

Supplementary Online Content

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eTable 1. ICD codes used in the study.

eTable 2. Sensitivity analyses (1).

eTable 3. Sensitivity analyses (2).

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. ICD codes used in the study.

	ICD-8	ICD-9	ICD-10
Obsessive-compulsive disorder	300.3	300D	F42
Attention-deficit/hyperactivity disorder		314	F90
Pervasive developmental disorders		299A, 299B, 299W, 299X	F84
Conduct disorders		312	F91
Learning disabilities		315	F81
Schizophrenia, schizotypal, and delusional disorders	291, 295, 296.99, 297, 298, 299	291-292, 295, 296X, 297, 298, 299	F20-F29, F32.3, x.5 in F10-F19
Phobic, anxiety, and reaction to stress/adjustment disorders	300.00, 300.20	300A, 300C	F40-F41 and F43
Affective disorders	296.1, 296.0, 296.2-8, 300.4	296A, 296B-296E, 296W, 300E, 311	F30-F39 except 32.3
Substance use disorders	303, 304	303, 304, 305A, 305X	F10-F19 except x.5
Other disorders (comprising dissociative, somatoform, other neurotic disorders, and eating disorders)	300.1, 300.5, 300.6, 300.7, 300.88, 300.99	300B, 300F, 300G, 300H, 300W, 300X, 307B, 307F	F44, F45, F48, F50

Abbreviations: ICD-8/9/10 International Classification of Diseases, eighth, ninth and tenth revisions

eTable 2. Sensitivity analyses (1).

Subcohort of individuals who had the time to complete every level of education assessed (cohort born between 1976 and 1992 for upper secondary school, between 1976 and 1990 for starting a university degree and between 1976 and 1988 for finishing a university degree). Odds ratios (OR) and corresponding 95% confidence intervals (CI) for educational attainment among individuals with Tourette's/chronic tic disorders (TD/CTD), compared with unaffected individuals from the general population and full siblings of affected individuals.

Educational attainment level	No. (%)		OR (95% CI)		
	Individuals with TD/CTD	Individuals without TD/CTD	Unadjusted model	Adjusted ^a	Full sibling comparison ^a
	n=2,029	n=1,584,149			
Finishing upper secondary school	944 (46.5)	1,249,973 (78.9)	0.23 (0.21-0.25)	0.25 (0.23-0.28)	0.39 (0.32-0.47)
	n=1,535	n=1,363,675			
Starting a university degree	272 (17.7)	550,815 (40.4)	0.32 (0.28-0.36)	0.38 (0.33-0.43)	0.36 (0.27-0.48)
	n=1,138	n=1,146,691			
Finishing a university degree	104 (9.1)	283,915 (24.8)	0.31 (0.25-0.37)	0.39 (0.32-0.48)	0.63 (0.44-0.91)

^aAdjusted by sex, year of birth, maternal age, paternal age and parity.

Abbreviations: CI confidence interval; TD/CTD Tourette's/chronic tic disorders; OR odds ratio.

Note: Statistically significant findings are highlighted in bold.

eTable 3. Sensitivity analyses (2).

Subcohort is restricted to individuals who were born between 1994-1998 to ensure full coverage of outpatient care from 2001. Odds ratios (OR) and corresponding 95% confidence intervals (CI) for educational attainment among individuals with Tourette's/chronic tic disorders (TD/CTD), compared with unaffected individuals from the general population and full siblings of affected individuals.

Educational attainment level	No. (%)		OR (95% CI)		
	Individuals with TD/CTD	Individuals without TD/CTD	Unadjusted model	Adjusted ^a	Full sibling comparison ^a
Compulsory education	n=222 (0.2)	n=9,3215 (99.8)			
Eligible for vocational program	167 (75.2)	85,535 (91.8)	0.27 (0.20-0.37)	0.30 (0.22-0.41)	-
Eligible for academic program	124 (55.9)	71,734 (77.0)	0.38 (0.29-0.49)	0.39 (0.30-0.51)	-
Post-compulsory education	n=1,307 (0.3)	n=424,887 (99.7)			
Finishing upper secondary school	107 (8.2)	72,134 (17.0)	0.44 (0.39-0.53)	0.31 (0.24-0.40)	-
Starting a university degree	-	306 (0.07)	-	-	-
Finishing a university degree	-	-	-	-	-

^aAdjusted by sex, year of birth, maternal age, paternal age and parity.

Abbreviations: CI confidence interval; TD/CTD Tourette's/chronic tic disorders; OR odds ratio; - insufficient data for calculations

Note: Statistically significant findings are highlighted in bold.