

Emotionality impairs memory for associations

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Abstract: The neural mechanism implicated in the emotional memory enhancement is amygdala modulation of hippocampal learning. However, most emotional memory studies test memory for items only. Because memory for associations is hippocampal-dependent, one would predict an even greater emotional enhancement for association memory than for item memory. Touryan et al. (2007) found emotionality impaired incidental association learning between peripheral neutral objects and central emotional scenes, despite enhanced memory for the emotional scenes themselves. Here we ask whether this detriment might turn into an enhancement effect for associative memory, a hippocampal-dependent memory function, if the associated information is central to the task and association learning is intentional. Instead we found that the detrimental effect holds even in this stronger test of the amygdala-hippocampal circuit, suggesting that amygdala enhancement of hippocampal function can be overridden by a bias to process emotional items at the expense of associations.