**Supplementary Table 1.** Measures of cluster partition quality for different number of clustersa for those diagnosed with ADHD and controls, respectively.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **PBCb** | **HGc** | **HGSDd** | **ASWe** | **ASW(w)f** | **R2g** | **R2sqh** | **HCi** |
| **ADHD** |  |  |  |  |  |  |  |  |
| 5 Clusters | 0.65 | 0.89 | 0.85 | 0.35 | 0.35 | 0.46 | 0.67 | 0.11 |
| 6 Clusters | 0.60 | 0.88 | 0.85 | 0.31 | 0.31 | 0.50 | 0.71 | 0.11 |
| 7 Clusters | 0.61 | 0.91 | 0.88 | 0.31 | 0.31 | 0.52 | 0.73 | 0.09 |
| **8 Clusters** | **0.61** | **0.92** | **0.90** | **0.32** | **0.32** | **0.53** | **0.75** | **0.09** |
| 9 Clusters | 0.61 | 0.93 | 0.91 | 0.32 | 0.32 | 0.55 | 0.76 | 0.08 |
| 10 Clusters | 0.59 | 0.93 | 0.91 | 0.30 | 0.30 | 0.56 | 0.77 | 0.09 |
| **Controls** |  |  |  |  |  |  |  |  |
| 5 Clusters | 0.69 | 0.84 | 0.84 | 0.43 | 0.43 | 0.46 | 0.66 | 0.08 |
| 6 Clusters | 0.71 | 0.89 | 0.89 | 0.44 | 0.44 | 0.49 | 0.71 | 0.05 |
| 7 Clusters | 0.72 | 0.91 | 0.91 | 0.44 | 0.44 | 0.51 | 0.73 | 0.04 |
| **8 Clusters** | **0.72** | **0.92** | **0.92** | **0.43** | **0.44** | **0.52** | **0.74** | **0.04** |
| 9 Clusters | 0.73 | 0.93 | 0.92 | 0.44 | 0.44 | 0.53 | 0.76 | 0.03 |
| 10 Clusters | 0.73 | 0.93 | 0.93 | 0.44 | 0.44 | 0.55 | 0.77 | 0.03 |

a The selected number of clusters in bold text; b Point Biserial Correlation; c Hubert’s Gamma; d Hubert’s Somers’ D; e Average Silhouette Width; f Average Silhouette Width (weighted); g Pseudo R2; h Pseudo R2 squared;i Hubert’s C

**Supplementary Figure 1.** Sequence index plot of labour market integration, among controls to young adults, aged 19-29, diagnosed with ADHD during 2006-2011 (N=8,018)



**Supplementary Figure 2.** Sequence index plot of labour market integration among controls to those diagnosed with ADHD in adult age during 2006-2011 (N=8,018)



**Supplementary Table 2.** Distribution and adjusted odds ratio (OR) for different factors in each of the eight clusters of labor market marginalization status/year from one year before to five years after a diagnosis of ADHD (Y-1 to Y+5) among 4309 individuals aged 20-29 years (Cluster 1 is reference).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Cluster 1a** | **Cluster 2** | | **Cluster 3** | | **Cluster 4** | | **Cluster 5** | | **Cluster 6** | | **Cluster 7** | | **Cluster 8** | | **R2 (diff.)b** |
|  | n (%) | n (%) | OR1  (95% CI) | n (%) | OR1  (95% CI) | n (%) | OR1  (95% CI) | n (%) | OR1  (95% CI) | n (%) | OR1  (95% CI) | n (%) | OR1  (95% CI) | n (%) | OR1  (95% CI) |  |
| **Total** | 4309  (53.7) | 702  (8.8) |  | 688  (8.6) |  | 296  (3.7) |  | 441  (5.5) |  | 647  (8.1) |  | 456  (5.7) |  | 479  (6.0) |  | 0.312 |
| **Sociodemographic factors** | | | | | | | | | | | | | | | |  |
| ***Sex*** | | | | | | | | | | | | | | | |  |
| Women | 1792  (41.6) | 311  (44.3) | ref. | 490  (71.2) | ref. | 159  (53.7) | ref. | 142  (32.2) | ref. | 296  (45.8) | ref. | 199  (43.6) | ref. | 227  (47.4) | ref. | 0.296  (0.016) |
| Men | 2517  (58.4) | 391  (55.7) | 0.9  (0.7-1.0) | 198  (28.8) | 0.3  (0.3-0.4) | 137  (46.3) | 0.7  (0.5-0.9) | 299  (67.8) | 1.3  (1.0-1.7) | 351  (54.3) | 0.8  (0.7-1.0) | 257  (56.4) | 0.8  (0.7-1.0) | 252  (52.6) | 0.7  (0.5-0.9) |  |
| ***Age group*** | | | | | | | | | | | | | | | |  |
| *19-24 years* | 2109  (48.9) | 445  (63.4) | ref. | 528  (76.7) | ref. | 200  (67.6) | ref. | 246  (55.8) | ref. | 395  (61.1) | ref. | 271  (59.4) | ref. | 301  (62.8) | ref. | 0.290 (0.022) |
| 25-29 years | 2200  (51.1) | 257  (36.6) | 0.6  (0.5-0.7) | 160  (23.3) | 0.3  (0.2-0.3) | 96  (32.4) | 04  (0.3-0.6) | 195  (44.2) | 0.9  (0.8-1.2) | 252  (39.0) | 0.7  (0.6-0.8) | 185  (40.6) | 0.7  (0.6-0.9) | 178  (37.2) | 0.9  (0.7-1.1) |  |
| ***Educational level*** | | | | | | | | | | | | | | | |  |
| Elementary (<10 years) | 1448  (33.6) | 433  (61.7) | ref. | 280  (40.7) | ref. | 239  (80.7) | ref. | 338  (76.6) | ref. | 355  (54.9) | ref. | 338  (74.1) | ref. | 420  (87.7) | ref. | 0.218 (0.094) |
| High school (10-12 years) | 2377  (55.2) | 231  (32.9) | 0.4  (0.3-0.4) | 324  (47.1) | 0.8  (0.6-0.9) | 54  (18.2) | 0.2  (0.1-0.2) | 99  (22.5) | 0.2  (0.2-0.2) | 271  (41.9) | 0.5  (0.4-0.6) | 99  (21.7) | 0.2  (0.2-0.3) | 57  (11.9) | 0.1  (0.1-0.1) |  |
| University/college (<12 years) | 484  (11.2) | 38  (5.4) | 0.3  (0.2-0.5) | 84  (12.2) | 1.1  (0.9-1.5) | <8 | - | <8 | - | 21  (3.3) | 0.21  (0.1-0.3) | 19  (4.2) | 0.2  (0.1-0.3) | <8 | - |  |
| ***Country of Birth*** | | | | | | | | | | | | | | | |  |
| Sweden | 3952  (91.7) | 562  (80.1) | ref. | 596  (86.6) | ref. | 216  (73.0) | ref. | 361  (81.9) | ref. | 548  (84.7) | ref. | 345  (75.7) | ref. | 426  (88.9) | ref. | 0.260 (0.004) |
| Outside Sweden | 357  (8.3) | 140  (19.9) | 2.6  (2.0-3.2) | 92  (13.4) | 1.7  (1.3-2.2) | 80  (27.0) | 3.1  (2.3-4.2) | 80  (18.1) | 2.4  (1.8-3.1) | 99  (15.3) | 1.9  (1.5-2.4) | 111  (24.3) | 3.1  (2.4-4.0) | 53  (11.1) | 1.2  (0.8-1.7) |  |
| ***Family compositionc*** | | | | | | | | | | | | | | | |  |
| Married/in partnership without children | 104  (2.4) | 12  (1.7) | 0.6  (0.3-1.2) | 10  (1.5) | 0.7  (0.3-1.3) | 10  (3.4) | 1.3  (0.6-2.8) | 8  (1.8) | 0.8  (0.4-1.7) | 12  (1.9) | 0.7  (0.4-1.4) | <8 | - | 8  (1.7) | 0.7  (0.3-1.7) | 0.299 (0.013) |
| Married/in partnership with children | 727  (16.9) | 90  (12.8) | 0.7  (0.6-0.9) | 130  (18.9) | 1.5  (1.2-1.9) | 66  (22.3) | 1.4  (1.0-1.9) | 50  (11.3) | 0.5  (0.4-0.8) | 103  (15.9) | 0.9  (0.7-1.2) | 50  (11.0) | 0.5  (0.4-0.8) | 22  (4.6) | 0.2  (0.1-0.3) |  |
| Singles without children | 3390  (78.7) | 554  (78.9) | ref. | 512  (74.4) | ref. | 192  (64.9) | ref. | 357  (81.0) | ref. | 501  (77.4) | ref. | 365  (80.0) | ref. | 431  (90.0) | ref. |  |
| Singles with children | 88  (2.0) | 46  (6.6) | 2.4  (1.6-3.6) | 36  (5.2) | 2.0  (1.3-3.1) | 28  (9.5) | 3.1  (1.9-5.0) | 26  (5.9) | 1.9  (1.1-3.1) | 31  (4.8) | 1.7  (1.1-2.7) | 34  (7.5) | 2.3  (1.5-3.6) | 18  (3.8) | 0.7  (0.4-1.2) |  |
| ***Type of living aread*** | | | | | | | | | | | | | | | |  |
| Big cities | 1547  (35.9) | 257  (36.6) | ref. | 258  (37.5) | ref. | 101  (34.1) | ref. | 97  (22.0) | ref. | 217  (33.5) | ref. | 189  (41.5) | ref. | 134  (28.0) | ref. | 0.296 (0.009) |
| Medium-sized cities | 1528  (35.5) | 267  (38.0) | 1.2  (1.0-1.4) | 260  (37.8) | 1.0  (0.8-1.2) | 117  (39.5) | 1.36  (1.0-1.8) | 177  (40.1) | 2.2  (1.6-2.8) | 222  (34.3) | 1.1  (0.9-1.3) | 174  (38.2) | 1.1  (0.9-1.4) | 187  (39.0) | 1.7  (1.3-2.2) |  |
| Small cities/villages | 1234  (28.6) | 178  (25.4) | 1.0  (0.8-1.3) | 170  (24.7) | 0.8  (0.7-1.1) | 78  (26.4) | 1.2  (0.9-1.7) | 167  (37.9) | 2.6  (2.0-3.5) | 208  (32.2) | 1.3  (1.0-1.6) | 93  (20.4) | 0.8  (0.6-1.0) | 158  (33.0) | 1.9  (1.4-2.5) |  |
| **Comorbid disorderse** | | | | | | | | | | | | | | | |  |
| ***Depression/bipolar disorder*** | | | | | | | | | | | | | | | |  |
| No | 4286  (99.5) | 691  (98.4) | ref. | 683  (99.3) | ref. | 288  (97.3) | ref. | 427  (96.8) | ref. | 643  (99.4) | ref. | 438  (96.1) | ref. | 436  (91.0) | ref. | 0.308 (0.004) |
| Yes | 23  (0.5) | 11  (1.6) | 2.2  (1.0-4.7) | <8 | - | 8  (2.7) | 2.7  (1.1-6.5) | 14  (3.2) | 3.4  (1.6-7.3) | <8 | - | 18  (4.0) | 4.4  (2.2-8.9) | 43  (9.0) | 6.9  (3.6-13.5) |  |
| ***Anxiety/stress-related disorders*** | | | | | | | | | | | | | | | |  |
| No | 4281  (99.4) | 687  (97.9) | ref. | 674  (98.0) | ref. | 282  (95.3) | ref. | 414  (93.9) | ref. | 636  (98.3) | ref. | 438  (96.1) | ref. | 419  (87.5) | ref. | 0.312 (0.000) |
| Yes | 28  (0.7) | 15  (2.1) | 2.4  (1.2-4.8) | 14  (2.0) | 2.6  (1.3-5.2) | 14  (4.7) | 3.9  (1.9-8.1) | 27  (6.1) | 6.4  (3.5-11.7) | 11  (1.7) | 2.3  (1.1-4.8) | 18  (4.0) | 3.4  (1.7-6.6) | 60  (12.5) | 6.2  (3.5-11.1) |  |
| ***Autism-spectrum-disorder*** | | | | | | | | | | | | | | | |  |
| No | 4309  (100.0) | 702  (100.0) | ref. | 688  (100.0) | ref. | 296  (100.0) | ref. | 440  (99.8) | ref. | 647  (100.0) | ref. | 456  (100.0) | ref. | 440  (91.9) | ref. | 0.300 (0.012) |
| Yes | <8 | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - | 39  (8.1) | To few  referencesa |  |
| ***Substance use*** | | | | | | | | | | | | | | | |  |
| No | 4277  (99.3) | 689  (98.2) | ref. | 684  (99.4) | ref. | 282  (95.3) | ref. | 424  (96.2) | ref. | 639  (98.8) | ref. | 429  (94.1) | ref. | 454  (94.8) | ref. | 0.308 (0.004) |
| Yes | 32  (0.7) | 13  (1.9) | 2.1  (1.1-4.1) | <8 | - | 14  (4.7) | 4.5  (2.2-8.9) | 17  (3.9) | 3.0  (1.6-5.8) | 8  (1.2) | 1.5  (0.7-3.3) | 27  (5.9) | 5.3  (3.0-9.3) | 25  (5.2) | 1.7  (0.9-3.5) |  |
| ***Behavioural/emotional disorders*** | | | | | | | | | | | | | | | |  |
| No | 4308  (100.0) | 702  (100.0) | ref. | 688  (100.0) | ref. | 296  (100.0) | ref. | 441  (100.0) | ref. | 646  (99.9) | ref. | 456  (100.0) | ref. | 479  (100.0) | ref. | 0.311 (0.001) |
| Yes | <8 | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - |  |
| ***Intellectual disabilities/developmental disorders*** | | | | | | | | | | | | | | | |  |
| No | 4309  (100.0) | 702  (100.0) | ref. | 688  (100.0) | ref. | 296  (100.0) | ref. | 439  (99.6) | ref. | 647  (100.0) | ref. | 456  (100.0) | ref. | 455  (95.0) | ref. | 0.307 (0.005) |
| Yes | <8 | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - | 24  (5.0) | To few  referencesa |  |
| ***Schizophrenia/psychoses*** | | | | | | | | | | | | | | | |  |
| No | 4306  (99.9) | 702  (100.0) | ref. | 688  (100.0) | ref. | 294  (99.3) | ref. | 440  (99.8) | ref. | 647  (100.0) | ref. | 455  (99.8) | ref. | 451  (94.2) | ref. | 0.303 (0.009) |
| Yes | <8 | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - | 28  (5.9) | 89.4  (21.4-374) |  |
| ***Other mental disorders*** | | | | | | | | | | | | | | | |  |
| No | 4295  (99.7) | 696  (99.2) | ref. | 683  (99.3) | ref. | 291  (98.3) | ref. | 437  (99.1) | ref. | 645  (99.7) | ref. | 449  (98.5) | ref. | 438  (91.4) | ref. | 0.309 (0.003) |
| Yes | 14  (0.3) | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - | <8 | - | 41  (8.6) | 7.3  (3.3-16.1) |  |
| ***Musculoskeletal disorders*** | | | | | | | | | | | | | | | |  |
| No | 4189  (97.2) | 685  (97.6) | ref. | 668  (97.1) | ref. | 286  (96.6) | ref. | 428  (97.1) | ref. | 632  (97.7) | ref. | 444  (97.4) | ref. | 457  (95.4) | ref. | 0.312 (0.000) |
| Yes | 120  (2.8) | 17  (2.4) | 0.8  (0.5-1.4) | 20  (2.9) | 1.4  (0.6-1.7) | 10  (3.4) | 0.9  (0.5-19) | 13  (3.0) | 0.9  (0.5-1.6) | 15  (2.3) | 0.8  (0.5-1.4) | 12  (2.6) | 0.8  (0.4-1.5) | 22  (4.6) | 1.0  (0.6-1.9) |  |
| ***Accidents*** | | | | | | | | | | | | | | | |  |
| No | 4045  (93.9) | 666  (94.9) | ref. | 661  (96.1) | ref. | 271  (91.6) | ref. | 403  (91.4) | ref. | 605  (93.5) | ref. | 417  (91.5) | ref. | 457  (95.4) | ref. | 0.310 (0.002) |
| Yes | 264  (6.1) | 36  (5.1) | 0.8  (0.5-1.1) | 27  (3.9) | 0.7  (0.5-1.1) | 25  (8.5) | 1.2  (0.8-1.9) | 38  (8.6) | 1.1  (0.8-1.6) | 42  (6.5) | 1.0  (0.7-1.4) | 39  (8.6) | 1.2  (0.8-1.7) | 22  (4.6) | 0.4  (0.2-0.6) |  |
| ***Other somatic disorders*** | | | | | | | | | | | | | | | |  |
| No | 3427  (79,5) | 547  (77.9) | ref. | 492  (71.5) | ref. | 192  (64.9) | ref. | 336  (76.2) | ref. | 481  (74.3) | ref. | 348  (76.3) | ref. | 306  (63.9) | ref. | 0.309 (0.003) |
| Yes | 882  (20.5) | 155  (22.1) | 1.0  (0.8-1.2) | 196  (28.5) | 1.2  (1.0-1.4) | 104  (35.1) | 1.6  (1.2-2.1) | 105  (23.8) | 1.2  (0.9-1.5) | 166  (25.7) | 1.2  (1.0-1.5) | 108  (23.7) | 1.0  (0.8-1.3) | 173  (36.1) | 1.9  (1.5-2.4) |  |

a Due to the analysis should resemble analyses of the ADHD group, all covariates are included, also where the reference clusters had too low numbers to create valid estimates for autism-spectrum-disorders or intellectual disabilities/developmental disorders