SUPPLEMENTAL TABLES

Table S1: Frequency (valid %) distribution for each item

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | “never”, “do not know” | “rarely: less than once per week” | “sometimes: 1-2 times per week” | “frequently: 3-4 times per week” | “always: 5-7 times per week” |
|  | N (%) |
| snorting or gasping during sleep | 1242 (82.3%) | 165 (10.9%) | 59 (3.9%) | 32 (2.1%) | 12 (0.8%) |
| loud snoring | 1247 (82.7%) | 129 (8.6%) | 62 (4.1%) | 44 (2.9%) | 25 (1.7%) |
| breathing stops/ choke or struggle for breath during sleep | 1389 (92%) | 80 (5.3%) | 23 (1.5%) | 11 (0.7%) | 7 (0.5%) |

Please note the numbers do not all add up to 1521 because of missing data’

Table S2: Composite Apnea symptoms scores

|  |  |
| --- | --- |
| Score | Frequency N (%) |
| 0 | 1120 (74.5) |
| 1 | 185 (9.0) |
| 2 | 86 (5.7) |
| 3 | 60 (4.0) |
| 4 | 38 (2.5) |
| 5 | 17 (1.1) |
| 6 | 19 (1.3) |
| 7 | 8 (0.5) |
| 8 | 6 (0.4) |
| 9 | 6 (0.4) |
| 10 | 4 (0.3) |
| 11 | 1 (0.1) |
| 12 | 3 (0.2) |

Note. Distribution of people with apnea symptoms in the past month from the 3 single questions (each question ranges from 0=”never/ do not know”; 4=” always”)

Table S3: Univariate results from the multivariate analysis

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Model** | **Variable** | **Model for comparison** | **A**  | **D**  | **E** | **Twin effect**  | **df** | **-2LL** | **AIC** | **DiffLL** | **Diffdf** | **p** |
|  |  |  | **95% CI** |  |  |  |  |  |  |
| ADE+TW |  |  |  |  |  |  | 5963 | 13720.19 | 1794.19 |  |  |  |
|  | Apnea symptoms |  | 0.06 | 0.41 | 0.53 | 0 |  |  |  |  |  |  |
|  | Depression |  | 0.12 | 0.29 | 0.57 | 0.02 |  |  |  |  |  |  |
|  | Anxiety |  | 0.27 | 0.15 | 0.53 | 0.05 |  |  |  |  |  |  |
|  | Externalizing |  | 0 | 0.39 | 0.54 | 0.07 |  |  |  |  |  |  |
| ADE |  | ADE+TW |  |  |  |  | 5973 | 13722.04 | 1776.04 | 1.85 | 10 | 0.99 |
|  | Apnea |  | 0.10 | 0.37 | 0.53 | / |  |  |  |  |  |  |
|  | Depression |  | 0.15 | 0.29 | 0.57 | / |  |  |  |  |  |  |
|  | Anxiety |  | 0.34 | 0.13 | 0.53 | / |  |  |  |  |  |  |
|  | Externalizing |  | 0.07 | 0.40 | 0.53 | / |  |  |  |  |  |  |
| **AE** |  | **ADE** |  |  |  | / | **5983** | **13732.87** | **1766.87** | **10.83** | **10** | **0.37** |
|  | **Apnea** |  | **0.39 (0.18,0.57)** | / | **0.61 (0.43,0.82)** | / |  |  |  |  |  |  |
|  | **Depression** |  | **0.39 (0.29,0.49)** | / | **0.61 (0.51,0.71)** | / |  |  |  |  |  |  |
|  | **Anxiety** |  | **0.46 (0.36,0.54)** | / | **0.54 (0.46,0.64)** | / |  |  |  |  |  |  |
|  | **Externalizing** |  | **0.40 (0.29,0.50)** | / | **0.60 (0.50,0.71)** | / |  |  |  |  |  |  |
| E |  |  |  |  |  | / | 5993 | 13880.17 | 1894.17 | 147.31 | 10 | <0.001 |
|  | Apnea | AE | / | / | 1 | / |  |  |  |  |  |  |
|  | Depression |  | / | / | 1 | / |  |  |  |  |  |  |
|  | Anxiety |  | / | / | 1 | / |  |  |  |  |  |  |
|  | Externalizing |  | / | / | 1 | / |  |  |  |  |  |  |

Note. A, additive genetic influence; D, dominant genetic influence E, non-shared environmental influence; -2LL, negative 2 log-likelihood; AIC, Akaike’s information criterion; CI, confidence interval; df, degrees of freedom; P-value, significance value of the likelihood-ratio chi-square test; TW, twin effect component on the variance. Bold text indicates best fitting mode