## SUPPLEMENT

### ADDITIONAL EXCLUSION CRITERIA

### CLINICAL CRITERIA

Patients were excluded from the NESDA-MRI sample if they had an axis-I disorder other than MDD, panic disorder or social phobia (except generalized anxiety disorder). Patients were also excluded if they used any psychotropic medication other than a stable use of SSRI or infrequent benzodiazepine use (3×2 tablets weekly, or within 48 hrs prior to scanning). Additional exclusion criteria were the presence of major internal or neurological disorders; dependency or past year abuse of alcohol and/or drugs; hypertension (>180/130mm Hg); heavy smoking (>5 cigarettes/day); and general MRI-contra-indications.

### TECHNICAL CRITERIA

We had complete word encoding and recognition data (EPIs and e-prime output) for 286 participants (data of 15 participants was incomplete). In addition, 61 participants were excluded because of 1) bad quality of the EPI data acquired during encoding and/or recognition (n=22), 2) movement >3mm (n=6), 3) not enough coverage of the hippocampus and amygdala (n=4), 4) loss of voxels in the first level mask, owing to large inter-hemispheric frontal space (n=1), 5) very low discriminant power (i.e. d'=<.1; n=17) or >40 missing responses (n=7) indicating unreliable task involvement, 6) medication use (n=2; 1× mirtazepine, 1× corticosteroids), 7) MADRS scores of HC (n=2) that were indicative of possible depressive psychopathology, leaving data of 225 participants suitable for the present analysis. Of these 225, 98 participants reported to have never experienced abuse in their lives, and 111 participants reported to have experienced chronic childhood abuse. Because we were primarily interested in the impact of CEM, we excluded individuals reporting physical and/or sexual abuse during childhood, but no CEM (n=15).

## WORD ENCODING AND RECOGNITION TASK

All words were matched for length (3-12 letters), and frequency of occurrence in the Dutch language. The words were presented pseudo-randomized together with 40 baseline trials in 20 blocks of eight words, and with an average interstimulus interval of 1026 ms (1018 ms-1035 ms). During each block, two positive, two negative, two neutral, and two baseline words were presented, with response options presented at the bottom of the screen. Participants were required to indicate whether they thought the word was positive, negative, or neutral. To protect against primacy and recency effects, we presented three filler words (1 positive, 1 negative, and 1 neutral word) at the beginning and end of the encoding task. These filler words were not part of the recognition task.

After a ten minutes retention interval, participants completed a word recognition task. This task consisted of the 120 old encoding target words and 120 new distracter words, and 40 baselines, presented in a pseudo-randomized order of 20 blocks of 14 words. Old and new words were matched on their complexity, word length, and emotional intensity. Subjects had to indicate whether they have 'seen' (i.e. remembered) the words previously, 'probably have seen it' ('know'), or 'haven't seen it' (rejection). No feedback was presented to the participants. Participants' responses and reaction times (RT) were registered through two magnet-compatible response boxes.

Before and after the word encoding-recognition task, we also monitored anxiety levels using a Visual Analogue Scale (VAS; Huskisson, 1993) ranging from zero to 100. Task instructions were presented inside the scanner and participants had the opportunity to ask questions before the task started. The encoding-recognition paradigm was part of a larger functional and structural imaging, results of that are reported elsewhere. The word task was presented after a neutral executive functioning task, (i.e. the tower of London task). In addition, the effect of psychiatric status on word encoding and recognition are described by van (Van Tol et al., 2012).

## MEMORY PERFORMANCE AND REACTION TIMES ANALYSES

A CEM (CEM vs. No Abuse)×Words (Positive, Negative, Neutral) RM ANOVA, with a dummy demeaned for variability due to current diagnosis within group, age, gender education, and dummies for location as covariates showed a marginal effect of CEM on old/new discriminant sensitivity (F(1, 186)=2.85, P=.09). Overall, individuals reporting CEM were slightly more accurate to detect old words from new words (Mean= .61, SE= .013) when compared to individuals reporting No Abuse (Mean= .58, SE= .013).

There was no main effect of Words (F(2, 372)=.23, P=.79), nor a interaction between CEM and Words (F(2, 372)=.45, P=.64). When we repeated this analysis for proportions (p) Correctly Recognized words (pCREC), CEM and Words had no significant main effects [i.e. CEM (F(1, 186)=1.02, P=.31), Words (F(3,272)=.48, P=.62)], and there was no CEM×Words interaction (F(2, 372)=1.05, P=.35). When we repeated the analysis for proportion of false alarms, only a marginal main effect of Words was obtained (F(2, 372)=2.57, P=.08). All individuals had fewer false alarms with positive words (M=.114, SE=.007), when compared to negative (M=.16, SE =.007, P=.00), and neutral words (M=.06, SE =0.04, P=.00). CEM did not have a significant main effect (F(1, 186)=1.21, P=.27). There was no CEM×Words interaction (F(2, 372)=1.39, P=.25).

When we repeated the analysis for RT for subsequently correctly recognized words during encoding, no main effect was found for CEM (F(1, 186)=.04, P=.85). A main effect was found for Words (F(2, 372)=4.57, P=.01). All individuals responded quicker to negative words (M=1.26, SE=.02) when compared to positive (M=1.32, SE=.02, P=.00), and neutral words (M=1.33, SE=0.2, P=.00). There was no CEM×Words interaction (F(2, 372)=.68, P=.51). Finally, we found no significant main nor interaction effects of CEM or Words when we repeated the analysis for RT of false alarms (all F's <.76, all P's>.47).

## CEM AND WORD ENCODING: AMYGDALA AND HIPPOCAMPUS, ADDITIONAL FINDINGS.

The CEM (No abuse, CEM)×Words (Positive, Negative, Neutral)×Lateralization (Left, Right) RM ANCOVA with a dummy for diagnosis, age, gender, education level and dummies for locations as covariates for both bilateral (i.e. left and right) amygdala and bilateral hippocampal activations showed no main effect of lateralization [i.e. Amygdala: ($F(1, 186)=0.42$, $P=.51$), Hippocampus: ($F(1, 186)=0.00$, $P=.99$)]. Psychiatric status did have a main effect on amygdala and hippocampal activation [Amygdala: ($F(1, 186)=7.67$, $P=.006$) & Hippocampus: ($F(1, 186)=5.81$, $P=.02$)]. Patients showed less bilateral amygdala and hippocampal activation during the encoding of positive words ($t's>2.51$, $P's<.013$), but not during encoding of negative words ($t's<1.22$, $P's>.22$). During the encoding of neutral words, patients showed reduced bilateral amygdala activation ($t's>2.08$, $P's<.04$), marginal reduced right hippocampal activation ($t=1.7$, $P=.08$), but not differential left hippocampal activation ($t=1.6$, $P=.11$).

## ADDITIONAL COVARIANCE ANALYSES FOR WORD ENCODING AND RECOGNITION

For all additional covariance analyses (see below) we repeated the CEM (No Abuse vs. CEM)×Words (positive, negative, neutral) RM ANCOVA on mPFC activations, with a demeaned dummy for diagnosis, age, gender, education level, dummies for location, and the additional variable as covariates. Because of the large amount of covariates that we wanted to investigate, we choose to perform separate analyses per covariate because we believe this is a more stringent way to investigate the possible impact of each covariate. We believe this is a more stringent way to investigate the possible impact of each covariate as there is high multicollinearity between some of the covariates (i.e., depression and anxiety severity are highly correlated ($r=.69$, $P=.001$), as is neuroticism with the dummy for psychopathological status ($r=.64$, $P<.001$), and neuroticism with depression and anxiety severity ($r=.61$, $r=.60$, both $P<.001$). This multicollinearity is not the case for life events with depression and anxiety ($r=.28$, and $r=.18$, $P=.001$, $P=.04$), and life events with neuroticism ($r=.18$, $p=.03$), however.

Hence, adding all these variables at once would result in unreliable outcomes. However, we would like to note that when we repeated the CEM (No Abuse vs. CEM) X Words (positive, negative, neutral) RM ANCOVA on mPFC activations for encoding and retrieval, with a demeaned dummy for diagnosis, age, gender, education level, and locations, while also adding the factors parental psychopathology, negative life events and mPFC volume (i.e. but excluding the factors that are highly correlated with psychiatric status; neuroticism, depression and anxiety severity) the main effect of CEM still remained significant for encoding ($F(1,122)=4.80, P<.03$) and recognition ($F(1,122)=15.58, P<.001$).

### Depression and Anxiety severity

To exclude the possibility that more severe depressive symptoms in the CEM groups explained our findings, we added depression severity (MADRS instead of psychiatric status) at the moment of scanning as a covariate to the RM ANCOVA. In this analysis all results remained, including the main effect of CEM for encoding ($F(1,179)=7.67, P=.006$) and recognition ($F(1,179)=12.08, P=.001$). Moreover, depression severity at the moment of scanning did not have a main effect on mPFC activation during encoding ($F(1,179)=1.62, P=.20$) and recognition ($F(1,179)=1.88, P=.17$).

Similarly, all results remained when we added anxiety severity at the moment of scanning to the analysis (i.e. main effect of CEM during encoding ($F(1,178)=9.25, P=.003$) and recognition ($F(1,178)=16.58, P<.001$). Anxiety severity at the moment of scanning had a main effect on mPFC activation during encoding ($F(1,178)=4.48, P=.04$), but not during recognition ($F(1,178)=.04, P=.83$).

### Neuroticism

To investigate whether our results were driven by higher neuroticism scores in the CEM group, we next repeated the RM analyses while additionally covarying for neuroticism score. In these analyses, all results remained, including the main effect of CEM for word encoding (F(1,

185)=16.31, P<.001), and word recognition (F(1, 185)=8.32, P=.004). In addition, Neuroticism was a significant covariate for emotional word encoding (F(1, 185)=4.83, P=.03), but not for word recognition (F(1, 185)=2.124, P=.15).

### PARENTAL PSYCHOPATHOLOGY

To investigate whether parental psychopathology was related to our findings, we added parental psychopathology (yes, no) as a covariate to the RM ANCOVAs. In these analyses, hypoactive mPFC activation in adults reporting CEM remained for word encoding (F(1,126)=6.09, P=.015) and recognition (F(1,126)=24.25, P<.001). Furthermore, parental psychopathology had no significant main effect during encoding (F(1,126)=.01, P=.92), and recognition (F(1,126)=.87, P=.35).

### SMALLER MPFC VOLUME IN THE CEM GROUP

To investigate whether CEM related reduced mPFC activation during emotional word encoding would be explained by a volumetrically smaller mPFC in these individuals (Figure 1), we added mPFC volume as a covariate to the RM ANCOVAs. In these analyses all results remained unchanged, including the main effect of CEM during word encoding (F(1,185)=11.91, P=.001) and word recognition (F(1,185)=17.58, P<.001), Furthermore, structural volume of the mPFC had no significant main effect on mPFC activation during word encoding (F(1,185)=1.52, P=.22), nor word recognition (F(1,185)=.73, P=.39).

### MORE NEGATIVE LIFE EVENTS

To investigate if more negative lifetime life events in the CEM group explained our findings we next repeated the RM ANCOVAs while adding the total number of lifetime life events as covariate. The analyses did not change our results including the main effect of CEM during encoding (F(1,183)=11.78, P=.001), and recognition (F(1,183)=15.96, P<.001). Number of

lifetime negative life events did not have a significant main effect on mPFC activation during encoding (F(1,183)=1.38, P=.24), nor recognition (F(1,183)=.14, P=.71).

### CONCURRENT OTHER TYPES OF ABUSE

To examine whether our results were driven by concurrent physical and/or sexual abuse, we next excluded all individuals reporting sexual and/or physical abuse besides CEM (n=40; 38 Patients and 2 HC) from the RM ANCOVAs (the clinical characteristics, demographics, and performance scores for this new 'only' CEM group when compared to the No Abuse groups are depicted in table S5). In these analyses, all results remained unchanged, including the effect of CEM on mPFC activation during word encoding (F(1,146)=6.22, P=.01), and recognition (F(1,146)=13.47, P<.001).

### SSRI USE

To explore the impact of SSRI use on our findings, we repeated all RM ANCOVAs while excluding SSRI users from the analysis (n=50). In these analyses all results remained, including the main effect of CEM for word encoding (F(1,136)=6.57, P=.01), and word recognition (F(1,136)=14.09, P<.001) in mPFC hypoactivation.

### PSYCHO-PHYSIOLOGICAL INTERACTION ANALYSES

We used psycho-physiological interaction analyses to investigate the functional connectivity of the CEM related mPFC clusters that we found to be hypoactive during encoding, and retrieval, and to investigate whether these mPFC clusters showed differential functional connectivity for adults reporting CEM vs. No Abuse. For these PPI analyses, we used the deconvolved time series from a 8 mm radius sphere around the CEM related mPFC cluster (i.e. encoding (x=-3, y=45, z=33), recognition (x=-6, y=48, z=39)). The PPI was calculated as the product of the mPFC time series (the first eigenvariate from all voxels' time series) and a vector coding for the effect of task ("Subsequently remembered emotional words>baseline"). Because of the fact that we found no

effect of valence in mPFC activation during encoding, nor retrieval, we investigated mPFC connectivity patterns irrespective of valence (positive, negative and neutral together). This product of the mPFC time series was subsequently re-convolved with the haemodynamic response function (HRF). This interaction term was then entered as a regressor in a first level model together with the time series of the mPFC and the vector coding for the task effect. The models were estimated and contrasts generated to estimate the effects of positive and negative PPIs. These subject specific maps represent stronger positive and negative functional connectivity with the mPFC for an emotional compared to a baseline words. The contrast images for the PPI effects were then entered in a second level two-group t-test analysis. Subsequently, positive and negative brain connectivity with the mPFC was tested at P=.001, with a spatial extend of K>5 contiguous voxels for ROIs (i.e. Hippocampus and Amygdala, masks defined using the WFU pickatlas). Furthermore we report activation outside our ROIs at $P< 0.05$, $K \geq 5$ voxels corrected for multiple comparisons.

**Table S1.** Mean and Standard deviations of Reaction Times

| | No abuse | | CEM | | | |
|---|---|---|---|---|---|---|
| encoding | M | SD | M | SD | *F* | *P* |
| Subsequent remembered positive words | 1.47 | 0.35 | 1.45 | 0.35 | 0.09 | 0.77 |
| Subsequent remembered negative words | 1.26 | 0.29 | 1.31 | 0.40 | 0.87 | 0.35 |
| Subsequent remembered neutral words | 1.52 | 0.32 | 1.59 | 0.42 | 1.86 | 0.17 |
| Baseline trials in encoding phase | 0.84 | 0.21 | 0.85 | 0.38 | 0.12 | 0.73 |
| recognition | | | | | | |
| Correctly recognized positive words | 1.32 | 0.24 | 1.33 | 0.27 | 0.02 | 0.88 |
| Correctly recognized negative words | 1.25 | 0.22 | 1.27 | 0.30 | 0.41 | 0.52 |
| Correctly recognized neutral words | 1.32 | 0.23 | 1.34 | 0.30 | 0.15 | 0.70 |
| Misses positive recognition words | 1.92 | 0.59 | 1.89 | 0.64 | 0.14 | 0.71 |
| Misses negative recognition words | 1.86 | 0.66 | 1.82 | 0.56 | 0.18 | 0.68 |
| Misses neutral recognition words | 1.72 | 0.53 | 1.63 | 0.60 | 1.19 | 0.28 |
| False alarms positive words | 1.50 | 0.46 | 1.65 | 0.57 | 4.03 | 0.05 |
| False alarms negative words | 1.51 | 0.49 | 1.47 | 0.42 | 0.40 | 0.53 |
| False alarms neutral words | 1.57 | 0.51 | 1.56 | 0.47 | 0.01 | 0.92 |
| Baseline trials in recognition phase | 0.79 | 0.14 | 0.81 | 0.37 | 0.30 | 0.59 |

**Table S2** Main effect of encoding and recognition outside our ROIs

| Encoding | K | equivZ | p(unc) | x,y,z {mm} |
|---|---|---|---|---|
| Middle Temporal Gyrus | 6180 | >8 | <.001 | 60 -54 6 |
| | | >8 | <.001 | 57 -57 -6 |
| | | >8 | <.001 | 60 -48 15 |
| Anterior Frontal Gyrus | 387 | >8 | <.001 | -51 24 0 |
| | | >8 | <.001 | -51 27 12 |
| | | 7.47 | <.001 | -48 9 -27 |
| Cuneus | 1963 | >8 | <.001 | -15 -96 6 |
| | | >8 | <.001 | -30 -90 -6 |
| | | >8 | <.001 | 18 -93 9 |
| Anterior Frontal Gyrus | 967 | >8 | <.001 | 51 12 24 |
| | | >8 | <.001 | 45 6 51 |
| | | >8 | <.001 | 48 42 12 |
| Middle Temporal Gyrus | 16 | 6.73 | <.001 | -60 -9 -15 |
| Insula | 71 | 6.03 | <.001 | -45 0 0 |
| | | 5.14 | <.001 | -36 0 12 |
| | | 5.13 | <.001 | -42 -9 -12 |
| Inferior Orbital Frontal Gyrus | 9 | 5.74 | <.001 | 39 33 -9 |
| Middle Temporal Gyrus | 6 | 5.12 | <.001 | -45 -66 27 |
| Rolandic Operculum | 3 | 4.98 | <.001 | 39 -15 21 |
| Insula | 4 | 4.81 | <.001 | -33 -36 21 |
| Middle Temporal Gyrus | 1 | 4.76 | <.001 | 54 3 -21 |
| Caudate | 1 | 4.7 | <.001 | 15 18 15 |
| **Recognition** | **K** | **Z** | **p(unc)** | **x,y,z {mm}** |
| Precuneus | 3584 | >8 | <.001 | 3 -54 45 |
| | | >8 | <.001 | 60 -57 0 |
| | | >8 | <.001 | 60 -54 12 |
| Inferior Parietal Lobe | 906 | >8 | <.001 | -48 -39 51 |
| | | >8 | <.001 | -57 -60 -3 |
| | | >8 | <.001 | -60 -54 12 |
| Middle Occipital Gyrus | 208 | >8 | <.001 | -24 -93 0 |
| | | 7.82 | <.001 | -12 -90 -3 |
| | | 7.77 | <.001 | -15 -96 6 |
| Cuneus | 69 | 7.45 | <.001 | 18 -96 3 |
| | | 5.24 | <.001 | 30 -90 -3 |
| Inferior Frontal Gyrus | 163 | 7.17 | <.001 | -45 45 3 |
| | | 6.38 | <.001 | -36 21 -3 |
| | | 6.18 | <.001 | -48 33 -3 |
| Superior Occipital Gyrus | 11 | 5.77 | <.001 | -39 -81 24 |
| | | 5.36 | <.001 | -45 -78 18 |
| Cerebellum | 38 | 5.75 | <.001 | 24 -54 -18 |
| Inferior frontal Operculum | 13 | 5.11 | <.001 | 51 15 30 |
| | | 4.88 | <.001 | 51 9 36 |
| Inferior frontal Gyrus | 3 | 4.72 | <.001 | -51 27 21 |
| Superior Temporal Gyrus | 2 | 4.65 | <.001 | 57 6 3 |
| Superior Frontal Gyrus | 1 | 4.61 | <.001 | -30 45 33 |
| Superior Temporal Gyrus | 1 | 4.58 | <.001 | 63 -6 3 |

**Table S3**. Connectivity with the main effect of mPFC during encoding as seed region at P<.001, K>5.

| | K | F | Z | p(unc) | x,y,z {mm} |
|---|---|---|---|---|---|
| Inferior Frontal Gyrus | 130 | 33.22 | 5.40 | <.001 | 45 33 -9 |
| | | 20.00 | 4.20 | <.001 | 54 18 0 |
| | | 19.03 | 4.09 | <.001 | 54 12 -6 |
| Middle Frontal Gyrus | 524 | 29.00 | 5.05 | <.001 | -42 12 36 |
| | | 23.70 | 4.57 | <.001 | -27 21 -6 |
| | | 22.65 | 4.47 | <.001 | -27 -30 -15 |
| Medial Frontal Gyrus | 434 | 26.10 | 4.80 | <.001 | -3 48 30 |
| | | 24.92 | 4.69 | <.001 | -6 63 9 |
| | | 23.03 | 4.51 | <.001 | 0 21 51 |
| Inferior Parietal Lobe | 135 | 22.95 | 4.50 | <.001 | -51 -33 45 |
| | | 18.04 | 3.98 | <.001 | -39 -39 39 |
| | | 15.25 | 3.65 | <.001 | -39 -51 45 |
| Superior Temporal Gyrus | 19 | 22.90 | 4.50 | <.001 | 42 15 -27 |
| | | 13.31 | 3.40 | <.001 | 36 3 -24 |
| Superior Temporal Gyrus | 217 | 21.23 | 4.33 | <.001 | -57 -60 24 |
| | | 21.10 | 4.31 | <.001 | -57 -51 27 |
| | | 18.39 | 4.02 | <.001 | -51 -54 21 |
| Putamen | 30 | 21.12 | 4.32 | <.001 | 21 3 -12 |
| Caudate | 105 | 20.96 | 4.30 | <.001 | 12 3 3 |
| | | 18.44 | 4.03 | <.001 | 12 18 6 |
| | | 13.77 | 3.46 | <.001 | 18 0 12 |
| Putamen | 61 | 19.15 | 4.11 | <.001 | -15 12 0 |
| | | 15.37 | 3.66 | <.001 | -15 -3 15 |
| Superior Temporal Gyrus | 22 | 18.65 | 4.05 | <.001 | 45 -21 -3 |
| Inferior Temperal Gyrus | 53 | 18.36 | 4.02 | <.001 | -48 -66 -6 |
| | | 14.49 | 3.55 | <.001 | -45 -75 -6 |
| | | 13.39 | 3.41 | <.001 | -48 -57 3 |
| Superior Temporal Gyrus | 9 | 17.16 | 3.88 | <.001 | 42 3 -15 |
| Medial Frontal Gyrus | 22 | 17.03 | 3.86 | <.001 | -3 54 -6 |
| | 23 | 16.87 | 3.85 | <.001 | 30 -45 -9 |
| Inferior Frontal Gyrus | 14 | 16.63 | 3.82 | <.001 | 57 18 18 |
| Fusiform Gyrus | 10 | 16.46 | 3.80 | <.001 | -24 -66 -15 |
| Middle Temporal Gyrus | 29 | 16.27 | 3.77 | <.001 | -51 3 -21 |
| | | 16.03 | 3.74 | <.001 | -60 -6 -15 |
| Superior Frontal Gyrus | 10 | 14.85 | 3.60 | <.001 | -27 39 36 |
| Middle Frontal Gyrus | 13 | 14.79 | 3.59 | <.001 | -27 -6 48 |
| Inferior Frontal Gyrus | 7 | 14.40 | 3.54 | <.001 | 30 21 -15 |
| Middle Frontal Gyrus | 13 | 14.39 | 3.54 | <.001 | -27 51 12 |
| Thalamus | 5 | 13.52 | 3.42 | <.001 | 6 -21 6 |
| Middle Temporal Gyrus | 7 | 13.12 | 3.37 | <.001 | -54 -27 -6 |
| CEM>No Abuse | | | | | |
| | Thalamus | 3.9 | 3.81 | <.001 | 12 -3 3 |
| | Insula | 3.84 | 3.76 | <.001 | 42 -33 21 |
| No Abuse > CEM | no sigificant clusters | | | | |

**Table S4.** Connectivity with the main effect mPFC during recognition as seed region at P<.001, K>5

| | K | F | Z | P(unc) | x,y,z (mm) |
|---|---|---|---|---|---|
| Superior Frontal Gyrus | 6880 | 53.25 | 6.73 | 0.000 | 0 30 51 |
| | | 41.93 | 6.03 | 0.000 | -3 9 51 |
| | | 39.25 | 5.84 | 0.000 | 12 -15 9 |
| Inferior Parietal Lobe | 152 | 21.38 | 4.34 | 0.000 | 51 -39 45 |
| | | 19.64 | 4.16 | 0.000 | 54 -48 42 |
| | | 15.98 | 3.74 | 0.000 | 51 -24 48 |
| Middle Occipital Gyrus | 14 | 16.52 | 3.80 | 0.000 | 33 -84 -3 |
| Middle Occipital Gyrus | 10 | 15.55 | 3.69 | 0.000 | -48 -72 3 |
| Parahippocampal Gyrus | 9 | 15.50 | 3.68 | 0.000 | 21 -15 -21 |
| Precentral Gyrus | 12 | 15.41 | 3.67 | 0.000 | -18 -30 57 |
| | | 13.22 | 3.38 | 0.000 | -12 -39 57 |
| Lingual Gyrus | 10 | 15.21 | 3.64 | 0.000 | 12 -90 0 |
| Precuneus | 8 | 13.95 | 3.48 | 0.000 | 33 -72 33 |
| Superior Frontal Gyrus | 8 | 13.77 | 3.46 | 0.000 | 0 60 30 |
| Fusiform Gyrus | 19 | 13.71 | 3.45 | 0.000 | -39 -69 -12 |
| | | 12.01 | 3.21 | 0.001 | -27 -66 -15 |
| Insula | 5 | 13.26 | 3.39 | 0.000 | -36 -12 12 |
| Putamen | 5 | 12.65 | 3.30 | 0.000 | 27 -6 3 |
| CEM > No abuse | No significant clusters | | | | |
| No Abuse > CEM | No significant clusters | | | | |

**Table S5**, Demographic, clinical characteristics, and memory performance of the CEM only (n=56) versus No abuse (N=98) groups.

| | **No Abuse (N=98)** | | **only CEM (N=56)** | | | | |
|---|---|---|---|---|---|---|---|
| | Mean | SD | Mean | SD | *X2* | *F* | *P* |
| Age | 36.48 | 10.56 | 36.73 | 10.06 | | 0.02 | 0.89 |
| Gender (male/female)(n) | 32/66 | | 27/ 29 | | 3.65 | | 0.06 |
| Education level (attained in years) | 13.16 | 2.88 | 12.96 | 2.84 | | 0.17 | 0.68 |
| Scan location (A/L/G)(n) | 30/37/31 | | 17/ 24/ 15 | | 0.52 | | 0.77 |
| Diagnosis (yes/no) (n) | 65/33 | | 49/ 7 | | 8.31 | | 0.00 |
| Diagnosis (MDD/CDA/ANX/HC) (n) | 24/19/22/33 | | 13/ 20/ 16/ 7 | | 10.46 | | 0.15 |
| Frequency of CEM (Som/Reg/Often/very Often) (n) | | | 9/ 20/ 10/ 17 | | | | |
| SSRI use (yes/no) (n) | 21/77 | | 40/ 16 | | | 0.99 | 0.33 |
| Parental Psychopathology (yes/no) (n)* | 38/25 | | 33/ 13 | | | 1.52 | 0.23 |
| Negative Life events | 4.06 | 1.97 | 5.07 | 2.04 | | 9.01 | 0.00 |
| Neuroticism | 34.31 | 7.93 | 40.86 | 7.84 | | 19.62 | 0.00 |
| MADRS | 8.19 | 9.29 | 13.88 | 9.46 | | 13.14 | 0.00 |
| BAI | 9.29 | 9.62 | 12.24 | 9.58 | | 3.23 | 0.07 |
| Anxiety score (VAS) before encoding | 34.12 | 24.71 | 31.79 | 26.53 | | 0.30 | 0.58 |
| Anxiety score (VAS) after encoding | 29.54 | 21.66 | 29.45 | 24.66 | | 0.00 | 0.98 |
| | | | | | | | |
| Word classification# | | | | | | | |
| Words classified as positive | 41.56 | (10.10) | | | | | |
| Words classified as negative | 40.73 | (2.39) | | | | | |
| Words classified as neutral | 43.32 | (10.30) | | | | | |
| | | | | | | | |
| Subsequent memory during Encoding | | | | | | | |
| Proportion subsequent remembered positive words | 0.73 | 0.13 | 0.72 | 0.14 | | 0.17 | 0.68 |
| Proportion subsequent remembered negative words | 0.69 | 0.13 | 0.66 | 0.17 | | 1.07 | 0.30 |
| Proportion subsequent remembered neutral words | 0.69 | 0.15 | 0.70 | 0.16 | | 0.52 | 0.47 |
| Memory during Recognition | | | | | | | |
| Discriminant sensitivity positive words | 0.61 | 0.16 | 0.61 | 0.14 | | 0.04 | 0.84 |
| Discriminant sensitivit negative words | 0.52 | 0.12 | 0.51 | 0.14 | | 0.34 | 0.56 |
| Discriminant sensitivit neutral words | 0.63 | 0.16 | 0.65 | 0.16 | | 0.63 | 0.43 |
| Proportion false alarms positive words | 0.12 | 0.10 | 0.11 | 0.08 | | 0.06 | 0.80 |
| Proportion false alarms negative words | 0.17 | 0.11 | 0.16 | 0.11 | | 0.52 | 0.47 |
| Proportion false alarms neutral words | 0.06 | 0.06 | 0.06 | 0.05 | | 0.08 | 0.78 |