
Article:
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Child maltreatment is associated with poor socioeconomic outcomes at 50 years of age.

STUDY DESIGN
Design: Cohort study

STUDY QUESTION
Setting: England, Wales and Scotland

Patients: 1958 birth cohort

Exposure: Experience of abuse during childhood, measured prospectively by parent and teacher interviews and retrospectively by self report.

Outcomes: Markers of socio-economic function at 45-50 years.

Follow-up period: 50 years from birth.

Patient follow-up: Surveys sent out at 45 and 50 years of age.

MAIN RESULTS:

The study results are summarised in table 1 below.

Outcomes	**Exposure**	**Unadjusted OR (95% CI)**	**Adjusted OR (95 CI)***
Long Term Sickness (4.3% of cohort)	Neglect	2.5 (1.9 to 3.2)	1.7 (1.3 to 2.2)
	Emotional Neglect	1.8 (1.3 to 2.4)	1.2 (0.8 to 1.7)
	Sexual Abuse	3.5 (1.9 to 6.4)	1.8 (0.95 to 3.4)
	Non-sexual Abuse (1)	2.1 (1.5 to 2.9)	1.8 (1.2 to 2.5)
	Non-sexual Abuse (2-3)	2.8 (1.9 to 4.0)	2.1 (1.4 to 3.2)
Not in Employment, Education or Training (7.4% of cohort)	Neglect	1.7 (1.3 to 2.1)	1.4 (1.1 to 1.9)
	Emotional Neglect	1.4 (1.1 to 1.8)	1.2 (0.9 to 1.6)
	Sexual Abuse	1.9 (1.1 to 3.3)	1.4 (0.8 to 2.4)
	Non-sexual Abuse (1)	1.3 (0.99 to 1.8)	1.2 (0.9 to 1.6)
	Non-sexual Abuse (2-3)	1.6 (1.2 to 2.2)	1.3 (0.9 to 1.9)
Lack of assets (13.7% of cohort)	Neglect	2.3 (1.9 to 2.7)	1.7 (1.4 to 2.0)
	Emotional Neglect	1.4 (1.2 to 1.7)	1.1 (0.9 to 1.4)
	Sexual Abuse	2.6 (1.7 to 3.9)	1.6 (1.0 to 2.5)
	Non-sexual Abuse (1)	1.5 (1.2 to 1.9)	1.3 (1.0 to 1.6)
	Non-sexual Abuse (2-3)	1.8 (1.4 to 2.3)	1.4 (1.0 to 1.8)
Poor qualifications (30.4% of cohort)	Neglect	3.7 (3.2 to 4.2)	2.3 (2.0 to 2.7)
	Emotional Neglect	1.3 (1.1 to 1.5)	1.1 (0.9 to 1.3)
	Sexual Abuse	2.3 (1.6 to 3.4)	1.5 (1.0 to 2.3)
	Non-sexual Abuse (1)	1.1 (0.95 to 1.4)	0.90 (0.7 to 1.1)

	Non-sexual Abuse (2-3)	1.2 (0.9 to 1.5)	0.88 (0.69 to 1.1)
Manual social class (31.3% of cohort)	Neglect	2.5 (2.2 to 2.9)	1.8 (1.5 to 2.1)
	Emotional Neglect	1.3 (1.1 to 1.5)	1.2 (0.97 to 1.4)
	Sexual Abuse	2.2 (1.4 to 3.4)	1.80 (1.1 to 2.9)
	Non-sexual Abuse (1)	0.97 (0.79 to 1.2)	0.79 (0.64 to 0.98)
	Non-sexual Abuse (2-3)	1.2 (0.90 to 1.1)	0.82 (0.63 to 1.1)

Table 1: Summary of psychosocial outcomes of children subject to abuse.
Non-sexual Abuse (1): 1 of witnessed violence, physical or psychological abuse,
Non-sexual Abuse (2-3): 2-3 of witnessed violence, physical or psychological abuse
*Adjustment for maternal age, birth weight, birth order, poor childhood health, social class in 1958, parental education, household amenities, crowding and tenure

CONCLUSION: All forms of childhood maltreatment result in poorer socio-economic outcomes at 50 years of age. Sexual abuse had the greatest effect, with neglect also having a significant impact. Adjusting for cognition and mental health mediates some, but not all, of these affects.

ABSTRACTED FROM: PINTO PEREIRA, S.M., LI, L. and POWER, C., 2017. Child maltreatment and adult living standards at 50 years. Pediatrics, 139(1).

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Two existing papers[1,2], mine the rich vein of data from the four-decade-long Dunedin birth cohort study to show that adverse childhood experiences (ACE) predict poor adult outcomes. Can this data form the basis of early intervention programmes for vulnerable families to *prevent* adverse childhood experiences, *including* child maltreatment?

Early intervention to break the intergenerational cycle of child maltreatment remains the Holy Grail. It would deliver, as this paper shows, a 'very large return on investment' and prevent untold human misery. The cup remains elusive. Since the seminal paper of Felitti[2], studies have demonstrated an association between ACE and poor adult physical and mental health outcomes, including criminality. These largely retrospective findings can be challenged on the basis of recall bias for episodic memory from early childhood.

This paper demonstrates that ACE scores can be used *prospectively* to identify vulnerable adults. The authors have shown agreement between retrospective ACE (from self-reports) and prospective assessments (from archival records)[3] and that ACE, including a poor neurodevelopment profile at 3 years-of-age, strongly predicts poor adult outcomes. They did this through use of a longitudinal data set and administrative

data, the analysis of which, while a challenging read, is both novel and robust. They stressed that such predictive associations do not imply causality

An adverse ACE score will capture around 14% of adults[4]. There is no single childhood risk factor that is either necessary or sufficient to predict child maltreatment[5]. Many adults who have had ACE prove resilient to longer-term adverse effects. Refinement is necessary if ACE is to be used as a tool for early identification of vulnerable families who pose a risk to their children. This paper is an important waymark along the journey to that grail.

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