

Table S1: STROBE Statement—Checklist of items that should be included in reports of cohort studies.

	Item No	Recommendation	Page #
Title and abstract	1	(a) Indicate the study’s design with a commonly used term in the title or the abstract	3
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	3
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	4
Objectives	3	State specific objectives, including any prespecified hypotheses	4
Methods			
Study design	4	Present key elements of study design early in the paper	5
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	5
Participants	6	(a) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	5
		(b) For matched studies, give matching criteria and number of exposed and unexposed	5
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	5
Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group	5
Bias	9	Describe any efforts to address potential sources of bias	N/A
Study size	10	Explain how the study size was arrived at	6
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	5-6
		(b) Describe any methods used to examine subgroups and interactions	6
		(c) Explain how missing data were addressed	6
		(d) If applicable, explain how loss to follow-up was addressed	N/A
		(e) Describe any sensitivity analyses	N/A
Results			
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	5-6
		(b) Give reasons for non-participation at each stage	N/A
		(c) Consider use of a flow diagram	N/A

Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	6
		(b) Indicate number of participants with missing data for each variable of interest	6
		(c) Summarise follow-up time (eg, average and total amount)	6
Outcome data	15*	Report numbers of outcome events or summary measures over time	6
Main results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	7-10
		(b) Report category boundaries when continuous variables were categorized	N/A
		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	N/A
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	9-10
Discussion			
Key results	18	Summarise key results with reference to study objectives	11
Limitations	19	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	13
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	11-13
Generalisability	21	Discuss the generalisability (external validity) of the study results	13
Other information			
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	1

*Give information separately for exposed and unexposed groups.

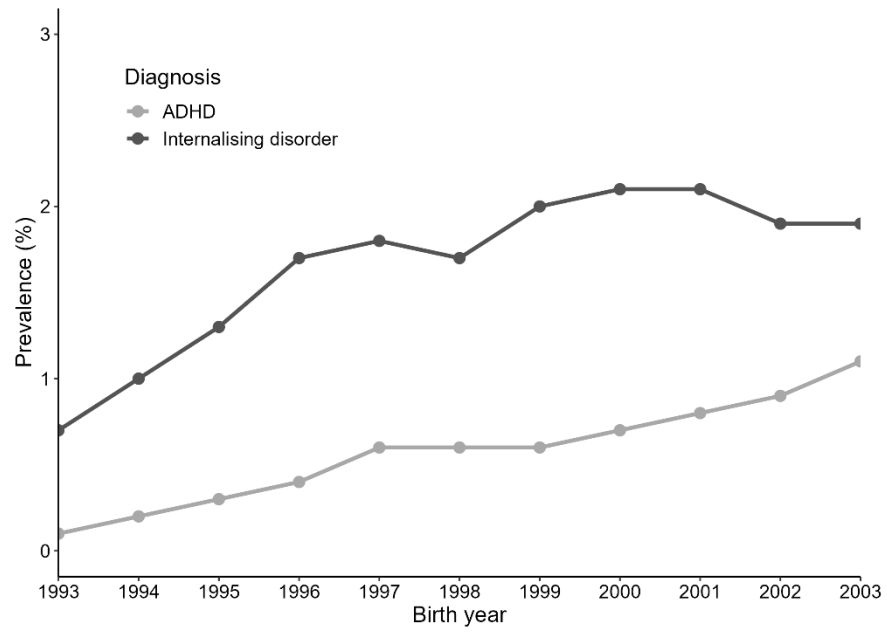


Figure S1: Lifetime prevalence (birth – end of Year 11) of recorded mental health diagnosis for each birth cohort.

Table S1: Full regression results for ADHD diagnosis and Year 11 attainment, n=149,841.

Exposure	b coefficient (95% CI)	p-value
Intercept	-0.14 (-0.15 to -0.13)	<0.001
ADHD diagnosis	-1.67 (-1.85 to -1.49)	<0.001
Birth year	0.00 (-0.00 to 0.00)	0.901
Gender (female)	0.30 (0.29 to 0.31)	<0.001
ADHD diagnosis x birth year interaction	0.06 (0.03 to 0.08)	<0.001

Table S2: Full regression results for internalising disorder diagnosis and Year 11 attainment, n=149,841.

Exposure	b coefficient (95% CI)	p-value
Intercept	-0.15 (-0.16 to -0.13)	<0.001
Internalising disorder diagnosis	-0.80 (-0.89 to -0.71)	<0.001
Birth year	-0.00 (-0.00 to 0.00)	0.322
Gender (female)	0.32 (0.31 to 0.33)	<0.001
Internalising disorder diagnosis x birth year interaction	0.05 (0.03 to 0.06)	<0.001

Table S3: Cross-tabulation comparing pupils with and without ADHD diagnoses before Year 6 and Year 11 exams (n = 85,055).

	No ADHD diagnosis before end of Year 11	ADHD diagnosis before end of Year 11	Total
No ADHD diagnosis before end of Year 6	84,427	370	84,797
ADHD diagnosis before end of Year 6	Empty by definition	258	258
Total	84,427	628*	85,055

*Discrepancy with number reported in Year 11 main analysis is because not all pupils with Year 11 exam results had available Year 6 exam results.

Table S4: Cross-tabulation comparing pupils with and without internalising disorder diagnoses before Year 6 and Year 11 exams (n = 85,055).

	No internalising disorder diagnosis before end of Year 11	Internalising disorder diagnosis before end of Year 11	Total
No internalising disorder diagnosis before end of Year 6	83,347	1,460	84,807
Internalising disorder diagnosis before end of Year 6	Empty by definition	248	248
Total	83,347	1,708*	85,055

*Discrepancy with number reported in Year 11 main analysis is because not all pupils with Year 11 exam results had available Year 6 exam results.

Table S5: Full regression results for ADHD diagnosis and Year 6 attainment, n=85,055.

Exposure	b coefficient (95% CI)	p-value
Intercept	-0.05 (-0.06 to -0.03)	<0.001
ADHD diagnosis	-1.09 (-1.37 to -0.81)	<0.001
Birth year	-0.00 (-0.01 to 0.00)	0.185
Gender (female)	0.10 (0.09 to 0.12)	<0.001
ADHD diagnosis x birth year interaction	0.05 (-0.02 to 0.11)	0.166

Table S6: Full regression results for internalising disorder diagnosis and Year 6 attainment, n=85,055.

Exposure	b coefficient (95% CI)	p-value
Intercept	-0.05 (-0.06 to -0.04)	<0.001
Internalising disorder diagnosis	-0.54 (-0.84 to -0.25)	<0.001
Birth year	-0.00 (-0.01 to 0.00)	0.086
Gender (female)	0.11 (0.09 to 0.12)	<0.001
Internalising disorder diagnosis x birth year interaction	0.10 (0.03 to 0.18)	0.007