**Appendix I**Descriptive breakdown of the 10.67 and 13.83 year cross-sectional sample

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Very Healthy, No Problems | Quite Healthy, but a Few Minor Problems | Sometimes Quite Ill/Almost Always Unwell | Group Comparative Tests |
| 10.67 Years | *Gender, N(%)*  Male  Female  Missing | 2387 (52.03%)  2201 (47.97%)  - | 590 (47.62%)  649 (52.38%)  - | 25 (39.06%)  39 (60.94%)  - | *Chi2:*11.25  (p<0.01) |
|  | *Socio-Economic Status (i.e. Housing Tenure), N(%)*  Owned/Mortgaged  Rented Privately  Council/Housing Association  Missing Data | 1620 (35.31%)  46 (1%)  168 (3.66%)  2543 (60.03%) | 456 (36.8%)  19 (1.53%)  46 (3.71%)  718 (57.95%) | 19 (26.69%)  -  < 5 (3.13%)  43 (67.19%) | *Fisher’s Exact P:*  0.665 (ns) |
|  | *History of Parental Mental Illness, N(%)*  No Reported History of Parental Mental Illness  History of Parental Mental Illness  Missing Data | 3246 (70.75%)  553 (12.05%)  789 (17.2%) | 835 (67.39%)  183 (14.77%)  221 (17.84%) | 46 (71.88%)  8 (12.5%)  10 (15.63%) | *Chi2*:7.27  (p<0.05) |
|  | *Any Psychiatric Disorder DAWBA, N(%)*  No  Yes  Missing | 4367 (95.18%)  210 (4.58%)  11 (0.24%) | 1145 (92.41%)  91 (7.34%)  3 (0.24%) | 53 (82.81%)  11 (17.19%)  - | *Chi2*:33.06  (p<0.001) |
|  | *Any Emotional Disorder DAWBA, N(%)*  No  Yes  Missing | 4490 (97.86%)  87 (1.9%)  11 (0.24%) | 1189 (95.96%)  47 (3.79%)  3 (0.24%) | 55 (85.94%)  9 (14.06%)  0 | *Chi2*: 51.69  (p<0.001) |
|  | *Any Anxiety Disorder DAWBA, N(%)*  No  Yes  Missing | 4509 (98.28%)  68 (1.48%)  11 (0.24%) | 1197 (96.61%)  39 (3.15%)  3 (0.24%) | 61 (95.31%)  3 (4.69%)  0 | *Chi2*:17.56  (p<0.001) |
|  | *Any Behavioural Disorder DAWBA, N(%)*  No  Yes  Missing | 4419 (96.32%)  124 (2.7%)  45 (0.98%) | 1179 (95.16%)  48 (3.87%)  12 (0.97%) | 60 (93.75%)  4 (6.5%)  0 | *Chi2*:6.92  (p<0.05) |
| 13.83 Years | *Gender, N(%)*  Male  Female  Missing | 2162 (52.4%)  1964 (47.6%)  - | 587 (47.76%)  642 (52.24%)  - | 28 (37.84%)  46 (62.16%)  - | *Chi2:*13.47  (p<0.001) |
|  | *Socio-Economic Status (i.e. Low Household Income), N(%)*  Average/High Income  Low Income  Missing Data | 1113 (26.98%)  254 (6.16%)  2759 (66.87%) | 313 (25.47%)  61 (4.96%)  855 (69.57%) | 19 (25.68%)  7 (9.46%)  48 (64.86%) | *Chi2:* 2.48  *(ns)* |
|  | *History of Parental Mental Illness, N(%)*  No Reported History of Parental Mental Illness  History of Parental Mental Illness  Missing Data | 2927 (70.94%)  474 (11.49%)  725 (17.57%) | 834 (67.86%)  177 (14.4%)  218 (17.74%) | 47 (63.51%)  14 (18.92%)  13 (17.57%) | *Chi2*:11.04  (p<0.01) |
|  | *Any Psychiatric Disorder DAWBA, N(%)*  No  Yes  Missing | 3951 (95.76%)  175 (4.24%)  - | 1152 (93.73%)  77 (6.27%)  - | 65 (87.84%)  9 (12.16%)  - | *Chi2*: 17.34  (p<0.001) |
|  | *Any Emotional Disorder DAWBA, N(%)*  No  Yes  Missing | 4077 (98.81%)  49 (1.19%)  - | 1198 (97.48%)  31 (2.52%)  - | 66 (89.19%)  8 (10.81%)  - | *Chi2*: 50.31  (p<0.001) |
|  | *Any Anxiety Disorder DAWBA, N(%)*  No  Yes  Missing | 4093 (99.2%)  33 (0.8%)  - | 1207 (98.21%)  22 (1.79%)  - | 67 (90.54%)  7 (9.46%)  - | *Chi2*: 54.2  (p<0.001) |
|  | *Any Behavioural Disorder DAWBA, N(%)*  No  Yes  Missing | 3968 (96.17%)  120 (2.91%)  38 (0.92%) | 1176 (95.69%)  46 (3.74%)  7 (0.57%) | 68 (91.89%)  5 (6.76%)  1 (1.35%) | *Chi2*: 5.35  (ns) |

Descriptive breakdown of the 10.67 and 13.83 year cross-sectional sample for comparative analyses of children with asthma

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Healthy Comparative Sample | Asthma Sample | Group Comparative Tests |
| 10.67 Years | *Gender, N(%)*  Male  Female  Missing | 1960 (50.76%)  1901 (49.24%)  - | 972 (57.24%)  726 (42.76%)  - | *Chi2:*19.87  (p<0.01) |
|  | *Socio-Economic Status (i.e. Housing Tenure), N(%)*  Owned/Mortgaged  Rented Privately  Council/Housing Association  Missing Data | 1385 (35.87%)  40 (1.04%)  146 (3.78%)  2290 (59.31%) | 587 (34.57%)  18 (1.06%)  57 (3.36%)  1036 (61.01%) | *Chi2:*0.31  (ns) |
|  | *History of Parental Mental Illness, N(%)*  No Reported History of Parental Mental Illness  History of Parental Mental Illness  Missing Data | 2740 (70.97%)  458 (11.86%)  663 (17.17%) | 1118 (65.84%)  238 (14.02%)  342 (20.14%) | *Chi2:* 7.67  (p<0.01) |
|  | *Any Psychiatric Disorder DAWBA, N(%)*  No  Yes  Missing | 3673 (95.13%)  179 (4.64%)  9 (0.23%) | 1583 (93.23%)  111 (6.54%)  4 (0.24%) | *Chi2*: 8.62  (p<0.01) |
|  | *Any Emotional Disorder DAWBA, N(%)*  No  Yes  Missing | 3778 (97.85%)  74 (1.92%)  9 (0.23%) | 1643 (96.76%)  51 (3%)  4 (0.24%) | *Chi2*: 6.34  (p<0.05) |
|  | *Any Anxiety Disorder DAWBA, N(%)*  No  Yes  Missing | 3795 (98.29%)  57 (1.48%)  9 (0.23%) | 1655 (97.47%)  39 (2.3%)  4 (0.24%) | *Chi2*: 4.68  (p<0.05) |
|  | *Any Behavioural Disorder DAWBA, N(%)*  No  Yes  Missing | 3714 (96.19%)  109 (2.82%)  38 (0.98%) | 1621 (95.47%)  57 (3.36%)  20 (1.18%) | *Chi2*: 1.19  (ns) |
| 13.83 Years | *Gender, N(%)*  Male  Female  Missing | 1757 (51.71%)  1642 (48.29%)  - | 897 (54.6%)  746 (45.4%)  - | *Chi2:*3.76  (p=0.054) |
|  | *Socio-Economic Status (i.e. Low Household Income), N(%)*  Average/High Income  Low Income  Missing Data | 935 (27.52%)  224 (6.59%)  2239 (65.89%) | 413 (25.14%)  94 (5.72%)  1136 (69.14%) | *Chi2*:0.14  (ns) |
|  | *History of Parental Mental Illness, N(%)*  No Reported History of Parental Mental Illness  History of Parental Mental Illness  Missing Data | 2430 (71.51%)  385 (11.33%)  583 (17.16%) | 1092 (66.46%)  227 (13.82%)  324 (19.72%) | *Chi2:* 8.89  (p<0.01) |
|  | *Any Psychiatric Disorder DAWBA, N(%)*  No  Yes  Missing | 3259 (95.91%)  139 (4.09%)  - | 1556 (94.7%)  87 (5.3%)  - | *Chi2*: 3.75  (p=0.053) |
|  | *Any Emotional Disorder DAWBA, N(%)*  No  Yes  Missing | 3357 (98.79%)  41 (1.21%)  - | 1614 (98.23%)  29 (1.77%)  - | *Chi2*: 2.52  (ns) |
|  | *Any Anxiety Disorder DAWBA, N(%)*  No  Yes  Missing | 3372 (99.23%)  26 (0.77%)  - | 1620 (98.6%)  23 (1.4%)  - | *Chi2*: 4.64  (p<0.05) |
|  | *Any Behavioural Disorder DAWBA, N(%)*  No  Yes  Missing | 3274 (96.35%)  97 (2.85%)  27 (0.79%) | 1567 (95.37%)  61 (3.71%)  15 (0.91%) | *Chi2*: 2.71  (ns) |

Descriptive breakdown of the longitudinal sample

|  |  |  |  |
| --- | --- | --- | --- |
|  | Healthy Comparative Sample  (n=2681) | Chronically Ill Sample  (n=1303) | Group Comparative Tests |
| *Gender, N(%)*  Male  Female  Missing | 1424 (53.11%)  1257 (46.89%)  - | 615 (47.2%)  688 (52.8%)  - | *Chi2:*12.28  (p<0.001) |
| *Socio-Economic Status (i.e. Low Household Income), N(%)*  Average/High Income  Low Income  Missing Data | 727 (27.12%)  166 (6.19%)  1788 (66.69%) | 332 (25.28%)  68 (5.22%)  903 (69.3%) | *Chi2*:0.47  (ns) |
| *History of Parental Mental Illness, N(%)*  No Reported History of Parental Mental Illness  History of Parental Mental Illness  Missing Data | 1958 (73.03%)  317 (11.82%)  406 (15.14%) | 881 (67.61%)  191 (14.66%)  231 (17.73%) | *Chi2:* 8.53  (p<0.01) |
| *Any Psychiatric Disorder DAWBA 10 Years, N(%)*  No  Yes  Missing | 2658 (95.79%)  110 (4.1%)  3 (0.11%) | 1198 (91.94%)  102 (7.83%)  3 (0.23%) | *Chi2*: 24.25  (p<0.001) |
| *Any Emotional Disorder DAWBA 10 Years, N(%)*  No  Yes  Missing | 2642 (98.55%)  36 (1.34%)  3 (0.11%) | 1244 (95.47%)  56 (4.3%)  3 (0.23%) | *Chi2*: 34.02  (p<0.001) |
| *Any Anxiety Disorder DAWBA 10 Years, N(%)*  No  Yes  Missing | 2651 (98.88%)  27 (1.01%)  3 (0.11%) | 1258 (96.55%)  42 (3.22%)  3 (0.23%) | *Chi2*: 25.36  (p<0.001) |
| *Any Behavioural Disorder DAWBA 10 Years, N(%)*  No  Yes  Missing | 2600 (95.98%)  66 (2.46%)  15 (0.56%) | 1239 (95.09%)  52 (3.99%)  12 (0.92%) | *Chi2*: 7.24  (p<0.01) |
| *Any Psychiatric Disorder DAWBA 13 Years, N(%)*  No  Yes  Missing | 2592 (96.68%)  89 (3.32%)  - | 1217 (93.4%)  86 (6.6%)  - | *Chi2*: 22.47  (p<0.001) |
| *Any Emotional Disorder DAWBA 13 Years, N(%)*  No  Yes  Missing | 2656 (99.07%)  25 (0.93%)  - | 1264 (97.01%)  39 (2.99%)  - | *Chi2*: 23.56  (p<0.001) |
| *Any Anxiety Disorder DAWBA 13 Years, N(%)*  No  Yes  Missing | 2663 (99.3%)  18 (0.67%)  - | 1274 (97.77%)  29 (2.34%)  - | *Chi2*: 18.17  (p<0.001) |
| *Any Behavioural Disorder DAWBA 13 Years, N(%)*  No  Yes  Missing | 2602 (97.05%)  60 (2.24%)  19 (0.71%) | 1244 (95.47%)  51 (3.91%)  8 (0.61%) | *Chi2*: 9.06  (p<0.01) |
| *Any Psychiatric Disorder DAWBA 15 Years, N(%)*  No  Yes  Missing | 1668 (62.22%)  85 (3.17%)  928 (34.61%) | 882 (63.09%)  68 (5.22%)  413 (31.7%) | *Chi2*: 8.44  (p<0.01) |
| *Any Emotional Disorder DAWBA 15 Years, N(%)*  No  Yes  Missing | 1714 (63.93%)  32 (1.19%)  935 (34.88%) | 849 (65.16%)  34 (2.61%)  420 (32.23%) | *Chi2*: 9.76  (p<0.01) |
| *Any Anxiety Disorder DAWBA 15 Years, N(%)*  No  Yes  Missing | 1725 (64.34%)  21 (0.78%)  935 (34.88%) | 867 (66.54%)  16 (1.23%)  420 (32.23%) | *Chi2*: 1.57  (ns) |
| *Any Behavioural Disorder DAWBA 15 Years, N(%)*  No  Yes  Missing | 1697 (63.3%)  56 (2.09%)  928 (34.61%) | 857 (65.77%)  33 (2.53%)  413 (31.7%) | *Chi2*: 0.48  (ns) |

Descriptive breakdown of the longitudinal sample for comparative analyses of children with asthma

|  |  |  |  |
| --- | --- | --- | --- |
|  | Healthy Comparative Sample  (n=2313) | Asthma Sample  (n=1698) | Group Comparative Tests |
| *Gender, N(%)*  Male  Female  Missing | 1211 (52.36%)  1102 (47.64%)  - | 972 (57.24%)  726 (42.76%)  - | *Chi2:* 9.43  (p<0.01) |
| *Socio-Economic Status (i.e. Low Household Income), N(%)*  Average/High Income  Low Income  Missing Data | 632 (27.32%)  149 (6.44%)  1532 (66.23%) | 436 (25.68%)  105 (6.18%)  1157 (68.14%) | *Chi2*:0.02  (ns) |
| *History of Parental Mental Illness, N(%)*  No Reported History of Parental Mental Illness  History of Parental Mental Illness  Missing Data | 1699 (73.45%)  263 (11.37%)  351 (15.18%) | 1118 (65.84%)  238 (14.02%)  342 (20.14%) | *Chi2:* 10.76  (p<0.01) |
| *Any Psychiatric Disorder DAWBA 10 Years, N(%)*  No  Yes  Missing | 2215 (95.76%)  97 (4.19%)  1 (0.04%) | 1583 (93.23%)  111 (6.54%)  4 (0.24%) | *Chi2:* 11.03  (p<0.01) |
| *Any Emotional Disorder DAWBA 10 Years, N(%)*  No  Yes  Missing | 2228 (98.66%)  30 (1.3%)  1 (0.04%) | 1643 (96.76%)  51 (3%)  4 (0.24%) | *Chi2*: 14.48  (p<0.001) |
| *Any Anxiety Disorder DAWBA 10 Years, N(%)*  No  Yes  Missing | 2291 (99.05%)  21 (0.91%)  1 (0.04%) | 1655 (97.47%)  39 (2.3%)  4 (0.24%) | *Chi2*: 12.88  (p<0.001) |
| *Any Behavioural Disorder DAWBA 10 Years, N(%)*  No  Yes  Missing | 2240 (96.84%)  61 (2.64%)  12 (0.52%) | 1621 (95.47%)  57 (3.36%)  20 (1.18%) | *Chi2*: 1.88  (ns) |
| *Any Psychiatric Disorder DAWBA 13 Years, N(%)*  No  Yes  Missing | 2241 (96.89%)  72 (3.11%)  - | 1269 (74.73%)  73 (4.3%)  356 (20.97%) | *Chi2:* 5.04  (p<0.05) |
| *Any Emotional Disorder DAWBA 13 Years, N(%)*  No  Yes  Missing | 2291 (99.05%)  22 (0.95%)  - | 1321 (77.8%)  21 (1.24%)  356 (20.97%) | *Chi2*: 2.75  (ns) |
| *Any Anxiety Disorder DAWBA 13 Years, N(%)*  No  Yes  Missing | 2297 (99.31%)  16 (0.69%)  - | 1328 (78.21%)  14 (0.82%)  356 (20.97%) | *Chi2*: 1.29  (ns) |
| *Any Behavioural Disorder DAWBA 13 Years, N(%)*  No  Yes  Missing | 2248 (97.19%)  49 (2.12%)  16 (0.69%) | 1271 (74.85%)  56 (3.3%)  371 (21.85%) | *Chi2*: 13.02  (p<0.001) |
| *Any Psychiatric Disorder DAWBA 15 Years, N(%)*  No  Yes  Missing | 1438 (62.17%)  68 (2.94%)  807 (34.89%) | 922 (54.3%)  77 (4.53%)  699 (41.17%) | *Chi2:* 11.22  (p<0.01) |
| *Any Emotional Disorder DAWBA 15 Years, N(%)*  No  Yes  Missing | 1474 (63.73%)  25 (1.08%)  814 (35.19%) | 957 (56.36%)  37 (2.18%)  704 (41.46%) | *Chi2*: 10.4  (p<0.01) |
| *Any Anxiety Disorder DAWBA 15 Years, N(%)*  No  Yes  Missing | 1483 (64.12%)  16 (0.69%)  814 (35.19%) | 976 (57.48%)  18 (1.06%)  704 (41.46%) | *Chi2*: 2.46  (ns) |
| *Any Behavioural Disorder DAWBA 15 Years, N(%)*  No  Yes  Missing | 1461 (63.16%)  45 (1.95%)  807 (34.89%) | 957 (56.36%)  42 (2.47%)  699 (41.17%) | *Chi2*: 2.65  (ns) |