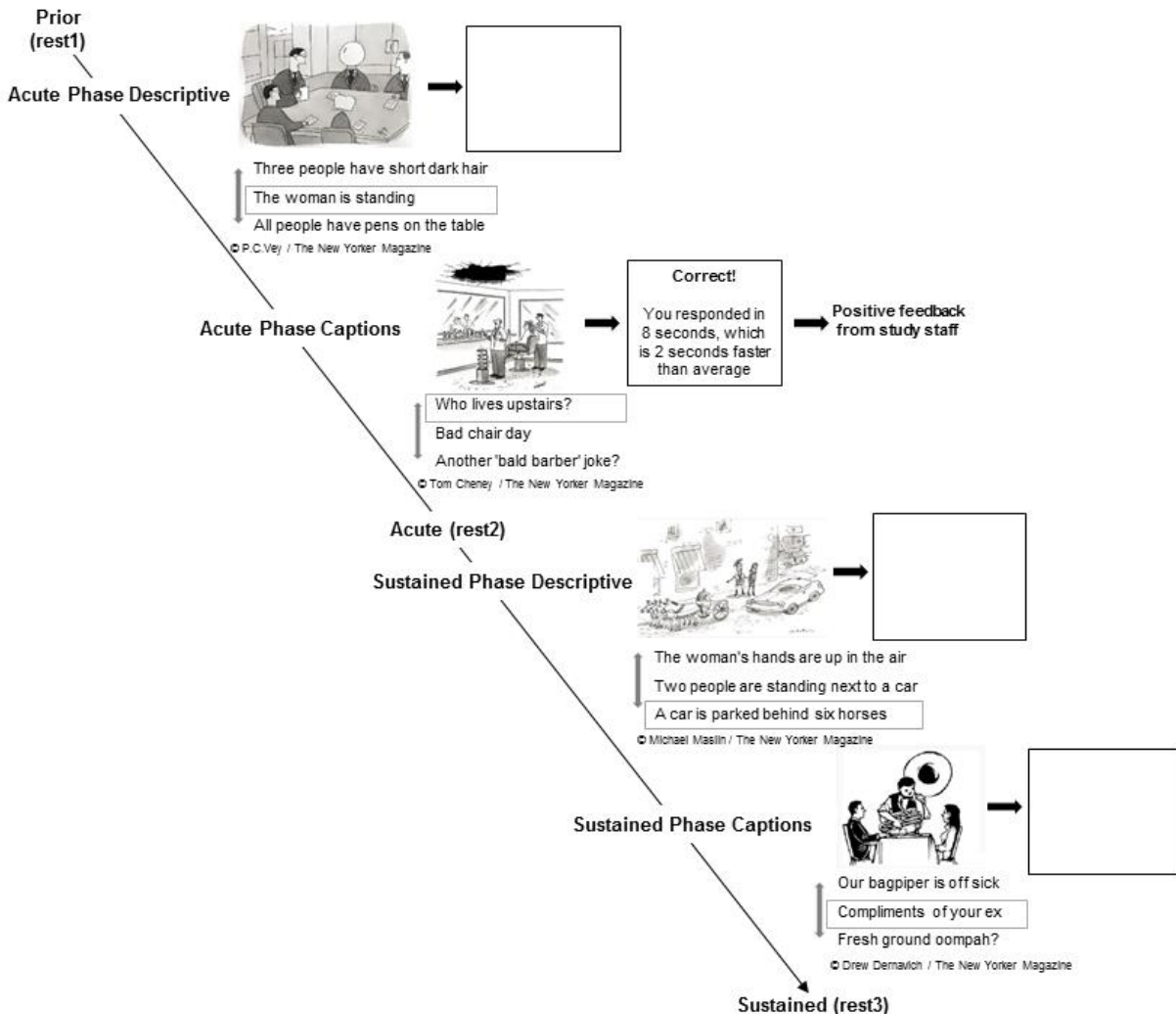


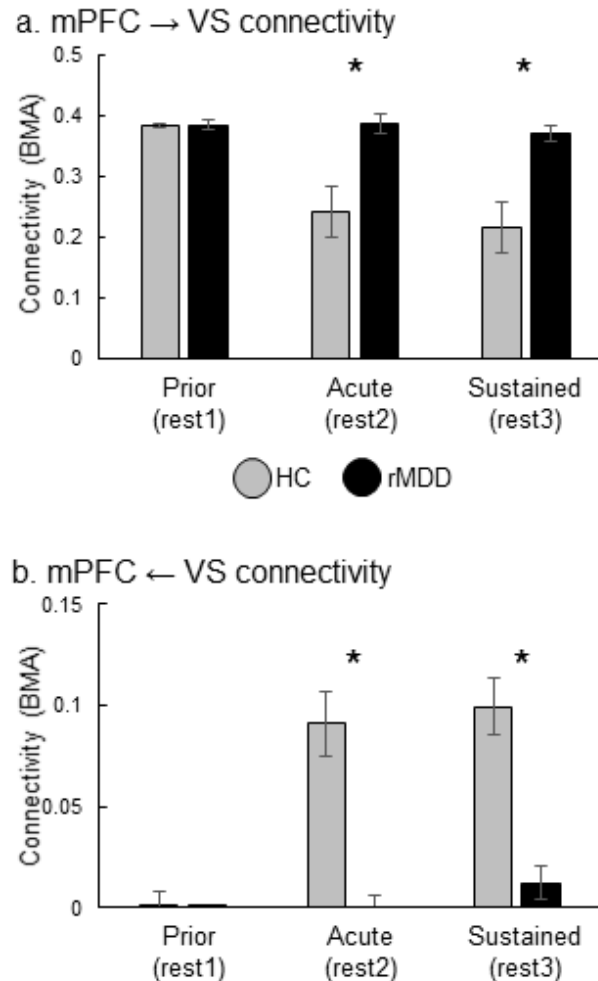
Supplementary Figure 1



Supplementary Figure 1 - Graphical description of the order of the interleaved tasks and resting state scan throughout the study. In the acute phase, mood was induced naturalistically and implicitly (i.e., with participants unaware of the purpose of the manipulation) by providing participants positive social feedback related to their task performance. The sustained effect of the manipulation was assessed 30 min later while participants completed a similar task devoid of any feedback. In addition, spontaneous affective and neural fluctuations in the absence of external stimuli were investigated by

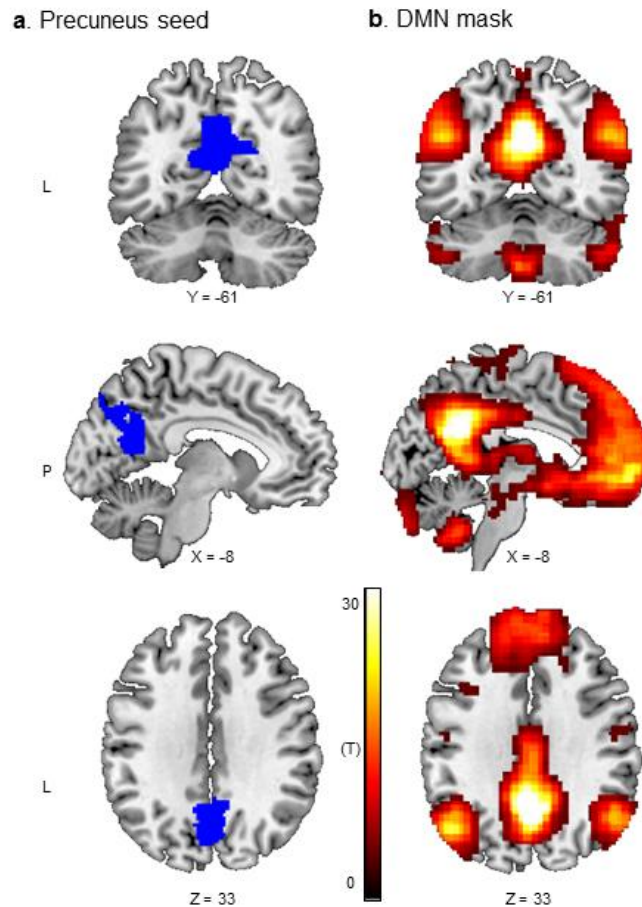
means of three resting-state scans that were acquired prior to the acute phase (rest1), following the acute phase (rest2), and following the sustained phase (rest3).

Supplementary Figure 2



Supplementary Figure 2 - Bayesian model averages (BMA) of the (a) [mPFC → VS] and (b) [mPFC ← VS] connections per group per resting state time point. Notably, mixed ANOVA revealed that the control group, relative to rMDD group, exhibited reduced [mPFC → VS] connectivity strength but enhanced [mPFC ← VS] connectivity strength at the second and third, but not first resting state scan. Bars ± 1 S.E.M. * $p < 0.05$. rMDD – Remitted individuals with a history of recurrent MDD ($n = 25$). HC – Healthy controls ($n = 25$). VS - Ventral striatum. mPFC - Medial prefrontal cortex.

Supplementary Figure 3



Supplementary Figure 3 - DMN mask. **(a)** Location of the anatomically defined precuneus seed, which was used in a whole brain ANOVA across groups and resting-state time points in order to identify the DMN mask **(b)** at a significance level adjusted such that Type I error was controlled for all voxels in the brain using the false discovery rate (FDR), with $q = 0.05$ in more than 10 contiguous voxels. DMN - Default mode network.

Supplementary Table 1

Group	Acute Phase Descriptive	Acute Phase Captions	Sustained Phase Descriptive	Sustained Phase Captions
Reaction time (sec)				
HC	11.12 (1.46)	10.32 (2.51)	10.49 (2.17)	10.01 (2.15)
rMDD	10.30 (3.61)	9.53 (2.23)	9.33 (3.53)	9.93 (2.39)
Number of trials without a selection				
HC	1.72 (1.55)	1.28 (2.23)	1.10 (1.32)	1.24 (2.82)
rMDD	1.27 (1.42)	0.68 (2.10)	0.86 (0.92)	1.00 (3.12)
Total number of cursor movements				
HC	1.20 (0.36)	1.34 (0.43)	1.35 (0.49)	1.36 (0.50)
rMDD	1.49 (0.57)	1.29 (0.61)	1.50 (0.57)	1.54 (0.76)

Supplementary Table 1. Group averages for three different measures of task-related performance: Length of time needed to make a selection (reaction time, in sec), number of trials without a selection (out of 18), and total number of cursor movements needed to make a selection. For each of these variables, a mixed ANOVA with Group (Controls vs. rMDD) as a between-subject factor, and Condition (Caption vs. Descriptive) and Phase (Acute vs. Sustained) as repeated measures was conducted. No significant effect of Group (all $F_{s(1,49)} < 1.85$, all P 's > 0.18), Condition (all $F_{s(11,49)} < 0.77$, all P 's > 0.38), or Group by Condition emerged (all $F_{s(1,49)} < 2.83$, all P 's > 0.10). Taken together, these analyses suggest that task difficulty did not differ across tasks or between groups.

Supplementary Table 2

Group	Comments	Group	Comments
HC	Very positively	rMDD	Made me more positive
HC	Made me feel like I have a good sense of humor and can read into things pretty well	rMDD	Positively
HC	Positive	rMDD	Positive effect
HC	Positively	rMDD	It helped me to motivate
HC	It felt good	rMDD	It made me feel good
HC	Was nice	rMDD	Enhanced my performance
HC	Positively	rMDD	It was nice
HC	Motivated me to continue performing well	rMDD	Made me feel proud
HC	It made me feel pretty confident	rMDD	It was very uplifting and encouraging
HC	It made me feel proud about myself	rMDD	Calmed me
HC	Showed that I was doing the task correctly	rMDD	Felt fine hearing it
HC	In a positive way	rMDD	It made me feel good
HC	I felt good about it and surprised	rMDD	Positively
HC	It made me smile	rMDD	More positive
HC	Excited and happy	rMDD	Reinforcement
HC	Boosted my emotional state	rMDD	Without positive feedback I would have second guessed my decision
HC	Unexpected and good	rMDD	It kept me in a positive mind
HC	It made me more focused	rMDD	Made me enjoy this task

Supplementary Table 2. Participants' responses after study completion to an open-ended questions whether they perceived the positive feedback as reliable, and if so how did it make them feel. rMDD - Remitted individuals with a history of recurrent MDD; HC - healthy controls.