## SUPPLEMENTARY MATERIALS

## Supplementary Table 1: Items of the EPICES score (n=44,648)

| Items of EPICES score | Yes (n, \%) | Coefficient* |
| :--- | ---: | ---: |
| Have you ever met a social worker? | $1,483(3.3)$ | 10.06 |
| Do you have a supplementary insurance?** | $43,827(98.2)$ | -11.83 |
| Do you live as a couple? | $34,804(78.0)$ | -8.28 |
| Do you own your home? | $37,587(84.2)$ | -8.28 |
| Do you experience financial difficulties to buy food? | $3,672(8.2)$ | 14.80 |
| Have you done sports in the last 12 months? | $31,952(71.6)$ | -6.51 |
| Have you been to a show or movie in the last 12 months? | $37,705(84.5)$ | -7.10 |
| Have you been on vacation in the last 12 months? | $39,408(88.3)$ | -7.10 |
| In the last 6 months, have you had any contacts with | $41,338(92.6)$ | -9.47 |
| family members? |  |  |
| In case of difficulties, are there people in your entourage |  | -9.47 |
| you can count on: |  | -7.10 |
| $\quad$ To take you in for a few days? | $38,550(86.3)$ |  |
| $\quad$ - To offer you material assistance? | $33,607(75.3)$ |  |

[^0]
*education ( $\mathrm{n}=1,471$ ), tobacco ( $\mathrm{n}=3,036$ ), alcohol consumption ( $\mathrm{n}=4,006$ ), CESD ( $\mathrm{n}=4,451$ ), history of cardiovascular disease ( $n=882$ ), BMI ( $n=3,219$ ), diabetes ( $n=1,309$ ), geographical origin ( $n=1,027$ )

Supplementary Figure 1: Sample Selection

Supplementary Table 2: Association between individual deprivation/neighbourhood deprivation and cognitive tests, based on multilevel logistic models ( $\mathrm{N}=\mathbf{4 4 , 6 4 8 \text { ) }}$

| Odds Ratio$(95 \% \mathrm{CI})$ |  | Individual deprivation EPICES score |  | Neighbourhood deprivation |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | FDep index |  |  |  |  |  |  |
|  |  | Not deprived | Deprived | p-value | Q1 <br> (most favored) | Q2 | Q3 | Q4 | $\begin{gathered} \text { Q5 } \\ \text { (most deprived) } \end{gathered}$ | p-value |
| MMSE | Model 3a | Ref. | 1.65 [1.54;1.77] | <. 0001 | Ref. | 1.06 [0.96;1.17] | 1.05 [0.95;1.16] | 1.08 [0.98;1.20] | 1.11 [1.00;1.23] | 0.38 |
|  | Model 3b | Ref. | 1.51 [1.40;1.63] | <. 0001 | Ref. | 1.05 [0.95;1.16] | 1.04 [0.94;1.15] | 1.08 [0.97;1.19] | 1.10 [0.99;1.22] | 0.45 |
| FCRST | Model 3a | Ref. | 1.33 [1.24;1.43] | <. 0001 | Ref. | 0.94 [0.86;1.03] | 1.00 [0.91;1.10] | 1.02 [0.92;1.12] | 1.05 [0.95;1.15] | 0.20 |
|  | Model 3b | Ref. | 1.28 [1.19;1.37] | <. 0001 | Ref. | 0.94 [0.86;1.03] | 0.99 [0.91;1.09] | 1.01 [0.92;1.11] | 1.04 [0.94;1.14] | 0.27 |
| Semantic VFT | Model 3a | Ref. | 1.39 [1.29;1.49] | <. 0001 | Ref. | 1.04 [0.95;1.13] | 1.02 [0.93;1.11] | 1.02 [0.93;1.12] | 0.99 [0.91;1.09] | 0.83 |
|  | Model 3b | Ref. | 1.26 [1.17;1.36] | <. 0001 | Ref. | 1.03 [0.95;1.13] | 1.01 [0.92;1.10] | 1.01 [0.93;1.11] | 0.98 [0.89;1.08] | 0.78 |
| Phonemic VFT | Model 3a | Ref. | 1.37 [1.28;1.47] | <. 0001 | Ref. | 1.00 [0.92;1.09] | 1.09 [1.00;1.20] | 1.09 [1.00;1.19] | 1.12 [1.02;1.23] | 0.04 |
|  | Model 3b | Ref. | 1.31 [1.22;1.40] | <. 0001 | Ref. | 1.00 [0.92;1.09] | 1.09 [0.99;1.19] | 1.08 [0.99;1.18] | 1.10 [1.00;1.21] | 0.08 |
| TMTA | Model 3a | Ref. | 1.43 [1.34;1.53] | <.0001 | Ref. | 1.06 [0.97;1.16] | 1.05 [0.96;1.15] | 1.10 [1.00;1.20] | 1.12 [1.02;1.23] | 0.18 |
|  | Model 3b | Ref. | 1.32 [1.23;1.42] | <.0001 | Ref. | 1.05 [0.97;1.14] | 1.05 [0.96;1.14] | 1.09 [1.00;1.20] | 1.12 [1.02;1.22] | 0.16 |
| TMTB | Model 3a | Ref. | 1.65 [1.55;1.77] | <. 0001 | Ref. | 1.05 [0.96;1.16] | 1.04 [0.94;1.14] | 1.02 [0.92;1.13] | 1.08 [0.98;1.19] | 0.49 |
|  | Model 3b | Ref. | 1.45 [1.36;1.56] | <. 0001 | Ref. | 1.05 [0.95;1.15] | 1.03 [0.94;1.13] | 1.02 [0.92;1.12] | 1.07 [0.97;1.18] | 0.59 |
| DSST | Model 3a | Ref. | 1.85 [1.73;1.99] | <. 0001 | Ref. | 1.05 [0.96;1.15] | 1.13 [1.03;1.24] | 1.12 [1.02;1.24] | 1.21 [1.10;1.34] | 0.001 |
|  | Model 3b | Ref. | 1.54 [1.43;1.66] | <. 0001 | Ref. | 1.03 [0.94;1.13] | 1.13 [1.03;1.24] | 1.15 [1.04;1.26] | 1.18 [1.07;1.30] | 0.005 |

Model 3: Individual deprivation and neighborhood deprivation were considered in the same model.
Model3a adjusted for sex, age, education level and HSC.
Model3b adjusted for M3a and geographical origin, smoking, alcohol consumption, BMI, HBP, diabetes, cardiovascular diseases and depressive symptomatology.
$\mathrm{OR}=$ Odds Ratio; $\mathrm{CI}=$ Confidence Interva


[^0]:    *Coefficient used to calculate the EPICES score: only applicable when the participant responds yes at the question.**Imputed variable.

