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

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| --- | --- | --- | --- | --- | --- |
|  |  | 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 FemaleMissing | 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/MortgagedRented PrivatelyCouncil/Housing AssociationMissing 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 IllnessHistory of Parental Mental IllnessMissing 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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 FemaleMissing | 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 IncomeLow IncomeMissing 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 IllnessHistory of Parental Mental IllnessMissing 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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 FemaleMissing | 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/MortgagedRented PrivatelyCouncil/Housing AssociationMissing 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 IllnessHistory of Parental Mental IllnessMissing 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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 FemaleMissing | 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 IncomeLow IncomeMissing 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 IllnessHistory of Parental Mental IllnessMissing 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(%)*NoYesMissing | 3259 (95.91%)139 (4.09%)- | 1556 (94.7%)87 (5.3%)- | *Chi2*: 3.75(p=0.053) |
|  | *Any Emotional Disorder DAWBA, N(%)*NoYesMissing | 3357 (98.79%)41 (1.21%)- | 1614 (98.23%)29 (1.77%)- | *Chi2*: 2.52(ns) |
|  | *Any Anxiety Disorder DAWBA, N(%)*NoYesMissing | 3372 (99.23%)26 (0.77%)- | 1620 (98.6%)23 (1.4%)- | *Chi2*: 4.64(p<0.05) |
|  | *Any Behavioural Disorder DAWBA, N(%)*NoYesMissing | 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 FemaleMissing | 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 IncomeLow IncomeMissing 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 IllnessHistory of Parental Mental IllnessMissing 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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 FemaleMissing | 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 IncomeLow IncomeMissing 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 IllnessHistory of Parental Mental IllnessMissing 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 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(%)*NoYesMissing | 1461 (63.16%)45 (1.95%)807 (34.89%) | 957 (56.36%)42 (2.47%)699 (41.17%) | *Chi2*: 2.65(ns) |