

Data supplement

Table DS1 Drop-out analysis for availability of psychotic experiences interview at age 18 ^a			
	Psychotic experiences interview status		Associations, OR (95% CI)
	Interview not available	Interview available	Available v. not available
Gender, <i>n</i> (%)			
Male	5486 (55.0)	2054 (43.5)	Reference
Female	4485 (45.0)	2666 (56.5)	1.59 (1.48–1.71)
Ethnicity, <i>n</i> (%)			
White	7426 (94.5)	4048 (95.7)	Reference
Minority ethnic	429 (5.5)	180 (4.3)	0.77 (0.64–0.92)
Marital status (mother), <i>n</i> (%)			
Single	2484 (28.4)	797 (18.3)	Reference
Married	6255 (71.6)	3551 (81.7)	1.77 (1.62–1.93)
Home ownership (mother), <i>n</i> (%)			
Mortgaged	5910 (70.5)	3649 (87.1)	Reference
Rent	2475 (29.5)	540 (12.9)	0.35 (0.32–0.39)
Educational level (mother), <i>n</i> (%)			
Below O level	2919 (35.9)	809 (18.8)	Reference
O level or above	5206 (64.1)	3484 (81.2)	2.41 (2.21–2.64)
Family Adversity Index, mean (s.d.)	1.40 (1.65)	1.01 (1.40)	0.84 (0.82–0.86)
IQ, mean (s.d.) ^b	100.17 (16.04)	107.31 (16.25)	1.03 (1.03–1.03)
Any Axis I diagnosis (DAWBA), ^c <i>n</i> (%)			
No	5986 (92.5)	3935 (95.3)	Reference
Yes	482 (7.5)	194 (4.7)	0.61 (0.52–0.73)
Any anxiety diagnosis at age 10, <i>n</i> (%)			
No	3844 (97.7)	3813 (98.1)	Reference
Yes	91 (2.3)	75 (1.9)	0.83 (0.61–1.13)
Depression at 10, 11.6 or 12.6 years, <i>n</i> (%)			
No	4180 (90.2)	3888 (88.0)	Reference
Yes	456 (9.8)	531 (12.0)	1.25 (1.10–1.43)
Physical/sexual abuse between 2.5 and 6.8 years, <i>n</i> (%)			
No	6426 (89.9)	3762 (88.6)	Reference
Yes	724 (10.1)	486 (11.4)	1.15 (1.02–1.30)
Psychotic experiences at age 12 (without attributions), <i>n</i> (%)			
No	2419 (88.4)	3590 (88.4)	Reference
Yes	317 (11.6)	470 (11.6)	1.00 (0.86–1.16)
Enuresis between 4.5 and 9 years, <i>n</i> (%)			
No	5945 (88.0)	3829 (86.7)	Reference
Yes	810 (12.0)	585 (13.3)	1.12 (1.00–1.26)
Persistent nightmares between 2.5 and 9 years, <i>n</i> (%)			
None	1624 (28.6)	1019 (25.1)	Reference
1 time point	1256 (22.1)	830 (20.4)	1.05 (0.94–1.19)
2 time points	934 (16.4)	708 (17.4)	1.21 (1.07–1.37)
3 or more time points	1871 (32.9)	1503 (37.0)	1.28 (1.15–1.42)
Nightmares at age 12, <i>n</i> (%)			
No	2089 (76.4)	3048 (75.1)	Reference
Yes	645 (23.6)	1010 (24.9)	1.07 (0.96–1.20)
Night terrors at age 12, <i>n</i> (%)			
No	2462 (90.0)	3698 (91.2)	Reference
Yes	274 (10.0)	359 (8.8)	0.87 (0.74–1.03)
Sleepwalking at age 12, <i>n</i> (%)			
No	2395 (87.6)	3545 (87.4)	Reference
Yes	340 (12.4)	513 (12.6)	1.02 (0.88–1.18)
Any parasomnia at age 12, <i>n</i> (%)			
No	1748 (64.0)	2580 (63.7)	Reference
Yes	985 (36.0)	1473 (36.3)	1.01 (0.92–1.12)

a. Any parasomnia refers to reports of any nightmares, night terrors or sleep-walking. Results in bold are significant at $P < 0.05$.

b. IQ measured at 8 years.

c. Development and Well-being Assessment (DAWBA) at 7 years.

Table DS2 Sleeping problems in childhood and suspected/definite psychotic experiences at 18 years excluding attributions to sleep and fever (weighted)^a

	n	Suspected/definite without attributes, OR (95% CI)		
		Model A ^b	Model B ^c	Model C ^d
Persistent nightmares (2–9 years) Linear trend	2852	1.18 (1.07–1.30)	1.15 (1.04–1.27)	1.11 (1.00–1.23)
Nightmares (12 years)	2870	Reference	Reference	Reference
No				
Yes		2.14 (1.69–2.70)	1.92 (1.51–2.43)	1.61 (1.26–2.05)
Night terrors (12 years)	2869	Reference	Reference	Reference
No				
Yes		2.01 (1.45–2.78)	1.73 (1.24–2.42)	1.53 (1.09–2.16)
Sleepwalking (12 years)	2869	Reference	Reference	Reference
No				
Yes		1.25 (0.92–1.71)	1.21 (0.88–1.65)	1.11 (0.81–1.53)
Any parasomnias (12 years)	2866	Reference	Reference	Reference
No				
Yes		2.06 (1.64–2.58)	1.86 (1.48–2.34)	1.62 (1.28–2.06)

a. Weightings are done using inverse probability (of having missing outcome data) weights to account for those lost to follow-up. The reference group in all of the analysis is made up of participants without any sleeping problems. Any parasomnia refers to reports of any nightmares, night terrors or sleep-walking at age 12.

b. Unadjusted analysis.

c. Adjusted for gender, Family Adversity Index (FAI) score, enuresis at 4.5, 5.5, 6.5, 7.5 or 9 years, IQ at 8 years, depression score at 10, 11.6 or 12.6 years, sexual or physical abuse at 2.5, 3.5, 4.8, 5.8 or 6.8 years, Development and Well-being Assessment (DAWBA) score at 7 years (any Axis I diagnoses) and any anxiety disorder diagnosis at 10 years.

d. Adjusted for gender, Family Adversity Index (FAI) score, enuresis at 4.5, 5, 5.5, 6.5, 7.5 or 9 years, IQ at 8 years, depression score at 10, 11.6 or 12.6 years, sexual or physical abuse at 2.5, 3.5, 4.8, 5.8 or 6.8 years, Development and Well-being Assessment (DAWBA) score at 7 years (any Axis I diagnoses), any anxiety disorder diagnosis at 10 years and psychotic experiences at age 12 without attributes to sleep and fever.

Table DS3 Childhood sleeping problems and persistence of suspected/definite psychotic experiences between 12 and 18 years excluding attributions to sleep and fever (weighted)^a

	Persistent nightmares (2.5–9 years)		Nightmares (12 years)		Night terrors (12 years)		Sleepwalking (12 years)		Any parasomnias (12 years)	
	n	OR (95% CI)	n	OR (95% CI)	n	OR (95% CI)	n	OR (95% CI)	n	OR (95% CI)
Psychotic experiences ^b	2852	Reference	2870	Reference	2869	Reference	2869	Reference	2866	Reference
None (not at 12 or 18)										
Incident (at 18 but not 12)		1.16 (1.04–1.30)		1.83 (1.37–2.44)		1.74 (1.15–2.64)		1.42 (0.99–2.04)		1.86 (1.42–2.44)
Remitted (at 12 but not 18)		1.29 (1.18–1.40)		2.98 (2.43–3.65)		2.00 (1.48–2.69)		1.74 (1.35–2.25)		2.49 (2.04–3.05)
Persistent (at 12 and 18)		1.33 (1.12–1.59)		4.48 (2.99–6.71)		3.31 (2.01–5.45)		1.15 (0.64–2.04)		3.58 (2.36–5.42)
Adjusted psychotic experiences ^c	2852	Reference	2870	Reference	2869	Reference	2869	Reference	2866	Reference
None (not at 12 or 18)										
Incident (at 18 but not 12)		1.14 (1.01–1.28)		1.69 (1.26–2.26)		1.57 (1.03–2.39)		1.40 (0.97–2.02)		1.74 (1.33–2.29)
Remitted (at 12 but not 18)		1.24 (1.14–1.36)		2.85 (2.32–3.51)		1.84 (1.36–2.50)		1.74 (1.34–2.25)		2.42 (1.97–2.97)
Persistent (at 12 and 18)		1.28 (1.07–1.53)		4.01 (2.65–6.07)		2.71 (1.62–4.53)		1.07 (0.59–1.92)		3.10 (2.03–4.75)

a. The reference group in all of the analysis is made up of participants without any psychotic experiences at 12 or 18 years. Weightings are done using inverse probability (of having missing outcome data) weights to account for those lost to follow-up.

b. Unadjusted analysis.

c. Adjusted for gender, Family Adversity Index (FAI) score, enuresis at 4.5, 5.5, 6.5, 7.5 or 9 years; IQ at 8 years, depression score at 10, 11.6 or 12.6 years, sexual or physical abuse at 2.5, 3.5, 4.8, 5.8 or 6.8 years, Development and Well-being Assessment (DAWBA) score at 7 years (any Axis I diagnoses) and any anxiety disorder diagnosis at 10 years.

Table DS4 Sleeping problems in childhood and suspected/definite psychotic experiences at 18 years excluding attributions to sleep/fever ^a				
	<i>n</i>	Suspected/definite psychosis without attributes, OR (95% CI)		
		Model A ^b	Model B ^c	Model C ^d
Nightmares (12 years)	3048			
None		Reference	Reference	Reference
Only once or twice		1.99 (1.44–2.76)	1.84 (1.32–2.56)	1.60 (1.14–2.24)
Quite often, often or most of the time		2.64 (1.63–4.29)	2.17 (1.32–3.56)	1.65 (0.98–2.76)
Night terrors (12 years)	3035			
None		Reference	Reference	Reference
Only once or twice		1.58 (0.93–2.71)	1.41 (0.81–2.43)	1.34 (0.77–2.34)
Quite often, often or most of the time		3.45 (1.89–6.30)	3.02 (1.63–5.61)	2.39 (1.26–4.55)
Sleepwalking (12 years)	3049			
None		Reference	Reference	Reference
Only once or twice		1.24 (0.81–1.91)	1.18 (0.76–1.82)	1.14 (0.73–1.77)
Quite often, often or most of the time		1.36 (0.54–3.44)	1.38 (0.54–3.54)	1.07 (0.41–2.81)

a. The reference group in all of the analysis is made up of participants without any sleeping problems.
b. Unadjusted analysis.
c. Adjusted for gender, Family Adversity Index (FAI) score, enuresis at 4.5, 5.5, 6.5, 7.5 or 9 years, IQ at 8 years, Depression score at 10, 11.6 or 12.6 years, sexual or physical abuse at 2.5, 3.5, 4.8, 5.8 or 6.8 years, Development and Well-being Assessment (DAWBA) score at 7 years (any Axis I diagnoses) and any anxiety disorder diagnosis at 10 years.
d. Adjusted for gender, FAI score, enuresis at 4.5, 5, 5.5, 6.5, 7.5 or 9 years, IQ at 8 years, Depression score at 10, 11.6 or 12.6 years, sexual or physical abuse at 2.5, 3.5, 4.8, 5.8 or 6.8 years, DAWBA score at 7 years (any Axis I diagnoses), any anxiety disorder diagnosis at 10 years and psychotic experiences at age 12 without attributes to sleep and fever.

Table DS5 Childhood sleeping problems and persistence of suspected/definite psychotic experiences between 12 and 18 years excluding attributions to sleep/fever ^a						
	Unadjusted analyses, ^b OR (95% CI)			Adjusted analyses, ^c OR (95% CI)		
	Incident (at 18 but not 12)	Remitted (at 12 but not 18)	Persistent (at 12 and 18)	Incident (at 18 but not 12)	Remitted (at 12 but not 18)	Persistent (at 12 and 18)
Nightmares (12 years)						
None	Reference	Reference	Reference	Reference	Reference	Reference
Only once or twice	1.74 (1.17–2.59)	2.48 (1.86–3.31)	3.70 (2.11–6.48)	1.64 (1.09–2.45)	2.44 (1.81–3.28)	3.48 (1.96–6.18)
Quite often, often or most of the time	2.11 (1.10–4.06)	4.38 (2.90–6.60)	7.02 (3.41–14.47)	1.83 (0.95–3.54)	3.75 (2.45–5.73)	5.50 (2.61–11.60)
Night terrors (12 years)						
None	Reference	Reference	Reference	Reference	Reference	Reference
Only once or twice	1.44 (0.74–2.80)	1.40 (0.84–2.33)	2.14 (0.90–5.08)	1.32 (0.67–2.59)	1.29 (0.76–2.16)	1.77 (0.73–4.27)
Quite often, often or most of the time	2.87 (1.27–6.48)	3.11 (1.69–5.73)	7.12 (3.07–16.52)	2.63 (1.15–5.99)	2.91 (1.55–5.45)	6.45 (2.69–15.51)
Sleepwalking (12 years)						
None	Reference	Reference	Reference	Reference	Reference	Reference
Only once or twice	1.36 (0.83–2.24)	1.34 (0.91–1.97)	1.11 (0.50–2.45)	1.32 (0.80–2.18)	1.30 (0.88–1.93)	0.79 (0.46–1.34)
Quite often, often or most of the time	1.43 (0.44–4.70)	3.42 (1.80–6.50)	2.11 (0.50–8.94)	1.52 (0.46–5.04)	3.43 (1.77–6.63)	0.99 (0.44–2.22)

a. The reference group in all of the analysis is made up of participants without the respected parasomnia.
b. Unadjusted analysis.
c. Adjusted for gender, Family Adversity Index (FAI) score, enuresis at 4.5, 5.5, 6.5, 7.5 or 9 years, IQ at 8 years, Depression score at 10, 11.6 or 12.6 years, sexual or physical abuse at 2.5, 3.5, 4.8, 5.8 or 6.8 years, Development and Well-being Assessment (DAWBA) score at 7 years (any Axis I diagnoses) and any anxiety disorder diagnosis at 10 years.