**Table S1: The association of physical activity and social network in relation to cognitive function at follow-up: Model 3 with all control variables shown**

|  |  |  |
| --- | --- | --- |
| VARIABLES |  |  R2 |
| Baseline measures |  |   |
| Cognition |  |  0.44\*\*\* |
| Moderate physical activity |  |  0.02\* |
| High physical activity |  |  0.03\*\*\* |
| Social network size |  |  0.03\*\*\* |
| Age |  |  -0.17\*\*\* |
| Gendera |  |  0.03\*\*\* |
| Marital statusa |  | -0.01 |
| Education levela  | Secondary  |  0.04\*\*\* |
|   | Post secondary |  0.09\*\*\* |
| Financial adequacya | With some difficulty |  0.02\* |
|  | Fairly easily |  0.04\*\* |
|  | Easily |  0.04\*\*\* |
| Chronic diseases |  |  0.02\*\* |
| ADL |  |  0.01 |
| IADL limitations |  |  -0.09\*\*\* |
| Perceived health |  |  0.05\*\*\* |
| Countrya | Germany |  0.01 |
|  | Sweden |  0.01 |
|  | Spain | -0.05\*\*\* |
|  | Italy | -0.06\*\*\* |
|  | France | -0.04\*\*\* |
|  | Denmark |  0.01 |
|  | Switzerland |  0.01 |
|  | Belgium | -0.02\* |
|  | Czech Republic |  0.05\*\*\* |
|  | Poland | -0.03\*\*\* |
|  | Portugal | -0.07 |
|  | Slovenia | -0.02\*\* |
|  | Estonia | -0.04\*\*\* |
|  |  |  |
| Observations |  | 16,496 |
| R-squared |  | 0.443 |

a Reference categories: gender (male); marital status (not married or partnered); education level (primary education or less); financial adequacy (with great difficulty), country (Austria) .