**Appendix II.**Overview of sample size for each mediation pathway tested

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| Mediation Pathway to Test | Sample with Complete Data |
| Chronic Illness – High Levels of Health-Related School Absenteeism at 10 – Any Psychiatric Illness at 10 | Healthy Comparative Sample n: 2640Chronically Ill Sample n: 1294 |
| Chronic Illness – High Levels of Health-Related School Absenteeism at 13 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 2644Chronically Ill Sample n: 1271 |
| Chronic Illness – Perceptions of Fatigue – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 2256Chronically Ill Sample n: 1093 |
| Chronic Illness – Conflict in the Parents Relationship at 9 – Any Psychiatric Illness at 10 | Healthy Comparative Sample n: 956Chronically Ill Sample n: 456 |
| Chronic Illness – Conflict in the Parents Relationship at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 850Chronically Ill Sample n: 438 |
| Chronic Illness – Parental Monitoring at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1630Chronically Ill Sample n: 797 |
| Chronic Illness – Parental Monitoring at 13 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1953Chronically Ill Sample n: 958 |
| Chronic Illness – Parental Monitoring at 15 – Any Psychiatric Illness at 15 | Healthy Comparative Sample n: 1490Chronically Ill Sample n: 757 |
| Chronic Illness – Child Disclosure at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1626Chronically Ill Sample n: 797 |
| Chronic Illness – Child Disclosure at 13 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1953Chronically Ill Sample n: 960 |
| Chronic Illness – Child Disclosure at 15 – Any Psychiatric Illness at 15 | Healthy Comparative Sample n: 1429Chronically Ill Sample n: 715 |
| Chronic Illness – Parental Solicitation at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1625Chronically Ill Sample n: 794 |
| Chronic Illness – Parental Solicitation at 13 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1955Chronically Ill Sample n: 960 |
| Chronic Illness – Parental Solicitation at 15 – Any Psychiatric Illness at 15 | Healthy Comparative Sample n: 1553Chronically Ill Sample n: 785 |
| Chronic Illness – Parental Control at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1631Chronically Ill Sample n: 795 |
| Chronic Illness – Parental Control at 13 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1950Chronically Ill Sample n: 965 |
| Chronic Illness – Parental Control at 15 – Any Psychiatric Illness at 15 | Healthy Comparative Sample n: 1369Chronically Ill Sample n: 692 |
| Chronic Illness – Satisfaction with Peer Relationships at 10 – Any Psychiatric Illness at 10 | Healthy Comparative Sample n: 2210Chronically Ill Sample n: 1082 |
| Chronic Illness – Satisfaction with Peer Relationships at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 2144Chronically Ill Sample n: 1051 |
| Chronic Illness – Peer Victimisation at 10 – Any Psychiatric Illness at 10 | Healthy Comparative Sample n: 2180Chronically Ill Sample n: 1060 |
| Chronic Illness – Peer Victimisation at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 2109Chronically Ill Sample n: 1031 |
| Asthma – High Levels of Health-Related School Absenteeism at 10 – Any Psychiatric Illness at 10 | Healthy Comparative Sample n: 2277Asthma Sample n: 1679 |
| Asthma – High Levels of Health-Related School Absenteeism at 13 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 2282Asthma Sample n: 1315 |
| Asthma – Perceptions of Fatigue – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1945Asthma Sample n: 1197 |
| Asthma – Conflict in the Parents Relationship at 9 – Any Psychiatric Illness at 10 | Healthy Comparative Sample n: 826Asthma Sample n: 601 |
| Asthma – Conflict in the Parents Relationship at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 734Asthma Sample n: 554 |
| Asthma – Parental Monitoring at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1399Asthma Sample n: 933 |
| Asthma – Parental Monitoring at 13 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1682Asthma Sample n: 1066 |
| Asthma – Parental Monitoring at 15 – Any Psychiatric Illness at 15 | Healthy Comparative Sample n: 1267Asthma Sample n: 844 |
| Asthma – Child Disclosure at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1394Asthma Sample n: 936 |
| Asthma – Child Disclosure at 13 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1684Asthma Sample n: 1062 |
| Asthma – Child Disclosure at 15 – Any Psychiatric Illness at 15 | Healthy Comparative Sample n: 1215Asthma Sample n: 789 |
| Asthma – Parental Solicitation at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1392Asthma Sample n: 935 |
| Asthma – Parental Solicitation at 13 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1683Asthma Sample n: 1072 |
| Asthma – Parental Solicitation at 15 – Any Psychiatric Illness at 15 | Healthy Comparative Sample n: 1323Asthma Sample n: 871 |
| Asthma – Parental Control at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1401Asthma Sample n: 931 |
| Asthma – Parental Control at 13 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1678Asthma Sample n: 1074 |
| Asthma – Parental Control at 15 – Any Psychiatric Illness at 15 | Healthy Comparative Sample n: 1170Asthma Sample n: 760 |
| Asthma – Satisfaction with Peer Relationships at 10 – Any Psychiatric Illness at 10 | Healthy Comparative Sample n: 1910Asthma Sample n: 1347 |
| Asthma – Satisfaction with Peer Relationships at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1842Asthma Sample n: 1230 |
| Asthma – Peer Victimisation at 10 – Any Psychiatric Illness at 10 | Healthy Comparative Sample n: 1882Asthma Sample n: 1334 |
| Asthma – Peer Victimisation at 12 – Any Psychiatric Illness at 13 | Healthy Comparative Sample n: 1818Asthma Sample n: 1201 |

Outcomes of the mediation analyses based on the four-step approach to establishing mediation (Baron and Kenny, 1986)

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|  | *Step 1:* Confirm causal variable is associated with outcome  | *Step 2:* Confirm causal variable is associated with mediator | *Step 3:* Show the mediator effects the association with the outcome variable | *Step 4:* Identify if it is partial/full mediation |
| Chronic Illness – High Levels of Health-Related School Absenteeism at 10 – Any Psychiatric Illness at 10 | ✓OR: 1.99(95% CI: 1.51 – 2.62) | ✓Significant association with high-levels of absenteeism (OR: 6.11 (95% CI: 5.14 – 7.26), p<0.001) | ✓ | PartialA significant association is still identified between chronic illness and psychiatric illness at age 10 (p<0.01) |
| Chronic Illness – High Levels of Health-Related School Absenteeism at 13 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | ✓Significant association with high-levels of absenteeism (OR: 4.29 (95% CI: 3.76 – 5.13), p<0.001) | ✓ | PartialA significant association is still identified between chronic illness and psychiatric illness at age 13 (p<0.01) |
| Chronic Illness – Perceptions of Fatigue – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | ✓Significant association with perceptions of fatigue (Coeff: 1.8 (95% CI: 1.42 – 2.18), p<0.001) | ✓ | PartialA significant association is still identified between chronic illness and psychiatric illness at age 13 (p<0.01) |

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| Chronic Illness –Conflict in the Parents Relationship at 9 –Any Psychiatric Illness at 10 | ✓OR: 1.99(95% CI: 1.51 – 2.62) | xRegression coefficient is not significant (p=0.91) |  |  |
| Chronic Illness – Conflict in the Parents Relationship at 12 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | xRegression coefficient is not significant (p=0.56) |  |  |
| Chronic Illness – Parental Monitoring at 12 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | xRegression coefficient is not significant (p=0.97) |  |  |
| Chronic Illness – Parental Monitoring at 13 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | xRegression coefficient is not significant (p=0.5) |  |  |
| Chronic Illness – Parental Monitoring at 15 – Any Psychiatric Illness at 15 | ✓OR: 1.62(95% CI: 1.17 – 2.26) | ✓Borderline association with lower levels of monitoring (Coefficient: -0.32 (95% CI: -0.65 – 0.01), p=0.054) | ✓ | PartialA significant association is still identified between chronic illness and psychiatric illness at age 15 (p<0.05) |
| Chronic Illness – Child Disclosures at 12 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | xRegression coefficient is not significant (p=0.28) |  |  |
| Chronic Illness – Child Disclosures at 13 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | xRegression coefficient is not significant (p=0.93) |  |  |
| Chronic Illness – Child Disclosures at 15 – Any Psychiatric Illness at 15 | ✓OR: 1.62(95% CI: 1.17 – 2.26) | ✓Significant association with lower levels of disclosures (Coefficient: -0.36, (95% CI: -0.63 – -0.1), p<0.01) | ✓ | PartialA significant association is still identified between chronic illness and psychiatric illness at age 15 (p<0.05) |
| Chronic Illness – Parental Solicitation at 12 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | xRegression coefficient is not significant (p=0.55) |  |  |

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| Chronic Illness –Parental Solicitation at 13 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | xRegression coefficient is not significant (p=0.37) |  |  |
| Chronic Illness – Parental Solicitation at 15 – Any Psychiatric Illness at 15 | ✓OR: 1.62(95% CI: 1.17 – 2.26) | ✓Significant association with lower levels of disclosures (Coefficient: -0.28 (95% CI: -0.48 – -0.08, p<0.01) | ✓ | PartialA significant association is still identified between chronic illness and psychiatric illness at age 15 (p<0.05) |
| Chronic Illness – Parental Control at 12 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | xRegression coefficient is not significant (p=0.13) |  |  |
| Chronic Illness – Parental Control at 13 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | xRegression coefficient is not significant (p=0.15) |  |  |
| Chronic Illness – Parental Control at 15 – Any Psychiatric Illness at 15 | ✓OR: 1.62(95% CI: 1.17 – 2.26) | xRegression coefficient is not significant (p=0.97)  |  |  |

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| Chronic Illness – Satisfaction with Peer Relationships at 10 – Any Psychiatric Illness at 10 | ✓OR: 1.99(95% CI: 1.51 – 2.62) | xRegression coefficient is not significant (p=0.22) |  |  |
| Chronic Illness – Satisfaction with Peer Relationships at 12 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | ✓Significant association with higher level of dissatisfaction (Coefficient: 0.16, p<0.05) | xFriendship dissatisfaction scores are not significantly associated with the prevalence of mental health disorders at 13 years (p=0.57) |  |
| Chronic Illness – Peer Victimisation at 10 – Any Psychiatric Illness at 10 | ✓OR: 1.99(95% CI: 1.51 – 2.62) | ✓Significant association with victimisation (OR: 1.32 (95% CI: 1.1 – 1.59), p<0.01) | ✓ | PartialA significant association is still identified between chronic illness and psychiatric illness at age 10 (p<0.001) |
| Chronic Illness – Peer Victimisation at 12 – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | ✓Significant association with victimisation (OR: 1.58 (95% CI: 1.31 – 1.92), p<0.01) | ✓ | PartialA significant association is still identified between chronic illness and psychiatric illness at age 10 (p<0.001) |

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| Asthma Diagnosis – High Levels of Health-Related School Absenteeism at 10 – Any Psychiatric Illness at 10 | ✓OR: 1.6(95% CI: 1.21 – 2.12) | ✓Significant association with high-levels of absenteeism (OR: 4.77 (95% CI: 3.97 – 5.71), p<0.001) | ✓ | PartialA significant association is still identified between Asthma Diagnosis and psychiatric illness at age 10 (p<0.01) |
| Asthma Diagnosis – High Levels of Health-Related School Absenteeism at 13 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | ✓Significant association with high-levels of absenteeism (OR: 3.05 (95% CI: 2.59 – 3.6), p<0.001) | ✓ | PartialA significant association is still identified between Asthma Diagnosis and psychiatric illness at age 13 (p<0.01)*(Please note that the association between absenteeism and psychiatric illness is borderline significant (p=0.057)* |
| Asthma Diagnosis – Perceptions of Fatigue – Any Psychiatric Illness at 13 | ✓OR: 2.06(95% CI: 1.52 – 2.79) | ✓Significant association with perceptions of fatigue (Coeff: 0.93 (95% CI: 0.55 – 1.3), p<0.001) | xPerceptions of fatigues are not associated with the prevalence of psychiatric illness (p=0.3) |  |
| Asthma Diagnosis – Conflict in the Parents Relationship at 9 – Any Psychiatric Illness at 10 | ✓OR: 1.6(95% CI: 1.21 – 2.12) | xRegression coefficient is not significant (p=0.08) |  |  |

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| Asthma Diagnosis – Conflict in the Parents Relationship at 12 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | xRegression coefficient is not significant (p=0.56) |  |  |
| Asthma Diagnosis – Parental Monitoring at 12 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | xRegression coefficient is not significant (p=0.37) |  |  |
| Asthma Diagnosis – Parental Monitoring at 13 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | xRegression coefficient is not significant (p=0.71) |  |  |
| Asthma Diagnosis – Parental Monitoring at 15 – Any Psychiatric Illness at 15 | ✓OR: 1.77(95% CI: 1.26 – 2.47) | xRegression coefficient is not significant (p=0.61) |  |  |
| Asthma Diagnosis – Child Disclosures at 12 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | xRegression coefficient is not significant (p=0.53) |  |  |

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| Asthma Diagnosis – Child Disclosures at 13 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | xRegression coefficient is not significant (p=0.39) |  |  |
| Asthma Diagnosis – Child Disclosures at 15 – Any Psychiatric Illness at 15 | ✓OR: 1.77(95% CI: 1.26 – 2.47) | xRegression coefficient is not significant (p=0.17)  |  |  |
| Asthma Diagnosis – Parental Solicitation at 12 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | xRegression coefficient is not significant (p=0.1) |  |  |
| Asthma Diagnosis – Parental Solicitation at 13 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | xRegression coefficient is not significant (p=0.88) |  |  |
| Asthma Diagnosis – Parental Solicitation at 15 – Any Psychiatric Illness at 15 | ✓OR: 1.77(95% CI: 1.26 – 2.47) | xRegression coefficient is not significant (p=0.23) |  |  |

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| Asthma Diagnosis – Parental Control at 12 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | xRegression coefficient is not significant (p=0.93) |  |  |
| Asthma Diagnosis – Parental Control at 13 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | xRegression coefficient is not significant (p=0.33) |  |  |
| Asthma Diagnosis – Parental Control at 15 – Any Psychiatric Illness at 15 | ✓OR: 1.77(95% CI: 1.26 – 2.47) | xRegression coefficient is not significant (p=0.69)  |  |  |
| Asthma Diagnosis – Satisfaction with Peer Relationships at 10 – Any Psychiatric Illness at 10 | ✓OR: 1.6(95% CI: 1.21 – 2.12) | xRegression coefficient is not significant (p=0.09) |  |  |
| Asthma Diagnosis – Satisfaction with Peer Relationships at 12 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | xRegression coefficient is not significant (p=0.16) |  |  |

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| Asthma Diagnosis – Peer Victimisation at 10 – Any Psychiatric Illness at 10 | ✓OR: 1.6(95% CI: 1.21 – 2.12) | ✓Significant association with victimisation (OR: 1.38 (95% CI: 1.16 – 1.65), p<0.001) | ✓ | PartialA significant association is still identified between Asthma Diagnosis and psychiatric illness at age 10 (p<0.05) |
| Asthma Diagnosis – Peer Victimisation at 12 – Any Psychiatric Illness at 13 | ✓OR: 1.79(95% CI: 1.28 – 2.5) | ✓Significant association with victimisation (OR: 1.42 (95% CI: 1.17 – 1.72), p<0.001) | ✓ | PartialA significant association is still identified between Asthma Diagnosis and psychiatric illness at age 10 (p<0.01) |