***SUPPLEMENTARY FILE***

**Supplementary Figure 1:** Analytical model to evaluate the association between SES sedentary behavior variables at 18 years, and assessing how much is the direct effect of SES in each age on sedentary behavior at 18 years.

**Supplementary Table 1:** Correlation between SEP variables.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **at birth** | **at 11 years** | **at 15 years** |
| **Maternal education** |  |  |  |
| **at birth** | 1.000 |  |  |
| **at 11 years** | 0.801 | 1.000 |  |
| **at 15 years** | 0.789 | 0.893 | 1.000 |
| **at 18 years** | 0.652 | 0.741 | 0.767 |
| **Family income** |  |  |  |
| **at birth** | 1.000 |  |  |
| **at 11 years** | 0.451 | 1.000 |  |
| **at 15 years** | 0.422 | 0.587 | 1.000 |
| **at 18 years** | 0.281 | 0.348 | 0.382 |
| **SEP composite** |  |  |  |
| **at birth** | 1.000 |  |  |
| **at 11 years** | 0.652 | 1.000 |  |
| **at 15 years** | 0.639 | 0.767 | 1.000 |
| **at 18 years** | 0.513 | 0.600 | 0.604 |

**Supplementary Table 2:** Descriptive cross-sectional analysis between maternal education and sedentary behavior variables at each age.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Screen time (>4h/day)*** | |  | ***TV (>4h/day)*** | |  | ***Computer (>2h/day)*** | |  | ***Video game (>4h/day)*** | |  | ***Accelerometer (5th quintile)*** | |
|  | N | % |  | N | % |  | N | % |  | N | % |  | N | % |
| Maternal education at  11 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 | 432 | 37.8 |  | 340 | 29.7 |  | 7 | 0.6 |  | 57 | 5.0 |  |  |  |
| 5-8 | 797 | 42.1 |  | 573 | 30.3 |  | 21 | 1.1 |  | 127 | 6.7 |  |  |  |
| 9-11 | 446 | 47.4 |  | 281 | 29.7 |  | 36 | 3.8 |  | 72 | 7.6 |  |  |  |
| 12+ | 225 | 53.6 |  | 118 | 28.1 |  | 51 | 12.1 |  | 30 | 7.1 |  |  |  |
| Maternal education at  15 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 | 366 | 39.7 |  | 212 | 23.0 |  | 80 | 8.7 |  | 52 | 5.6 |  |  |  |
| 5-8 | 857 | 51.8 |  | 420 | 25.4 |  | 261 | 15.8 |  | 124 | 7.5 |  |  |  |
| 9-11 | 575 | 61.0 |  | 206 | 21.8 |  | 280 | 29.6 |  | 81 | 8.6 |  |  |  |
| 12+ | 342 | 70.1 |  | 90 | 18.4 |  | 242 | 49.6 |  | 35 | 7.2 |  |  |  |
| Maternal education at  18 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 | 406 | 43.7 |  | 132 | 14.2 |  | 199 | 21.3 |  | 62 | 6.6 |  | 111 | 13.4 |
| 5-8 | 713 | 47.4 |  | 192 | 12.7 |  | 489 | 32.4 |  | 78 | 5.2 |  | 204 | 15.5 |
| 9-11 | 569 | 53.1 |  | 107 | 10.0 |  | 498 | 46.4 |  | 57 | 5.3 |  | 235 | 24.5 |
| 12+ | 122 | 57.6 |  | 19 | 9.0 |  | 112 | 52.8 |  | 7 | 3.3 |  | 56 | 33.1 |

**Supplementary Table 3:** Descriptive cross-sectional analysis between family income and sedentary behavior variables at each age.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Screen time (>4h/day)*** | |  | ***TV (>4h/day)*** | |  | ***Computer (>2h/day)*** | |  | ***Video game (>4h/day)*** | |  | ***Accelerometer (5th quintile)*** | |
|  | N | % |  | N | % |  | N | % |  | N | % |  | N | % |
| Family income at 11 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1st | 416 | 36.4 |  | 328 | 28.7 |  | 8 | 0.7 |  | 56 | 4.9 |  |  |  |
| 2nd | 466 | 42.5 |  | 339 | 30.9 |  | 4 | 0.4 |  | 61 | 5.6 |  |  |  |
| 3rd | 497 | 45.7 |  | 358 | 32.8 |  | 20 | 1.8 |  | 84 | 7.7 |  |  |  |
| 4th | 536 | 48.5 |  | 294 | 26.5 |  | 83 | 7.5 |  | 88 | 8.0 |  |  |  |
| Family income at 15 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1st | 456 | 40.5 |  | 260 | 23.1 |  | 109 | 9.7 |  | 66 | 5.9 |  |  |  |
| 2nd | 530 | 50.7 |  | 264 | 25.2 |  | 141 | 13.5 |  | 71 | 6.9 |  |  |  |
| 3rd | 595 | 54.8 |  | 268 | 24.7 |  | 217 | 20.0 |  | 86 | 7.9 |  |  |  |
| 4th | 678 | 66.5 |  | 202 | 19.8 |  | 441 | 43.3 |  | 83 | 8.2 |  |  |  |
| Family income at 18 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1st | 473 | 46.7 |  | 150 | 14.8 |  | 307 | 30.1 |  | 58 | 5.7 |  | 164 | 18.6 |
| 2nd | 497 | 48.5 |  | 154 | 15.0 |  | 328 | 31.9 |  | 62 | 6.0 |  | 171 | 18.6 |
| 3rd | 519 | 50.7 |  | 116 | 11.3 |  | 414 | 40.4 |  | 54 | 5.3 |  | 163 | 18.2 |
| 4th | 529 | 51.5 |  | 62 | 6.0 |  | 452 | 44.0 |  | 47 | 4.6 |  | 219 | 24.9 |

**Supplementary Table 4:** Descriptive analysis between maternal education and sedentary behavior variables at 18 years.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Screen time (>4h/day)*** | |  | ***TV (>4h/day)*** | |  | ***Computer (>2h/day)*** | |  | ***Video game (>4h/day)*** | |  | ***Accelerometer (5th quintile)*** | |
|  | N | % |  | N | % |  | N | % |  | N | % |  | N | % |
| Birth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 | 466 | 43.0 |  | 153 | 14.1 |  | 245 | 22.5 |  | 69 | 6.3 |  | 130 | 13.5 |
| 5-8 | 967 | 49.5 |  | 239 | 12.2 |  | 714 | 36.5 |  | 103 | 5.3 |  | 298 | 17.4 |
| 9-11 | 414 | 56.7 |  | 64 | 8.8 |  | 366 | 50.1 |  | 38 | 5.2 |  | 182 | 28.3 |
| 12+ | 168 | 53.5 |  | 26 | 8.3 |  | 174 | 55.4 |  | 11 | 3.5 |  | 106 | 40.0 |
| 11 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 | 436 | 44.3 |  | 138 | 14.0 |  | 223 | 22.6 |  | 64 | 6.5 |  | 115 | 13.2 |
| 5-8 | 814 | 48.1 |  | 213 | 12.5 |  | 581 | 34.1 |  | 83 | 4.9 |  | 235 | 15.8 |
| 9-11 | 473 | 54.4 |  | 88 | 10.1 |  | 411 | 47.3 |  | 51 | 5.9 |  | 219 | 27.9 |
| 12+ | 216 | 56.5 |  | 31 | 8.1 |  | 215 | 56.3 |  | 13 | 3.4 |  | 124 | 37.2 |
| 15 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 | 368 | 44.7 |  | 111 | 7.9 |  | 182 | 22.0 |  | 47 | 5.7 |  | 99 | 13.4 |
| 5-8 | 714 | 47.0 |  | 196 | 10.0 |  | 506 | 33.1 |  | 74 | 4.9 |  | 224 | 16.6 |
| 9-11 | 471 | 54.2 |  | 87 | 12.9 |  | 411 | 47.3 |  | 42 | 4.8 |  | 204 | 26.2 |
| 12+ | 253 | 55.6 |  | 36 | 13.5 |  | 243 | 53.4 |  | 19 | 4.2 |  | 142 | 36.6 |

**Supplementary Table 5:** Descriptive analysis between family income and sedentary behavior variables at 18 years.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***Screen time (>4h/day)*** | |  | ***TV (>4h/day)*** | |  | ***Computer (>2h/day)*** | |  | ***Video game (>4h/day)*** | |  | ***Accelerometer (5th quintile)*** | |
|  | N | % |  | N | % |  | N | % |  | N | % |  | N | % |
| Birth |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1st | 471 | 43.4 |  | 151 | 13.9 |  | 282 | 25.9 |  | 67 | 6.1 |  | 140 | 14.8 |
| 2nd | 439 | 47.9 |  | 109 | 11.9 |  | 316 | 34.4 |  | 54 | 5.9 |  | 130 | 15.9 |
| 3rd | 523 | 50.7 |  | 124 | 12.0 |  | 376 | 36.4 |  | 59 | 5.7 |  | 180 | 19.7 |
| 4th | 551 | 56.0 |  | 87 | 8.8 |  | 501 | 50.9 |  | 38 | 3.9 |  | 256 | 30.2 |
| 11 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1st | 431 | 44.0 |  | 151 | 15.4 |  | 238 | 24.1 |  | 58 | 5.9 |  | 117 | 13.3 |
| 2nd | 445 | 45.7 |  | 116 | 11.9 |  | 290 | 29.7 |  | 49 | 5.0 |  | 143 | 16.6 |
| 3rd | 512 | 51.8 |  | 122 | 12.3 |  | 384 | 38.8 |  | 58 | 5.9 |  | 164 | 18.6 |
| 4th | 563 | 55.9 |  | 84 | 8.3 |  | 530 | 52.6 |  | 47 | 4.7 |  | 270 | 30.7 |
| 15 years |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1st | 448 | 44.5 |  | 148 | 14.7 |  | 242 | 23.9 |  | 71 | 7.0 |  | 125 | 13.9 |
| 2nd | 439 | 46.1 |  | 120 | 12.6 |  | 293 | 30.7 |  | 52 | 5.4 |  | 133 | 15.7 |
| 3rd | 521 | 51.5 |  | 113 | 11.2 |  | 412 | 40.7 |  | 47 | 4.6 |  | 191 | 21.1 |
| 4th | 511 | 55.5 |  | 81 | 8.8 |  | 474 | 51.4 |  | 39 | 4.2 |  | 241 | 30.0 |

**Supplementary Table 6:** Cross-sectional association between socioeconomic indicators and sedentary behavior variables throughout adolescence. 1993 Pelotas Birth Cohort

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 11 years | |  | 15 years | |  | 18 years | |
|  | OR (95%CI) crude | OR (95%CI) adjusted |  | OR (95%CI) crude | OR (95%CI) adjusted |  | OR (95%CI) crude | OR (95%CI) adjusted |
| ***Screen time (>4h/day)*** |  |  |  |  |  |  |  |  |
| Maternal education | **1.90 (1.52-2.38)** | **1.64 (1.27-2.13)** |  | **3.56 (2.82-4.51)** | **2.47 (1.89-3.23)** |  | **1.75 (1.29-2.36)** | **1.70 (1.25-2.32)** |
| Income | **1.65 (1.39-1.95)** | **1.36 (1.12-1.65)** |  | **2.93 (2.45-3.49)** | **2.08 (1.69-2.55)** |  | **1.21 (1.02-1.44)** | 1.11 (0.91-1.34) |
| ***Television (>4h/day)*** |  |  |  |  |  |  |  |  |
| Maternal education | 0.93 (0.72-1.19) | 1.06 (0.80-1.41) |  | 0.76 (0.58-1.00) | 0.83 (0.61-1.14) |  | **0.60 (0.36-0.99)** | 0.84 (0.50-1.41) |
| Income | 0.90 (0.75-1.08) | 0.87 (0.70-1.08) |  | 0.82 (0.67-1.01) | 0.92 (0.72-1.17) |  | **0.37 (0.27-0.51)** | **0.40 (0.28-0.57)** |
| ***Computer (>2h/day)*** |  |  |  |  |  |  |  |  |
| Maternal education | **22.41 (10.08-49.80)** | **7.15 (2.94-17.37)** |  | **10.38 (7.77-13.87)** | **4.74 (3.43-6.56)** |  | **4.15 (3.04-5.67)** | **3.68 (2.67-5.07)** |
| Income | **11.49 (5.53-23.85)** | **4.35 (1.92-9.83)** |  | **7.14 (5.65-9.01)** | **3.89 (2.98-5.08)** |  | **1.82 (1.52-2.19)** | **1.41 (1.15-1.74)** |
| ***Video game (>2h/day)*** |  |  |  |  |  |  |  |  |
| Maternal education | 1.46 (0.93-2.31) | 1.09 (0.65-1.82) |  | 1.30 (0.83-2.02) | 1.06 (0.64-1.76) |  | 0.48 (0.22-1.07) | 0.52 (0.23-1.18) |
| Income | **1.68 (1.19-2.37)** | **1.63 (1.10-2.42)** |  | **1.43 (1.02-1.99)** | 1.41 (0.96-2.07) |  | 0.79 (0.53-1.18) | 0.84 (0.54-1.30) |
| ***Accelerometer (5th quintile)*** |  |  |  |  |  |  |  |  |
| Maternal education | **-** | **-** |  | **-** | - |  | **3.21 (2.20-4.69)** | **3.13 (2.12-4.62)** |
| Income | **-** | **-** |  | **-** | - |  | **1.46 (1.16-1.84)** | 1.08 (0.83-1.41) |

1. Mutually adjusted for maternal education and income
2. ORs indicate the change in odds of being in the high-risk group in the highest SES comparing to the lowest SES for each sedentary behavior domain.
3. Accelerometer 5th quintile: >12.7h/day
4. Analytical sample between 4441 and 3275

**Supplementary Table 7:** Association between socioeconomic position throughout adolescence and sedentary behavior variables at 18 years old. 1993 Pelotas Birth Cohort

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Birth |  |  | 11 years | |  | 15 years | |
|  | OR (95%CI) crude | OR (95%CI) adjusted |  | OR (95%CI) crude | OR (95%CI) adjusted |  | OR (95%CI) crude | OR (95%CI) adjusted |
| ***Screen time (>4h/day)*** |  |  |  |  |  |  |  |  |
| Maternal education | **1.53 (1.19-1.96)** | **1.22 (0.92-1.62)** |  | **1.64 (1.29-2.08)** | **1.30 (0.99-1.71)** |  | **1.55 (1.23-1.95)** | 1.29 (0.99-1.68) |
| Income | **1.66 (1.39-1.97)** | **1.47 (1.21-1.79)** |  | **1.61 (1.35-1.92)** | **1.41 (1.15-1.74)** |  | **1.56 (1.30-1.86)** | **1.33 (1.07-1.64)** |
| ***Television (>4h/day)*** |  |  |  |  |  |  |  |  |
| Maternal education | **0.55 (0.36-0.85)** | 0.70 (0.43-1.14) |  | **0.54 (0.36-0.81)** | 0.76 (0.48-1.20) |  | **0.55 (0.37-0.82)** | 0.68 (0.44-1.07) |
| Income | **0.60 (0.45-0.79)** | **0.72 (0.52-0.98)** |  | **0.50 (0.38-0.66)** | **0.57 (0.41-0.79)** |  | **0.56 (0.42-0.75)** | **0.68 (0.48-0.95)** |
| ***Computer (>2h/day)*** |  |  |  |  |  |  |  |  |
| Maternal education | **4.29 (3.30-5.59)** | **2.91 (2.17-3.91)** |  | **4.42 (3.44-5.68)** | **2.58 (1.94-3.42)** |  | **4.06 (3.17-5.20)** | **2.49 (1.88-3.30)** |
| Income | **2.97 (2.47-3.57)** | **1.95 (1.59-2.41)** |  | **3.49 (2.88-4.22)** | **2.38 (1.91-2.96)** |  | **3.38 (2.78-4.10)** | **2.26 (1.80-2.83)** |
| ***Video game (>2h/day)*** |  |  |  |  |  |  |  |  |
| Maternal education | 0.54 (0.28-1.02) | 0.70 (0.34-1.42) |  | **0.51 (0.28-0.93)** | 0.53 (0.27-1.04) |  | 0.72 (0.42-1.25) | 0.93 (0.50-1.74) |
| Income | **0.61 (0.41-0.92)** | 0.68 (0.43-1.07) |  | 0.78 (0.53-1.16) | 0.91 (0.58-1.44) |  | **0.58 (0.39-0.87)** | 0.63 (0.39-1.03) |
| ***Accelerometer (5th quintile)*** |  |  |  |  |  |  |  |  |
| Maternal education | **4.26 (3.13-4.29)** | **3.00 (2.11-4.25)** |  | **3.92 (2.91-5.27)** | **2.73 (1.94-3.83)** |  | **3.73 (2.78-5.02)** | **2.63 (1.87-3.69)** |
| Income | **2.49 (1.98-3.14)** | **1.60 (1.22-2.09)** |  | **2.88 (2.26-3.66)** | **1.76 (1.34-2.33)** |  | **2.66 (2.08-3.38)** | **1.67 (1.26-2.22)** |

1. Mutually adjusted to maternal education and income
2. Linear ORs indicates the in odds of being in the high-risk group for each sedentary behavior domain for one category increase in SES indicators.
3. Accelerometer 5th quintile: >12.7h/day
4. Analytical sample between 4088 and 3275