Supplementary material

Supplementary Table 1 Dimensions, definitions, and counts of childhood adversities in the five trajectory groups of adversity identified by Rod et al. (1)
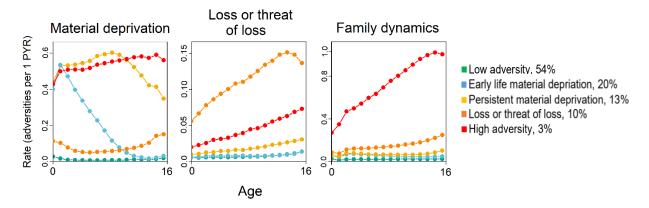
	Adversity	Definition	Count
Material deprivation	**Family poverty**	Family income below 50% of the median national family income in a given year	1 count each year of life
	Parental long-term unemployment	A parent being unemployed for at least 12 months	1 count each year of life for each parent
Loss or threat of loss	**Death of a parent**	Death of a parent	1 count for each parent
	Death of a sibling	Death of a sibling	1 count for each sibling
	Parental somatic illness	A parent being diagnosed with one of the diseases included in the Charlson comorbidity index in the period 1980–1993 (2) or one of the diseases included in the updated version of the Charlson comorbidity index in the period 1994–2015 (3)	1 count each year of life for each parent
	Sibling somatic illness	A sibling being diagnosed with one of the seven somatic illnesses most commonly related to mortality in children aged 0–18 years in Denmark	1 count each year of life for each sibling aged less than 18 years
Family dynamics	**Foster care**	Being placed in out-of-home care	1 count each year of life where the child was registered as placed in out-of-home care
	Parental psychiatric illness	A parent being admitted for at least 1 day to a psychiatric hospital or ward with a primary diagnosis related to psychiatric illness (excluding primary diagnoses related to alcohol and drug abuse)	1 count each year of life for each parent
	Sibling psychiatric illness	A sibling being admitted for at least 1 day to a psychiatric hospital or ward with a primary diagnosis related to psychiatric illness	1 count each year of life for each sibling aged less than 18 years
	Parental alcohol abuse	A parent being diagnosed with a disease related to alcohol abuse or buying a prescribed drug used in treatment of alcohol dependence	1 count each year of life for each parent
	Parental drug abuse	A parent being diagnosed with a disease related to drug abuse or buying a prescribed drug used in treatment of drug dependence	1 count each year of life for each parent
	Maternal separation	The mother no longer sharing address with a partner	1 count each year of life where the mother separates from a partner

1. Rod NH, Bengtsson J, Budtz-Jørgensen E, Clipet-Jensen C, Taylor-Robinson D, Andersen A-MN, et al. Trajectories of childhood adversity and mortality in early adulthood: a population-based cohort study. The Lancet. 2020 Aug 15;396(10249):489–97.

2. Christensen S, Johansen MB, Christiansen CF, Jensen R, Lemeshow S. Comparison of Charlson comorbidity index with SAPS and APACHE scores for prediction of mortality following intensive care. Clin Epidemiol. 2011 Jun 17;3:203–11.

3. Quan H, Li B, Couris CM, Fushimi K, Graham P, Hider P, et al. Updating and validating the Charlson comorbidity index and score for risk adjustment in hospital discharge abstracts using data from 6 countries. Am J Epidemiol. 2011 Mar 15;173(6):676–82.

Supplementary Figure 1. Trajectories of childhood adversity across dimensions of material deprivation, loss or threat of loss, and family dynamics as defined by Rod et al. (1) presented as rates of adversities per 1 person-year (PYR)

1. Rod NH, Bengtsson J, Budtz-Jørgensen E, Clipet-Jensen C, Taylor-Robinson D, Andersen A-MN, et al. Trajectories of childhood adversity and mortality in early adulthood: a population-based cohort study. The Lancet. 2020 Aug 15;396(10249):489–97.

Supplementary Figure 2. Directed acyclic graph representing the presumed relationships among the variables influencing childhood adversity, type 1 diabetes, and their common causes, applied to identify the following potential confounders of the association between childhood adversities and type 1 diabetes: age, date of birth, parental area of origin, parental education at birth, birth order, birth weight, maternal age at birth, and family type 1 diabetes. Persons with parental type 1 diabetes were excluded, and the analyses were, therefore, adjusted only for sibling type 1 diabetes. Also, the analyses were not adjusted for caesarean section and infections because the confounding paths through these nodes were blocked by adjustment for other variables. All analyses were stratified by sex to account for differences in age at onset of type 1 diabetes and potential sex differences in the effect of childhood adversities on type 1 diabetes.