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  |