

Table S2. Association between depression and current cognitive performance

| Dependent variables | Depressive symptomatology | | | Depressive symptomatology | | |
|--|----------------------------------|----------------------------|----------|----------------------------------|----------------------------|----------|
| | CES-D<16 and not treated (n=285) | CES-D≥16 or treated (n=93) | P- value | CES-D<16 and not treated (n=284) | CES-D≥16 or treated (n=93) | P- value |
| | Mean(SEM) ^a | Mean (SEM) ^a | | Mean(SEM) ^b | Mean (SEM) ^b | |
| Working memory: time difference between double task and simple task (milliseconds) | -129.6 (180.4) | 242.0 (315.9) | 0.31 | -121.3 (206.7) | 214.4 (327.0) | 0.36 |
| Form matching: mean time for correct responses (milliseconds) | 5713.0 (89.5) | 5851.3 (156.6) | 0.44 | 5685.1 (102.5) | 5828.5 (162.1) | 0.43 |
| Phoneme comprehension: mean time for correct responses (milliseconds) | 1498.8 (17.7) | 1488.5 (31.0) | 0.75 | 1511.1 (20.0) | 1500.7 (31.7) | 0.77 |
| Name-face associations: number of names correctly recalled | 5.5 (0.13) | 4.9 (0.22) | 0.03 | 5.1 (0.13) | 4.6 (0.21) | 0.03 |
| Verbal fluency: number of correct answers | 28.8 (0.38) | 27.8 (0.66) | 0.18 | 28.0 (0.42) | 27.2 (0.67) | 0.26 |
| Narrative recall: number of correct answers | 13.3 (0.26) | 12.8 (0.45) | 0.31 | 12.9 (0.29) | 12.5 (0.46) | 0.46 |
| Descriptive recall: number of correct answers | 13.1 (0.26) | 12.3 (0.45) | 0.14 | 12.5 (0.28) | 11.9 (0.44) | 0.22 |

| | | | | | | |
|--|-------------|-------------|------|-------------|-------------|------|
| Implicit Memory: difference between learnt and new items | 1.02 (0.04) | 0.99 (0.08) | 0.72 | 1.07 (0.05) | 1.02 (0.08) | 0.58 |
|--|-------------|-------------|------|-------------|-------------|------|

^a Non adjusted.

^b Adjusted for education level, gender and age.

Table S3. Association between depression and current categorical cognitive performances

| | Depressive symptomatology | | P- value ^a | P- value ^b |
|---|---|-------------------------------------|-----------------------|-----------------------|
| | CES-D<16 and not treated (n=285) n (%) | CES-D≥16 or treated (n=93) n (%) | | |
| Form matching, <7 correct responses | 144 (50.5) | 54 (58.1) | 0.21 | 0.19 |
| Phoneme comprehension, <9 correct responses | 85 (29.8) | 35 (37.6) | 0.16 | 0.18 |

^a Non adjusted, Chi squared test.

^b Adjusted for education level, gender and age, logistic regression.

Table S4. Associations between hippocampal volume as the dependent variable and cognitive scores (separate linear models), n=193

| Dependent variables | Hippocampal gray matter volume (Adjusted cognitive change for one cm ³) | |
|--|--|----------------------|
| | β (SE) ^a | p-value ^a |
| Linear model | | |
| Working memory: time difference between double task and simple task (milliseconds) | 490 (1188) | 0.68 |
| Form matching: mean time for correct responses (milliseconds) | -0.80 (536) | 0.99 |
| Phoneme comprehension: mean time for correct responses (milliseconds) | 40.37 (110) | 0.72 |
| Name-face associations: number of names correctly recalled | 0.17 (0.76) | 0.82 |
| Verbal fluency: number of correct answers | -0.26 (2.27) | 0.91 |
| Narrative recall: number of correct answers | 0.40 (1.71) | 0.81 |
| Descriptive recall: number of correct answers | 0.56 (1.47) | 0.70 |
| Implicit Memory: difference between learnt and new items | -0.12 (0.32) | 0.71 |
| Logistic regression | OR (95%IC) | p-value ^a |
| Form matching, <7 correct responses | 0.55 (0.13; 2.39) | 0.43 |
| Phoneme comprehension, <9 correct responses | 2.82 (0.60;13.33) | 0.19 |

^a Adjusted for total intracranial volume, education, gender and age

