

APPENDICES

Appendix A. Variable Names and Definitions

Variable Role	Definition and comments
Dependent Variables	<p>Consumption of antidepressant drugs: individuals who have consumed or have been prescribed antidepressant or stimulant drugs in the last two weeks. This takes the value one if the individual declares that he/she has consumed or has been prescribed the drug during the last two weeks.</p> <p>Consumption of sedative drugs: individuals who have consumed or have been prescribed tranquilizers, sedative/hypnotic or sleeping pills in the last two weeks. It takes the value one if the individual declares that he/she has consumed or has been prescribed the drug during the last two weeks.</p>
Independent Variables	<p>Year of the survey*: represented by a dummy variable that indicates 0='2006 survey' (reference period) and 1='2011-2012 survey'.</p> <p>Depression, anxiety or other mental health disorders: a dummy variable in which 1 indicates individuals who declared that they were suffering from these illnesses during the last twelve months.</p> <p>Mental health index using the Goldberg Health Questionnaire (GHQ-12) [32]. The GHQ-12 questionnaire includes 12 questions aimed to detect symptoms of anxiety or depression and it moves on a 12-point scale (0 to 12) i.e. from better to worse mental health. In order to observe the worst cases, we recoded the mental health index as zero if the index is below or equal to 8 points and one if the index is between 9 and 12 points.</p> <p>Question on self-rated health (SRH) status in the last 12 months. Asked in SNHS as 'how would you rate your health during the last twelve months?', and categorized as very good (reference category), good, fair, bad, very bad.</p> <p>Chronic illness: a dummy variable equal to one if the individual declares that he/she has ever had at least three of the following chronic diseases: upper back pain, lower back pain, frequent headaches, malignant tumours, diabetes, hypertension, high cholesterol, stomach ulcers, chronic constipation, chronic bronchial disease, asthma, cardiac disorder, heart attack, chronic skin problems, chronic allergies, anaemia, varicose leg veins, haemorrhoids, stroke, depression, anxiety or other mental problems, cataracts, arthritis or rheumatism, osteoporosis, urinary incontinence, prostate disorder (men), thyroid diseases, menopausal period problems (women), other chronic diseases.</p> <p>Smoking: we include a categorized variable recoded as zero if the individual does not smoke, one if he/she currently smokes and two if the person used to smoke in the past.</p> <p>Hours of sleep: a dummy variable recoded as one if the individual sleeps more than 7 hours and zero otherwise.</p> <p>Body Mass Index (BMI) categorized as [33]: low weight ($BMI < 18 \text{ kg/m}^2$) (reference category); normal weight ($18 \text{ kg/m}^2 \leq BMI \leq 25 \text{ kg/m}^2$); overweight ($25 \text{ kg/m}^2 < BMI \leq 30 \text{ kg/m}^2$); obese ($BMI > 30 \text{ kg/m}^2$). Both height and weight were reported by the individual.</p> <p>Physical activity in the workplace: sitting (reference category), standing, walking and carrying things, and doing heavy tasks.</p> <p>Medical visits: categorized as a dummy that equals one if the individual visited the doctor during the last year, and zero otherwise.</p> <p>Gender* (male groups of reference) and age (age groups: 15-35 years (group of reference); 36-45; 46-55; 56-65; 66-75; +75).</p> <p>Demographic and economic characteristics: the region of residence, marital status (single (group of reference), married, widowed, separated and divorced), social class [34], educational level (no education (reference category), primary education, secondary education and tertiary education), and employment status* (currently working (group of reference), short-term unemployed (unemployed less than a year), long-term unemployed (unemployed more than a year), retired, studying and homemaker).</p>

* These variables are the only ones considered as the explanatory variables in the analysis, and all the others are considered as the covariates.

Appendix B. Descriptive statistics^a

VARIABLES	Period 2006			Period 2011-2012		
	Total (%) ^b (n=28,954)	Use of antidepressants (%) ^c	Use of sedatives (%) ^c	Total (%) ^b (n=20,509)	Use of antidepressants (%) ^c	Use of sedatives (%) ^c
		(n=2,089)	(n=3,904)		(n=1,099)	(n=2,787)
Total	100	5.8 ^d	10.7 ^e	100	4.3 ^d	11.1 ^e
<i>Sociodemographic variables</i>						
Sex						
Male	49.1	3.3	6.7	48.8	1.6	6.7
Female	50.9	8.2	14.5	51.2	6.7	15.3
Current activity						
Working	48.2	3.1	6	44.2	1.9	5.2
Unemployed short-term	3.7	6.1	6.5	6.1	2.6	6.3
Unemployed long-term	2	11.2	15.6	6.7	5	11.4
Retired	24	11.7	23.9	23.1	8	23.1
Studying	4.6	0.9	2.3	6.3	0.3	1.5
Homemaker	17.4	10.2	18.9	13.5	9.3	21.1
Age (years old)						
16-35	34.5	2	3.5	31	1	3.1
36-45	19.2	4.6	8	19.8	2.7	7.6
46-55	15.6	7.5	11.6	17	4.8	11
56-65	12.3	10.2	16.1	12.9	7.8	16.1
66-75	10.2	10.3	21.5	10	8.2	20.5
>75	8.1	9.1	24.1	9.3	8.3	28.2
Region						
Andalusia	17.5	6.1	10.5	17.8	4	11.9
Aragon	2.9	5.1	8.4	2.9	4.5	14.8
Asturias	2.5	10.7	16.4	2.4	8.9	19.4
Balearic Islands	2.3	6.6	12.3	2.4	3.1	8.4
Canary Islands	4.4	9.6	15.4	4.6	5.3	12.6
Cantabria	1.3	3.9	9.6	1.3	2.2	4.9
Castile-Leon	5.8	4.4	7.9	5.5	4.1	12.1
Castile-La Mancha	4.3	5	9.6	4.5	2.8	5.6
Catalonia	16	5.2	9.7	15.7	4.2	8.3
Region of Valencia	10.7	4.6	11.7	10.9	5.1	13.5
Extremadura	2.4	6.3	8.8	2.4	5	13.2
Galicia	6.4	7.9	13.9	6.2	6.4	13.5
Madrid	13.6	5.1	9.7	13.7	2.6	9.4
Murcia	3	5	8.8	3.1	4.9	8.5
Navarre	1.3	6.4	13.2	1.3	5.9	11.4
Basque Country	4.9	5.9	11.3	4.7	3.6	13.3
La Rioja	0.7	2.4	4.8	0.7	3	9.7
Education (ed)						
No ed	12.9	12	24.5	13	9.3	24.6
Primary ed	43.3	8.1	14.7	43.1	5.6	14.1
Secondary ed	19.7	4.5	8.3	20.9	3.1	8.2
Tertiary ed	24.1	3.8	7.2	23	2.2	6
Marital Status						
Single	27.9	3.9	7.6	31.7	1.9	5.5
Married	54.9	6.5	11.8	56.1	4.2	11.1

Widowed	11.8	13.3	28.2	7.4	12	30.3
Separated	3.1	9.9	16.5	1.8	6	16.8
Divorced	2.4	12.3	17.2	2.9	9.4	18.2
Social class						
Class I	10.5	4.1	8.4	11.4	3.26	9.69
Class II	10.1	5.2	11.1	7.8	4.5	10.99
Class III	24.5	6.5	12.1	19.1	4.76	11.72
Class IV	27.8	6.9	13.2	15.2	4.8	12.91
Class V	13.2	8.3	14.1	32	5.69	14.26
Class VI	13.9	8.9	15.2	14.4	7	17.13
Health variables						
Depression						
No	86.3	0.9	5.1	89.2	0.8	6.2
Yes	13.7 ^d	36.5	46	10.8 ^d	32.7	52
Mental health						
<=8	96.6	4.6	9.4	95.8	3.1	9
>=9	3.4 ^d	38.4	47.5	4.2 ^d	28.1	51.9
SAH						
Very good	17.9	0.8	2.1	21.1	0.3	1.8
Good	48.6	2.1	5	50.8	1.7	5.9
Fair	24.8	10.5	19.3	20.2	8.7	22.3
Bad	6.4	22	35.2	6.3	18.9	39.6
Very bad	2.3	26.8	38.7	1.5	22.4	47.2
Chronic diseases						
<3	57.4	1.3	3.1	63.9	0.8	3.5
>=3	42.6	11.8	21	36.1	10.4	24.6
Smoking						
No	50	6.4	12	53.4	4.9	12.1
Yes	29.5	5.3	8.7	27	3.8	8.8
In the past	20.5	4.9	10.4	19.6	3.1	11.4
Sleeping						
<=7	52.1	6.2	12.2	49.8	4.5	13
>7	47.9	5.3	9.1	50.2	4	9.2
BMI						
underweight	1.3	4.3	7.4	1.7	0.6	6.7
normal weight	47.2	4.3	8.3	46	2.8	8.3
overweight	36.5	5.8	11	35.7	4	10.7
obesity	15	9.3	14.6	16.6	7.4	15.8
Physical activity						
Sitting	35.1	6.5	12.6	40.3	5.7	14
Standing up	47.7	6.2	10.8	44.8	3.7	10.3
Walking and carrying	13.1	3.6	7.3	12.1	2.2	5.6
Heavy tasks	4.1	2.4	5.4	2.7	1.1	6.7
Medical visits						
No	68.7	3.1	6.5	71.7	2.6	7.2
Yes	31.3	11.5	19.7	28.3	8.4	20.9

a Weighted distribution of the sample

b For the categorical variables, data are % in the category. The 2006 survey increased its sample size in some regions to obtain more accurate estimations on smaller geographical areas (e.g. NUTS4 or health areas).

c For the categorical variables, data are % of individuals using drugs for each case

d P<0.01

e P=0.735

Appendix C. Mixed logistic estimations of covariables of the use of antidepressants and sedatives^a

	Antidepressants		Sedatives	
	Exp (beta) (95% CI)	P-value	Exp (beta) (95% CI)	P-value
Intercept	0.0014 (6.20e ⁻⁴ -0.0033)	P<0.01	0.008 (0.0037-0.0183)	P<0.01
<i>Sociodemographic variables</i>				
Age (15-35 years old)				
36-45 years old	1.48 (1.21-1.81)	P<0.01	1.51 (1.31-1.74)	P<0.01
46-55 years old	1.83 (1.49-2.24)	P<0.01	1.77 (1.54-2.05)	P<0.01
56-65 years old	2.15 (1.73-2.66)	P<0.01	2.10 (1.80-2.44)	P<0.01
66-75 years old	1.77 (1.40-2.25)	P<0.01	2.50 (2.10-2.96)	P<0.01
>75 years old	1.28 (0.99-1.66)	P=0.028	2.82 (2.35-3.37)	P<0.01
Education (None)				
Primary	1.22 (1.08-1.38)	P<0.01	1.19 (1.09-1.30)	P<0.01
Secondary	1.33 (1.11-1.59)	P<0.01	1.31 (1.15-1.48)	P<0.01
Tertiary	1.46 (1.21-1.77)	P<0.01	1.16 (1.02-1.33)	P=0.014
Marital Status (single)				
Married	0.99 (0.86-1.14)	P=0.455	0.90 (0.82-0.99)	P=0.017
Widowed	0.97 (0.82-1.16)	P=0.377	1.05 (0.93-1.19)	P=0.201
Separated	1.02 (0.79-1.32)	P=0.435	1.12 (0.92-1.35)	P=0.132
Divorced	1.29 (1.01-1.65)	P=0.020	1.08 (0.90-1.30)	P=0.206
Social Class (class I)				
Class II	0.93 (0.75-1.16)	P=0.256	0.99 (0.86-1.15)	P=0.466
Class III	1.03 (0.86-1.23)	P=0.368	0.87 (0.77-0.98)	P<0.01
Class IV	0.99 (0.83-1.18)	P=0.456	0.92 (0.82-1.04)	P=0.099
Class V	1.06 (0.89-1.27)	P=0.252	0.90 (0.80-1.02)	P=0.045
Class VI	0.95 (0.79-1.15)	P=0.307	0.86 (0.75-0.98)	P=0.011
<i>Health variables</i>				
Depression	28.71 (25.53-32.28)	P<0.01	7.60 (6.61-7.61)	P<0.01
Mental health	1.89 (1.66-2.15)	P<0.01	1.97 (1.75-2.21)	P<0.01
SAH (very good)				
Good	1.61 (1.22-2.11)	P<0.01	1.58 (1.35-1.85)	P<0.01
Fair	2.44 (1.85-3.21)	P<0.01	2.55 (2.17-2.99)	P<0.01
Bad	3.10 (2.32-4.13)	P<0.01	3.36 (2.81-4.00)	P<0.01
Very bad	3.04 (2.21-4.18)	P<0.01	3.65 (2.96-4.52)	P<0.01
Chronic diseases	1.45 (1.26-1.68)	P<0.01	1.88 (1.73-2.05)	P<0.01
Smoker (No)				
Yes (current)	1.15 (1.01-1.31)	P=0.016	1.17 (1.07-1.29)	P<0.01
Yes (past)	0.88 (0.77-1.01)	P=0.036	1.07 (0.98-1.17)	P=0.069
Sleep (<=7)	1.26 (1.15-1.38)	P<0.01	0.81 (0.76-0.87)	P<0.01
BMI (underweight)				
Normal weight	1.02 (0.88-1.18)	P=0.412	1.08 (0.97-1.20)	P=0.073
Overweight	1.24 (1.07-1.43)	P<0.01	1.07 (0.96-1.18)	P=0.110
Obese	1.19 (1.02-1.39)	P=0.011	0.95 (0.85-1.06)	P=0.178
Physical activity (sitting)				
Standing	0.89 (0.81-0.99)	P=0.022	0.81 (0.76-0.87)	P<0.01
Walking and carrying	0.83 (0.69-0.99)	P=0.019	0.77 (0.68-0.87)	P<0.01
Heavy tasks	0.66 (0.45-0.98)	P=0.020	0.83 (0.64-1.07)	P=0.071
Medical visits	1.44 (1.31-1.58)	P<0.01	1.57 (1.47-1.68)	P<0.01

^a Global statistical results from the model of the covariates