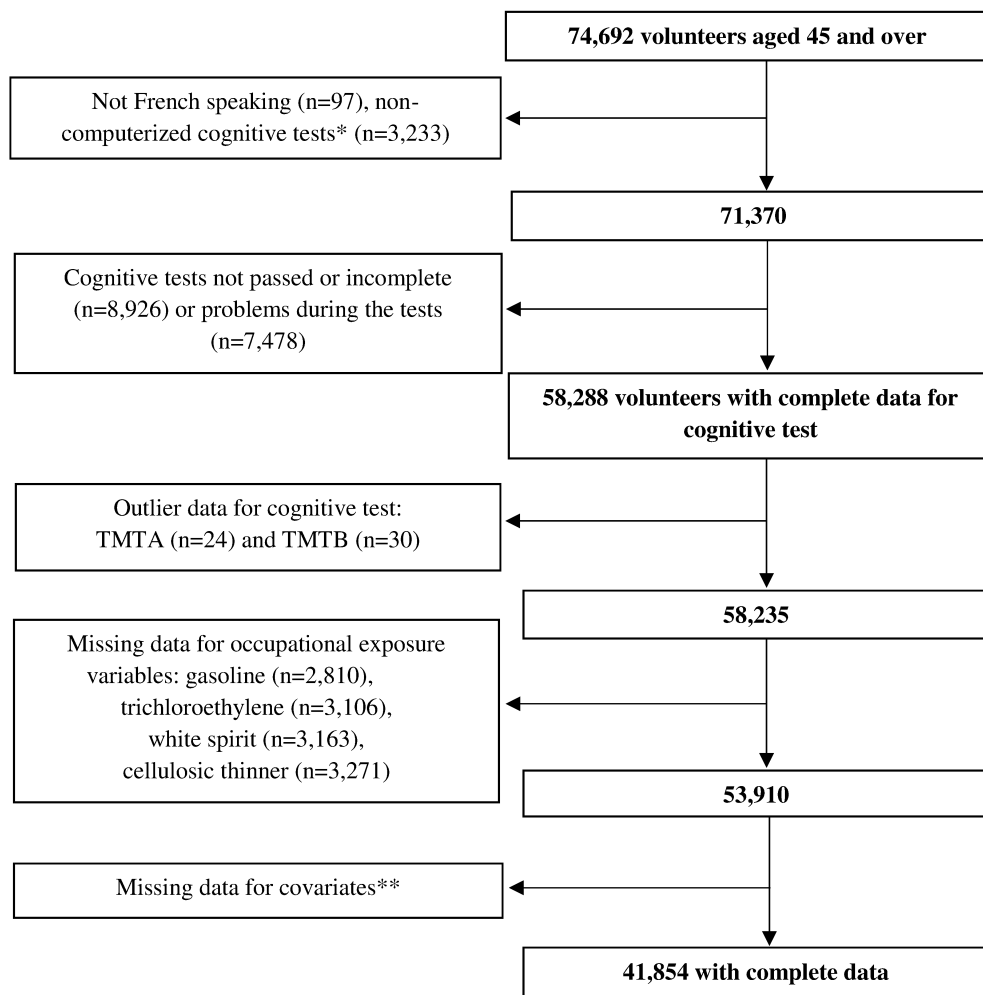


SUPPLEMENTARY MATERIALS

Supplementary figure 1: Sample selection



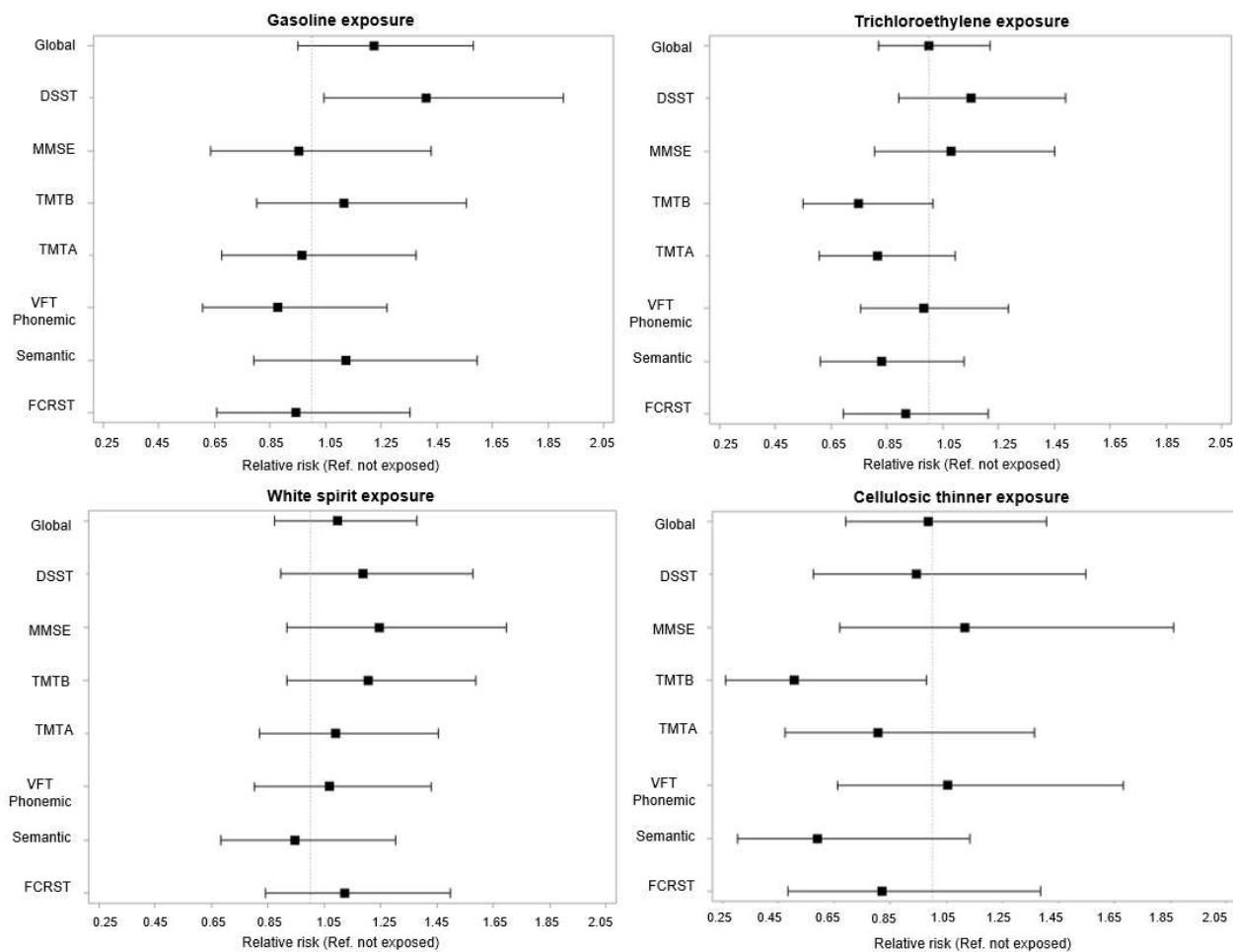
* When administering the cognitive tests, performance was first recorded on paper forms with manual timing of the tests. In a second phase, the scores were directly indicated on the data entry software, which also allowed automated timing of the tests and thus better standardization.

**education (n=1,283), marital status (n=1,439), income (n=1,311), tobacco (n=2,577), alcohol consumption (n=3,469), CESD (n=3,764), history of cardiovascular disease (n=964), history of respiratory disease (n=838), diabetes (n=1,156), repetitive work (n=384), shift work (n=966), noisy work (n=924)

Supplementary table 1: Socio-demographic differences between the main cohort and the final study population

Socio-demographic characteristics, n (%)	Excluded (n = 32,774)	Included (n = 41,854)
Women	17 446 (53.2)	21 620 (51.7)
Age (years)*	59 (52.5-64.5)	57.5 (51-63.5)
Education Level	<i>(n=30,502)</i>	
No diploma or certificate of primary education	5 180 (17.0)	3 924 (9.4)
Secondary education	7 908 (25.9)	8 931 (21.3)
High school graduation	4 769 (15.6)	7 072 (16.9)
Up to 2 years of university education	8 191 (26.9)	13 962 (33.4)
Master degree or more	4 454 (14.6)	7 965 (19.0)
Civil status	<i>(n = 30,300)</i>	
Single	4 039 (13.3)	5 171 (12.4)
Married	20 067 (66.2)	29 179 (69.7)
Divorced or separated	5 004 (16.5)	6 199 (14.8)
Widowed	1 190 (3.9)	1 305 (3.1)
Income	<i>(n=30,334)</i>	
< 2 100 €	7 855 (25.9)	6 281 (15.0)
Occupation	<i>(n= 28,913)</i>	
Farmer or craftsman	772 (2.7)	898 (2.2)
Executive, intellectual profession	7 142 (24.7)	13 097 (32.6)
Middle-level profession	8 279 (28.6)	13 145 (32.7)
Employee	7 158 (24.8)	8 596 (21.4)
Blue-collar worker	4 010 (13.9)	3 143 (7.8)
Never worked or other	1 552 (5.4)	1 363 (3.4)

*Median (interquartile range)

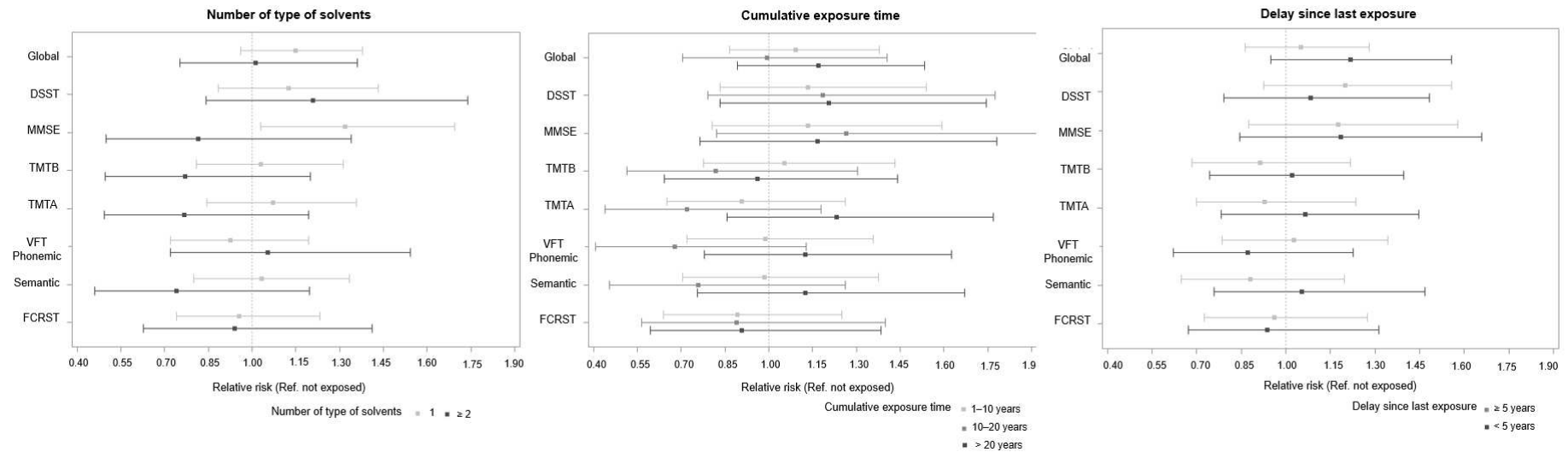


Supplementary figure 2: Association between cognitive performances and type of occupational solvent exposure using modified Poisson regression in women (n=21,620)

*RR: Relative Risk

For each cognitive score, RRs and their 95% confidence interval were provided by a modified Poisson regression. The RRs estimate the risk of cognitive impairment in participants exposed at each solvents, adjusted for all variables included in model 2 (age, education level, marital status, income, smoking, alcohol consumption, body mass index, hypertension, diabetes, cardiovascular disease, respiratory diseases, Center for Epidemiological Studies-Depression (CESD) score, French deprivation index (FDep09), night-shift work, repetitive work and noisy work).

Note. Global = global cognitive score ; DSST = Digit Symbol Substitution Test ; MMSE = Mini Mental State Examination ; TMT = Trail Making Test ; VFT = Verbal Fluency Tasks ; FCRST = Free and Cued Selective Reminding Test.



Supplementary figure 3: Association between cognitive performances and number of solvent type exposure, cumulative exposure time and delay since last exposure using modified Poisson regression, in women (n=21,620)

*RR: Relative Risk

For each cognitive score, RRs and their 95% confidence interval were provided by a modified Poisson regression. The RRs estimate the risk of cognitive impairment in participants exposed at each solvents, adjusted for all variables included in model 2 (age, education level, marital status, income, smoking, alcohol consumption, body mass index, hypertension, diabetes, cardiovascular disease, respiratory diseases, Center for Epidemiological Studies-Depression (CESD) score, French deprivation index (FDep09), night-shift work, repetitive work and noisy work).

Note. Global = global cognitive score ; DSST = Digit Symbol Substitution Test ; MMSE = Mini Mental State Examination ; TMT = Trail Making Test ; VFT = Verbal Fluency Tasks ; FCRST = Free and Cued Selective Reminding Test.