

## Supplementary Online Content

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

**eTable 1.** Description of the Registers Used

<b>Register</b>	<b>Years*</b>	<b>Coverage</b>	<b>Variables</b>
Medical Birth Register	1973-2013	All births in Sweden	Date of birth
Causes of Death Register	1952-2013	All deaths of Swedish residents	Date of death, underlying cause of death
National Patient Register	1987-2013	All individuals admitted to psychiatric or general hospitals	Date of admission and discharge, diagnoses
Total Enumeration Income Survey	1968-2013	Data on the income of and governmental benefits provided to all Swedish residents	Household public assistance
Total Population Register	1968-2013	Based on data from the Swedish Tax Agency	Demographic characteristics including age, sex, place of residence and country of birth
Longitudinal Integration Database for Health Insurance and Labor Market Studies	1990-2013	Existing data integrated from the labor market, educational and social sectors.	Parental marital status and education
Register of Court Convictions	1973-2013	Information on all court convictions in Sweden	Date of conviction, type of conviction and penalty
National Child Welfare Register	1968-2013	Records on children and young persons subjected to child welfare measures	Foster care, residential care
Multi-Generation Register	2000-2013	All known relationships between children and parents since 1961	Index numbers to link families together

\* Most recent year used in the study

**eTable 2.** Number of Individuals Who Had Experienced Different Childhood Adversities and Combination of Adversities.

	1	2	3	4	5	6	7	8
1. Parental death	11,065	1,560	1,250	1,663	6,899	1,039	966	304
2. Parental substance abuse	-	14,357	4,666	5,032	7,767	5,204	2,434	792
3. Substantial parental criminality	-	-	19,676	3,422	10,373	7,563	2,369	1,082
4. Parental psychiatric disorder	-	-	-	24,212	11,558	4,127	2,441	974
5. Parental separation	-	-	-	-	114,432	12,162	3,500	3,887
6. Public assistance reciprocity	-	-	-	-	-	20,944	3,111	1,395
7. Child welfare intervention	-	-	-	-	-	-	6,442	795
8. Residential instability	-	-	-	-	-	-	-	6,098

**eTable 3.** Risk of Violent Offending by Exposure to Cumulative Childhood Adversity\*

<b>Number of childhood adversities</b>	<b>Model I<sup>a</sup></b>	<b>Model II<sup>b</sup></b>	<b>Model III<sup>c</sup></b>
0	1 (REF)	1 (REF)	1 (REF)
1	2.5 (2.4-2.6)	2.2 (2.1-2.4)	2.1 (2.0-2.2)
2	4.2 (3.9-4.5)	3.3 (3.1-3.6)	2.9 (2.8-3.1)
3	6.7 (6.2-7.3)	5.0 (4.6-5.5)	4.2 (3.8-4.5)
4+	9.3 (8.5-10.1)	6.7 (6.1-7.3)	5.1 (4.6-5.5)

\* Incidence Rate Ratios with 95% confidence intervals

<sup>a</sup> Adjusted for birth year and sex

<sup>b</sup> Model I with additional adjustments for parental country of birth and parental education

<sup>c</sup> Model II with additional adjustments for psychiatric disorder prior to age 20 years

**eTable 4.** Risk of Suicide From Age 20, by Exposure to Adolescent Violent Offending and Childhood Adversity Stratified by History of Self-harm

	Self-harm before age 20=0 (n= 470,909)		Self-harm before age 20=1 (n= 5,194)	
	No violent offending	Violent offending	No violent offending	Violent offending
Parental death				
No	1 (REF)	4.7 (3.6-6.2)	1 (REF)	2.1 (1.1-3.9)
Yes	1.2 (0.7-2.1)	12.3 (5.8-26.2)	n/a	n/a
Parental suicide				
No	1 (REF)	5.0 (3.8-6.5)	1 (REF)	2.1 (1.1-3.9)
Yes	2.5 (1.1-5.5)	14.6 (3.7-58.8)	n/a	n/a
Parental substance abuse				
No	1 (REF)	4.7 (3.5-6.3)	1 (REF)	1.4 (0.6-3.3)
Yes	2.9 (2.1-4.0)	11.0 (6.5-18.9)	3.1 (1.6-6.2)	8.1 (3.4-19.1)
Substantial parental criminality				
No	1 (REF)	4.8 (3.6-6.5)	1 (REF)	1.7 (0.8-3.7)
Yes	2.1 (1.5-2.8)	7.9 (4.8-13.1)	1.3 (0.5-3.0)	3.6 (1.4-9.3)
Parental psychiatric disorder				
No	1 (REF)	5.2 (4.0-6.9)	1 (REF)	2.2 (1.4-4.3)
Yes	2.0 (1.5-2.7)	5.9 (2.9-11.9)	0.8 (0.3-2.1)	1.0 (0.1-7.0)
Parental separation				
No	1 (REF)	4.6 (3.2-6.7)	1 (REF)	2.1 (0.9-4.9)
Yes	1.5 (1.2-1.8)	6.9 (4.8-9.8)	1.1 (0.6-1.9)	2.2 (0.9-5.3)
Public assistance reciprocity				
No	1 (REF)	4.9 (3.6-6.6)	1 (REF)	1.7 (0.8-3.8)
Yes	2.5 (1.9-3.4)	8.3 (5.1-13.4)	1.5 (0.7-3.3)	3.9 (1.5-10.1)
Child welfare intervention				
No	1 (REF)	5.1 (3.9-6.7)	1 (REF)	2.1 (1.1-4.1)
Yes	2.5 (1.5-4.1)	5.5 (2.3-13.4)	0.7 (0.1-2.9)	1.2 (0.2-9.1)
Residential instability				
No	1 (REF)	5.0 (3.8-6.5)	1 (REF)	2.0 (1.0-3.9)
Yes	0.6 (0.2-1.7)	5.7 (1.8-17.9)	1.5 (0.4-6.2)	4.1 (0.5-30.2)

\* Multi-adjusted Incidence Rate Ratios with 95% confidence intervals

<sup>a</sup> Adjusted for sex, birth year, parental country of birth and parental education

**eTable 5.** Risk of Suicide From Age 20 by Exposure to Adolescent Violent Offending and Cumulative Childhood Adversity Stratified by History of Self-harm

Number of childhood adversities	Self-harm before age 20=0 (n=470,909)		Self-harm before age 20=1 (n=5,194)	
	No violent offending	Violent offending	No violent offending	Violent offending
0	1 (REF)	6,0 (3,7-9,5)	1 (REF)	1,9 (0,6-6,4)
1	1,5 (1,2-1,9)	6,8 (4,1-11,3)	0,8 (0,4-1,5)	1,6 (0,4-6,8)
2	2,2 (1,6-3,0)	14,0 (8,4-23,3)	1,3 (0,6-3,0)	3,6 (1,1-11,9)
3	2,5 (1,6-4,0)	12,9 (6,4-26,2)	1,2 (0,4-4,1)	4,5 (1,1-19,5)
4+	3,3 (2,0-5,4)	15,8 (7,8-32,0)	1,7 (0,6-4,9)	5,2 (1,5-17,8)

\* Multi-adjusted Incidence Rate Ratios with 95% confidence intervals

<sup>a</sup> Adjusted for sex, birth year, parental country of birth and parental education

**eTable 6.** Number of Individuals With Violent Offending and Suicide by Sex and Type of Psychiatric Disorder Before Age 20 Years

	Women			Men		
	Total	Violent Conviction	Suicide	Total	Violent Conviction	Suicide
N	231,699	1,616	155	244,404	7,533	468
<i>Any psychiatric disorder before age 20</i>	19,825 (8.6)	562 (34.8)	86 (55.5)	13,677 (5.6)	1,601 (21.3)	131 (28)
Substance abuse	5,887 (2.5)	327 (20.2)	33 (21.3)	5,332 (2.2)	929 (12.3)	112 (23.9)
Psychotic disorders	252 (0.2)	12 (0.7)	2 (1.3)	265 (0.1)	45 (0.6)	7 (1.5)
Mood disorders	5,380 (2.3)	121 (7.5)	33 (21.3)	2,290 (0.9)	211 (2.8)	28 (6)
Anxiety spectrum disorders	6,597 (2.8)	176 (10.9)	35 (22.6)	2,806 (1.1)	261 (3.5)	27 (5.8)
Self-harm	3,844 (1.7)	188 (11.6)	38 (24.5)	1,350 (0.6)	263 (3.5)	30 (6.4)
Any personality disorder	633 (0.3)	31 (1.9)	9 (5.8)	152 (0.1)	36 (0.5)	1 (0.2)