

collapsed across PPA subtypes. Incidental encoding ($ps = <.01$), effortful encoding ($ps < .05$), and delayed recall ($ps < .01$) declined for both words and shapes over time. Copy and recognition of words ($ps < .05$), but not shapes declined over time.

Conclusions: The current results are consistent with prior findings of relative preservation of memory for nonverbal compared to verbal material in PPA as measured by 3W3S, especially in the semantic subtype. Learning and recall of words and shapes declined over time in all groups, whereas there was selective decline in copy and recognition of words compared to shapes. These results provide evidence of differential patterns of decline in certain aspects of memory over time in PPA and highlight the relative preservation of memory in this language-focused dementia even over time.

Categories: Neurodegenerative Disorders

Keyword 1: neuropsychological assessment

Keyword 2: aging disorders

Keyword 3: language: aphasia

Correspondence: Janelli Rodriguez, Northwestern University Mesulam Center for Cognitive Neurology and Alzheimer's Disease, janelli.rodriguez@northwestern.edu

46 Intrusions in Verbal Fluency Tasks in Mild Cognitive Impairment and Dementia: A Longitudinal Analysis

Layaly Shihadeh^{1,2}, Monica Rosselli^{1,2}

¹Florida Atlantic University, Boca Raton, Florida, USA. ²Florida Alzheimer's Disease Research Center, Miami, Florida, USA

Objective: Research shows intrusions in memory tests can predict cognitive impairment in abnormal aging. However, there still is a need for additional research regarding the association of intrusions in verbal fluency tasks and clinical diagnosis of mild cognitive impairment, and dementia. The aim of this research is to determine if there is an association between intrusion totals in verbal fluency tasks and diagnosis, longitudinally (across 3 years), if there are significant differences between category and phonemic fluency tasks in intrusion total scores, and if progression from cognitively normal (CN) to mild cognitive impairment (MCI)

or dementia and from MCI to dementia can be indicated through differences in intrusion scores.

Participants and Methods: Participants were recruited from the Memory Disorders Center at Wien Center for Alzheimer's Disease and Memory Disorders at Mount Sinai Medical Center in Miami, Florida to take part in the ongoing 1Florida Alzheimer's Disease Research Center (ADRC) project. At baseline, participants had an average of 15 years of education ($M = 15.00$, $SD = 3.65$), were an average of 72.24 years old ($M = 72.24$, $SD = 7.99$), and were 62.93% female. At baseline (Visit/ year 1), there were 88 CN, 229 MCI, and 58 dementia participants. Participants were asked to complete Categorical and Phonemic verbal fluency tasks in which correct words said and intrusions were collected. Intrusion totals were quantified as the sum of intrusions within each subsection of the tasks (i.e., fruits, vegetables, and animals for the category; F, L, A, S for phonemic). Intrusion totals and correct words were analyzed across diagnostic groups and progressor vs. non-progressor groups.

Results: Results indicated that intrusions are significantly associated with diagnosis in Phonemic fluency tasks, however, this was not the case for Category fluency tasks. Higher phonemic fluency task intrusions were associated with more severe cognitive decline. In progressor versus non-progressor groups there were no significant differences in intrusion totals. Lower correct scores for category and phonemic fluency tasks were found to be significantly associated with increased severity of diagnosis. Lower correct scores also significantly predicted progressor classification. **Conclusions:** These findings suggest possible association of higher intrusion errors in verbal fluency tasks with more severe cognitive decline. Although these indications were significant, further research exploring intrusions and cognitive diagnosis are still needed.

Categories: Neurodegenerative Disorders

Keyword 1: neuropsychological assessment

Keyword 2: aging disorders

Keyword 3: cognitive neuroscience

Correspondence: Layaly Shihadeh; Florida Atlantic University; lshihadeh2017@fau.edu

47 Assessing the Feasibility of Cardiorespiratory Exercise During Functional MRI