# S1 Table: Descriptive statistics of the control variables and coefficients of the propensity score estimation based on the KiGGS sample (probit)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | No Sports | Sports | Sports - No Sports | Probit Coefficient |
|  |  |  | Diff. | p-val. % | Coef. | p-val. % |
| **Child characteristics** |  |  |  |  |  |  |
| Male | 0.50 | 0.52 | 0.02 | *13* | 0.06 | *10* |
| Age: 3 years | 0.17 | 0.05 | -0.11 | *0* | -0.76 | *0* |
|  4 years | 0.15 | 0.09 | -0.07 | *0* | -0.41 | *0* |
|  5 years | 0.13 | 0.11 | -0.02 | *5* | -0.12 | *11* |
|  6 years | 0.13 | 0.13 | 0.01 | *52* | 0.16 | *3* |
|  7 years | 0.11 | 0.15 | 0.04 | *0* | 0.27 | *0* |
|  8 years | 0.10 | 0.15 | 0.05 | *0* | 0.31 | *0* |
|  9 years | 0.11 | 0.16 | 0.06 | *0* | 0.17 | *11* |
|  10 years | 0.10 | 0.14 | 0.04 | *0* | -0.76 | *0* |
| Height in cm | 121.0 | 127.6 | 6.6 | *0* | 0.00 | 28 |
| Birthweight in grams | 3346.7 | 3361.6 | 14.9 | *40* | 0.00 | 89 |
| **Mother's characteristics** |  |  |  |  |  |  |
| Education: Basic | 0.20 | 0.15 | -0.05 | *0* | -0.14 | 1 |
|  Intermediate | 0.49 | 0.47 | -0.03 | *5* | ref. |  |
|  High school | 0.12 | 0.18 | 0.06 | *0* | 0.09 | 11 |
|  University | 0.14 | 0.19 | 0.05 | *0* | 0.02 | 76 |
|  Other | 0.04 | 0.01 | -0.03 | *0* | -0.61 | 0 |
| LFP: Not working | 0.17 | 0.18 | 0.01 | *29* | -0.07 | 21 |
|  Unemployed | 0.14 | 0.06 | -0.08 | *0* | -0.12 | 11 |
|  Maternal leave | 0.10 | 0.10 | -0.01 | *24* | 0.01 | 87 |
|  Part time | 0.37 | 0.51 | 0.14 | *0* | ref. |  |
|  Fulltime | 0.20 | 0.15 | -0.06 | *0* | -0.17 | 0 |
| Job: Unskilled | 0.24 | 0.19 | -0.06 | *0* | -0.18 | 0 |
|  Semiskilled  | 0.45 | 0.53 | 0.08 | *0* | ref. |  |
|  Highskilled | 0.06 | 0.08 | 0.02 | *0* | -0.04 | 62 |
|  Self employed | 0.06 | 0.07 | 0.01 | *0* | -0.08 | 34 |
|  Other job | 0.03 | 0.01 | -0.02 | *0* | ref. |  |
|  Housewife | 0.13 | 0.11 | -0.02 | *0* | -0.09 | 18 |
| BMI: Underweight | 0.03 | 0.03 | 0.00 | *79* | 0.02 | 83 |
|  Normal | 0.61 | 0.67 | 0.06 | *0* | ref. |  |
|  Overweight | 0.23 | 0.21 | -0.02 | *10* | -0.02 | 69 |
|  Obese | 0.12 | 0.09 | -0.03 | *0* | -0.06 | 35 |

Note: S1 Table 1 to be continued.

S1 Table continued

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | No Sports | Sports | Sports - No Sports | Probit Coefficient |
|  |  |  | Diff. | p-val. % | Coef. | p-val. % |
| **Father's characteristics** |  |  |  |  |  |  |
| Education: Basic | 0.24 | 0.24 | 0.00 | *72* | 0.04 | 44 |
|  Intermediate | 0.40 | 0.32 | -0.08 | *0* | ref. |  |
|  High school | 0.08 | 0.12 | 0.04 | *0* | 0.13 | 5 |
|  University | 0.19 | 0.28 | 0.10 | *0* | -0.03 | 71 |
|  Other | 0.03 | 0.01 | -0.02 | *0* | 0.00 | 100 |
| LFP: Not working | 0.02 | 0.02 | 0.00 | *91* | 0.22 | 9 |
|  Unemployed | 0.10 | 0.04 | -0.07 | *0* | -0.13 | 11 |
|  Paternal leave | 0.00 | 0.00 | 0.00 | *70* | ref. |  |
|  Parttime | 0.03 | 0.03 | 0.00 | *48* | -0.02 | 88 |
|  Fulltime | 0.79 | 0.89 | 0.10 | *0* | ref. |  |
| Job: Unskilled  | 0.14 | 0.08 | -0.06 | *0* | -0.13 | 4 |
|  Semiskilled  | 0.51 | 0.47 | -0.04 | *0* | ref. |  |
|  Highskilled  | 0.14 | 0.24 | 0.11 | *0* | 0.10 | 10 |
|  Self employed | 0.12 | 0.17 | 0.04 | *0* | 0.09 | 13 |
|  Other job | 0.01 | 0.01 | 0.00 | *82* | ref. |  |
|  Houseman | 0.01 | 0.00 | -0.01 | *0* | ref. |  |
| BMI: Underweight | 0.00 | 0.00 | 0.00 | *50* | ref. |  |
|  Normal | 0.35 | 0.40 | 0.05 | *0* |  |
|  Overweight | 0.38 | 0.43 | 0.05 | *0* | 0.04 | 36 |
|  Obese | 0.12 | 0.09 | -0.03 | *0* | -0.12 | 7 |
|  Missing | 0.15 | 0.09 | -0.06 | *0* | -0.26 | 0 |
| **Family characteristics** |  |  |  |  |  |  |
| Social class: Low | 0.31 | 0.15 | -0.16 | *0* | -0.16 | 1 |
|  Medium | 0.46 | 0.49 | 0.03 | *2* | ref. |  |
|  High | 0.22 | 0.36 | 0.14 | *0* | 0.01 | 94 |
| Total household income | 2024.9 | 2336.1 | 311.2 | *0* | 0.00 | 0 |
|  > 5000 (binary) | 0.02 | 0.06 | 0.04 | *0* | 0.50 | 0 |
|  Missing (binary) | 0.04 | 0.04 | 0.00 | *78.5* | 0.28 | 2 |
| Single parent household | 0.13 | 0.08 | -0.04 | *0* | 0.03 | 69 |
| Siblings in household | 1.13 | 1.12 | -0.01 | *82* | -0.10 | 0 |
| Older sibling in household (binary) | 0.50 | 0.49 | -0.01 | *47* | 0.02 | 58 |
| Mold at home | 0.06 | 0.03 | -0.02 | *0* | -0.23 | 1 |

Note: S1 Table 1 to be continued.

S1 Table continued

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | No Sports | Sports | Sports - No Sports | Probit Coefficient |
|  | Mean | Mean | Diff. | p-val. % | Coef. | p-val. % |
| **Parenting style** |  |  |  |  |  |  |
| Smoking during pregnancy: regularly | 0.06 | 0.03 | -0.04 | *0* | -0.39 | 0 |
|  occasionally | 0.15 | 0.11 | -0.04 | *0* | -0.12 | 3 |
|  never | 0.77 | 0.85 | 0.08 | *0* | ref. |  |
| Family cares: no | 0.01 | 0.00 | 0.00 | *35* | 0.05 | 72 |
|  rather no | 0.02 | 0.02 | 0.00 | *21* |
|  rather yes | 0.40 | 0.43 | 0.03 | *1* | 0.11 | 1 |
|  yes | 0.57 | 0.55 | -0.02 | *12* | ref. |  |
| Few rules: no | 0.47 | 0.51 | 0.04 | *0* | ref. |  |
|  rather no | 0.26 | 0.26 | 0.00 | *75* | -0.04 | 44 |
|  rather yes | 0.19 | 0.16 | -0.03 | *1* | -0.10 | 5 |
|  yes | 0.08 | 0.06 | -0.02 | *3* | -0.08 | 26 |
| Strict rules: no | 0.14 | 0.11 | -0.03 | *0* | -0.11 | 7 |
|  rather no | 0.32 | 0.28 | -0.03 | *1* | -0.10 | 3 |
|  rather yes | 0.46 | 0.52 | 0.06 | *0* | ref. |  |
|  yes | 0.08 | 0.08 | 0.00 | *85* | 0.06 | 38 |
| Listen to each other: no | 0.01 | 0.00 | 0.00 | *26* | 0.09 | 41 |
|  rather no | 0.04 | 0.04 | 0.00 | *91* |
|  rather yes | 0.50 | 0.52 | 0.02 | *19* | ref. |  |
|  yes | 0.45 | 0.44 | -0.01 | *33* | 0.07 | 8 |
|  missing | 0.01 | 0.00 | 0.00 | *10* | ref. |  |
| Toothbrush 2 times daily | 0.77 | 0.84 | 0.07 | *0* | 0.19 | 0 |
| **Regional characteristics** |  |  |  |  |  |  |
| Municipality size: <5K | 0.44 | 0.36 | -0.07 | *0* | 0.08 | 26 |
|  5-20K | 0.11 | 0.12 | 0.01 | *36* | -0.06 | 44 |
|  20-100K | 0.27 | 0.33 | 0.06 | *0* | ref. |  |
|  >100K | 0.18 | 0.18 | 0.00 | *90* | -0.29 | 0 |
|  East \* <5K |  |  |  |  | -0.19 | *8* |
|  East \* 5-20K |  |  |  |  | 0.10 | *52* |
|  East \* 20-100K |  |  |  |  | ref. |  |
|  East \* >100K |  |  |  |  | 0.15 | *34* |
| Recreation area | 45.62 | 37.77 | -7.84 | *0* |  |  |
|  East \* 1. tercile | 0.16 | 0.09 | -0.07 | *0* | -0.10 | *26* |
|  2. tercile | 0.16 | 0.09 | -0.07 | *0* | ref. |  |
|  3. tercile | 0.17 | 0.07 | -0.10 | *0* | 0.02 | *86* |
|  West \* 1. tercile | 0.17 | 0.26 | 0.09 | *0* | -0.02 | *72* |
|  2. tercile | 0.17 | 0.25 | 0.08 | *0* | ref. |  |
|  3. tercile | 0.16 | 0.25 | 0.08 | *0* | -0.12 | *7* |
| Tax income/Capita | 481.2 | 569.9 | 88.7 | *0* | 0.00 | *14* |
| Employed in I. Sector | 3.80 | 2.80 | -1.00 | *0* | ref. |  |
|  II. Sector | 34.43 | 35.54 | 1.11 | *1* |
|  III. Sector | 61.77 | 61.66 | -0.11 | *0* | 0.00 | *1* |
| Population growth 2002-07 | -1.75 | -0.46 | 1.29 | *0* | 0.01 | *23* |
|  East \* Population growth  | -1.73 | -0.58 | 1.15 | *0* | 0.00 | *94* |

Note: S1 Table 1 to be continued.

S1 Table continued

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | No Sports | Sports | Sports - No Sports | Probit Coefficient |
|  | Mean | Mean | Diff. | p-val. % | Coef. | p-val. % |
| **Regional characteristics (continued)** |  |  |  |  |  |  |
| State 1 | 0.03 | 0.03 | 0.00 | *29* | -0.21 | *21* |
| State 2 | 0.01 | 0.01 | 0.01 | *5* | ref. |  |
| State 3 | 0.06 | 0.11 | 0.06 | *0* | 0.10 | *49* |
| State 4 | 0.14 | 0.19 | 0.05 | *0* | -0.11 | *41* |
| State 5 | 0.03 | 0.06 | 0.02 | *0* | -0.20 | *20* |
| State 6 | 0.04 | 0.05 | 0.01 | *6* | -0.04 | *80* |
| State 7 | 0.08 | 0.14 | 0.06 | *0* | -0.08 | *56* |
| State 8 | 0.12 | 0.15 | 0.03 | *0* | -0.22 | *12* |
| State 9 | 0.01 | 0.01 | 0.00 | *47* | ref. |  |
| State 10 | 0.03 | 0.02 | -0.01 | *1* | -0.66 | *0* |
| State 11 | 0.10 | 0.06 | -0.04 | *0* | -0.69 | *0* |
| State 12 | 0.07 | 0.02 | -0.05 | *0* | -1.11 | *0* |
| State 13 | 0.13 | 0.06 | -0.07 | *0* | -0.63 | *0* |
| State 14 | 0.07 | 0.04 | -0.03 | *0* | -0.49 | *2* |
| State 15 | 0.09 | 0.04 | -0.04 | *0* | -0.47 | *2* |

Note: Almost empty groups have been omitted in the estimation or have been combined with another group. Efron's R2 for the probit estimation is 0.21.