**Table S1** Definition of the analysis variables in LIFE-Adult participants, the Leipzig population, and short questionnaire participants

|  |  |  |  |
| --- | --- | --- | --- |
|  | LIFE-Adult participants | Leipzig population | Short questionnaire participants |
| **Sex**  |  |  |  |
| Data source | Registration office | Census | Registration office |
| Classification for analysis | MaleFemale  | MaleFemale | MaleFemale |
|  |  |  |  |
| **Age** |  |  |  |
| Data source | Registration office | Census | Registration office |
| Classification for analysis | 5-year groups | 5-year groups | 5-year groups1 |
|  |  |  |  |
| **Marital status** |  |  |  |
| Data source | Interview | Microcensus: Interview  | Questionnaire |
| Questions  | Which marital status do you have? | Which marital status do you have? | Which marital status do you have? |
| Classification for analysis | Married (living together with spouse, living separated from spouse)Unmarried (single, divorced, widowed) | Married\* Unmarried (single, divorced\*, widowed\*)\*also refers to registered partnership | Married\* Unmarried (single, divorced\*, widowed\*)\*also refers to registered partnership |
|  |  |  |  |
| **Education**  |  |  |  |
| Data source | Interview | Microcensus: Interview | Questionnaire |
| Questions  | Which highest general school leaving certificate do you have?Which vocational qualification do you have? | Which highest general school leaving certificate do you have?Which highest vocational qualification do you have? | Which highest general school leaving certificate do you have? |
| Classification for analysis | Considering school and vocational qualification [S1,S2]:High education (first stage of tertiary education)Medium and low education (primary, lower secondary, upper secondary, and post-secondary non-tertiary education) | Considering school and vocational qualification [S1,S2]:High education (first stage of tertiary education)Medium and low education (primary, lower secondary, upper secondary, and post-secondary non-tertiary education) |  |
|  |  |  |  |
|  | Considering school qualification: Hochschulreife (technical college or university entrance qualification)Polytechnische Oberschule (POS) or Realschule (certificate of polytechnic secondary school or secondary education)Hauptschule (certificate of primary education)Other or no qualification |  | Hochschulreife (technical college or university entrance qualification)Polytechnische Oberschule (POS) or Realschule (certificate of polytechnic secondary school or secondary education)Hauptschule (certificate of primary education)Other or no qualification |
|  |  |  |  |
| **Employment**  |  |  |  |
| Data source | Interview | Microcensus: Interview | Questionnaire |
| Questions  | Are you currently gainfully employed? | Employment within the last week: Which group do you belong to? | Are you currently gainfully employed? |
| Classification for analysis | Employed (having a paid job regardless of duration)Unemployed or inactive persons | Employed (having a paid job regardless of duration)Unemployed or inactive persons | Employed (not further defined)Unemployed or inactive persons |
|  |  |  |  |
| **Smoking status** |  |  |  |
| Data source | Interview, questionnaire | Microcensus: Interview | Questionnaire |
| Questions  | Have you smoked regularly in your life for more than 6 months? If “Yes”: Do you smoke currently – if only occasionally?Additional questions related to the amount of consumption of different tobacco products | Do you smoke currently (if only occasionally)? | Do you smoke cigarettes currently? If “No”, did you smoke in the past? |
| Classification for analysis | Current smokerCurrent nonsmoker (former or never smoker) | Current smokerCurrent nonsmoker (former or never smoker) |  |
|  |  |  |  |
|  | Considering cigarette smoking:Current cigarette smokerFormer cigarette smokerNever cigarette smoker |  | Current cigarette smokerFormer cigarette smokerNever cigarette smoker |
|  |  |  |  |
| **Physical condition** |  | *Not available* |  |
| Data source | Questionnaire [S3] |  | Questionnaire |
| Questions  | How did you feel within the last seven days? Physically, I am in a poor condition: scale from 1 (yes, that is true) to 5 (no, that is not true) |  | How would you describe your current physical condition? |
| Classification for analysis | Poor (1)Not poor (2 to 5) |  | Poor Not poor (less well, good, very good) |
|  |  |  |  |
| **Disease diagnoses** |  | *Not available* |  |
| Data source | Interview |  | Questionnaire |
| Questions  | Have you ever been diagnosed with a myocardial infarction/stroke/diabetes/cancer by a doctor? |  | Have you ever been diagnosed with a myocardial infarction/stroke/diabetes/cancer by a doctor? |
| Classification for analysis | YesNo |  | YesNo |

Answer categories were given for all questions, except for the amount of tobacco consumption. To keep the table readable, these categories are not shown.

1For those who had been unwilling to participate in LIFE-Adult, information on age were exclusively available in 5-year groups for privacy reasons.

S1. International Standard Classification of Education ISCED 1997. <http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.htm> Accessed 18 July 2018.

S2. Statistische Ämter des Bundes und der Länder, editors. Internationale Bildungsindikatoren im Ländervergleich. Wiesbaden 2006. <https://www.destatis.de/GPStatistik/receive/DEHeft_heft_00010329> Accessed 18 July 2018.

S3. Smets EM, Garssen B, Bonke B, de Haes JC. The Multidimensional Fatigue Inventory (MFI) psychometric qualities of an instrument to assess fatigue. J Psychosom Res. 1995;39:315–25.