treatment

Keyword 3: mood disorders

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76 More Than One Way to Skin a Cortex: A Meta-Analysis Comparing Neuroimaging and Personality Testing

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Objective: Neuroimaging is commonly used in medicine to identify neuropathology and is widely considered to be a reliable and valid diagnostic modality. Personality testing is commonly used to identify psychopathology but is generally perceived to have less clinical efficacy than neuroimaging. The purpose of the current study was to compare the clinical efficacy of personality tests to neuroimaging using meta-analysis.

Participants and Methods: Multiple databases were searched for original research utilizing either personality tests or neuroimaging. The search interval covered articles published within the last 10 years. Studies were selected based on the criteria of having a clinical group and a healthy control sample with a reported diagnostic outcome. For this meta-analysis, neuroimaging studies focusing on diagnostic utility for Alzheimer's dementia were included. Personality testing studies were included if they broadly reported a clinical outcome, due to fewer studies in this area. Studies were coded using a complex multi-comparison, outcome, and subgroup schema, and were analyzed under random-effects modeling.

Results: Out of the 240 studies identified for the personality domain, 13 were selected for the meta-analysis. Out of 6522 studies identified for the neuroimaging domain, 21 studies were selected for the meta-analysis. Results indicated a significant difference between the neuroimaging and personality testing effect sizes. Specifically, neuroimaging [Hedge's $g = -1.623$, 95% CI = -1.973 to -1.273 , $p < .001$] yielded a greater effect size in comparison to the personality tests effect size [Hedge's $g = -0.658$, 95% CI = -0.751 to -0.565 , $p < .001$]. The effect size for clinical utility of neuroimaging was close to double that of the effect for personality tests diagnostic utility.

Conclusions: Findings from this meta-analysis showed a significant difference in the effect sizes obtained from neuroimaging studies compared to the studies of personality tests. While both neuroimaging and personality testing demonstrated meaningful clinical utility, neuroimaging studies had a larger effect size.

Categories: Other

Keyword 1: personality

Keyword 2: neuroimaging: functional

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77 Comparing the Performance of Videoconference and In-Person Neuropsychological Test Administration

for People Living with Younger Onset Neurocognitive Disorders

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Objective: People living with younger onset neurocognitive disorders (YOND) experience significant delays in receiving an accurate diagnosis. Although neuropsychological assessment can help assist in a timely diagnosis of YOND, several barriers limit the accessibility of these services. Utilising teleneuropsychology may assist with the service access gap. This study aimed to investigate whether similar results were found on neuropsychological tests administered using videoconference and in person in a sample of people living with YOND.

Participants and Methods: Participants with a diagnosis of YOND were recruited from the Royal Melbourne Hospital (RMH) Neuropsychiatry inpatient ward and outpatient clinic, and through community advertising. A randomised counterbalanced cross-over design was used where participants completed 14 tests, across two administration sessions: one in person and one using videoconference. There was a two-week interim between the administration sessions. The videoconference sessions were set up across two laptops using the Healthdirect Video Call platform and Q-Global. Repeated measures t-tests, intraclass correlation coefficients (ICC) and Bland-Altman plots were calculated to compare results across the test administration sessions.

Results: Thirty participants ($M_{Age} = 60.23$, $SD = 7.05$) completed both sessions. Huntington's disease was the most common YOND diagnosis ($n = 8$), followed by Alzheimer's disease ($n = 6$), mild cognitive impairment ($n = 6$) and frontotemporal dementia ($n = 4$). Preliminary results from the current study indicate no statistically significant differences, and small effect sizes, between the in-person or videoconference sessions. ICC estimates range from .69 to .97 across neuropsychological tests.

Conclusions: This study provides preliminary evidence that performances are comparable between in-person and videoconference-

mediated assessments for most neuropsychological tasks evaluated in people living with YOND. Should further research confirm these preliminary results, findings will support the provision of teleneuropsychology to address the current service gaps experienced by people with YOND.

Categories: Teleneuropsychology/ Technology

Keyword 1: teleneuropsychology

Keyword 2: dementia - Alzheimer's disease

Keyword 3: neuropsychological assessment

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78 Preliminary Exploration of a Novel Speech Analysis Algorithm to Detect Cognitive Impairment in a Spanish Population

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Objective: Early detection of mild cognitive impairment (MCI) and dementia is crucial for initiation of treatment and access to appropriate care. While comprehensive neuropsychological assessment is often an intrinsic part of the diagnostic process, access to services may be limited and cannot be utilized effectively on a large scale. For these reasons, cognitive screening instruments are used as brief and cost-effective methods to identify individuals who require further evaluation. Novel technologies and automated software systems to screen for cognitive changes in older individuals are evolving as new avenues for early detection. The present study presents preliminary data on a new technology that uses automated linguistic analysis software to screen for MCI and dementia.

Participants and Methods: Data were collected from 148 Spanish-speaking individuals recruited in Spain ($M_{Age} = 74.4$, $M_{Education} = 12.93$, 56.7% females) of whom 78 were diagnosed as cognitively normal [CN; $M_{MMSE} = 28.51$ (1.39)],