

for action-related pairs is found in both age groups. Conclusively, unitization by action relationships enhances associative memory in both age groups, but by different mechanisms. Younger adults seem to rely more on recollection for the associations, whereas older adults show enhanced reliance on associative familiarity.

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Talking about the past: A way to stimulate episodic memory development in preschoolers

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Introduction: For preschool-aged children, the development of episodic memory is of paramount importance. Although this development has been strongly linked with brain maturation (Casey, Tottenham, Liston, & Durston, 2005), environmental influences – such as parental reminiscing – also seem to play a role. Indeed, some results have suggested that elaborative parental reminiscing style (i.e., frequent, descriptive and collaborative conversations about the past) promotes children's episodic memory performance (Langley, Coffman, & Ornstein, 2017). **Aim:** By means of a nine-month longitudinal study, we explored what specific characteristics of parental reminiscing could predict 3- to 5-year-old children's episodic memory performance ($n = 57$). **Methods:** We analyzed parent-child discussion about a prior standardized event (i.e., to assess reminiscing style) and presented children with a story recall task (i.e., to assess episodic memory). **Results:** Backward stepwise regression analyses conducted on participants' memory score revealed that, at the time of the first evaluation (T1), children with better episodic memory performance have parents who discuss the memory of the past event in greater details. Furthermore, we found that parents who evoked more contextual information about the past events and adopted a more metacognitive speech (i.e., discussion about one's own memory operations) (T1) have children with better memory performance at the follow-up (T2). **Discussion:** Our results confirm that discussing the past in a more structured, detailed and metacognitive manner could have a positive influence on children's episodic memory development. In this line of research, a next step would be to examine whether differences in parental reminiscing style may affect children's metacognitive development.

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Common neural patterns for serial order coding in working memory, number and letter domains: A multi-voxel pattern analysis approach

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Background – The retention of serial order information allows for the structured encoding and maintenance of the sequential order of events and stimuli (Attout & Majerus, 2018). It's a fundamental component of working memory strongly associated with numerical and alphabetical abilities and critical for success in many different cognitive tasks. The codes used to represent serial order remain however poorly understood.

Aims – By using a functional neuroimaging approach (fMRI), we assessed the hypothesis that serial order information is coded using domain general ordinal representations that support serial order coding also in other domains characterized by sequential processing such as numbers and letters.

Methods – Twenty-five healthy young adults were invited to perform a set of four tasks in a 3T MRI scanner. The tasks were comprised of three ordinal judgement tasks (alphabetical, numerical and verbal working memory tasks) with further manipulation of ordinal distance effects, and a luminance comparison control task.

Results – Multi-voxel pattern analyses (MVPA), both at the whole brain level and in regions-of-interest within the parietal cortex, revealed robust ordinal distance effects for all tasks as neural patterns associated with high versus small ordinal distances could be reliably identified within each task. Critically, MVPA further showed greater-than-chance-level classification when predicting ordinal distance between tasks. Luminance distance in the control task could not be decoded by ordinal distance neural patterns, indicating that the results are specific to ordinal processing, and not to distance per se.

Conclusion – These results provide support for theoretical accounts considering the existence of domain general serial order coding.

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Resting EEG correlates of long-term memory performance after repeated testing practice

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