

IGSN - SYMPOSIUM

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Effects of stress on cognitive function

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Stress shapes long-term memories of real-life episodes

Memories of stressful episodes appear more accurate, vivid, and detailed compared to neutral memories. To understand how stress shapes the memory of the stressful episode itself, we ran an experiment where we monitored the effect of stress on encoding, early, and long-term systems consolidation. Participants experienced twelve distinct, standardized real-life episodes that were accompanied by two types of experimenters: Team A was friendly and tried to make episodes 1-3 and 10-12 as agreeable as possible for the participants. The episodes 4-9 with Team B were friendly in half of the participants and stressful in the other half.

On the next day and after 8 months, participants underwent an fMRI scan while remembering the episodes allowing for a quantification of the involvement of brain regions in the retrieval process and of the representations of the episodes. Finally, we conducted an autobiographical memory interview (AMI) to measure the accuracy and richness of detail of the memories. In my talk I will give an overview of the most interesting results that we found so far and present our take on how emotional memories differ from neutral memories.

Host:

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