Single Presenter Proposals

Submitters are asked to indicate whether they prefer a spoken paper, a poster, or either format. Spoken papers for the plenary sessions must be given by an individual with a PhD; the designated presenter (if accepted for this format) should be indicated. (Note: roughly 90% of individual presentations are given in poster format).

The abstract can be up to 250 words in length.

Single presentation proposals are due by **November 1, 2019**. We will notify submitters as to acceptance of their proposal by **December 15, 2019**, including the specific date/time designated for the presentations.

Preview Start **Presentation Title *** Relational Integration and Associative Memory Deficits in Older Adults Please use the appropriate character case for your title, including using both upper and lower case letters and capitalizing the first letter of all major words. -Presenter First Name * Taylor Middle Initial Last Name * James **Primary Affiliation *** Georgia Institute of Technology **Secondary Affiliation** Name & Affiliation as it will appear on your badge * Taylor James, Georgia Tech Email Address * email@gatech.edu Is this presenter also an author? * Yes No -Author Please list all authors in order using the following format: Author Name, Affiliation (separated by a comma). One author per field. If an author is not listed in this field, the Presenter will be listed as the first and only author. Author's Name, Affiliation Taylor James, Georgia Tech Is this Author also the presenter? * Are there additional Authors? * • Yes Second Author Author's Name, Affiliation Audrey Duarte, Georgia Tech Is this Author also the presenter? * Yes Are there additional Authors? * • Yes • No

Abstract *

The anterior prefrontal cortex (aPFC) is believed to play a critical role in integrating the outputs of lower-order processes, such as evaluations of item or interitem properties. The high-order integration functions attributed to the aPFC have been shown to support complex reasoning. but the region's role in episodic memory is less well understood. Emerging data suggest high-order PFC functions may be particularly susceptible to the effects of age and may contribute to older adults' associative memory impairments. It is currently unknown how aging interferes with aPFC operations necessary for integrating multiple relations for episodic encoding and retrieval. We investigated this issue in the current fMRI study. Young and older adults were presented with an occupation and an object and were asked to judge how likely the two were to interact, either in general or within the context of a given scene. When provided with a scene, participants needed to consider and integrate the distinct relations between the three items to reach a decision – a task dependent on aPFC functions. fMRI data were collected during encoding, and memory for object-occupation pairs and associated scenes was tested outside of the scanner. Results indicated that both groups demonstrated a schema benefit, where likely pairs were better remembered than unlikely pairs. Older adults exhibited worse memory performance than the young overall but particularly for the scenes. Recruitment of aPFC was reduced in older adults, which could indicate difficulty engaging the necessary operations to encode the scene-occupation-object associations as an integrated whole.

Up to 250 words

Preview

Keyword 1 *
Associative Memory ▼
Please select your first keyword. If you do not see a specific keyword, please select "Other"
Keyword 2
Neuroscience: Functional ▼
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Keyword 3
- None - ▼
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Keyword 4
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Keyword 5
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