**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