

You are enjoying this poster: Investigating hypnosis as a tool for emotion regulation during fMRI

Benjamin M. Silver, Faustine Corbani, Philip R. Muskin, Lila Davachi, Kevin N. Ochsner

INTRODUCTION

We investigated the impacts of hypnotically-induced relaxation on emotion regulation and on functional connectivity (FC) within related brain networks.

Q1: Does hypnotically-induced relaxation differentially alter brain networks?

H1A: Altered FC in the default mode network

H1B: Altered FC in attention and control networks

Q2: Do altered brain networks predict subsequent affective responses and emotion regulation?

H2A: Differences in emotional reactivity

H2B: Differences in mindful regulation

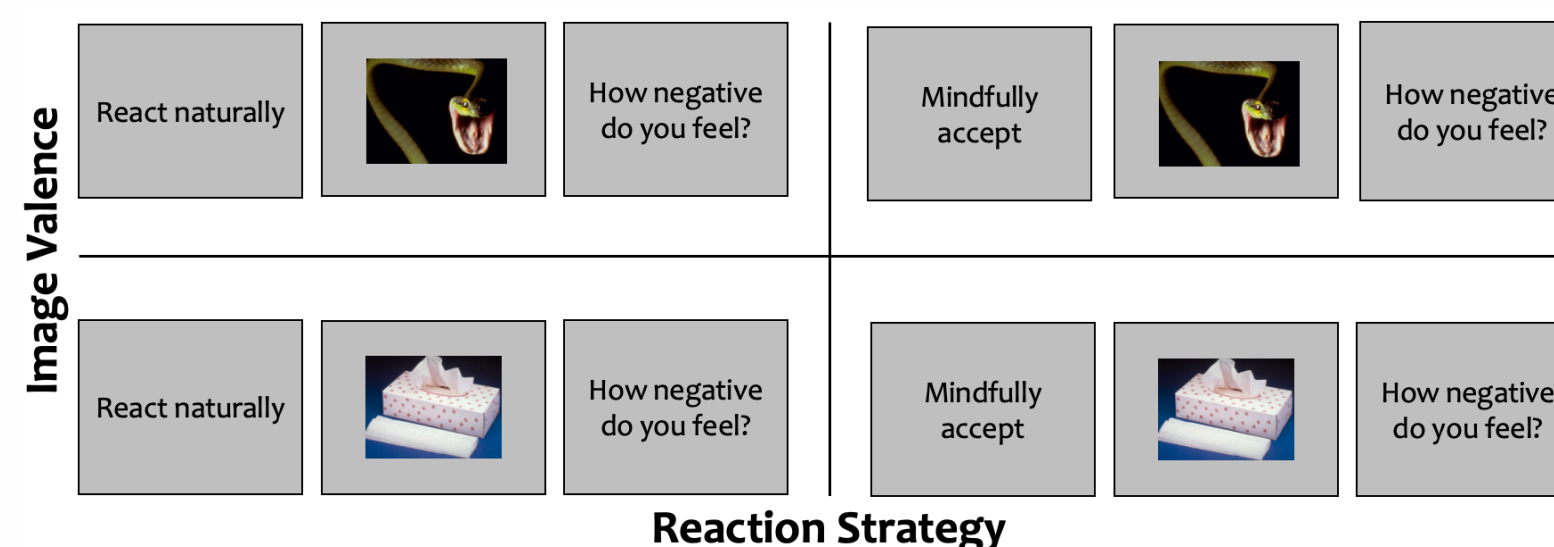
METHODS

Participants

Hypnosis	Nature	Control	Total
19	20	19	58

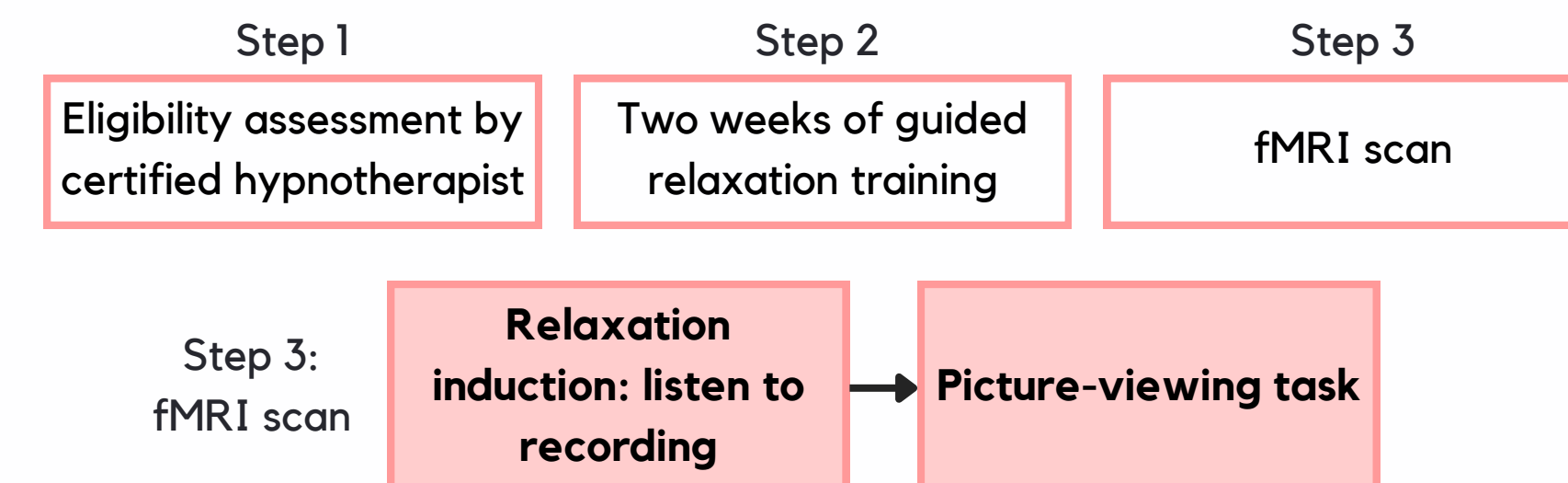
Participants in the Hypnosis group listened to a hypnotic induction recording from a certified hypnotherapist. The Nature group listened to nature sounds, and the Control group did not listen to any recording.

Mindfulness task

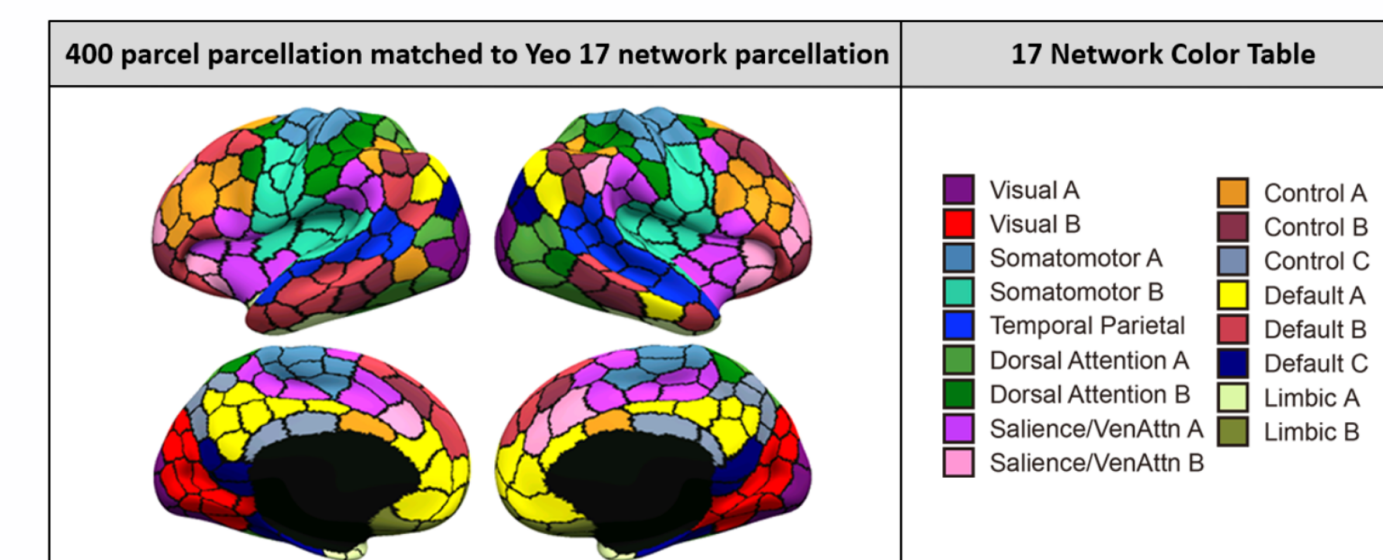


Participants viewed negative and neutral images, and were instructed to either react naturally or to mindfully accept before providing negative affect ratings.

Procedures

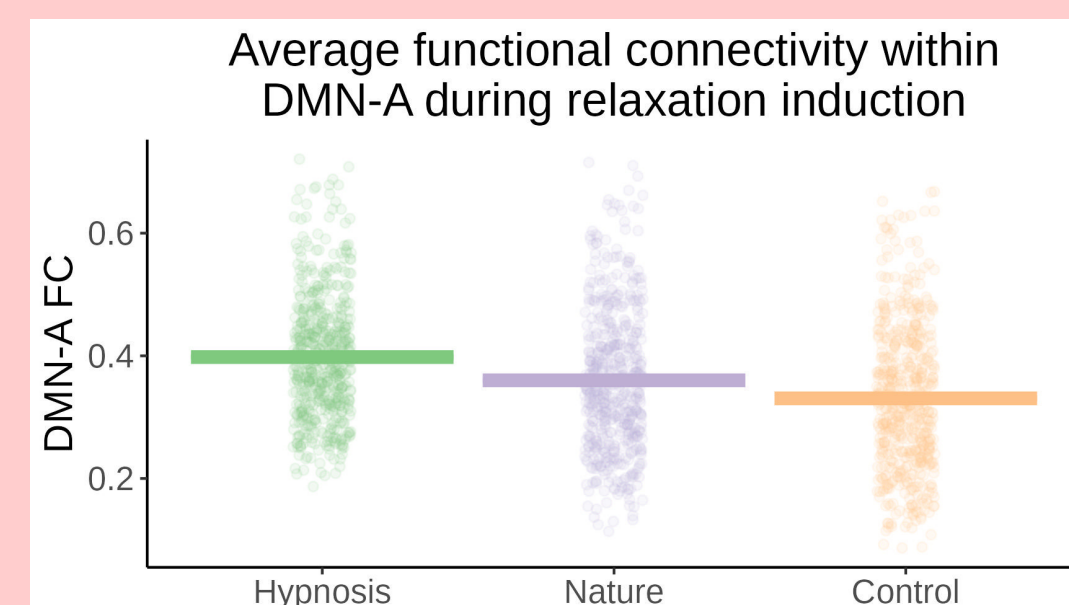


fMRI analyses

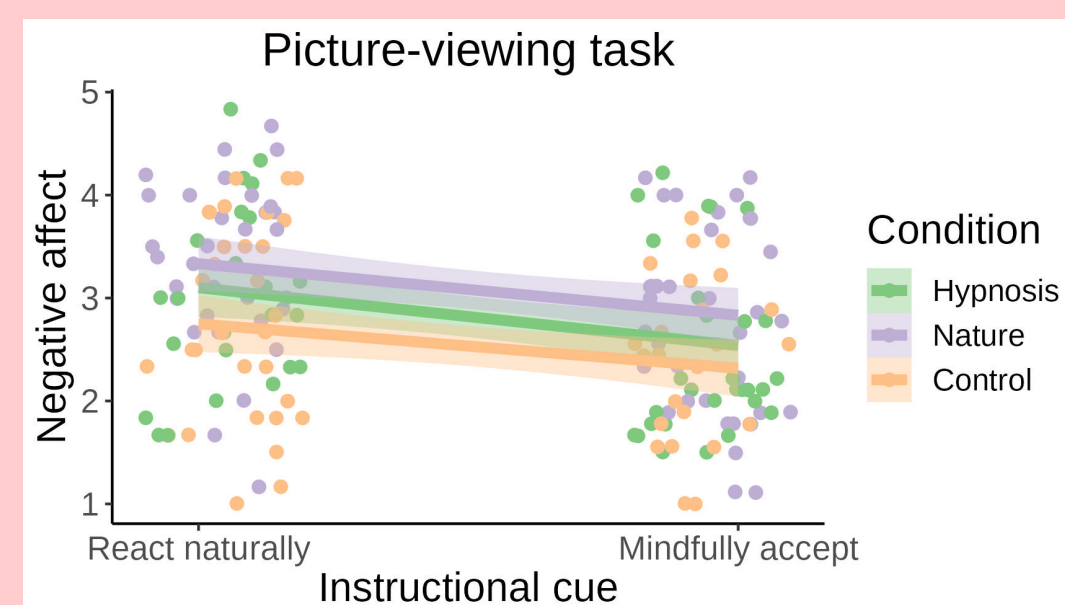


We conducted a between-groups comparison of within-network FC during the relaxation induction, using the Schaefer and Yeo parcellations.

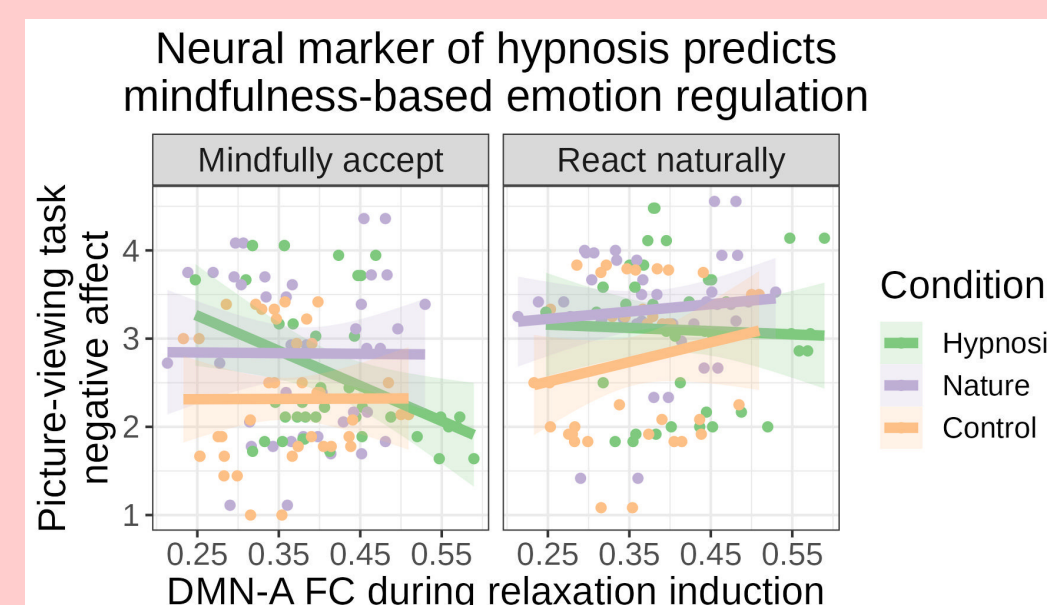
RESULTS



Q1 results: Functional connectivity in the DMN was higher during hypnotic induction than when listening to nature sounds ($B = 0.07$, $p = 0.003$).



Q2 results: Participants reported lower negative affect when instructed to be mindful ($B = -0.28$, $p = 0.005$), but there were no differences between groups.



Q2 results: Higher DMN-A functional connectivity during hypnotic induction predicted lower negative affect when instructed to be mindful ($B = -3.98$, $p = 0.013$).

CONCLUSIONS

Hypnotically-induced relaxation elicits greater FC in parts of the DMN.

Individuals who experience higher FC during induction also exhibit better subsequent emotion regulation.

SEE MORE



bms2202@columbia.edu
@bnjmnsivr
benjamin-silver.com