**Supplementary Table 1.**  *Summary of the percentage of missing data at baseline for key characteristics*

|  |  |  |  |
| --- | --- | --- | --- |
| **Key characteristic** | | | **Baseline 2004 %**  **(n= 7977)** |
| Gender | | | 0.0 |
| Age | | | 0.0 |
| Ethnicity | | | 0.1 |
| Exclusion | | | 2.47 |
| SDQ[[1]](#footnote-1)  (total difficulties score) | | Parent  Teacher | 0.7  24.98 |
| DAWBA (all diagnoses)[[2]](#footnote-2) | | | 0.0 |
| Learning disability | | | 0.6 |
| Child general health | | | 1.4 |
| Attainment | Reading  Mathematics  Spelling | | 25.5  26.3  25.8 |
| Weekly income | | | 38.0 |
| Housing tenure | | | 0.1 |
| Maternal education | | | 2.7 |
| Family type | | | 33.2 |

**Supplementary Table 2.**  *Unadjusted descriptive statistics for children in the sub-clinical group*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Characteristic | | | | N | No disorder or difficulty  (n= 6637) % | Difficulty recognised by both parent and teacher  (no DSM diagnosis)  (n=47) % | Difficulty recognised by the teacher only  (no DSM diagnosis)  (n=298) % | Difficulty recognised by the parent only  (no DSM diagnosis)  (n=231) % | P- value |
| School exclusion | | Yes  No | | 146  6891 | 1.7  98.3 | 18.2  81.8 | 5.5  94.5 | 7.3  92.7 | <0.001 |
| Gender | | Male  Female | | 3254  3383 | 49.0  51.0 | 72.3  27.7 | 70.5  29.5 | 61.9  38.1 | <0.001 |
| Age (years) | | 0-10  11-16 | | 3617  3596 | 50.0  50.0 | 44.7  55.3 | 59.1  40.9 | 45.5  54.5 | 0.007 |
| Ethnicity | | White  BME[[3]](#footnote-3) | | 6232  977 | 86.6  13.4 | 83.0  17.0 | 85.6  14.4 | 84.0  16.0 | 0.572 |
| Mean SDQ[[4]](#footnote-4) (SD) | | | | 7161 | 6.6 (4.5) | 15.5 (4.8) | 9.5 (4.7) | 15.2 (5.3) | <0.001 |
| Learning disability | | | No  Yes | 7073  97 | 99.0  1.0 | 87.2  12.7 | 94.0  6.0 | 96.0  4.0 | <0.001 |
| General health (child) | | | Good  Poor | 6762  344 | 95.6  4.4 | 87.0  13.0 | 92.2  7.8 | 88.1  11.9 | <0.001 |
| Reading[[5]](#footnote-5) | Above average/average  Some/marked difficulty | | | 4352  1022 | 84.0  16.0 | 23.4  76.6 | 51.0  49.0 | 55.1  44.9 | <0.001 |
| Mathematics3 | Above average/ average  Some/marked difficulty | | | 4222  1097 | 82.7  17.3 | 29.8  70.2 | 42.9  57.1 | 52.0  48.0 | <0.001 |
| Spelling3 | Above average/ average  Some/marked difficulty | | | 3960  1389 | 77.3  22.7 | 21.3  78.7 | 43.0  57.0 | 39.7  60.3 | <0.001 |
| Parent mental health | | | No distress  Distress | 3905  963 | 81.2  18.8 | 61.3  38.7 | 73.0  27.0 | 62.8  37.2 | <0.001 |
| Gross weekly household income | | | <£199  £200-399  £400-770  >£770 | 525  981  1712  1357 | 10.7  20.9  38.1  30.4 | 27.6  20.7  20.7  31.0 | 22.9  32.4  29.1  15.6 | 18.0  26.5  29.9  25.6 | <0.001 |
| Housing tenure | Own home  Rented | | | 5268  1940 | 74.4  25.6 | 53.2  46.8 | 53.7  46.3 | 65.7  34.4 | <0.001 |
| Maternal Education | None  Qualification(any) | | | 1174  5855 | 16.2  83.8 | 13.6  86.4 | 25.6  74.4 | 19.5  80.5 | <0.001 |
| Family type | Traditional  Single parent  Reconstituted | | | 3450  952  508 | 71.2  18.5  10.3 | 48.4  32.4  19.4 | 56.5  33.5  10.0 | 63.8  25.4  10.9 | <0.001 |

**Supplementary Table 3**. *Unadjusted descriptive statistics for children who have a recognised DSM-IV diagnosis at baseline*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *Characteristic* | | | *N* | *No disorder and no difficulty*  *(n=6637) %* | *Parent and Teacher recognises difficulty*  *(child has DSM diagnosis)*  *(n= 178) %* | *Teacher recognises difficulty*  *(child has DSM diagnosis)*  *(n=156) %* | *Parent recognises difficulty*  *(child has DSM diagnosis)*  *(n=217) %* | P-value |
| *School exclusion* | *Yes*  *No* | | *248*  *6785* | *1.7*  *98.3* | *34.3*  *65.7* | *22.9*  *77.1* | *22.3*  *77.7* | <0.001 |
| Gender | Male  Female | | 3254  3383 | 49.0  51.0 | 71.9  28.1 | 69.9  30.1 | 65.4  34.6 | <0.001 |
| Age (years) | 0-10  11-16 | | 3558  3630 | 50.0  50.0 | 46.1  53.9 | 43.0  57.0 | 43.3  56.7 | 0.061 |
| Ethnicity | White  BME[[6]](#footnote-6) | | 6246  938 | 86.6  13.4 | 94.4  5.6 | 89.1  10.9 | 89.9  10.1 | 0.009 |
| Mean SDQ[[7]](#footnote-7) (SD) | | | 7137 | 6.6 (4.5) | 21.4 (5.5) | 13.0 (5.5) | 20.4 (6.4) | <0.001 |
| Emotional disorder[[8]](#footnote-8) | | | 7188 | 0.0 | 28.1 | 21.2 | 37.3 | <0.001 |
| Conduct disorder | | | 7188 | 0.0 | 70.2 | 71.8 | 56.7 | <0.001 |
| Any ASD | | | 7188 | 0.0 | 17.4 | 3.9 | 12.0 | <0.001 |
| ADHD | | | 7188 | 0.0 | 42.1 | 18.0 | 27.7 | <0.001 |
| Learning disability | No  Yes | | 7022  125 | 99.0  1.0 | 84.3  15.7 | 91.0  9.0 | 91.2  8.8 | <0.001 |
| General health  (child) | Good  Poor | | 6712  377 | 95.6  4.4 | 82.6  17.4 | 93.5  6.5 | 77.9  22.1 | <0.001 |
| Reading[[9]](#footnote-9) | Above average/ average  Some/marked difficulty | | 4315  1023 | 84.0  16.0 | 38.9  61.1 | 45.8  54.2 | 54.0  46.0 | <0.001 |
| Mathematics4 | Above average/ average  Some/marked difficulty | | 4200  1084 | 82.7  17.3 | 36.0  64.0 | 46.7  53.3 | 47.5  52.5 | <0.001 |
| Spelling4 | Above average/ average  Some/marked difficulty | | 3942  1371 | 77.3  22.7 | 34.5  65.5 | 42.2  57.8 | 42.0  58.0 | <0.001 |
| Mental health  (parent) | | No distress  Distress | 3831  979 | 81.2  18.8 | 53.68  46.32 | 69.32  30.86 | 48.15  51.85 | <0.001 |
| Gross weekly  Household  income | <£199  £200-399  £400-770  >£770 | | 499  979  1698  1340 | 10.7  20.9  38.1  30.4 | 10.5  45.4  20.9  23.3 | 21.0  27.2  37.4  14.8 | 18.2  32.3  31.3  18.2 | <0.001 |
| Housing tenure | Own home  Rented | | 5202  1982 | 74.4  25.4 | 52.1  47.2 | 45.5  54.5 | 48.4  51.6 | <0.001 |
| Maternal Education | None  Qualification (any) | | 1226  5794 | 16.2  83.8 | 32.5  67.5 | 34.6  65.4 | 30.9  69.1 | <0.001 |
| Family type | Traditional  Single parent  Reconstituted | | 3388  938  523 | 71.2  18.5  10.3 | 56.0  27.0  17.0 | 42.7  34.8  22.5 | 50.0  33.6  16.4 | <0.001 |

**Supplementary Table 4**. *Summary of the proportion of children with comorbid conduct disorder or not, ADHD, ASD or emotional disorder who have been excluded or not from school*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Disorder | **With comorbid conduct disorder**  **N (%)** | | **Without comorbid conduct disorder**  **N (%)** | |
| Not excluded | Excluded | Not excluded | Excluded |
| ADHD | 125 (71.84) | 49 (28.16) | 62 (89.86) | 7 (10.14) |
| ASD | 43 (72.88) | 16 (27.12) | 28 (87.50) | 4 (12.50) |
| Emotional | 251 (88.07) | 34 (11.93) | 193 (93.24) | 14 (6.76) |

1. SDQ, Strengths and Difficulties Questionnaire [↑](#footnote-ref-1)
2. DAWBA, Development and Wellbeing assessment [↑](#footnote-ref-2)
3. BME, Black and minority ethnicity [↑](#footnote-ref-3)
4. SDQ, Strengths and Difficulties Questionnaire [↑](#footnote-ref-4)
5. Compared with other children [↑](#footnote-ref-5)
6. BME, Black, minority ethnicity [↑](#footnote-ref-6)
7. SDQ, Strengths and Difficulties Questionnaire [↑](#footnote-ref-7)
8. Includes any depression and/or anxiety disorder [↑](#footnote-ref-8)
9. Compared to other children [↑](#footnote-ref-9)