

Childhood vulnerabilities and outcomes in early adulthood

Study	Vulnerable group	Findings	Data source
<p>Heath, A. F., Colton, M. J., & Aldgate, J. (1994). Failure to Escape: A Longitudinal Study of Foster Children's Educational Attainment. <i>The British Journal of Social Work</i>, 24(3), 241-260. https://doi.org/10.1093/oxfordjournals.bjsw.a056064</p>	<p>Looked after children/ guardianship order</p>	<ul style="list-style-type: none"> • Foster children, who were in long-term, settled placements in middle-class environments continued to demonstrate low educational attainment, suggested difficulty in 'escaping from disadvantage'. There was no difference in attainment or progress between children where the eventual outcome was adoption or custodianship and those who would remain foster children. • Children who can be presumed to have experienced poor parenting and had been removed compulsorily from their parents did not appear to recover educationally as easily as those whose care had been necessitated by parental illness or by crises related to economic hardship. What we appear to see here are the lasting effects of early deprivation or maltreatment. 	<p>The sample consists of 49 foster children (26 boys, 23 girls), of approximately Middle School age (8-14 years) at the start of the study, in ordinary state schools in one county</p>
<p>Viner, R. M., & Taylor, B. (2005). Adult health and social outcomes of children who have been in public care: Population-based Study. <i>Pediatrics</i>, 115(4), 894-9. http://pediatrics.aappublications.org/content/115/4/894.short</p> <p>Power et al. (2002). Childhood and adulthood risk factors for socio-economic differentials in psychological distress: evidence from the 1958 British birth cohort. <i>Social Science & Medicine</i>, 55(11),</p>	<p>Looked after children</p>	<ul style="list-style-type: none"> • Research has provided relatively strong evidence that being looked after as a child has a sustained impact on a number of socio-economic outcomes. These studies found that a history of state care was associated with significantly poorer economic outcomes, a history of homelessness in both genders and a twofold risk of current unemployment in men. Public care in childhood is associated with adverse adult socioeconomic, educational, legal, and health outcomes in excess of that associated with childhood or adult disadvantage. • Childhood mental health problems are strongly linked to adverse adulthood experiences. • Another study also shows that being in care influenced psychological status in adulthood for men but not women. 	<p>The 1970 British birth cohort was followed up at 5 (N = 13135), 10 (N = 14875), 16 (N = 11622), and 30 years (N = 11261). BCS70 study</p> <p>1958 British National Child Development Study (NCDS85), age 7, 16, 22, 33</p>

1989-2004. http://www.sciencedirect.com/science/article/pii/S0277953601003252?via%3Dihub			
Jackson, S. & Ajayi, S. (2007) Foster care and higher education. <i>Adoption & Fostering</i> , 31, 62–72. http://docs.scie-socialcareonline.org.uk/fulltext/73912.pdf	Care leaver	<ul style="list-style-type: none"> • Evidence shows that 6% of carer leavers go on to University, compared with 39% of the general population in 2007 • Despite their success in obtaining university places, many of these students struggled to cope with the academic demands of their chosen courses. They tended to attribute this to the frequent interruptions to their education caused by the volatility of their birth families, changes of placement and periods out of school. 	Study of young people who had been in care at the age of 16 and had been offered a place to study at degree level in a higher education institution.
Johnson, S. et al. (2009). Academic attainment and special educational needs in extremely preterm children at 11 years of age: the EPICure study. <i>British Medical Journal</i> , 94(4), 283-9. http://fn.bmj.com/content/94/4/F283.short	Children with Special Educational Needs and Disabilities (SEND)	<ul style="list-style-type: none"> • Extremely preterm children had significantly lower scores for cognitive ability, reading, mathematics. 29 (13%) of them attended special school. In mainstream schools, 105 (57%) extremely preterm children had SEN and 103 (55%) required SEN resource provision. • Extremely preterm survivors remain at high risk for learning impairments and poor academic attainment in middle childhood. 	EPICure Study at birth and 11 years
Fauth, R. C., Platt, L., & Parsons, S. (2017). The development of behaviour problems among disabled and non-disabled children in England. <i>Journal of Applied Developmental Psychology</i> , 52, 48-58. https://www.sciencedirect.com/science/article/pii/S0193397317301740	Children with SEND	<ul style="list-style-type: none"> • Disabled children exhibit more behaviour problems than non-disabled children at age 3, and their trajectories from ages 3 to 7 do not converge. Rather, children with disabilities, particularly boys, show increasing gaps in peer problems, hyperactivity, and emotional problems over time. There was little evidence to show that parenting moderates these associations. 	MCS age 3-7 years

<p>Mars, B. et al. (2014). Clinical and social outcomes of adolescent self-harm: population based birth cohort study. <i>British Medical Journal</i>, 349, 1-13. http://www.bmj.com/content/349/bmj.g5954</p> <p>Green, H. et al. (2005). <i>Mental Health of Children and Young People in Great Britain, 2004</i>. NHS Digital: 1-4039-8637-1. http://digital.nhs.uk/catalogue/PUB06116</p>	<p>Children who have mental health difficulties</p>	<ul style="list-style-type: none"> • The Avon Longitudinal Study of Parents and Children (ALSPAC) showed an association between suicidal self-harm in adolescence and poorer educational and employment outcomes in early adulthood. However, this is not the case for self-harm without suicidal intent. • In 2004, 8% of 5 to 10 year olds and 12% of 11 to 16 year olds had a clinically diagnosed mental health condition. Up to 25% of children show signs of mental health problems with more than half continuing through into adulthood. 	<p>Avon Longitudinal Study of Parents and Children (ALSPAC), a UK birth cohort of children born in 1991-92. Age 16, 18, 19 and 21 years</p> <p>The survey of the mental health of children and young people living in private households in Great Britain 2004, age 5-16 years.</p>
<p>Goldman-Mellor et al., (2016). Committed to work but vulnerable: Self-perceptions and mental health in NEET 18 year olds from a contemporary British cohort. <i>Journal of Child Psychological Psychiatry</i>, 57(2), 196-203. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4789764/</p>	<p>Children with mental health difficulties / NEET status later life (NEET as outcome) health difficulties</p>	<ul style="list-style-type: none"> • The Environmental Risk (E-Risk) longitudinal study showed that pre-existing mental health conditions entirely explained mental health at 18, independently of NEET status. NEET is a correlate of poor mental health Goldman-Mellor et al., (2016). • The study showed that at age 18, 11.6% of participants were NEET. Nearly 60% of this (NEET) compared to 35% of non-NEET) youths had already experienced one or more mental health problems in childhood/adolescence (depression, ADHD, CD). Goldman-Mellor et al., (2016). 	<p>Environmental Risk (E-Risk) longitudinal study, age 5, 7, 10, 12 and 18</p>
<p>Taggart, B. et al (2015). Effective pre-school, primary and secondary education project (EPPSE 3-16+): How pre-school influences children and young people's attainment and</p>	<p>Children in poverty</p>	<ul style="list-style-type: none"> • Evidence shows that high quality pre-school influenced outcomes throughout primary school especially. It showed that at age 11, high quality pre-school was found to be especially important for boys, pupils with SEN and children and young people from disadvantaged 	<p>The Effective Pre-school, Primary and Secondary Education Project (EPPSE), a longitudinal study (1997 – 2014). Age</p>

<p>developmental outcomes over time. Department for Education. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/455670/RB455_Effective_primary_and_secondary_education_project.pdf</p>		<p>backgrounds. High quality pre-school enhanced maths outcomes for disadvantaged pupils and for those of low qualified parents.</p> <ul style="list-style-type: none"> • Related to vulnerability, parental qualifications predicted later life (age 16) cognition in maths to the greatest extent (0.74) followed by SES (0.66). By contrast, poverty measured through FSM (0.37) and health conditions in early life were had a weaker association with cognition. 	<p>3-16.</p>
<p>Flouri, E., & Buchanan, A. (2004). Childhood families of homeless and poor adults in Britain: A prospective study. <i>Journal of Economic Psychology</i>, 25(1), 1-14. https://www.sciencedirect.com/science/article/pii/S01</p>	<p>Children in poverty Children in homeless or in insecure/ unstable housing</p>	<ul style="list-style-type: none"> • Another study found that non-intact family, domestic tension, emotional problems at age 7 and involvement with the police at age 16 were not associated with the risk of ever being homeless between the ages of 23 and 33, state benefits receipts at age 33, living in subsidized housing for men or women. • The single exception was the significantly lower risk in males for the risk of living in subsidised housing at age 33 for those from intact families. 	<p>NCDS58 age 7, 23 and 33</p>
<p>Sloggett, A., & Joshi, H. (1998). Deprivation indicators are predictors of the UK ONS Longitudinal Study. <i>Journal of Epidemiology & Community Health</i>, 52(4), 228-233. http://jech.bmj.com/content</p> <p>Newbury, J. et al. (2016). Why Are Children in Urban Neighborhoods at Increased Risk for Psychotic Symptoms? Findings From a UK Longitudinal Cohort Study. <i>Schizophrenia Bulletin</i>, 42(6), 1372-1383. https://academic.oup.com/schizophreniabulletin/article/42/6/1372</p>	<p>Children in poor, sick or deprived places</p>	<ul style="list-style-type: none"> • All outcomes, except risk of stillbirth, show a clear, significant, and approximately linear association with social deprivation of ward of residence. • Associations were found to be much stronger for outcomes where a greater "social" component can be constructed (teenage birth, sole registered birth) than for outcomes that are probably more physiologically determined (mortality, stillbirth, low birth weight). • Urban residency at age 5 and age 12 were both significantly associated with childhood psychotic symptoms, but not with age 12 anxiety, depression, or antisocial behaviour. Low social cohesion and crime victimization in the neighbourhood explained nearly a 	<p>1981 and 1992 census</p> <p>Environmental Risk (E-Risk) Longitudinal Twin Study , age 5 and 12</p>

		quarter of the association between urban residency and childhood psychotic symptoms Newbury, J. et al. (2016).	
Liao, T. (2003). Mental health, teenage motherhood, and age at first birth among British women in the 1990s. ISER working paper series 2003-33. https://www.econstor.eu/handle/10419/92020	Teenage parents	<ul style="list-style-type: none"> • Teenage mothers tend to have a significantly higher level of depression in the medium term postpartum -Older mothers tend to have a smaller likelihood of depression than younger mothers. 	British Household Panel Survey (1991-2000) at time of pregnancy and 5 years postpartum
Flouri, E. & Buchanan, A. (2003). The role of father involvement in children's later mental health. <i>Journal of Adolescence</i> , 26, 63–78. http://www.sciencedirect.com/science/article/pii/S0140197102001161	Non intact families	<ul style="list-style-type: none"> • Father involvement at age 7 protected against psychological maladjustment in adolescents from non-intact families, and father involvement at age 16 protected against adult psychological distress in women. 	National Child Development Study (NCDS), age 7, 16 and 33
Goodman, A., Joyce, R., Smith, J. P. (2011). The long shadow cast by childhood physical and mental problems on adult life. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 108(15), 6032-6037. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3076863/ Viner, R. M., & Taylor B. (2007). Adult outcomes of binge drinking in adolescence: findings from a UK national birth cohort. <i>Journal of Epidemiology & Community Health</i> , 61, 902-907. http://jech.bmj.com/content/61/10/902.full	"Troubled" families Children whose parents use substances problematically	<ul style="list-style-type: none"> • Childhood psychological health predicts late life income and economic success than does childhood physical health. • Childhood psychological problems have a significant impact on family income which is as high as 28% lower net family income by age 50. –This is partly due to reduced diligence, lower probabilities of being married or being at work, and the stability of both behaviours during the adult years. • Adolescent binge drinking predicated an increased risk of adult alcohol dependence, illicit drug use, psychiatric morbidity amongst other health related outcomes. -These associations were found to be distinct from those associated with habitual frequent alcohol use. 	British National Child Development Study, age 7, 14 and 50.

<p>Murray, J. & Farrington, D. P. (2005). Parental imprisonment: Long-lasting effects on boys' anti-social behaviour and delinquency through the life course. <i>The Journal of Child Psychology and Psychiatry</i>, 46(12), 1269-1278. http://onlinelibrary.wiley.com/doi/10.1111/j.1469-7610.2005.01433.x/full#b9</p>	<p>Children of prisoners</p>	<p>Parental imprisonment has been shown to have long lasting effects on boys' internalising problems from age 14 to 48 and boys' anti-social behaviour and delinquency through the life course. Separation caused by parental imprisonment was also strongly associated with many other childhood risk factors for delinquency compared with other types of separation.</p>	<p>Cambridge Study in Delinquent Development (CSDD),</p>
<p>Kim-Cohen, J., Moffitt, T. E., Taylor, A. (2005). Maternal depression and children's anti-social behaviour: Nature and nurture effects. <i>Arch Gen Psychiatr</i>, 62(2), 173-181. https://jamanetwork.com/journals/jamapsychiatry/fullarticle/208278</p>	<p>Children with mental health in the household</p>	<ul style="list-style-type: none"> • Maternal depression predicted child Anti-Social Behaviour (ASB), and children exposed to their mother's depression between ages 5 and 7 years showed a subsequent increase in ASB by age 7 years. • Parental history of Anti-social personality disorder (ASPD) symptoms accounted for some of the association observed between maternal depression and children's ASB. • The combination of depression and ASPD symptoms in mothers posed the greatest risk for children's ASB. 	<p>E-risk study, age 5 and 7</p>
<p>Bynner, J. and Parsons, S., (2002). Social Exclusion and the Transition from School to Work: The Case of Young People Not in Education, Employment, or Training (NEET), <i>Journal of Vocational Behavior</i>, 60(2), 289-309. https://www.sciencedirect.com/science/article/abs/pii/S0001879101918688</p>	<p>NEET/Pre-NEET</p>	<ul style="list-style-type: none"> • The results support the hypothesis that NEET status has a negative effect on the adult outcomes associated with identity capital formation, particularly for young women. • For young men the effects of NEET status in the late teens could be seen mainly through poor labour market performance, especially though the continuation of NEET status itself at age. These effects reduced slightly when controls for qualifications were included. Young men who had experienced NEET were over three times as likely as those who had avoided NEET to not be in education, employment, or training at age 21, after taking account of qualifications and early life experiences. • Other outcomes such as depression and fatalistic attitudes, dissatisfaction with life, lack of a sense of control, and experiencing problems in life all had significant odds ratios for young men in the model without 	<p>1970 British Birth Cohort Study surveyed at age 21</p>

		controls. For young women in the study, these outcomes were different. NEET' s effects were not only sustained in relation to labour market outcomes, but also extending to early marriage or cohabiting, feelings of dissatisfaction with life, lack of a sense of control, and experiencing problems in life. NEET maintained statistically significant odds ratios for all of these outcomes even in the model with maximum controls.	
<p>Fisher, H. et al. (2012). Bullying victimisation and risk of self-harm in early adolescence: longitudinal cohort study. <i>British Medical Journal</i>, 344, e2683. https://www.bmj.com/content/344/bmj.e2683</p> <p>Takizawa, R., Maughan, B., & Arsenuault, L. (2014). Adult Health Outcomes of Childhood Bullying Victimization: Evidence From a Five-Decade Longitudinal British Birth Cohort. <i>American Journal of Psychiatry</i>, 171(7), 777-84. https://www.ncbi.nlm.nih.gov/pubmed/24743774</p>	<p>Children who have experienced childhood trauma/abuse - Bullying victimisation</p>	<ul style="list-style-type: none"> • Children who experienced childhood trauma/abuse via frequent bullying at or before aged 10 had a greater risk of self-harming at age 12. • Previous physical maltreatment by an adult, family history of suicide and child mental health difficulties (ADHD, anxiety, conduct disorder, depression, and psychotic symptoms) increased the risk for self-harm in bullied children. • Participants who were bullied in childhood had increased levels of psychological distress at ages 23 and 50. The effects were similar to those of being placed in public or substitute care 	<p>The Environmental Risk (E-Risk) longitudinal study, assessed at age 5,7, 10 and 12 years.</p> <p>British National Child Development Study (NCDS58), age 7, 11, 23, 24 and 50.</p>
<p>Newbury, J. B., et al. (2018). Measuring childhood maltreatment to predict early-adult psychopathology: Comparison of prospective informant-reports and retrospective self-reports. <i>Journal of Psychiatric Research</i> 96, 57-64. http://www.journalofpsychiatricresearch.com/article/S0022-3956(17)30797-5/pdf</p>	<p>Children who have experienced childhood trauma/abuse - Maltreatment during childhood</p>	<ul style="list-style-type: none"> • Maltreatment during childhood was significantly more likely to present a range of psychiatric problems in early adulthood including depression, anxiety, self-injurious behaviour, alcohol/cannabis dependence, and conduct disorder. 	<p>Environmental Risk (E-Risk) Longitudinal Twin Study, Age 5 and assessed at each wave until age 18.</p>

<p>Lereya, S. T., et al. (2015). Adult mental health consequences of peer bullying and maltreatment in childhood. <i>Lancet Psychiatry</i>, 2, 524-31. http://www.thelancet.com/pdfs/journals/lanpsy/PIIS2215-0366(15)00165-0.pdf</p> <p>Arseneault, L., et al. (2011). Childhood Trauma and Children's Emerging Psychotic Symptoms: A Genetically Sensitive Longitudinal Cohort Study. <i>The American Journal of Psychiatry</i>, 168(1), 65-72. http://psychiatryonline.org/doi/abs/10.1176/appi.ajp.2010.10040567</p>	<p>Children who have experienced childhood trauma/abuse - Maltreatment and bullying</p>	<ul style="list-style-type: none"> • Children who were both maltreated and bullied were at increased risk for overall mental health problems, anxiety, and depression and self-harm compared with typically developing peers. • Children who experienced maltreatment by an adult or bullying by peers were more likely to report psychotic symptoms at age 12. 	<p>Avon Longitudinal Study of Parents and Children in the UK, 8 weeks, 8-10 years, 13 years, and 16 years</p> <p>Environmental Risk Longitudinal Twin Study at age 5, 7, 10 and 12</p>
<p>Stewart-Brown, S. L., Fletcher, L., & Wadsworth, M. E. J. (2005). Parent-child relationships and health problems in adulthood in three UK national birth cohort studies. <i>European Journal of Public Health</i>, 15(6), 640-646. https://academic.oup.com/eurpub/article/15/6/640/440103</p>	<p>Children with childhood experiences of trauma/abuse - Poor quality parent-child relationships</p>	<ul style="list-style-type: none"> • Poor quality parent-child relationships could be a risk factor for poor health outcomes in adulthood • Reports of abuse and neglect (1946 cohort), poor quality relationship with mother and father (1958 cohort), and a range of negative relationship descriptors (1970 cohort) predicted reports of three or more illnesses or health problems in adulthood. 	<p>UK birth cohort studies: 1946, 1958 and 1970 cohorts</p>

<p>Roberts, R., O'Connor, T., Dunn, J., & Golding, J. (2004). The effects of child sexual abuse in later family life; mental health, parenting and adjustment of offspring. <i>Child Abuse & Neglect</i> 28, 525–545. https://www.ncbi.nlm.nih.gov/pubmed/15159068</p>	<p>Children who have experienced childhood trauma/abuse - Sexual abuse</p>	<ul style="list-style-type: none"> • After adjustment for other childhood adversity, prior child sexual abuse was associated with outcomes in adulthood, including current membership of a non-traditional family type (single mother and stepfather) poorer psychological well-being, teenage pregnancy, parenting behaviours, and adjustment problems in the victim's later offspring. • Child sexual abuse has long-term repercussions for adult mental health, parenting relationships, and child adjustment in the succeeding generation 	<p>ALSPAC, 21 months up until 17 years</p>
<p>Sidebotham, P., & Golding, J. (2001). Child maltreatment in the “Children of the nineties”: A longitudinal study of parental risk factors. <i>Child Abuse & Neglect</i>, 25(9), 1177-1200 https://www.sciencedirect.com/science/article/abs/pii/S0145213401002617</p>	<p>Children who have experienced childhood trauma/abuse - Child abuse and neglect</p>	<ul style="list-style-type: none"> • significant parental risk factors found within the backgrounds of mothers of children who were abused and neglected were age < 20; lower educational achievement; history of sexual abuse; child guidance or psychiatry; absence of her father during childhood; and a previous history of psychiatric illness. Sidebotham, P., & Golding, J. (2001). 	<p>Avon Longitudinal Study of Parents and Children (“Children of the Nineties”) Age 0-6.</p>
<p>Shalev, I., et al. (2013). Exposure to violence during childhood is associate with telomere erosion from 5 to 10 years of age: A longitudinal study. <i>Molecular Psychiatry</i>, 18, 579-581. https://www.nature.com/articles/mp201232</p>	<p>Domestic violence in the household Children who have experienced childhood trauma/abuse (Adverse life event)</p>	<ul style="list-style-type: none"> • Compared with their counterparts, children who experienced two or more kinds of violence exposure showed significantly more telomere* erosion between age-5 baseline and age-10 follow-up measurements, even after adjusting for sex, socioeconomic status and body mass index. • Exposure to violence within the household is linked to telomere erosion. The effects of cumulative childhood stress caused by exposure to domestic violence are observable at a young age and have the potential to impact life-long health. Shalev, I., et al. (2013). <p>* a region of DNA at the end of a chromosome that protects the start of the genetic coding sequence against shortening during successive replications</p>	<p>E-Risk Longitudinal Twin Study, 1994-1995 birth cohort at age 5 and 10.</p>
<p>Department for Work and Pensions</p>	<p>Children of migrants;</p>	<ul style="list-style-type: none"> • Children from minority ethnic backgrounds are more likely 	

<p>(2016) Labour market status by ethnic group. London: Department for Work and Pensions. Available at: https://www.gov.uk/government/statistics/labour-market-status-by-ethnic-group-annual-data-to-2015 [Accessed 20 April 2017]</p> <p>Fisher, P. and Nandi, A. (2015) Poverty across ethnic groups through recession and austerity. York: Joseph Rowntree Foundation. https://www.jrf.org.uk/report/poverty-across-ethnic-groups-through-recession-and-austerity</p>	<p>children from minority ethnic background</p>	<p>to be unemployed as adults than the general population.</p> <ul style="list-style-type: none"> • They are also more likely to live in persistent poverty, which in turn leads to worse outcomes. 	
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Source: Children’s Commissioner 2018: *Childhood vulnerabilities and outcomes in early childhood. Vulnerability Technical Report 4*