Contextualising ACEs: the relationship between childhood socioeconomic position and adverse childhood experiences

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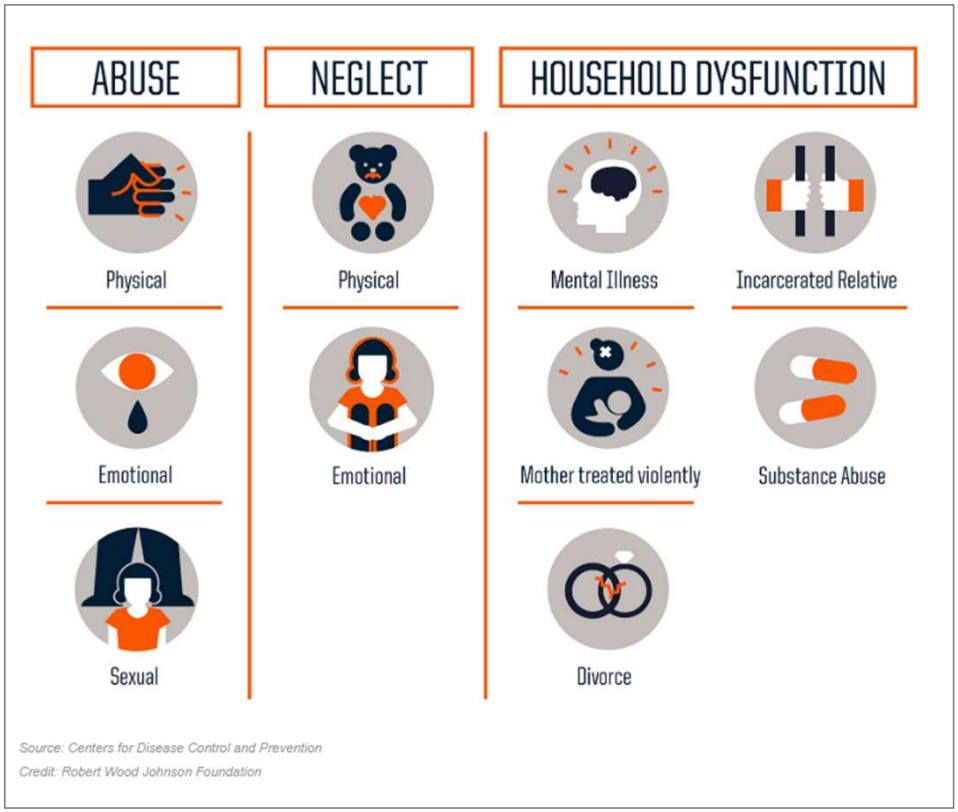
Today

- Background: what are ACEs and why is this topic important?
- Aims: what's missing and what we were trying to do?
- Methods mercifully brief
- Results what does the evidence actually show?
- Conclusions: what all this means and why it matters for policy

Background: adverse childhood experiences

- Childhood adversity associated with increased risk of negative outcomes in later life
- Evidence particularly influenced by CDC-Kaiser **Adverse Childhood Experiences** (ACE) Study (e.g. Felitti et al 1998):
  - (More or less) coined the term 'ACEs' to describe multiple facets of such adversity
  - Theirs now often cited as a 'standard' definition…

Background: adverse childhood experiences



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  - (More or less) coined the term 'ACEs' to describe multiple facets of such adversity
  - Theirs now often cited as a 'standard' definition…
- But actually (NB) ACEs defined in all sorts of different ways
- ACEs associated with very wide range of adverse outcomes…

Background: adverse childhood experiences

Figure 1
All-cause mortality rate by age 50 according to prevalence of adverse childhood experiences, British men and women, 2008

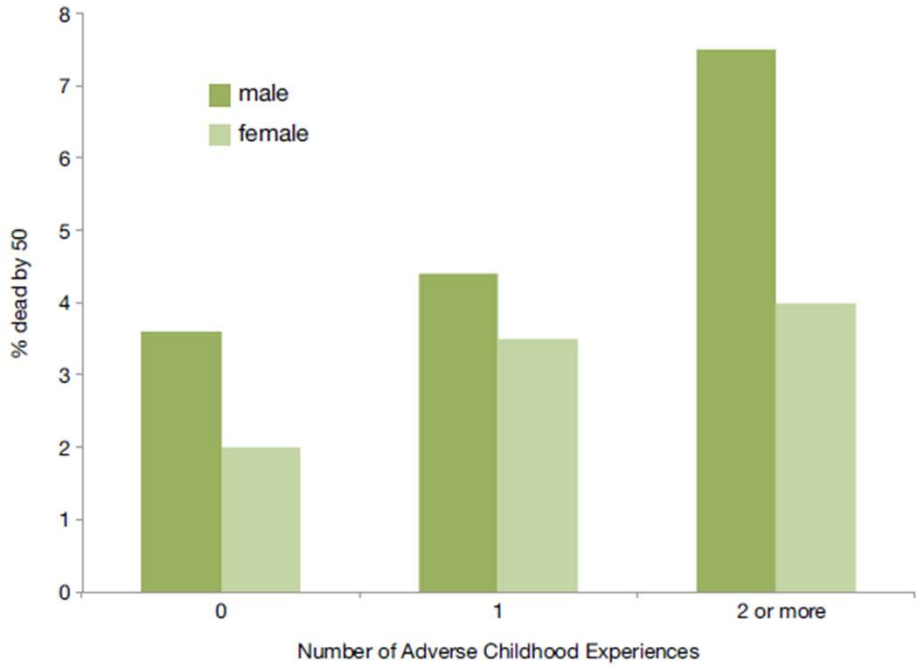
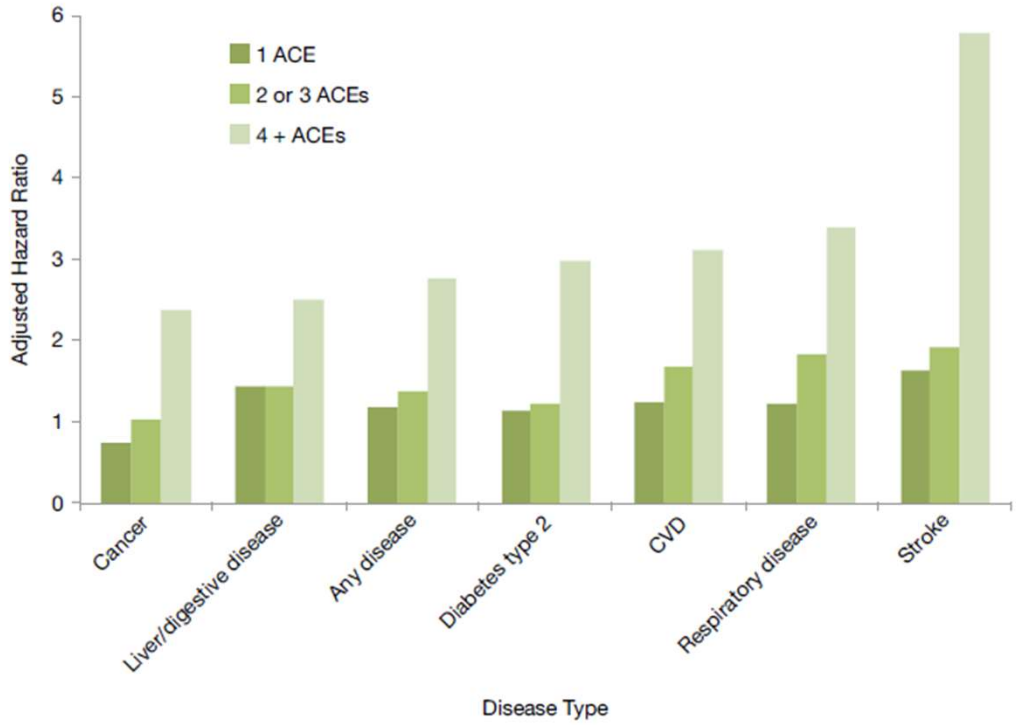


Figure 2
Changes in risk of disease development with increased history of ACE, English survey data, 2013



Source: Allan M., Donkin A. The impact of adverse experiences in the home on the health of children and young people, and inequalities in prevalence and effects. London: UCL Institute of Health Equity; 2016 (using data from: Kelly-Irving et al 2013 (Figure 1); and Bellis et al 2014 (Figure 2))

Background: adverse childhood experiences

- So, a major focus of policy e.g.
  - Lots going in Welsh policy and practice
  - Importance of ACEs emphasised by English DoH and UK Government Parliamentary Committees
  - And very clearly a priority of the Scottish Government…

Background: adverse childhood experiences

- SG's Programme for Government 2018/19
- ACEs woven throughout:
  - 'healthy & active nation'
  - 'best place to grow up and learn' (major emphasis)
  - 'empowered, equal, safe Scotland' (local government, justice, domestic abuse)
  - 'creative, open, connected nation' (culture)

Background: adverse childhood experiences

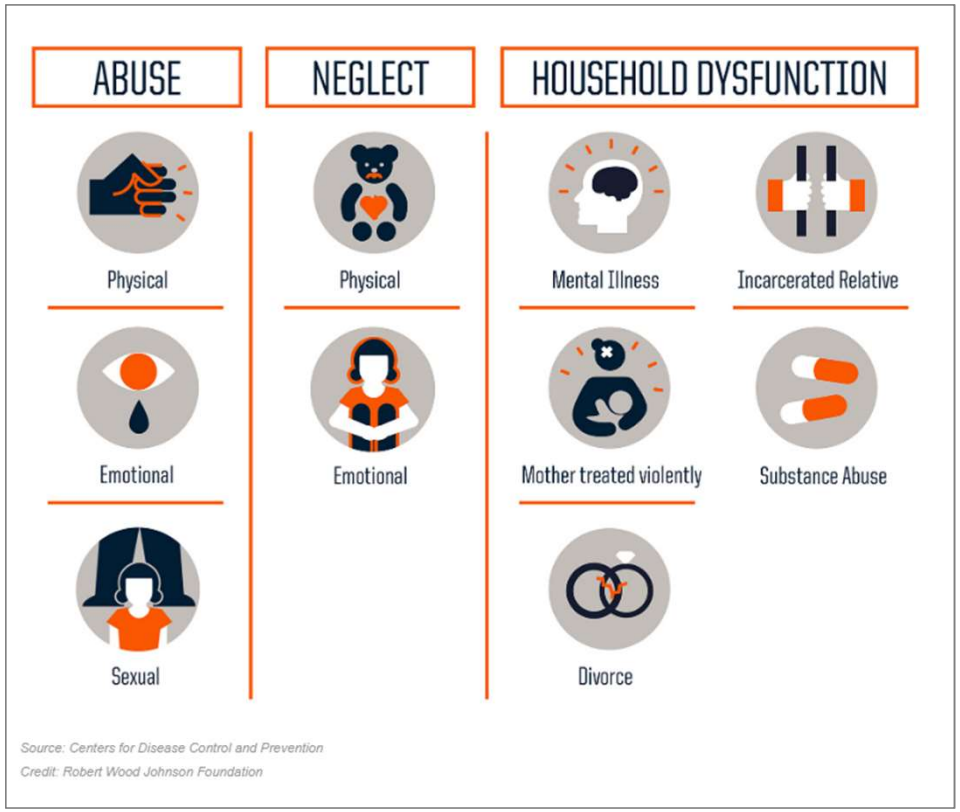
Background: adverse childhood experiences

adverse childhood experiences

Background: adverse childhood experiences and SEP

- Where is **poverty** (and broader socio-economic position (SEP)) in all this discussion?
- On the one hand:
  - Childhood adversity experienced across all social classes – e.g. CDC-Kaiser ACE Study itself (Felitti et al 1998 etc)
- But on the other hand:
  - All components of ACEs are very clearly socially patterned..

Background: adverse childhood experiences and SEP



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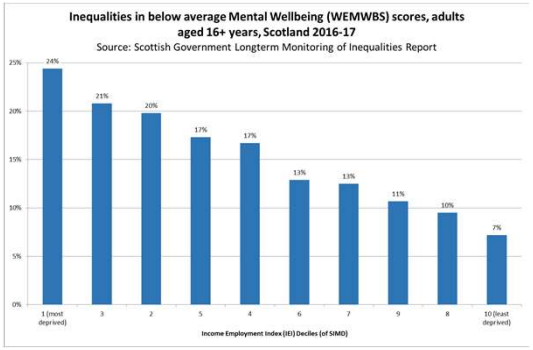

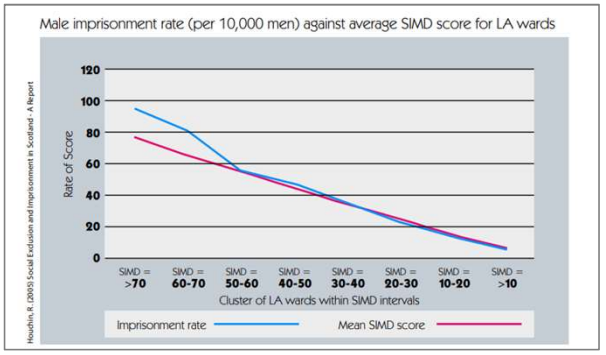

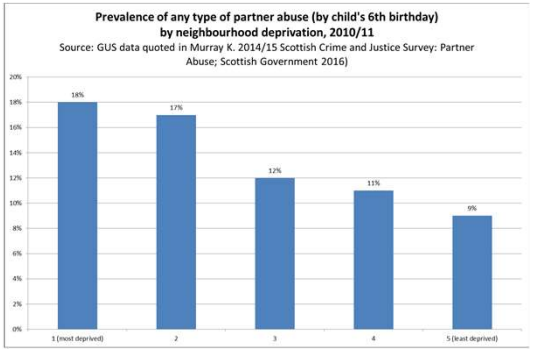

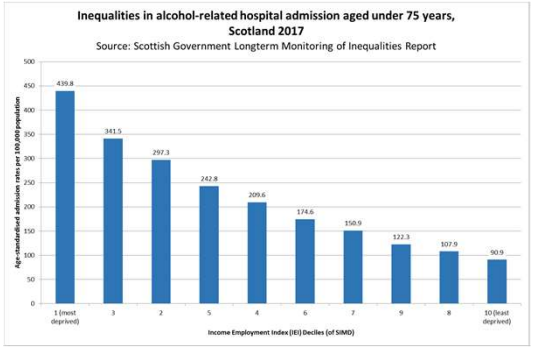

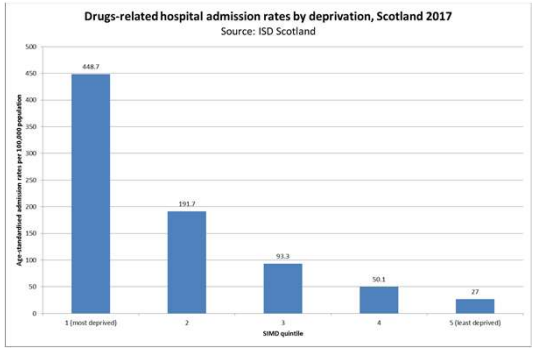

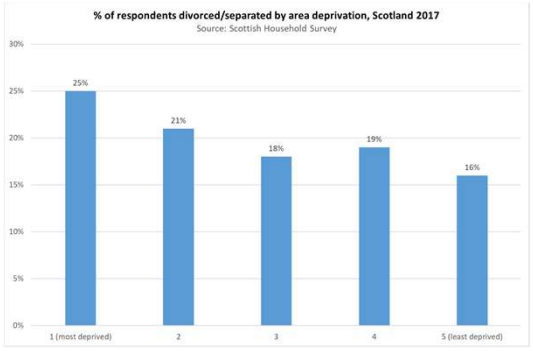

Background: adverse childhood experiences and SEP

- Where is **poverty** (and broader socio-economic position (SEP)) in all this discussion?
- On the one hand:
  - Childhood adversity experienced across all social classes – e.g. CDC-Kaiser ACE Study itself (Felitti et al 1998 etc)
- But on the other hand:
  - All components of ACEs are very clearly socially patterned..
- So begs the question: what's the role of childhood SEP/poverty in understanding and addressing ACEs?
- What's the evidence?

Aims and methods

- **Aim**: to systematically review and synthesise the literature on the relationship between childhood SEP and ACEs
- Methods:
  - Systematic literature review
  - Searched relevant databases for studies mentioning ACEs (or similar) **and** SEP (or similar)
  - Looking for **childhood** SEP, and where ACEs (or similar) were the **outcome**
  - Papers limited to 1998 onwards
  - Modified version of Hamilton tool* used to assess study quality/bias etc

* Effective Public Health Practice Project. Quality assessment tool for quantitative studies. Hamilton, Ontario: MERSC; 1998

Results 1:
Childhood SEP and ACEs

PRISMA 2009 Flow Diagram

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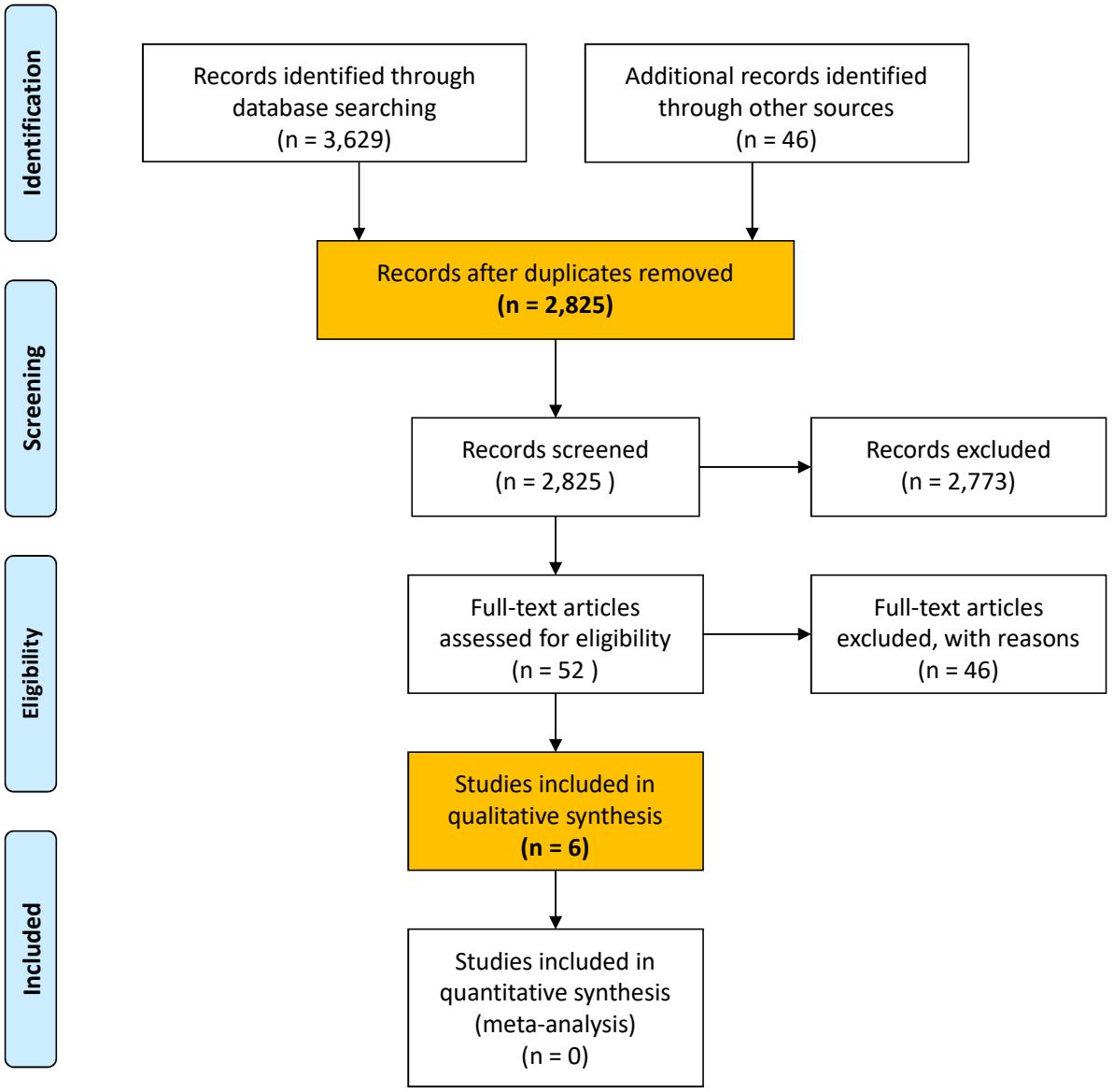
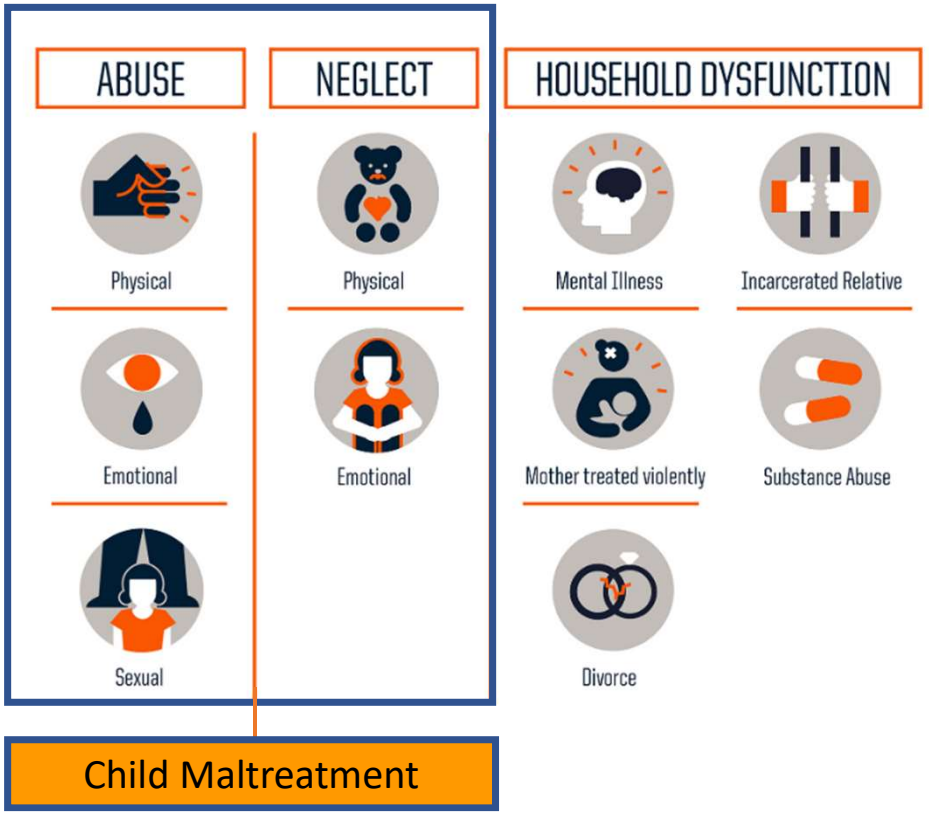


PRISMA 2009 Flow Diagram

Results 2: SEP and ACEs *and child maltreatment*

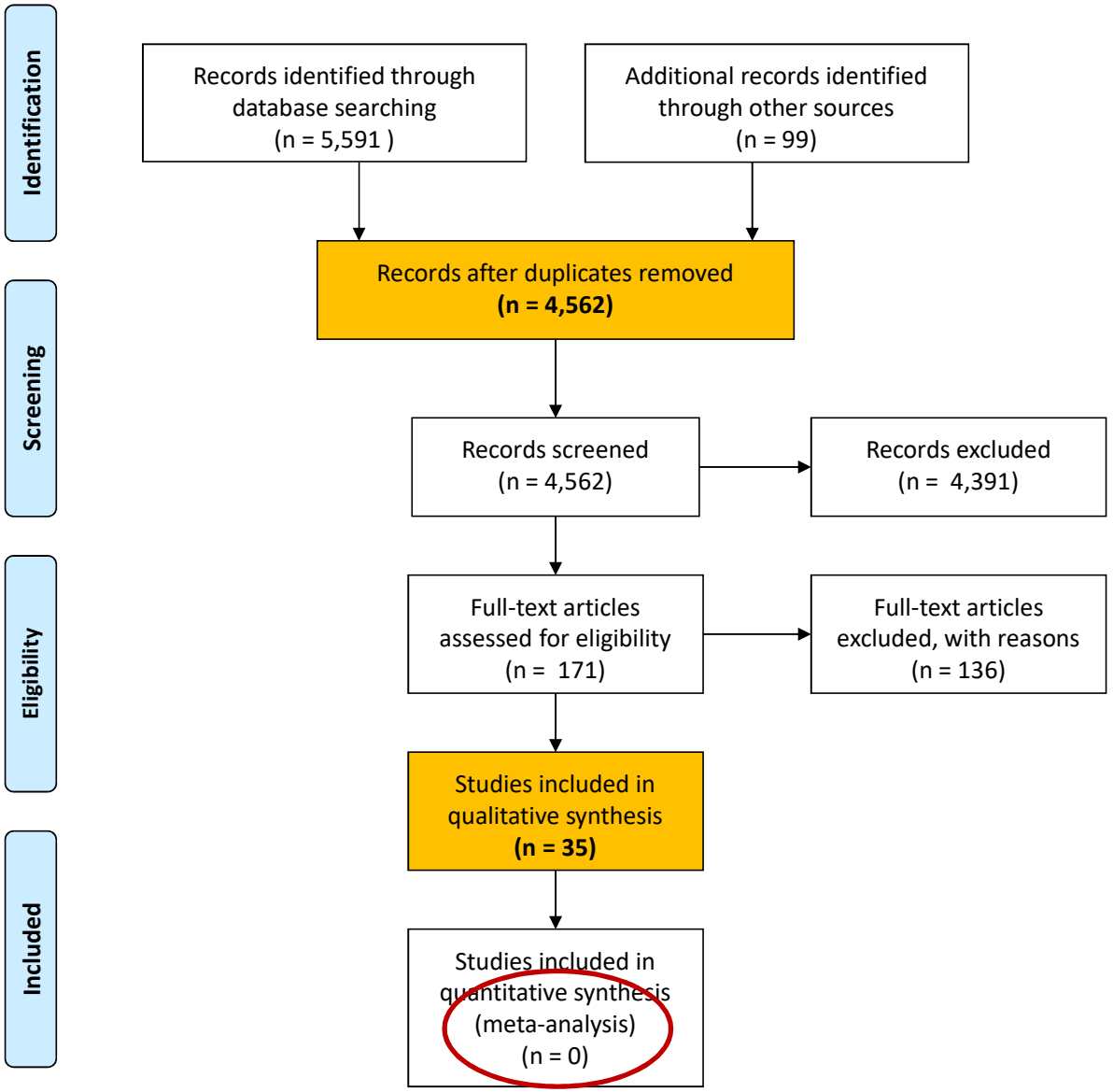
- More evidence in the literature re. **child maltreatment** (rather than ACEs) and SEP/poverty
- NB obvious differences between broader aspects of childhood adversity (ACEs) and much more specific maltreatment
- But maltreatment is a large component (half of the 10 ‘standard’ ACEs definition)…

Results 2: SEP and ACEs *and child maltreatment*



Source: CDC/NPR

Results 2: Childhood SEP and ACEs/maltreatment



PRISMA 2009 Flow Diagram

Results 2: childhood SEP and ACEs/maltreatment

- No meta-analysis of data possible
- Relatively small number of papers
- (Of which c. half deemed to be ‘high quality’)
- NB despite limitations, association between childhood SEP and childhood adversity **very clear**:
  - Meaningful (“significant”!) statistical associations observed in the vast majority of studies..
  - ..including all bar one of those deemed ‘high quality’
  - For example…

Results 2a: Childhood SEP and ACEs (selected examples)

Child Abuse & Neglect 51 (2016) 21–30

Contents lists available at ScienceDirect

Child Abuse & Neglect

Research article

Adverse childhood experiences: Prevalence and related factors in adolescents of a Brazilian birth cohort☆

Ana Luiza Gonçalves Soares[a,*], Laura D. Howe[b], Alicia Matijasevich[c], Fernando C. Wehrmeister[a], Ana M.B. Menezes[a], Helen Gonçalves[a]

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[b] MRC Integrative Epidemiology Unit at the University of Bristol, School of Social & Community Medicine, University of Bristol, Bristol, UK
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ABSTRACT

Adverse childhood experiences (ACEs) can affect people's health and wellbeing not only at the time the ACE is experienced, but also later in life. The majority of studies on ACEs are carried out in high-income countries and little is known about its prevalence in low and middle-income countries. Thus, the aim of this study was to assess the prevalence of ACEs, associations between ACEs and sociodemographic factors, and the interrelationship between types of ACEs in adolescents of a Brazilian birth cohort. Data from 3,951 adolescents (78.4% of the original cohort) from the 1993 Pelotas Cohort were analyzed. Seven types of ACEs were assessed in those up to 18 years old: physical abuse, sexual abuse, physical neglect, emotional neglect, domestic violence, parental separation and parental death. The most common ACE was parental separation (42%), followed by emotional neglect (19.7%) and domestic violence (10.3%). Approximately 85% of the adolescents experienced at least one ACE, and females reported a higher number of adversities. Several socioeconomic, demographic and family-related characteristics were associated with the occurrence of ACEs, e.g. non-white skin color, low family income, low maternal schooling, absence of mother's partner, maternal smoking, and poor maternal mental health. A strong interrelationship was observed among the ACEs, indicating clustering of risk. These aspects should be considered by health and social care professionals in the prevention and identification of childhood adversities.

Introduction

Adverse childhood experiences (ACEs) correspond to sources of stress that people may suffer early in life, usually before the age of 18. They are recognized as a public health problem, which can affect children's health and wellbeing not only at

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0145-2134/

Table 4
Adjusted odds ratio of ACE score according to socioeconomic, demographic, and family-related characteristics, estimated by multinomial logistic regression. 1993 Pelotas Birth Cohort, Brazil (N = 3,951).

Variables	Number of ACEs				
	0	1	2	3	4+
Skin color					
White	1	1	1	1	1
Non-white	1	1.3 (1.1, 1.7)*	2.1 (1.7, 2.6)*	2.0 (1.5, 2.6)*	3.1 (2.2, 4.3)*
Family income at birth (quintile)[a]					
1st (lowest)	1	1.3 (1.0, 1.7)	1.8 (1.3, 2.4)**	2.7 (1.8, 3.9)*	2.4 (1.4, 3.9)**
2nd	1	1.2 (0.9, 1.7)	1.6 (1.2, 2.3)*	2.3 (1.5, 3.6)*	1.6 (0.9, 2.8)
3rd	1	1.2 (0.9, 1.6)	1.3 (0.9, 1.7)	2.1 (1.4, 3.2)*	1.6 (0.9, 2.8)
4th	1	1.2 (0.9, 1.6)	1.2 (0.9, 1.7)	1.7 (1.2, 2.6)*	1.5 (0.9, 2.6)
5th (highest)	1	1	1	1	1
Income change from 0 to 15 years [a]					
Always poor	1	1.5 (1.2, 2.0)**	2.2 (1.6, 2.9)*	3.1 (2.3, 4.4)*	3.5 (2.3, 5.4)*
Non poor–poor	1	2.2 (1.5, 3.2)*	2.6 (1.8, 3.9)*	4.6 (3.0. 7.1)*	6.1 (3.6, 10.3)*
Poor–non poor	1	1.1 (0.9, 1.4)	1.5 (1.2, 1.9)**	1.6 (1.1, 2.2)**	1.6 (1.0, 2.5)**
Never poor	1	1	1	1	1
Mother's schooling (years)[a]					
0–4	1	1.9 (1.4, 2.7)*	2.8 (1.9, 4.1)*	3.2 (1.9, 5.4)*	6.1 (2.5, 14.8)*
5–8	1	1.9 (1.4, 2.6)*	2.4 (1.7, 3.5)*	2.7 (1.7, 4.5)*	4.1 (1.8, 9.9)**
9–11	1	1.6 (1.1, 2.2)**	1.7 (1.1, 2.5)**	1.5 (0.8, 2.5)	2.6 (1.0, 6.7)**
12 or more	1	1	1	1	1
Mother's age at birth (years)[b]					
<20	1	1.8 (1.2, 2.7)**	2.4 (1.6, 3.6)*	2.7 (1.6, 4.4)*	3.6 (1.8, 7.0)*
20–24	1	1.3 (0.9, 1.7)	1.4 (1.0, 1.9)	1.5 (0.9, 2.3)	2.1 (1.1, 3.9)**
25–29	1	1.3 (0.9, 1.8)	1.2 (0.9, 1.7)	1.4 (0.9, 2.1)	1.8 (1.0, 3.5)
30–34	1	1.1 (0.8, 1.5)	1.0 (0.7, 1.4)	1.1 (0.7, 1.8)	1.2 (0.6, 2.4)
≥35	1	1	1	1	1
Number of siblings[b]					
0	1	1	1	1	1
1	1	0.8 (0.6, 1.0)	0.8 (0.6, 1.0)	0.7 (0.5, 0.9)**	1.0 (0.7, 1.4)
2	1	0.9 (0.6, 1.1)	0.9 (0.7, 1.3)	0.8 (0.6, 1.2)	1.3 (0.9, 2.1)
3 or more	1	0.9 (0.7, 1.2)	0.9 (0.6, 1.2)	0.9 (0.6, 1.4)	0.9 (0.5, 1.5)

Source: Soares A.L., Howe L.D., Matijasevich A. et al. Adverse childhood experiences: Prevalence and related factors in adolescents of a Brazilian birth cohort. Child Abuse Negl. 2016; 51: 21-30.

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12 or more	1	1	1	1	1
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1	1	0.8 (0.6, 1.0)	0.8 (0.6, 1.0)	0.7 (0.5, 0.9)**	1.0 (0.7, 1.4)
2	1	0.9 (0.6, 1.1)	0.9 (0.7, 1.3)	0.8 (0.6, 1.2)	1.3 (0.9, 2.1)
3 or more	1	0.9 (0.7, 1.2)	0.9 (0.6, 1.2)	0.9 (0.6, 1.4)	0.9 (0.5, 1.5)

Source: Soares A.L., Howe L.D., Matijasevich A. et al. Adverse childhood experiences: Prevalence and related factors in adolescents of a Brazilian birth cohort. Child Abuse Negl. 2016; 51: 21-30.

Results 2a: Childhood SEP and ACEs (selected examples)

Article

Rethinking the Measurement of Adversity: Moving Toward Second-Generation Research on Adverse Childhood Experiences

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2017, Vol. 22(1) 58-68

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SAGE

Joshua P. Mersky[1,2], Colleen E. Janczewski[1,2], and James Topitzes[1,2]

Abstract

Research on adverse childhood experiences (ACEs) has unified the study of interrelated risks and generated insights into the origins of disorder and disease. Ten indicators of child maltreatment and household dysfunction are widely accepted as ACEs, but further progress requires a more systematic approach to conceptualizing and measuring ACEs. Using data from a diverse, low-income sample of women who received home visiting services in Wisconsin (N = 1,241), this study assessed the prevalence of and interrelations among 10 conventional ACEs and 7 potential ACEs: family financial problems, food insecurity, homelessness, parental absence, parent/sibling death, bullying, and violent crime. Associations between ACEs and two outcomes, perceived stress and smoking, were examined. The factor structure and test–retest reliability of ACEs was also explored. As expected, prevalence rates were high compared to studies of more representative samples. Except for parent/sibling death, all ACEs were intercorrelated and associated at the bivariate level with perceived stress and smoking. Exploratory factor analysis confirmed that conventional ACEs loaded on two factors, child maltreatment and household dysfunction, though a more complex four-factor solution emerged once new ACEs were introduced. All ACEs demonstrated acceptable test–retest reliability. Implications and future directions toward a second generation of ACE research are discussed.

Keywords

measurement, exploratory factor analysis, definitional issues, home visiting, instrument development

Over the past two decades, research on adverse childhood experiences (ACEs) has helped to unify the study of interrelated risks and understand the origins of dysfunction, disorder, and disease. Results from the U.S. National Comorbidity Study (Kessler, Davis, & Kendler, 1997), the seminal ACEs Study (Felitti et al., 1998), and scores of investigations since have shown that ACEs are prevalent. Although estimates vary across samples, they consistently show that over half of American adults have suffered at least one ACE (e.g., Chapman et al., 2013; Felitti et al., 1998; Kessler et al., 1997). ACEs also often co-occur and most adults who report at least one ACE have a history of multiple ACEs (Felitti et al., 1998; Green et al., 2010). This revelation is magnified by the repeated observation that with an increasing number of ACEs comes an elevated risk of poor health-related outcomes (Felitti et al., 1998; Green et al., 2010).

Despite the proliferation of ACE research, scientific gaps remain. First, low-income groups are understudied even though they are likely to be at a high risk of ACEs. Data from the National Survey of Child Health, for example, revealed that the poorest children averaged more than twice as many ACEs as did children in the highest income stratum (Slopen et al., 2016). Yet the effects of ACEs on low-income samples appear to be comparable to the effects on more representative or advantaged samples (Cambron, Gringeri, & Vogel-Ferguson, 2014; Mersky, Topitzes, & Reynolds, 2013). Hence, it seems that ACEs are not only more prevalent among the poor, but they are also associated with deleterious effects net of the effects of poverty.

Second, most research in this area has been restricted to 10 ACEs that were assessed in the ACEs Study, including five forms of child maltreatment (physical abuse, sexual abuse, emotional abuse, physical neglect, and emotional neglect) and five forms of household dysfunction (substance abuse, mental illness, domestic violence, incarceration/jail, and divorce/separation). When scored as an additive index, their predictive

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'Frequent family financial problems'

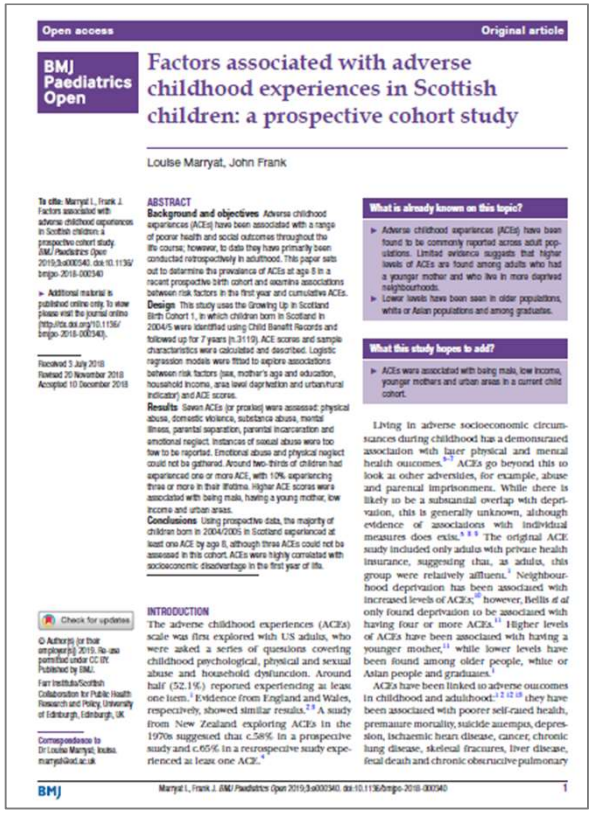
Table 3. Co-Occurrence of Adverse Childhood Experiences.

Adverse Childhood Experiences	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Physical abuse	—																
2. Sexual abuse	.28	—															
3. Emotional abuse	.47	.30	—														
4. Physical neglect	.22	.21	.23	—													
5. Emotional neglect	.33	.35	.40	.50	—												
6. Alcohol/drug problem	.32	.25	.29	.15	.24	—											
7. Mental illness	.30	.26	.31	.15	.28	.41	—										
8. Domestic violence	.48	.30	.32	.21	.28	.42	.33	—									
9. Incarceration/jail	.15	.14	.18	.10	.14	.38	.25	.24	—								
10. Divorce/separation	.11	.12	.12	**.02**	.08	.21	.18	.17	.18	—							
11. Financial problems	.26	.24	.33	.23	.30	.24	.24	.29	.14	.10	—						
12. Food insecurity	.23	.17	.23	.29	.29	.23	.16	.22	.11	**.02**	.46	—					
13. Homelessness	.22	.21	.24	.24	.25	.22	.20	.23	.21	.08	.33	.27	—				
14. Parental absence	.21	.17	.25	.15	.22	.23	.20	.22	.24	.29	.16	.12	.25	—			
15. Parent/sibling death	**.03**	**.03**	.09	**.02**	**.03**	**.05**	**.02**	**.03**	.08	**.01**	**.06**	**.04**	.06*	.10	—		
16. Peer victimization	.22	.27	.31	.13	.24	.19	.28	.16	.08	.08	.26	.14	.13	.12	**.01**	—	
17. Violent crime victim	.21	.32	.26	.17	.27	.22	.24	.20	.17	.06*	.19	.20	.21	.14	.09	.18	—
Number of other ACEs, if item endorsed (mean)	6.9	7.5	7.9	8.7	8.8	6.5	6.8	7.1	6.4	5.8	7.2	8.0	7.7	5.8	5.6	7.0	8.1

Note. Coefficients given in boldface are nonsignificant. ACE = adverse childhood experiences.
*$p < .05$. All other coefficients $p < .01$.

Source: Mersky J.P., Janczewski C.E, Topitzes J. Rethinking the Measurement of Adversity: Moving Toward Second-Generation Research on Adverse Childhood Experiences. Child Maltreatment 2017; 22 (1): 58–68.

Results 2a: Childhood SEP and ACEs (selected examples)



Open access Original article

BMJ Paediatrics Open

Factors associated with adverse childhood experiences in Scottish children: a prospective cohort study

Louise Marryat, John Frank

ABSTRACT

Background and objectives Adverse childhood experiences (ACEs) have been associated with a range of poorer health and social outcomes throughout the life course; however, to date they have primarily been conducted retrospectively in adulthood. This paper sets out to determine the prevalence of ACEs at age 8 in a recent prospective birth cohort and examine associations between risk factors in the first year and cumulative ACEs.

Design This study uses the Growing Up in Scotland Birth Cohort 1, in which children born in Scotland in 2004/5 were identified using Child Benefit Records and followed up for 7 years (n 2119). ACE scores and sample characteristics were calculated and described. Logistic regression models were fitted to explore associations between risk factors (sex, mother's age and education, household income, area level deprivation and urban/rural indicator) and ACE scores.

Results Seven ACEs (or proxies) were assessed: physical abuse, domestic violence, substance abuse, mental illness, parental separation, parental incarceration and emotional neglect. Instances of sexual abuse were too few to be reported. Emotional abuse and physical neglect could not be gathered. Around two-thirds of children had experienced one or more ACE, with 10% experiencing three or more in their lifetime. Higher ACE scores were associated with being male, having a young mother, low income and urban areas.

Conclusions Using prospective data, the majority of children born in 2004/2005 in Scotland experienced at least one ACE by age 8, although three ACEs could not be assessed in this cohort. ACEs were highly correlated with socioeconomic disadvantage in the first year of life.

What is already known on this topic?

- Adverse childhood experiences (ACEs) have been found to be commonly reported across adult populations. Limited evidence suggests that higher levels of ACEs are found among adults who had a younger mother and who live in more deprived neighbourhoods.
- Lower levels have been seen in older populations, white or Asian populations and among graduates.

What this study hopes to add?

- ACEs were associated with being male, low income, younger mothers and urban areas in a current child cohort.

INTRODUCTION

Living in adverse socioeconomic circumstances during childhood has a demonstrated association with later physical and mental health outcomes.[1–3] ACEs go beyond this to look at other adversities, for example, abuse and parental imprisonment. While there is likely to be a substantial overlap with deprivation, this is generally unknown, although evidence of associations with individual measures does exist.[4 8 9] The original ACE study included only adults with private health insurance, suggesting that, as adults, this group were relatively affluent.[1] Neighbourhood deprivation has been associated with increased levels of ACEs;[10] however, Bellis *et al* only found deprivation to be associated with having four or more ACEs.[11] Higher levels of ACEs have been associated with having a younger mother,[11] while lower levels have been found among older people, white or Asian people and graduates.[1]

ACEs have been linked to adverse outcomes in childhood and adulthood:[1 2 12–15] they have been associated with poorer self-rated health, premature mortality, suicide attempts, depression, ischaemic heart disease, cancer, chronic lung disease, skeletal fractures, liver disease, fetal death and chronic obstructive pulmonary

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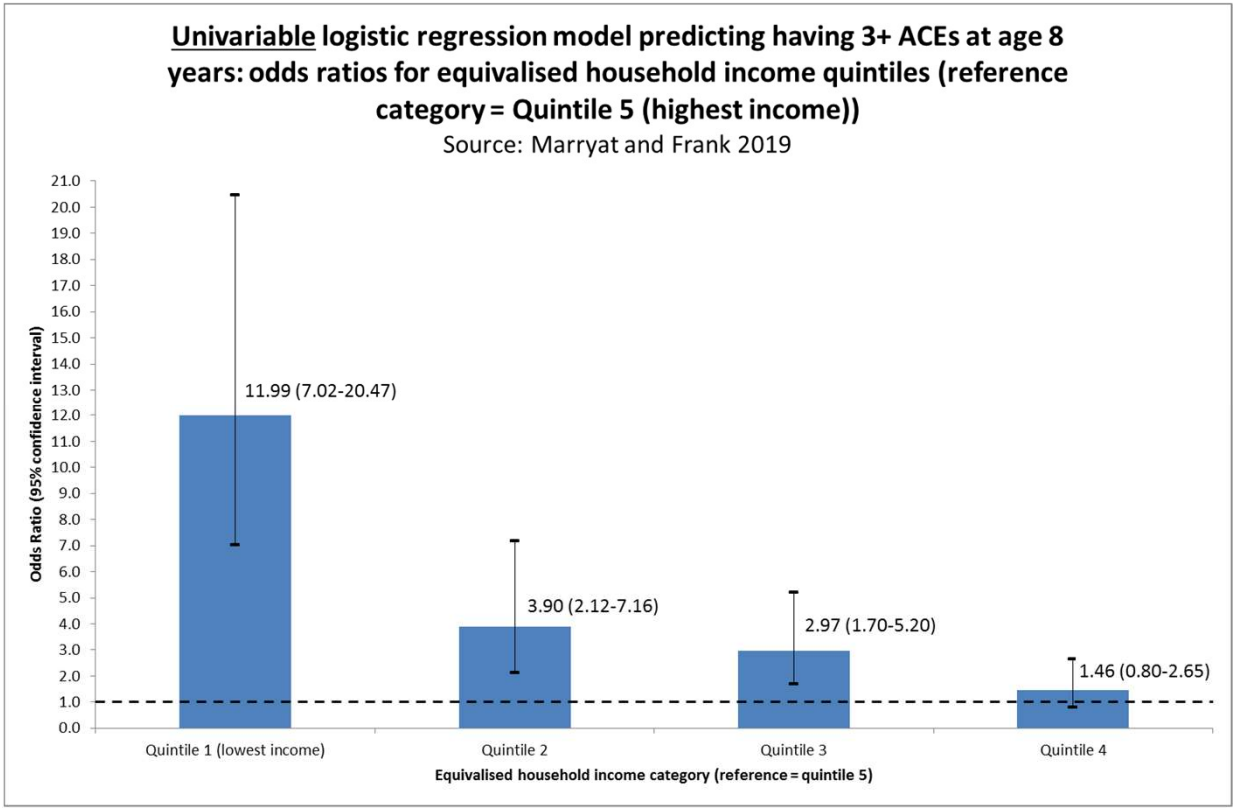

Source: Marryat, L., and Frank, J., Factors associated with Adverse Childhood Experiences in Scottish children: a prospective cohort study. BMJ Pediatrics Open 2019; 3: e000340

Results 2b: Childhood SEP and maltreatment (selected examples)

Child Abuse & Neglect 64 (2017) 47–60

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Child Abuse & Neglect

Risk factors for child maltreatment in an Australian population-based birth cohort

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ABSTRACT

Child maltreatment and other adverse childhood experiences adversely influence population health and socioeconomic outcomes. Knowledge of the risk factors for child maltreatment can be used to identify children at risk and may represent opportunities for prevention. We examined a range of possible child, parent and family risk factors for child maltreatment in a prospective 27-year population-based birth cohort of 2443 Australians. Physical abuse, sexual abuse, emotional abuse, neglect and witnessing of domestic violence were recorded retrospectively in early adulthood. Potential risk factors were collected prospectively during childhood or reported retrospectively. Associations were estimated using bivariate and multivariate logistic regressions and combined into cumulative risk scores. Higher levels of economic disadvantage, poor parental mental health and substance use, and social instability were strongly associated with increased risk of child maltreatment. Indicators of child health displayed mixed associations and infant temperament was uncorrelated to maltreatment. Some differences were observed across types of maltreatment but risk profiles were generally similar. In multivariate analyses, nine independent risk factors were identified, including some that are potentially modifiable: economic disadvantage and parental substance use problems. Risk of maltreatment increased exponentially with the number of risk factors experienced, with prevalence of maltreatment in the highest risk groups exceeding 80%. A cumulative risk score based on the independent risk factors allowed identification of individuals at very high risk of maltreatment, while a score that incorporated all significant risk and protective factors provided better identification of low-risk individuals.

1. Introduction

Adverse childhood experiences such as child abuse and neglect exert a high toll on population health, making prevention of child maltreatment a priority in both developing and developed countries (Gilbert et al., 2009; United Nations Children's Fund, 2012). Research which identifies the predictors of child maltreatment can inform and enhance prevention initiatives in two ways: by identifying vulnerable 'high-risk' individuals or groups for better targeting of prevention services, and

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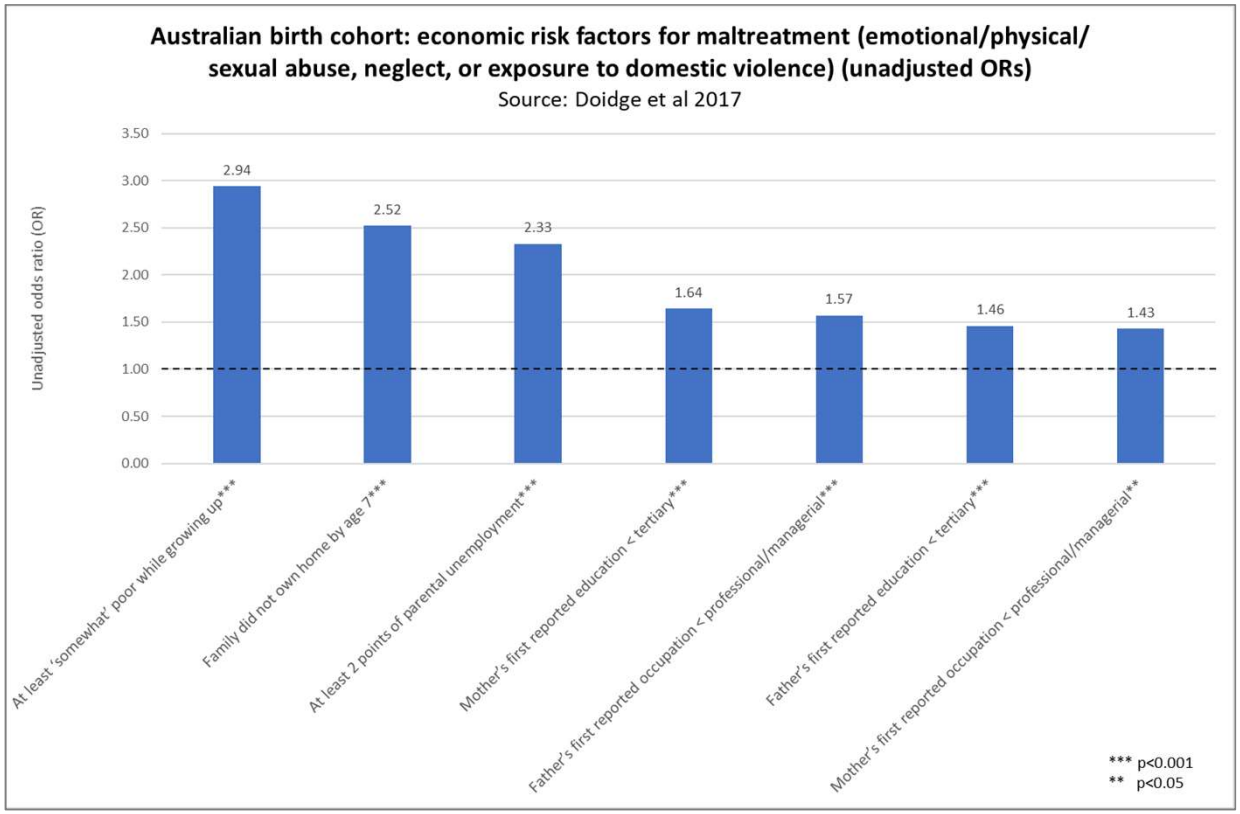

Source: Doidge J.C., Higgins D. J., Delfabbro P., Segal L. Risk factors for child maltreatment in an Australian population-based birth cohort. Child Abuse & Neglect 2017; 64: 47-60

Results 2b: Childhood SEP and maltreatment (selected examples)

Child Abuse & Neglect 37 (2013) 841–851

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Child Abuse & Neglect

ELSEVIER

The prevalence of child maltreatment in the Netherlands across a 5-year period☆

Saskia Euser[a], Lenneke R.A. Alink[a,*], Fieke Pannebakker[b], Ton Vogels[b], Marian J. Bakermans-Kranenburg[a], Marinus H. Van IJzendoorn[a]

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ABSTRACT

The prevalence of child maltreatment in the Netherlands was in 2005 first systematically examined in the Netherlands' Prevalence study on Maltreatment of children and youth (NPM-2005), using sentinel reports and substantiated CPS cases, and in the Pupils on Abuse study (PoA-2005), using high school students' self-report. In this second National Prevalence study on Maltreatment (NPM-2010), we used the same three methods to examine the prevalence of child maltreatment in 2010, enabling a cross-time comparison of the prevalence of child maltreatment in the Netherlands. First, 1,127 professionals from various occupational branches (sentinels) reported each child for whom they suspected child maltreatment during a period of three months. Second, we included 22,661 substantiated cases reported in 2010 to the Dutch Child Protective Services. Third, 1,920 high school students aged 12–17 years filled out a questionnaire on their experiences of maltreatment in 2010. The overall prevalence of child maltreatment in the Netherlands in 2010 was 33.8 per 1,000 children based on the combined sentinel and CPS reports and 99.4 per 1,000 adolescents based on self-report. Major risk factors for child maltreatment were parental low education, immigrant status, unemployment, and single parenthood. We found a large increase in CPS-reports, whereas prevalence rates based on sentinel and self-report did not change between 2005 and 2010. Based on these findings a likely conclusion is that the actual number of maltreated children has not increased from 2005 to 2010, but that professionals have become more aware of child maltreatment, and more likely to report cases to CPS.

The negative consequences of child maltreatment have been documented since several decades (e.g., Cyr, Euser, Bakermans-Kranenburg, & Van IJzendoorn, 2010). However, the actual prevalence of child maltreatment in the Netherlands was only recently systematically examined in the Netherlands' Prevalence study of Maltreatment of children and youth (NPM-2005; Euser, Van IJzendoorn, Prinzie, & Bakermans-Kranenburg, 2010). Based on the National Incidence Studies (NIS), large periodically conducted studies on the prevalence of child maltreatment in the USA (e.g., Sedlak et al., 2010), the NPM-2005 used reports from professionals working with children (sentinels) and substantiated cases reported to Child Protective Services (CPS). This NPM methodology combined with self-report measures of child maltreatment was repeated in the current study, enabling a cross-time comparison of the prevalence of child maltreatment in the Netherlands.

☆ The study was supported by the Dutch Ministry of Health, Welfare and Sport, and by the Netherlands Organization for Scientific Research (MJBK: VICI Grant no. 453-09-003; MHvIJ: NWO SPINOZA prize).
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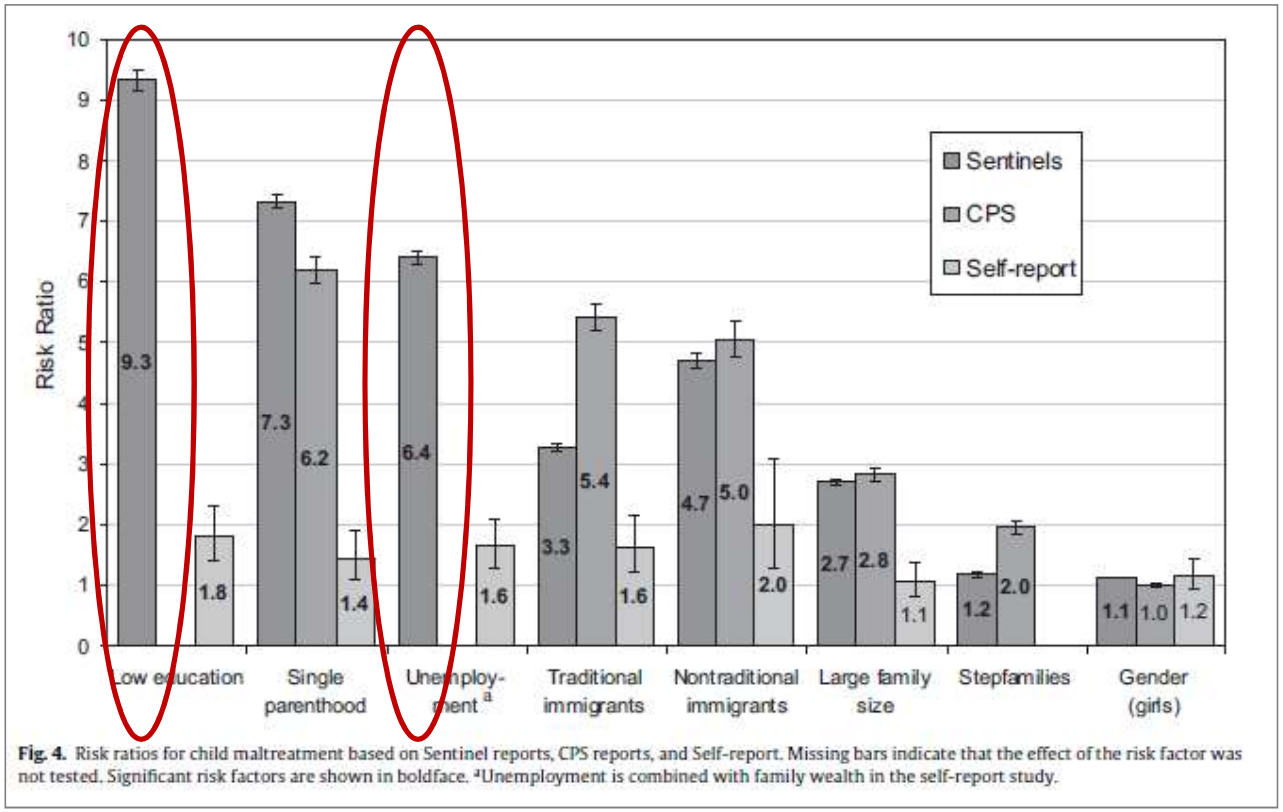
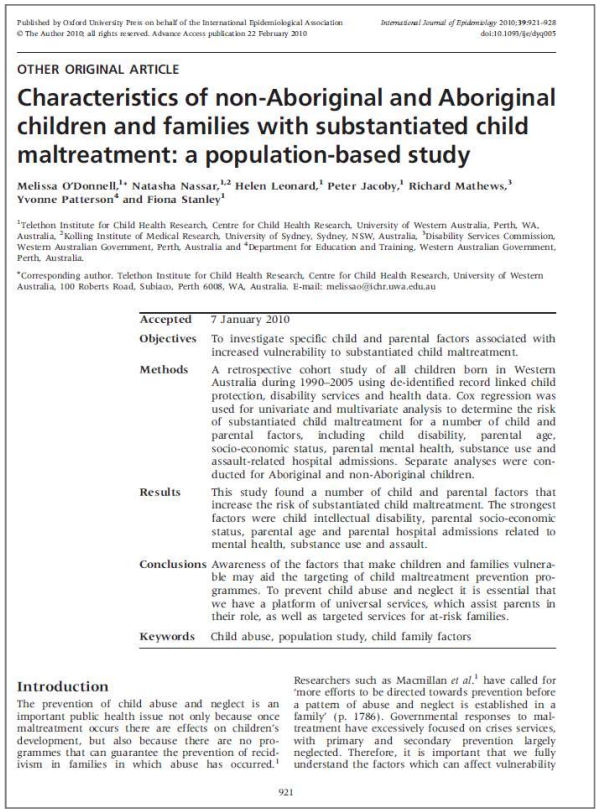


Fig. 4. Risk ratios for child maltreatment based on Sentinel reports, CPS reports, and Self-report. Missing bars indicate that the effect of the risk factor was not tested. Significant risk factors are shown in boldface. [a]Unemployment is combined with family wealth in the self-report study.

Source: Euser S., Alink L.R., Pannebakker F. The prevalence of child maltreatment in the Netherlands across a 5-year period. Child Abuse Negl. 2013; 37(10): 841-51

Results 2b: Childhood SEP and maltreatment (selected examples)



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International Journal of Epidemiology 2010;39:921–928
doi:10.1093/ije/dyp005

OTHER ORIGINAL ARTICLE

Characteristics of non-Aboriginal and Aboriginal children and families with substantiated child maltreatment: a population-based study

Melissa O'Donnell,[1]* Natasha Nassar,[1,2] Helen Leonard,[1] Peter Jacoby,[1] Richard Mathews,[3] Yvonne Patterson[4] and Fiona Stanley[1]

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Objectives To investigate specific child and parental factors associated with increased vulnerability to substantiated child maltreatment.

Methods A retrospective cohort study of all children born in Western Australia during 1990–2005 using de-identified record linked child protection, disability services and health data. Cox regression was used for univariate and multivariate analysis to determine the risk of substantiated child maltreatment for a number of child and parental factors, including child disability, parental age, socio-economic status, parental mental health, substance use and assault-related hospital admissions. Separate analyses were conducted for Aboriginal and non-Aboriginal children.

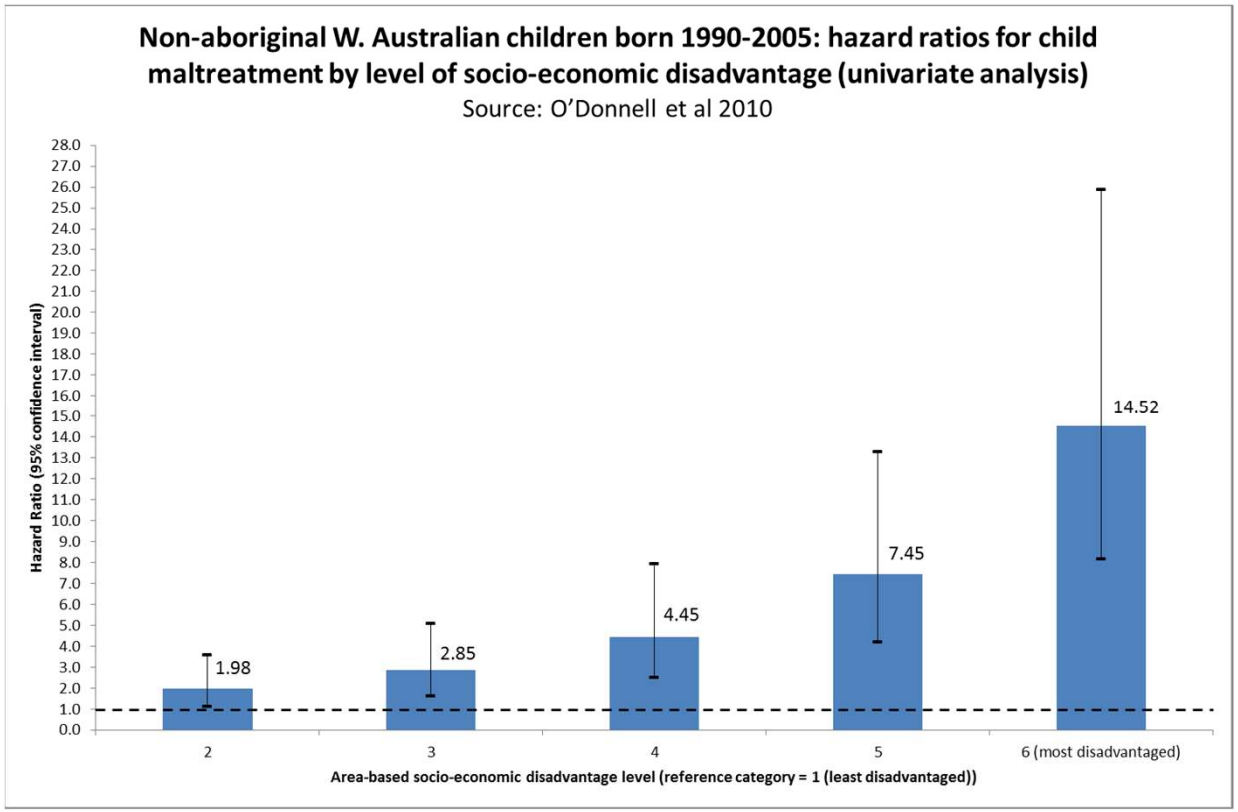
Results This study found a number of child and parental factors that increase the risk of substantiated child maltreatment. The strongest factors were child intellectual disability, parental socio-economic status, parental age and parental hospital admissions related to mental health, substance use and assault.

Conclusions Awareness of the factors that make children and families vulnerable may aid the targeting of child maltreatment prevention programmes. To prevent child abuse and neglect it is essential that we have a platform of universal services, which assist parents in their role, as well as targeted services for at-risk families.

Keywords Child abuse, population study, child family factors

Introduction

The prevention of child abuse and neglect is an important public health issue not only because once maltreatment occurs there are effects on children's development, but also because there are no programmes that can guarantee the prevention of recidivism in families in which abuse has occurred.[1] Researchers such as Macmillan *et al.*[1] have called for 'more efforts to be directed towards prevention before a pattern of abuse and neglect is established in a family' (p. 1786). Governmental responses to maltreatment have excessively focused on crises services, with primary and secondary prevention largely neglected. Therefore, it is important that we fully understand the factors which can affect vulnerability



Source: O'Donnell M., Nassar N., Leonard H. Et al. Characteristics of non-Aboriginal and Aboriginal children and families with substantiated child maltreatment: a population-based study, International Journal of Epidemiology 2010; 39 (3): 921–928

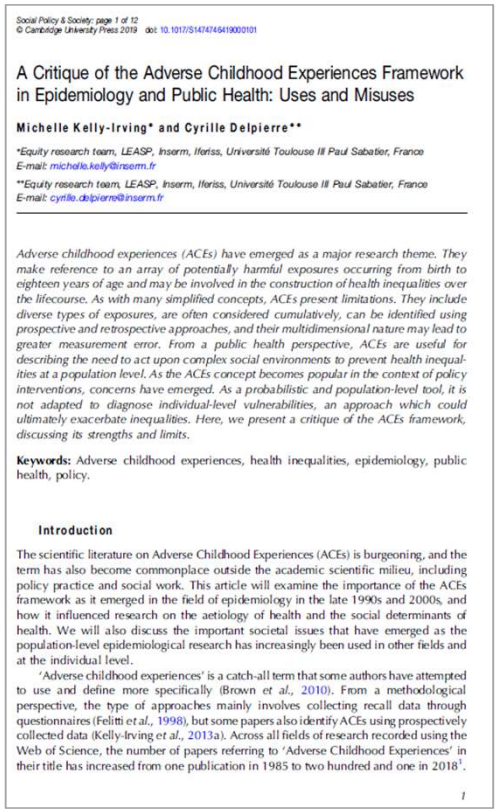
Conclusions: what does all this mean? (1)

- Clear relationship between SEP in childhood and risk of experiencing ACEs and maltreatment
  - robust across countries, measures of SEP and adversity, and the age at which adversity is measured
- But much more research into maltreatment – suggests that childhood SEP/poverty is not integrated into the understanding of what causes ACEs

Conclusions: what does all this mean? (2)

- So findings echo others' concerns re. the **decontextualised** manner in which ACEs are discussed – both in **policy** and **research**…

Decontextualisation of ACEs



Social Policy & Society: page 1 of 12
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A Critique of the Adverse Childhood Experiences Framework in Epidemiology and Public Health: Uses and Misuses

Michelle Kelly-Irving* and Cyrille Delpierre**

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Adverse childhood experiences (ACEs) have emerged as a major research theme. They make reference to an array of potentially harmful exposures occurring from birth to eighteen years of age and may be involved in the construction of health inequalities over the lifecourse. As with many simplified concepts, ACEs present limitations. They include diverse types of exposures, are often considered cumulatively, can be identified using prospective and retrospective approaches, and their multidimensional nature may lead to greater measurement error. From a public health perspective, ACEs are useful for describing the need to act upon complex social environments to prevent health inequalities at a population level. As the ACEs concept becomes popular in the context of policy interventions, concerns have emerged. As a probabilistic and population-level tool, it is not adapted to diagnose individual-level vulnerabilities, an approach which could ultimately exacerbate inequalities. Here, we present a critique of the ACEs framework, discussing its strengths and limits.

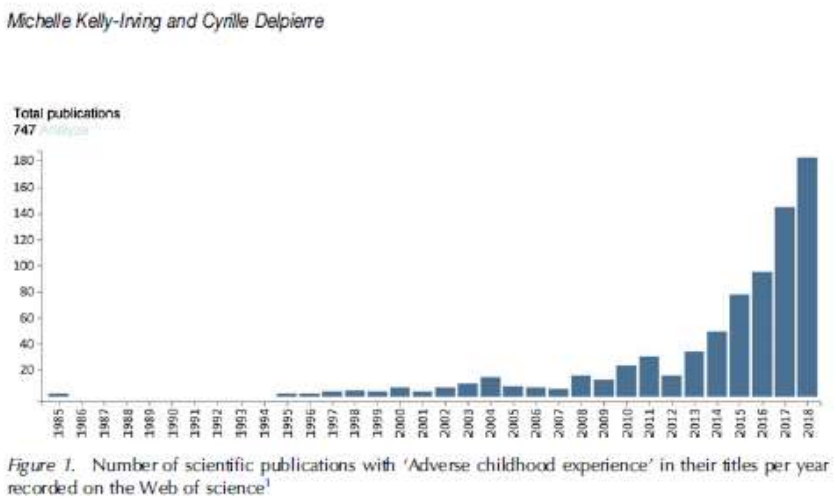
Keywords: Adverse childhood experiences, health inequalities, epidemiology, public health, policy.

Introduction

The scientific literature on Adverse Childhood Experiences (ACEs) is burgeoning, and the term has also become commonplace outside the academic scientific milieu, including policy practice and social work. This article will examine the importance of the ACEs framework as it emerged in the field of epidemiology in the late 1990s and 2000s, and how it influenced research on the aetiology of health and the social determinants of health. We will also discuss the important societal issues that have emerged as the population-level epidemiological research has increasingly been used in other fields and at the individual level.

'Adverse childhood experiences' is a catch-all term that some authors have attempted to use and define more specifically (Brown *et al.*, 2010). From a methodological perspective, the type of approaches mainly involves collecting recall data through questionnaires (Felitti *et al.*, 1998), but some papers also identify ACEs using prospectively collected data (Kelly-Irving *et al.*, 2013a). Across all fields of research recorded using the Web of Science, the number of papers referring to 'Adverse Childhood Experiences' in their title has increased from one publication in 1985 to two hundred and one in 2018[1].

1



Michelle Kelly-Irving and Cyrille Delpierre

Figure 1. Number of scientific publications with 'Adverse childhood experience' in their titles per year recorded on the Web of science[1]

- Increase attributable to various factors
- 'such a sudden increase in interest may have contributed to the decontextualisation of ACEs from the wider socioeconomic landscape and to a mismatch regarding links with policy'

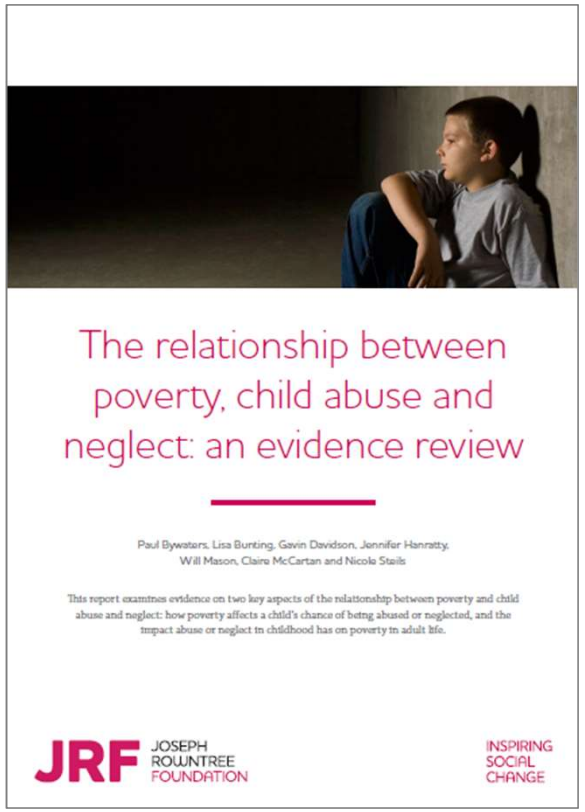
Source: Kelly-Irving M., Delpierre C. A Critique of the Adverse Childhood Experiences Framework in Epidemiology and Public Health: Uses and Misuses. Social Policy and Society 2019

Decontextualisation of child maltreatment?

- Importance of poverty much more explicit in the U.S. literature on maltreatment
  - Less so in the U.K. maltreatment literature

Child maltreatment and poverty

- Lots of US research, but…
- ‘UK evidence base is limited’
- ‘there is a lack of joined up thinking and action about poverty and child abuse and neglect in the UK’

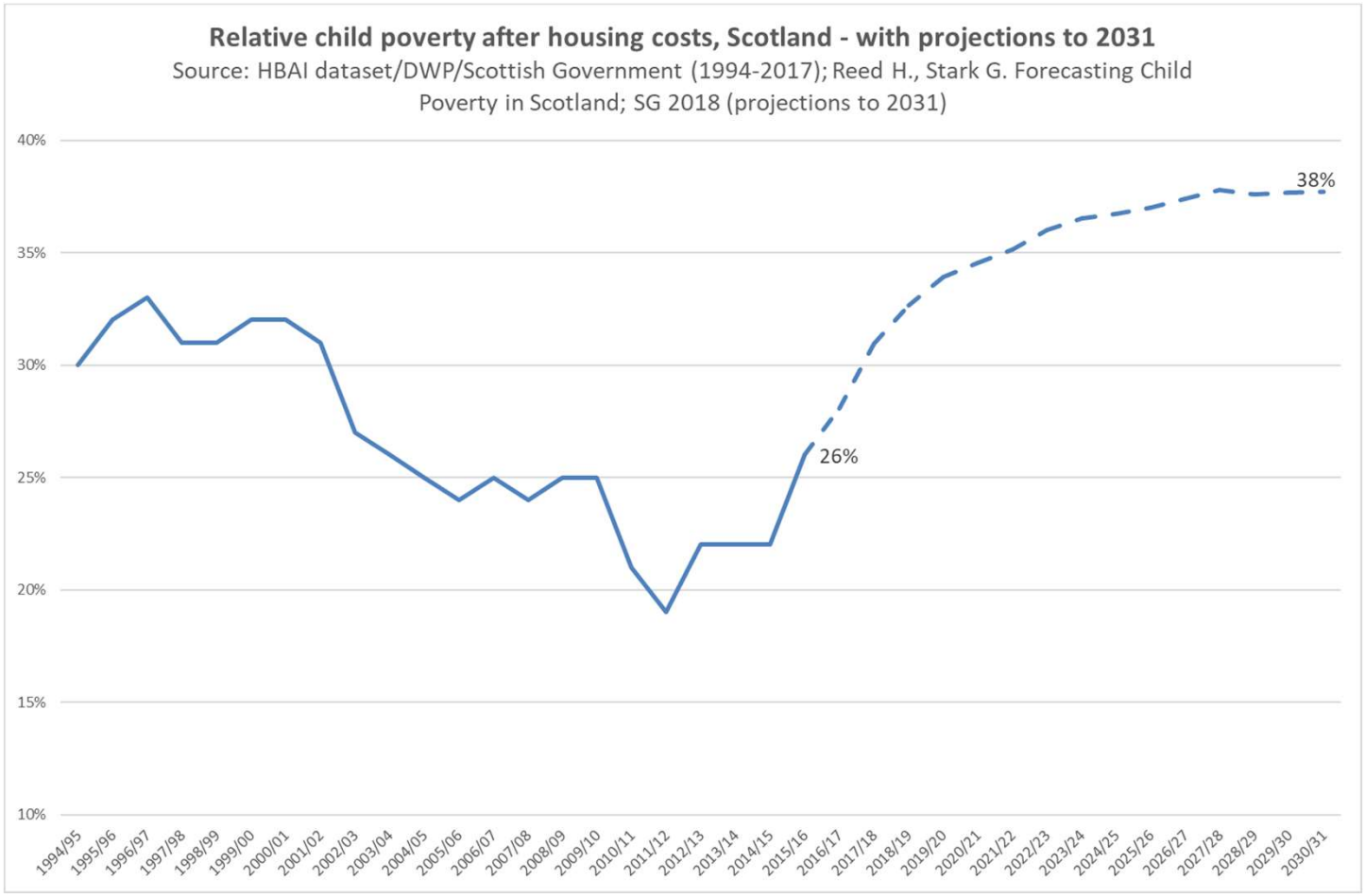


Source: Bywaters P., Bunting L., Davidson G. et al. The relationship between poverty, child abuse and neglect: an evidence review. York: Joseph Rowntree Foundation; 2015

In (final) conclusion

- Association between childhood SEP and ACEs is clear, but under-researched
  - More evidence in the maltreatment literature (but mainly from US)
- Policy focus on helping those affected by childhood adversity is a good thing
- But ignoring the wider socio-economic context is a stupid thing…

Child poverty trend and projection



Sources:

- HBAI data set/DWP/Scottish Government.
- Reed H., Stark G. Forecasting Child Poverty in Scotland. Edinburgh: Scottish Government; 2018

In (final) conclusion

- Association between childhood SEP and ACEs is clear, but under-researched
  - More evidence in the maltreatment literature (but mainly from US)
- Policy focus on helping those affected by childhood adversity is a good thing
- But ignoring the wider socio-economic context is a stupid thing…
- Policy needs to do <u>both</u> i.e.
  - Help those currently affected
  - Prevent further adversity by addressing the key socio-economic drivers

Contextualising ACEs: the relationship between childhood socioeconomic position and adverse childhood experiences

David Walsh, Gerry McCartney,
Michael Smith, Gillian Armour

Glasgow Centre for Population Health

NHS Health Scotland

NHS Greater Glasgow and Clyde