Supplementary table 1. Baseline table for men and women depicted separately

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | All (men)  (*N* = 5,408) | No depression  (*N* = 5,203; 96.2 %) | Depression  (*N* = 205; 3.8 %) | Sign. | All (women)  (*N* = 4,628) | No depression  (95 %; *N* = 4,396) | Depression  (5 %; *N* = 232) | p-value |
| *Sociodemographic* |  |  |  |  |  |  |  |  |
| Age (years) | 54.6±11.0 | 54.7±11.0 | 52.7±10.8 | 0.0096 | 53.9±10.9 | 54.1±10.9 | 50.1±9.9 | < 0.0001 |
| SES (Baseline) | 14.18±4.47 | 14.20±4.47 | 13.50±4.39 | 0.027 | 12.66±4.12 | 12.66±4.12 | 12.60±4.08 | 0.81 |
| Employment (%) | 68.9 (3719) | 68.7 (3567) | 75.2 (152) | 0.052 | 61.2 (2826) | 60.6 (2659) | 72.0 (167) | 0.00052 |
| Income OECD (€) | 2375.00 (1875.00/ 3375.00) | 2375.00 (1875.00/ 3375.00) | 2125.00  (1625.00/ 3125.00) | 0.0051 | 1125.00  (625.00/ 1875.00) | 1125.00  (625.00/ 1875.00) | 1125.00  (625.00/ 1875.00) | 0.65 |
| Living with partner (%) | 87.1 (4710) | 87.3 (4542) | 82.0 (168) | 0.033 | 81.5 (3771) | 81.6 (3587) | 79.3 (184) | 0.39 |
| *Psychological* |  |  |  |  |  |  |  |  |
| Type D (%) | 18.5 (998) | 17.8 (923) | 36.8 (75) | < 0.0001 | 20.3 (938) | 19.2 (843) | 41.3 (95) | < 0.0001 |
| Life events (past 12 months) | 2.66±2.56 | 2.64±2.53 | 3.30±3.22 | 0.0038 | 2.59±2.48 | 2.56±2.44 | 3.15±3.02 | 0.0035 |
| Loneliness (yes, %) | 5.5 (298) | 5.1 (263) | 17.2 (35) | < 0.0001 | 7.9 (364) | 7.3 (318) | 20.1 (46) | < 0.0001 |
| Social support | 20.91±3.32 | 20.98±3.27 | 19.14±4.08 | < 0.0001 | 20.79±3.35 | 20.86±3.30 | 19.44±4.01 | < 0.0001 |
| Anxiety (GAD-2≥3, %) | 2.1 (111) | 1.8 (93) | 8.9 (18) | < 0.0001 | 3.4 (158) | 2.9 (129) | 12.6 (29) | < 0.0001 |
| Social phobia (Mini-Spin ≥6,%) | 4.1 (221) | 3.8 (195) | 12.7 (26) | < 0.0001 | 6.3 (290) | 5.7 (250) | 17.4 (40) | < 0.0001 |
| Panic | 1.7 (90) | 1.6 (80) | 5.1 (10) | 0.0017 | 2.9 (129) | 2.7 (114) | 6.8 (15) | 0.0014 |
| History anxiety disorder (yes, %) | 1.8 (96) | 1.7 (90) | 2.9 (6) | 0.18 | 4.1 (191) | 4.0 (176) | 6.5 (15) | 0.087 |
|  |  |  |  |  |  |  |  |  |
| *Behavioral* |  |  |  |  | 16.3 (754) | 16.0 (703) | 22.0 (51) | 0.022 |
| Smoking (yes, %) | 18.0 (972) | 17.6 (917) | 27.2 (55) | 0.0010 | 25.3 (22.6/29.0) | 25.3  (22.6/29.0) | 24.8  (22.4/28.7) | 0.44 |
| BMI (kg/m²) | 27.1 (24.8/29.9) | 27.0 (24.8/29.9) | 27.7 (25.6/30.6) | 0.022 | 55.9 (2586) | 56.1 (2465) | 52.2 (121) | 0.25 |
| Active sports (yes, %) | 49.3 (2665) | 49.6 (2579) | 42.0 (86) | 0.033 | 1.8 (82) | 1.8 (77) | 2.2 (5) | 0.61 |
| Alcohol abuse | 3.6 (196) | 3.7 (190) | 2.9 (6) | 0.71 |  |  |  |  |
| *Somatic* |  |  |  |  | 6.8 (317) | 7.0 (306) | 4.7 (11) | 0.23 |
| CVD (CHD, MI, HF, PAD, Stroke)(yes, %) | 12.2 (658) | 12.0 (626) | 15.7 (32) | 0.13 | 4.3 (199) | 4.3 (187) | 5.2 (12) | 0.50 |
| COPD (yes, %) | 3.5 (191) | 3.5 (181) | 4.9 (10) | 0.25 | 8.8 (408) | 8.7 (381) | 11.6 (27) | 0.12 |
| Cancer (yes, %) | 7.2 (388) | 7.2 (375) | 6.4 (13) | 0.78 | 5.1 (235) | 5.1 (225) | 4.3 (10) | 0.76 |
| Diabetes (yes, %) | 9.1 (491) | 8.9 (465) | 12.7 (26) | 0.081 |  |  |  |  |

Supplementary table 2. Logistic Regression Models (men) depicted separately model 1 excluding depression measure (PHQ-9) at baseline vs. model 2 including subclinical depressive participants (PHQ-9<10) at baseline

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Incident depression | Model 1 men (*N* = 5,190; *N* = 188 events) | | | | | Model 2 men (*N* = 5,190; *N* = 188 events) | | | |
|  | Odds Ratio | *L* (95%CI) | *U* (95%CI) | *p* | | Odds Ratio | *L* (95%CI) | *U* (95%CI) | *p-value* |
| PHQ9\_baseline | - | - | - | |  | 1.490 | 1.392 | 1.597 | < 0.0001 |
| *Sociodemographic* |  |  |  | |  |  |  |  |  |
| Age [5y] | 0.924 | 0.850 | 1.004 | | < 0.062 | 0.941 | 0.863 | 1.026 | < 0.0001 |
| SES | 0.981 | 0.947 | 1.017 | | 0.30 | 0.993 | 0.956 | 1.030 | 0.69 |
| Partnership | 1.282 | 0.833 | 2.023 | | 0.27 | 1.166 | 0.752 | 1.855 | 0.50 |
| *Psychological* |  |  |  | |  |  |  |  |  |
| Type D | 1.904 | 1.360 | 2.645 | | 0.00014 | 1.260 | 0.890 | 1.769 | 0.19 |
| Life events | 1.335 | 1.001 | 1.764 | | 0.045 | 1.120 | 0.827 | 1.504 | 0.46 |
| Loneliness | 2.095 | 1.299 | 3.297 | | 0.0018 | 1.467 | 0.901 | 2.332 | 0.11 |
| Social support | 0.913 | 0.877 | 0.952 | | < 0.0001 | 0.950 | 0.909 | 0.993 | 0.021 |
| GAD2≥3 | 2.637 | 1.396 | 4.711 | | < 0.0001 | 1.391 | 0.732 | 2.505 | 0.29 |
| Social Phobia (Mini-Spin≥6) | 1.830 | 1.070 | 3.002 | | 0.021 | 1.260 | 0.727 | 2.099 | 0.39 |
| Panic | 1.921 | 0.834 | 3.959 | | 0.097 | 1.176 | 0.511 | 2.439 | 0.68 |
| History of anxiety disorder | 1.013 | 0.334 | 2.461 | | 0.98 | 0.945 | 0.311 | 2.309 | 0.91 |
| *Behavioral* |  |  |  | |  |  |  |  |  |
| Active sports | 0.793 | 0.579 | 1.084 | | 0.15 | 0.842 | 0.610 | 1.158 | 0.29 |
| Obesity | 1.234 | 0.871 | 1.726 | | 0.23 | 1.133 | 0.794 | 1.600 | 0.48 |
| Smoking | 1.472 | 1.030 | 2.077 | | 0.030 | 1.376 | 0.952 | 1.961 | 0.083 |
| Alcohol abuse | 0.825 | 0.316 | 1.772 | | 0.66 | 0.815 | 0.309 | 1.782 | 0.64 |
| *Somatic* |  |  |  | |  |  |  |  |  |
| CVD | 1.422 | 0.881 | 2.223 | | 0.13 | 1.205 | 0.735 | 1.916 | 0.44 |
| COPD | 1.354 | 0.620 | 2.612 | | 0.40 | 1.143 | 0.520 | 2.228 | 0.72 |
| Cancer | 1.158 | 0.602 | 2.050 | | 0.64 | 1.136 | 0.588 | 2.030 | 0.69 |
| Diabetes | 1.571 | 0.953 | 2.498 | | 0.065 | 1.460 | 0.872 | 2.361 | 0.14 |

Supplementary table 3. Logistic Regression Models (women) depicted separately model 1 excluding depression measure (PHQ-9) at baseline vs. model 2 including subclinical depressive participants (PHQ-9<10) at baseline

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Incident depression | Model 1 women (*N* = 4,353; *N* = 212 events) | | | | | Model 2 women (*N* = 4,353; *N* = 212 events) | | | |
|  | Odds Ratio | L (95%CI) | U (95%CI) | p | | Odds Ratio | L (95%CI) | U (95%CI) | p-value |
| PHQ9\_baseline | - | - | - | |  | 1.320 | 1.235 | 1.412 | < 0.0001 |
| *Sociodemographic* |  |  |  | |  |  |  |  |  |
| Age [5y] | 0.848 | 0.783 | 0.919 | | < 0.0001 | 0.847 | 0.780 | 0.919 | < 0.0001 |
| SES | 0.977 | 0.939 | 1.016 | | 0.25 | 0.992 | 0.952 | 1.032 | 0.68 |
| Partnership | 1.243 | 0.857 | 1.841 | | 0.26 | 1.170 | 0.802 | 1.744 | 0.43 |
| *Psychological* |  |  |  | |  |  |  |  |  |
| Type D | 1.814 | 1.319 | 2.478 | | 0.00021 | 1.385 | 0.999 | 1.906 | 0.048 |
| Life events | 1.124 | 0.844 | 1.482 | | 0.42 | 0.968 | 0.726 | 1.279 | 0.82 |
| Loneliness | 1.943 | 1.286 | 2.886 | | 0.0013 | 1.620 | 1.066 | 2.419 | 0.021 |
| Social support | 0.938 | 0.901 | 0.977 | | 0.0019 | 0.960 | 0.921 | 1.001 | 0.052 |
| GAD2≥3 | 2.763 | 1.646 | 4.481 | | < 0.0001 | 1.634 | 0.965 | 2.680 | 0.059 |
| Social Phobia (Mini-Spin≥6) | 1.938 | 1.253 | 2.929 | | 0.0022 | 1.614 | 1.034 | 2.461 | 0.030 |
| Panic | 1.490 | 0.770 | 2.700 | | 0.21 | 1.058 | 0.545 | 1.932 | 0.86 |
| History of anxiety disorder | 1.247 | 0.655 | 2.203 | | 0.47 | 1.223 | 0.643 | 2.161 | 0.51 |
| *Behavioral* |  |  |  | |  |  |  |  |  |
| Active sports | 0.990 | 0.739 | 1.329 | | 0.94 | 1.022 | 0.760 | 1.377 | 0.88 |
| Obesity | 1.057 | 0.722 | 1.517 | | 0.77 | 0.974 | 0.662 | 1.404 | 0.89 |
| Smoking | 1.223 | 0.849 | 1.734 | | 0.27 | 1.245 | 0.859 | 1.776 | 0.24 |
| Alcohol abuse | 1.508 | 0.512 | 3.548 | | 0.40 | 1.435 | 0.483 | 3.424 | 0.46 |
| *Somatic* |  |  |  | |  |  |  |  |  |
| CVD | 0.886 | 0.422 | 1.668 | | 0.73 | 0.883 | 0.420 | 1.668 | 0.72 |
| COPD | 1.121 | 0.530 | 2.124 | | 0.74 | 1.111 | 0.521 | 2.126 | 0.77 |
| Cancer | 1.940 | 1.213 | 2.997 | | 0.0039 | 1.943 | 1.206 | 3.025 | 0.0045 |
| Diabetes | 0.592 | 0.203 | 1.368 | | 0.27 | 0.598 | 0.204 | 1.391 | 0.28 |