

Supplemental Table 1. Comparison of the characteristics of responders at baseline, non-responders at follow-up and included participants.

CATEGORICAL VARIABLES	Responders at baseline		Non-responders to the entire questionnaire at follow-up		Non-responders to the questions related to substance use at follow-up		Included participants	
	N	%	N	%	N	%	N	%
	37,588	100	9,276	24.7	1,361	3.6	26,951	71.7
Education level¹								
Early childhood education and primary education	764	2.1	336	3.7	72	5.5	358	1.3
Lower secondary education	1756	4.7	499	5.5	133	10.1	1151	4.3
Upper secondary education and post-secondary non-tertiary education	12176	32.8	3440	37.6	556	42.4	8267	30.7
Short-cycle tertiary education and Bachelor's or equivalent level	13122	35.3	2998	32.8	378	28.8	9873	36.6
Master's or equivalent level and Doctoral or equivalent level	9307	25.1	1869	20.4	173	13.2	7302	27.1
Household income (in euros per month)								
Less than 2100	7007	20.0	2443	28.8	391	31.7	4423	16.4
From 2100 to 2800	5352	15.3	1476	17.4	234	19.0	4084	15.2
From 2800 to 4200	11490	32.8	2549	30.1	362	29.3	9140	33.9
More than 4200	11212	32.2	2007	23.7	247	20.0	9304	34.5
Marital status								
Living with a partner	26511	71.5	6098	67.0	874	66.9	19744	73.3
Single	10550	28.5	3004	33.0	31.8	33.1	7207	26.7
Alcohol use risk categories²								
Low	34843	92.7	6545	80.8	1312	96.4	24631	91.4
Moderate	2039	5.4	1275	15.7	41	3.0	1797	6.7
High	706	1.9	284	3.5	8	0.6	523	1.9
Cannabis frequency of use								
Not in the past 12 months	34225	91.1	8051	86.8	1295	95.2	24875	92.3

In the past 12 months but not in the past month	2477	6.6	461	5.0	22	1.6	1088	4.0
In the past month	886	2.4	762	8.2	44	3.2	988	3.7
CONTINUOUS VARIABLES	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Age	46.8	13.6	44.0	13.7	51.5	13.4	47.5	13.4
Number of cigarettes per day	1.8	4.9	2.8	6.1	1.6	5.0	1.4	4.4
CESD total score	14.3	5.6	14.9	6.4	14.7	6.8	14.1	5.3
Self-rated health status ³	2.8	1.4	2.9	1.5	3.0	1.5	2.7	1.3

SD: Standard Deviation. CESD: Center of Epidemiologic Studies Depression scale. ¹According to the 2011 ISCED classification; ²According to the 2000 WHO guidelines as follows: low risk (≤ 28 drinks per week in men; ≤ 14 drinks per week in women), moderate risk (> 28 and ≤ 42 in men; > 14 and ≤ 28 in women) and high risk (> 42 in men; > 28 in women); ³From 1="Very good general health" to 8="Very poor general health". Except for alcohol, tobacco and cannabis use, responders had missing data for the other covariables whereas those missing data have been imputed for included participants.

Supplemental Table 2. Total effects standardized coefficients for all covariables (n=26,951).

	Age	Sex	Education	Marital status	Household income	Self-rated health	Depressive symptoms	Number of cigarettes per day	Cannabis use at baseline	Alcohol use at baseline
Alcohol use at baseline										
Standardized coefficient	0.0837	0.0227	-0.003051	-0.0368	-0.005158	0.0181	0.0355	0.1445	.	.
Standard error	0.006711	0.006113	0.007322	0.007556	-0.6271	0.006583	0.006966	0.009636	.	.
p-value	<0.001	0.000202	0.6769	<0.001	0.5306	0.005944	<0.001	<0.001	.	.
Alcohol use at follow-up										
Standardized coefficient	0.0217	0.003410	0.0000944	-0.0183	-0.005682	0.006968	0.0172	0.0774	0.0637	0.4364
Standard error	0.003690	0.002828	0.003277	0.003427	0.003726	0.002960	0.003149	0.004991	0.007774	0.009931
p-value	<0.001	0.2279	0.9770	<0.001	0.1273	0.0186	<0.001	<0.001	<0.001	<0.001
Cannabis use at baseline										
Standardized coefficient	-0.2331	-0.1021	0.0224	-0.0347	-0.0538	-0.0147	0.0269	0.2245	.	.
Standard error	0.005627	0.005603	0.006739	0.007474	0.007857	0.005827	0.005909	0.008792	.	.
p-value	<0.001	<0.001	0.000901	<0.001	<0.001	0.0117	<0.001	<0.001	.	.
Cannabis use at follow-up										
Standardized coefficient	-0.1834	-0.0806	0.0177	-0.0282	-0.0428	-0.0113	0.0220	0.1806	0.7930	0.0176
Standard error	0.004784	0.004579	0.005354	0.005954	0.006272	0.004640	0.004727	0.007423	0.007006	0.005983
p-value	<0.001	<0.001	0.000955	<0.001	<0.001	0.0146	<0.001	<0.001	<0.001	0.003269

Supplemental Figure 1. Cross-lagged associations between frequency of cannabis use and alcohol consumption in 26,951 participants, enrolled in 2015 or 2016 in the CONSTANCES cohort and while introducing both outcomes as binary variables. Results on unidirectional arrows are standardized coefficients \pm their standard errors. Results on bidirectional arrows are residual correlations. The follow-up period was one year.

