**Supplemental Digital Content 3.** Descriptive statistics with additional covariates

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | All | | Women | | Men | |  |
|  | Data Source | *N* | Mean (SD) | *N* | Mean (SD) | *N* | Mean (SD) | *p* valuea |
| Physical activity | |  |  |  |  |  |  |  |
| PAI at 12 y (range 5–14) | YFS | 1723 | 9.57 (1.80) | 886 | 9.06 (1.63) | 837 | 10.11 (1.82) | *P* < 0.001 |
| PAI at 15 yb (range 5–14) | YFS | 2445 | 8.97 (1.97) | 1271 | 8.61 (1.77) | 1174 | 9.37 (2.10) | *P* < 0.001 |
| ∆PAI at 12–15 yc | YFS | 1723 | –0.52 (1.84) | 886 | –0.37 (1.80) | 837 | –0.70 (1.88) | *P* < 0.001 |
| +∆PAI at 12–15 yd | YFS | 1723 | 0.27 (0.45) | 886 | 0.31 (0.46) | 837 | 0.23 (0.42) | *P* < 0.001 |
| -∆PAI at 12–15 ye | YFS | 1723 | 0.50 (0.50) | 886 | 0.46 (0.50) | 837 | 0.53 (0.50) | *P* < 0.004 |
| Participation in sports club training at 15 yf | YFS | 2445 | 0.28 (0.45) | 1271 | 0.24 (0.43) | 1174 | 0.32 (0.47) | *P* < 0.001 |
| Participation in sports competitions at 15 yg | YFS | 1854 | 0.24 (0.43) | 981 | 0.19 (0.39) | 873 | 0.30 (0.46) | *P* < 0.001 |
| Educational attainment | | |  |  |  |  |  |  |
| Years of educationh | FLEED | 2445 | 13.53 (2.88) | 1271 | 13.88 (2.82) | 1174 | 13.23 (2.86) | *P* < 0.001 |
|  |  |  |  |  |  |  |  |  |
| Grade point average at 15 yi | YFS | 1941 | 7.82 (0.93) | 1022 | 8.08 (0.88) | 919 | 7.53 (0.90) | *P* < 0.001 |
| Control variables | |  |  |  |  |  |  |  |
| Healthj | YFS | 2437 | 0.19 (0.40) | 1266 | 0.21 (0.41) | 1171 | 0.18 (0.38) | *P* = 0.076 |
| Body fatk | YFS | 2409 | 16.44 (7.33) | 1254 | 21.18 (4.93) | 1155 | 11.30 (5.91) | *P* < 0.001 |
| Grade point average at 12 y | YFS | 1729 | 7.87 (0.73) | 899 | 8.07 (0.68) | 830 | 7.64 (0.73) | *P* < 0.001 |
| Income, Mother | LPC | 2429 | 4563 (3492) | 1262 | 4420 (3324) | 1167 | 4718 (3658) | *P* = 0.036 |
| Income, Father | LPC | 2335 | 8573 (5693) | 1213 | 8604 (6063) | 1122 | 8538 (5265) | *P* = 0.781 |
| Education, Mother | YFS | 2445 | 0.08 (0.27) | 1271 | 0.07 (0.26) | 1174 | 0.08 (0.27) | *P* = 0.309 |
| Education, Father | YFS | 2445 | 0.10 (0.30) | 1271 | 0.10 (0.30) | 1174 | 0.10 (0.31) | *P* = 0.514 |
| Family size | YFS | 2441 | 4.40 (1.44) | 1269 | 4.42 (1.45) | 1172 | 4.38 (1.44) | *P* = 0.492 |

*Notes*. Young Finns Study (YFS), and Finnish Longitudinal Employer-Employee Data (FLEED) from Statistics Finland.

a *P* values for gender differences (*t*-test).

b The physical activity index (PAI) (min. 5 to max. 14) at the age of 15 is a summary of five variables that illustrate the frequency and intensity of leisure-time physical activity, frequency of participation in sports clubs training sessions, participation in sports competitions, and the most common activity during leisure time.

c ∆PAI illustrates the change in the PAI level between the ages of 12 and 15 years, when controlling for the physical activity index at the age of 12.

d +∆PAI at 12–15 y is a binary variable, which gets value 1 if the physical activity level increases, and 0 otherwise.

e -∆PAI at 12–15 y is a binary variable that gets value 1 if the individual has decreased his or her physical activity level between the ages of 12 and 15 years, and 0 otherwise.

f Participation in sports club training sessions at the age of 15 is a binary variable that gets value 1 if an individual participates in organized sports clubs training sessions, and 0 otherwise.  
g Participation in sports competitions at the age of 15 is a binary variable that gets value 1 if an individual participates in national- or regional-level competitions, and 0 otherwise. The sample size varies because in the 1992 follow-up the participation in sports competitions was not asked.

h Register-based information on educational attainment based on the years of completed education.

i Grade point average (GPA) at the age of 15 referred to a self-reported numerical assessment on a scale of 4–10, where 4 denoted failing and 10 denoted excellent.

j Summary of the following diseases: allergy/asthma, diabetes, convulsions, heart defect, infectious and parasitic diseases, tumors, endocrine diseases/metabolic disorders/malnutrition, blood disorders, mental disturbances, nervous and sensory system diseases, circulatory system diseases, respiratory diseases, digestive system diseases, genital and urinary tract diseases, skin and subcutaneous tissue diseases, musculoskeletal disorders, and other unidentified symptoms.

k Body fat (Slaughter skinfold-thickness equation) (32).