

Supplementary Information for:

False memories in the field: impact of substance intoxication and sleep restriction on false memory formation

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This PDF file has been created to keep the main text as concise as possible and includes:

Additional analyses

Additional limitations

Additional analyses

To check for potential relations between alcohol levels and our outcome measures from both paradigms, we analyzed the correlations between breath alcohol concentration (BrAC) in those who had a BrAC > 0.00 % ($n = 114$) and all 8 DVs. To correct for multiple comparisons, an alpha level of .05/8 was adopted ($\alpha = .006$). There were no statistically significant correlations (all p values > .10)

Limitations

A related caveat regarding participants' non-alcoholic substance use was the apparent discrepancy between objective findings (i.e., saliva tests) and self-report: 86% indicated not having used any substances whereas 41% participants were positive for a non-alcoholic substance. It is not entirely clear how to explain this, but some of this discrepancy might stem from memory issues (e.g., forgetting). However, other explanations could stem from the facts that i) often very small concentrations were detected, so perhaps the substance was taken the day before, ii) psychoactive medication was detected, which people would unlikely report as drug use, and iii) reluctance to be honest. Another limitation was that the implantation required unsolicited acting on behalf of the experimenter, therefore introducing extra variability and potentially varying levels of convincingness. Future research on implanting memories for recent events could add, for example, imagination procedures to increase the level of suggestion.