# MULTIMODAL BENEFIT FOR LOW-LEVEL VISUAL WORKING MEMORY

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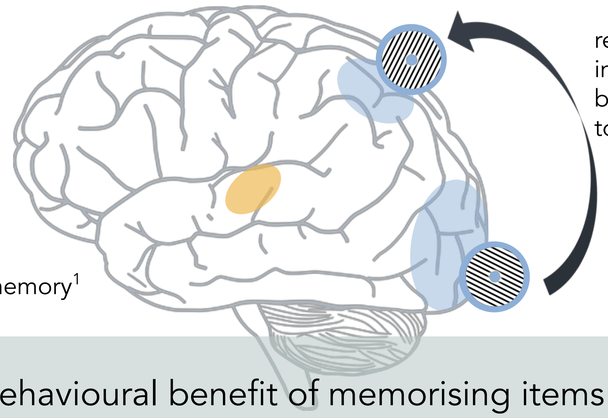
## Background



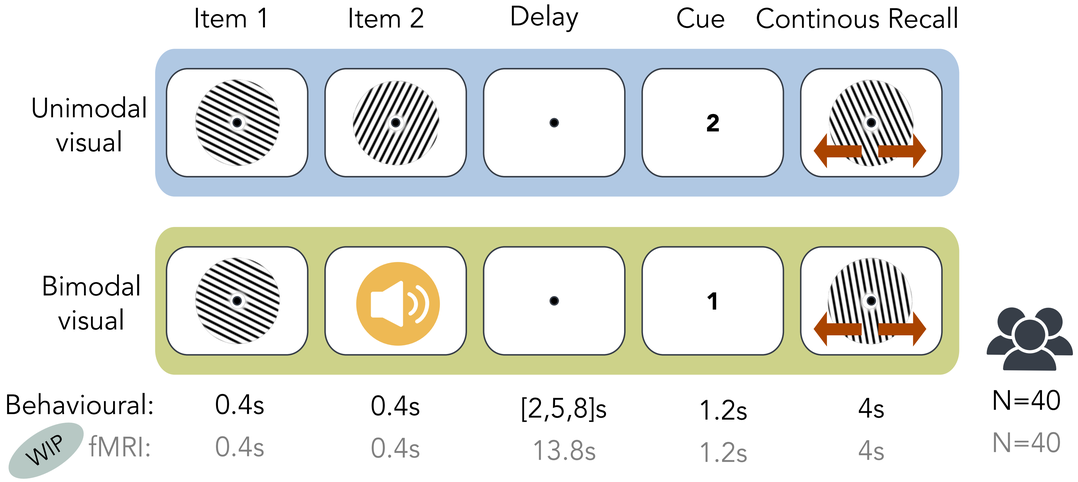
less interference in sensory cortices, when item from different modalities are maintained in memory[1]

reducing interference in visual cortex by allocating information to anterior regions

Is there a behavioural benefit of memorising items from different modalities over items from the same modality?

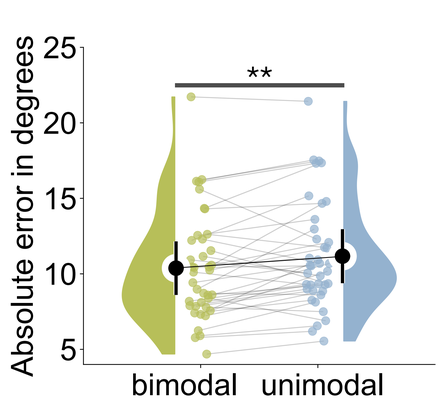
## Methods

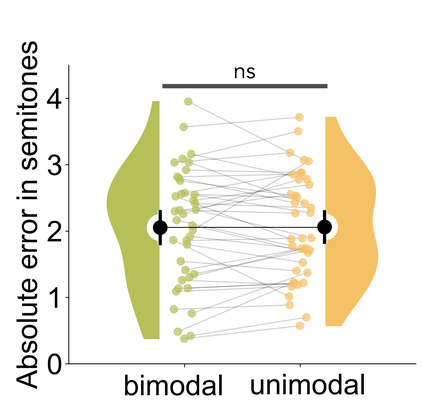
2 (target-modality: visual, auditory) x 2 (non-target modality: visual, auditory) Design



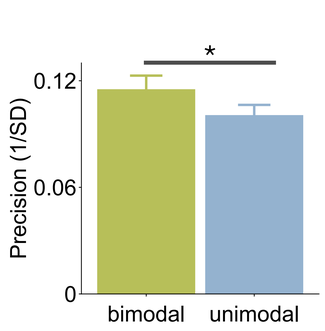

References: [1]Cohen et all., PNAS, 2014; [2]Lee et al., Nat. Neuroscience, 2013

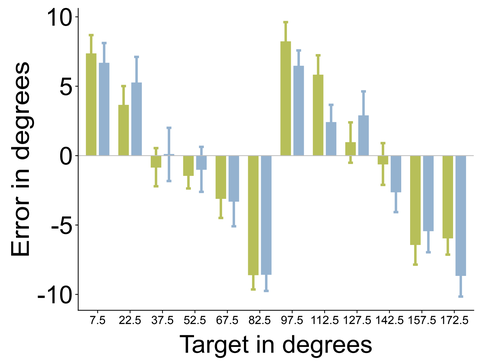
## Lower error in bimodal condition for visual items

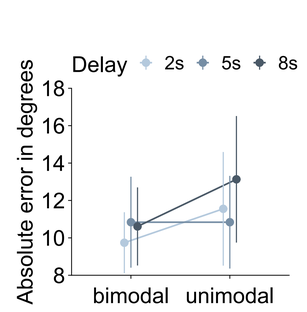



## Reduction in precision due to allocation[2] or interference of items?




## Conclusion

Neuroimaging results needed to disentangle the behavioural benefit in bimodal working memory for low-level visual stimuli. Reduced precision could indicate either allocation or interference of items.