

Does Local Authority Care make a Difference to the Lives of Vulnerable Children?

Longitudinal Analyses of a Retrospective Electronic Cohort



Research Team



Sara Long (PI), Rebecca Anthony, Graham Moore, Emily Lowthian

DECIPHer, Cardiff University



Shantini Paranjothy and Annette Evans
Division of Population Medicine, Cardiff University



Sinead Brophy and Muhammad Rahman
SAIL, Swansea University



Chris Taylor,
WISERD, Cardiff University



Johnathon Scourfield,
CASCADE, Cardiff University



Ian Thomas
ADRC, WISERD, Cardiff University

What we know so far

Cross-sectional studies from the UK and worldwide show that children who are looked after (CLA) have poorer educational outcomes

	<i>N</i>	Mean KS4 points	<i>SD</i>
Comparison Group (Not on the 2012-13 CIN or CLA databases)	622,970	340.59	87.10
CIN Group (Children in the CIN database but not CLA)	13,599	185.14	141.67
Shorter-Term CLA (Looked after at 31 st March 2013 but not 12 months continuously)	1,387	149.52	128.01
Longer-Term Early-entry CLA (Looked after at 31 st March 2013 and for 12 months or more continuously including at KS2)	2,584	213.89	134.52
Longer-Term Late-entry CLA (Looked after at 31 st March 2013 and for 12 months or more continuously but not at KS2)	2,265	185.55	130.93

Taken from the REES Centre report (2015)

Yes, used to ask me about my days, help me with homework, see what help they could do at their work, like research, print some homework out for me and stuff, so yes, they were pretty good, yes. (YP1)

..and the thing was, when it came to my last carers, I was getting support, like, food, shelter and like, you know, warmth but yeah, I was getting those ones, but I wasn't getting love, care, you know, compassion. Like, I just felt like it was just a placement... (YP9)

What we know so far

They also suggest that CLA have poorer health outcomes. Such as poorer mental health...

"I saw a psychiatrist because I had taken an overdose ..I think I was about fifteen at the time. It was a woman. I only saw her once and the reason for that was because she didn't understand me. I thought she would be able to help me sort myself out, but she kept asking questions like 'Why have you come here?' "

Taken from Dickson, Sutcliffe and Gough (2010)

	Psychosis		Depression	
	Model 1 RR (95% CI)	Model 2 RR (95% CI)	Model 1 RR (95% CI)	Model 2 RR (95% CI)
In-home care	4.4 (3.3–5.7)	2.7 (2.0–3.6)	2.9 (2.2–3.8)	1.7 (1.3–2.3)
Short-term care	3.5 (2.9–4.4)	2.0 (1.5–2.5)	3.2 (2.6–3.9)	1.9 (1.5–2.4)
Intermediate care	3.8 (2.6–5.7)	2.2 (1.5–3.4)	3.6 (2.5–5.2)	1.9 (1.2–2.8)
Long-term care	5.2 (3.9–6.8)	2.6 (1.9–3.6)	4.0 (3.0–5.3)	1.9 (1.4–2.7)
I.c. adoptees	2.1 (1.6–2.8)	–	2.6 (2.1–3.1)	–

Taken from Vinnerljung, Hjern and Lindblad (2006)

Links to adverse childhood experiences

We also know that CLA disproportionately experience trauma during childhood (e.g. ACEs) which can impact on health and education

Adverse Childhood Experiences (ACEs)	CAR Sample (n = 374)
Emotional abuse	85 (23)
Physical abuse	70 (19)
Sexual abuse	14 (4)
Neglect	203 (54)
Parental separation	113 (30)
Domestic violence	138 (37)
Parent mental illness	118 (32)
Parent alcohol abuse	96 (26)
Parent drug abuse	126 (34)
Parent incarceration	74 (20)
ACE "score" (M, SD)	2.68 (2.75)

Anthony, Paine and Shelton (2019)

	First all-cause emergency hospital admission	First injury or external cause emergency hospital admission	First child victimisation hospital admission
Most deprived quintile at birth or first 4 months AND maternal age at childbirth < 18 years AND maternal smoking at booking in for birth AND household member ever had a mental disorder AND household member ever had an alcohol-related hospital admission	1.65 (1.51-1.81)	3.02 (2.64-3.46)	20.97 (14.03-31.36)

Paranjothy et al (2019)

We aim to fill the knowledge gaps in 4 areas:

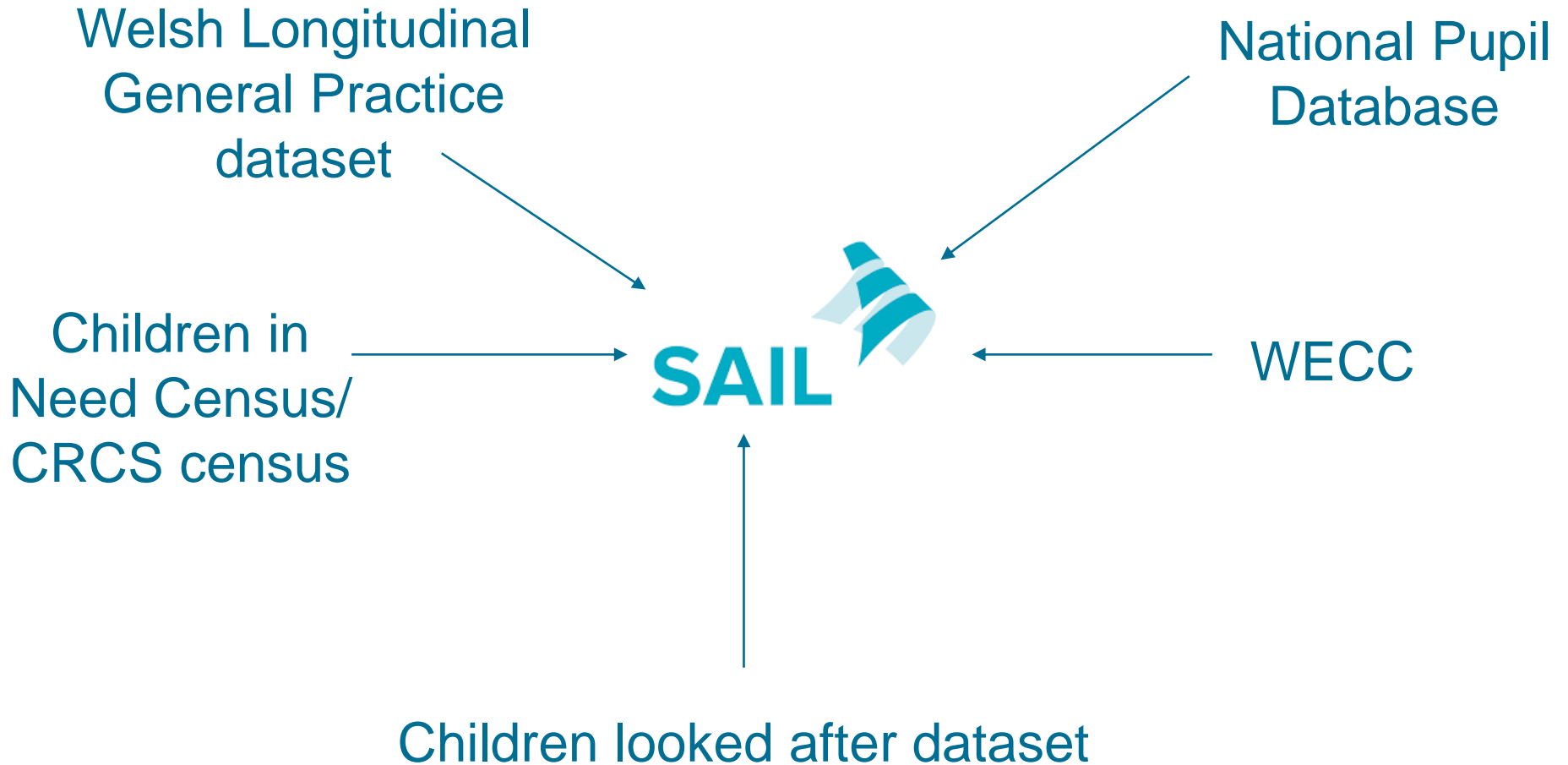
1. Is CLA status associated with higher or lower education attainment and healthcare usage compared to i) Children not looked after but in receipt of social service intervention ii) general population?
2. How do adverse childhood experiences contribute to education and healthcare outcomes?
3. Is CLA a protective factor when considering the relationship between childhood experiences and education/health outcomes?
4. Among CLA, how do experiences of care (.e.g short/long-term) impact on education and healthcare outcomes?

Why this study?

- Need for better evidence
- Many studies use cross-sectional data to answer complex questions that require longitudinal data (i.e. data that follows people and their experiences over time).
- Many existing studies based on self report data - potential for bias. Further, putting routinely collected data 'to good use'.
- To what extent (or not) is a protective factor, and if so what aspects of care are least/most protective and for whom – can be used to inform funding, policy and practice



Methodology



Analysis of data

- Descriptive statistics for all outcomes – how many of X do/have this?
- Prediction methods for educational and healthcare outcomes whilst controlling for demographics e.g. social class, gender. Will adjust for LA, as we know there is variability.
- Techniques will be repeated with the inclusion of ACEs
- Considering extent to which ACE's and being in explain poorer outcomes
- Measuring which care factors are important e.g. length of time in care

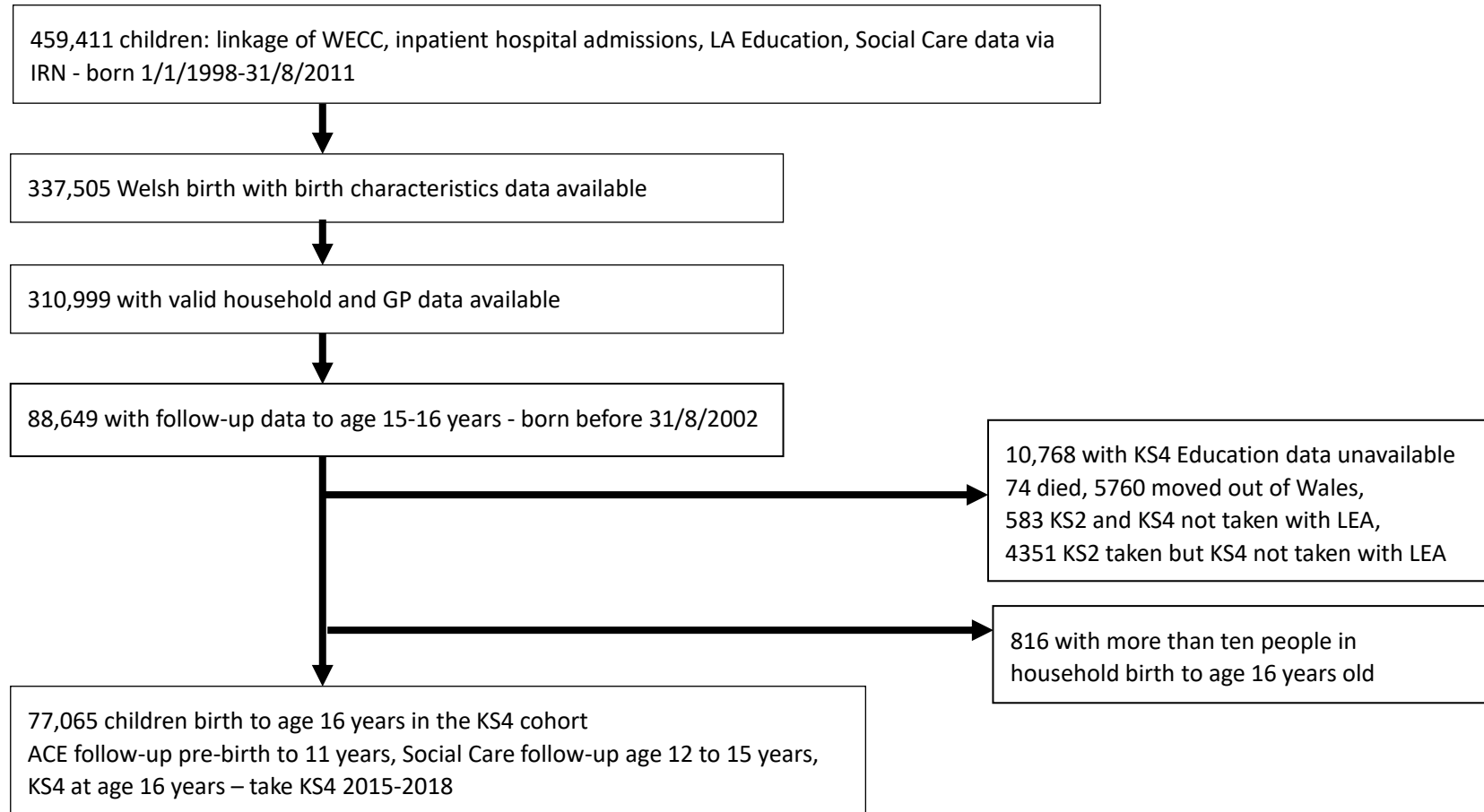
Children in Need (CIN) / Children in Receipt of Care and Support (CRCS) data

- Annual census of data collected from 3 months of the year from Jan to March (recorded 31st March)
- All Local Authorities in Wales
- Data held by year with good quality data from 2010 onwards
- Categories of disability recorded for the child
 - lift/carry objects / manual dexterity / memory / mobility / perception of risk or danger / physical coordination / speech/hearing/sight
- Parental capacity data recorded
 - domestic abuse / learning disabilities / mental ill health / physical ill health / substance/alcohol misuse
- Youth offending

Complexity of CIN/CRCS data

- Annual census using 3 month recording timeframe means not all children are in the data
- Data reconfiguration needed from date to age of child for our analyses
- We are currently linking Social Care data using the 'individual registration number' IRN used in schools data
 - data mostly unavailable before age 4 years
- Disabled children: categorisation required to differentiate those with and without disability
- 'Main category of need' variable gives information on disability and abuse
- Limited information about multiple abuse types – only recently recorded for those on the Child Protection Register (CPR)
- Multiple measures for parent capacity per year that may often occur together

Cohort of children in analyses followed from birth to age 16 years – KS4 cohort

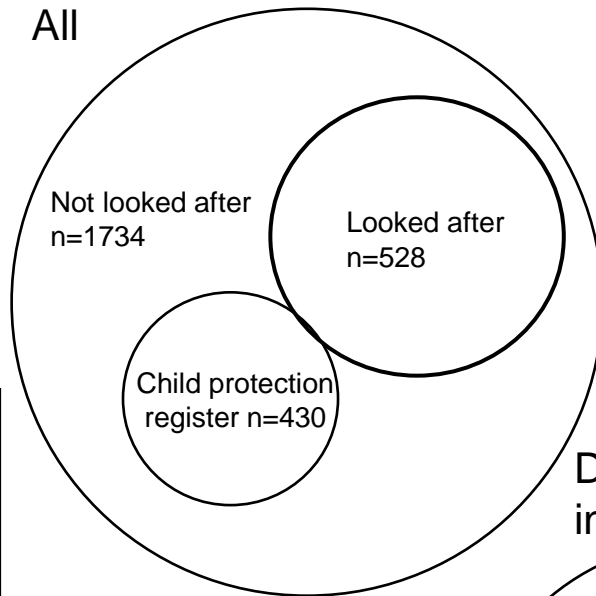


KS4 cohort: Level of severity of Social Services intervention between age 12-15 years

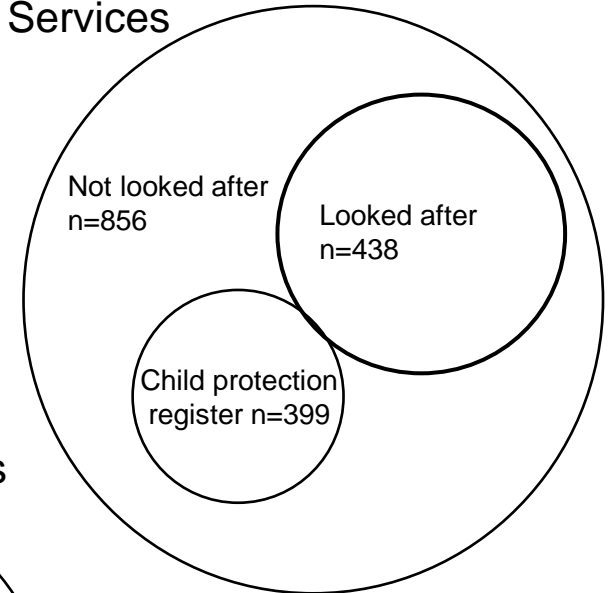
Priority order:
CLA
CPR
NLA

KS4 cohort 77065 children
Total CIN/CRCS n=2692 (3.5%)
All excluding disabled children in Social Services n=1693
Any disability in Social Services data n=560
Any disability in Social Services data no social issues (parent problems / youth offending) n=257

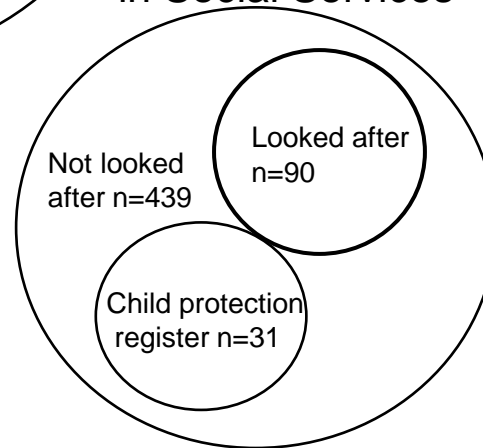
All



All excluding disabled children in Social Services



Disabled children in Social Services



KS4 attainment for children receiving care and support compared to the general population of children in the KS4 cohort

Social Care intervention group*	Attained KS4 5 GCSEs A*- C inc. language and mathematics (Level 2) n / Total (%)
None	44474 / 74373 (60%)
With Social issues (parent problems / youth offending)	
CLA (not disabled)	101 / 438 (23%)
Not looked after (not disabled)	286 / 1295 (22%)
CPR (not disabled)	60 / 399 (15%)
Not looked after and disabled	22 / 196 (11%)
Disabled no social issues (parent problems / youth offending) either NLA or CLA	34 / 257 (13%)

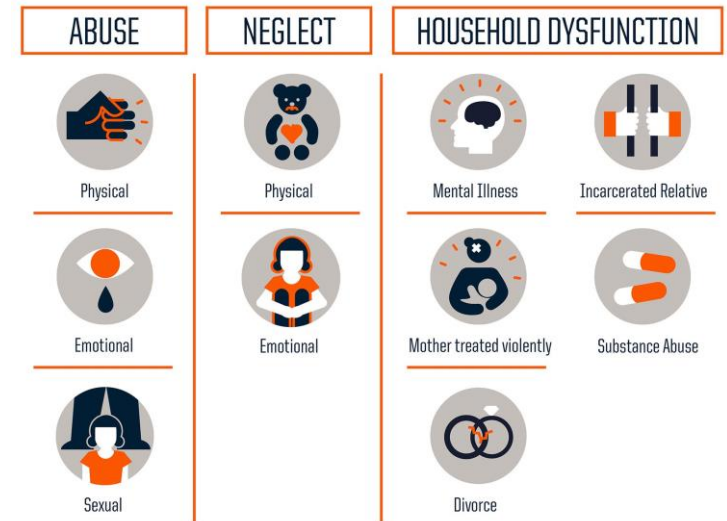
* Discrete sub-groups reported where there were enough numbers to meet anonymity rules

Next Stage

- Investigate predisposing factors not attaining 5 A* - C at KS4
 - ACEs from GP and inpatient admission
 - living with someone with an alcohol problem, mental health disorder or serious mental illness, death of a household member, victimisation hospital inpatient admission
 - Poverty (i.e. eligible for free school meals), single parent
 - Birth characteristics (e.g. sex, gestational age)
 - Socio-economic status
- ...inpatient hospital admissions

School aged children receiving care and support from Social Services in Wales: A Latent Class Analysis

- Children in care are more likely to encounter adversities compared to those in the general population (Lester, Khatwa, & Sutcliffe, 2020)
- What about those in receipt of care and support from social services?
- Cross-sectional study of CIN/CRCS Census data from 2018
- Children 4 to 16 years



Aims:

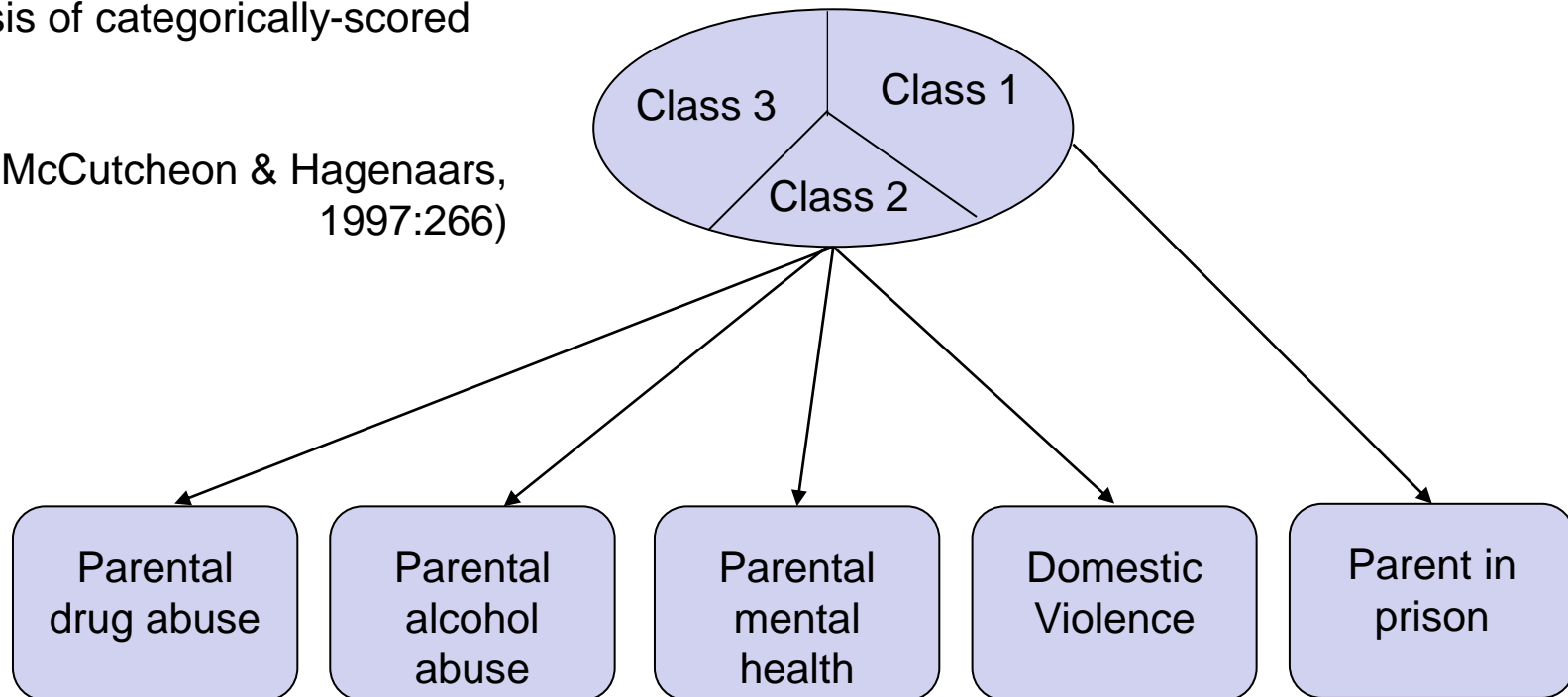
1. Examine the prevalence of life stressors experienced by children in receipt of care and support from social services (i.e. in the receiving care and support census dataset);
2. Use latent class analysis to identify 'sub-groups' of families with similar adversities
3. To explore how distribution of adversities across the sub-groups differs by family characteristics (including demographics, measures of social disadvantage, perinatal and care factors).

What is Latent Class Analysis?

“Latent class analysis provides a powerful, flexible approach to the analysis of categorically-scored data.”

McCutcheon & Hagenars,
1997:266)

An example



So what did we find?

RESULTS



Aim 1 - Prevalence of adversity

Recorded adversity n=9,032		
Child protection register (CPR)	1,197	13.3%
'Looked after' by local authority	3,382	37.4%
Disability	2,623	29.0%
Seeking asylum	11	0.1%
Parental substance misuse	2,362	26.2%
Parental learning disabilities	558	6.2%
Parental mental ill health	2,780	30.8%
Parental physical ill health	1,101	12.2%
Parental domestic abuse	2,091	23.2%
Neglect	492	5.4%
Physical abuse	150	1.7%
Sexual abuse	91	1.0%
Financial abuse	<5	0%
Emotional abuse	520	5.8%

Aim 2 – identification of ‘classes’ of families with similar adversities

- **Class One “*Child disability*”** 27% ($n = 2,191$) Characterized by the highest probabilities of the child experiencing a disability and low probabilities of any other.
- **Class Two “*Lower exposure class*”** 44% ($n = 4,130$). Characterised by low probabilities of exposure to any current adversity.
- **Class Three “*Family poor health*”** 7% ($n = 611$) characterised as experiencing parental and child poor health class, with high probabilities of the parent experiencing physical and mental health problems.
- **Class Four “*Multiple exposures*”** 23% ($n = 2,100$) of the sample. The multiple exposures class was characterised of children with high probabilities of experiencing parental substance misuse, parental mental health problems and parental domestic abuse.

Aim 3 – comparison of family characteristics across classes

- **Class One “*Child disability*”** were significantly more likely to have major and minor birth abnormalities, to be a boy, and have a mother who was aged over 18 at birth. Also less likely to receive free school meals and less likely to be ‘looked after’.
- **Class three “*Family poor health*”** were significantly more likely to be older children i.e., in middle childhood or adolescence, be male, to receive free school meals
- **Class four “*Multiple exposures*”** were younger and more likely to receive free school meals. They were also significantly more likely to be ‘looked after’

(in comparison to “*Lower exposure class*” group)

Next steps

- To assess how educational outcomes differ across these typologies

Key points

1. Not simply evaluation childrens' services – providing robust evidence to 'make the case' for investment
2. Understanding where need is the greatest - more cost-effective services
3. Feeding back on data collection practices and potential uses of data - move towards a system that can self-monitor and self-evaluate?



Reflections

- ✓ Contextualisation and implications for different organisations – what are your views?
- ✓ How can we maximise impact?
- ✓ What are the implications for policy and practice?
- ✓ Dissemination strategy – what, when, who how?



References

- Anthony RE, Paine AL, Shelton KH. (2019). Adverse Childhood Experiences of Children Adopted from Care: The Importance of Adoptive Parental Warmth for Future Child Adjustment. *Int J Environ Res Public Health*;16(12):2212.
- Dickson K, Sutcliffe K and Gough D. (2010). Improving the emotional and behavioural health of looked-after children and young people (LACY), London: Centre for Excellence and Outcomes in Children and Young People's Services
- Lester S., Khatwa M, Sutcliffe K. (2020). Service needs of young people affected by adverse childhood experiences (ACEs): A systematic review of UK qualitative evidence. *Children and youth services review*;118:05429.
- Paranjothy S, Evans A, Bandyopadhyay A et al. (2018). Risk of emergency hospital admission in children associated with mental disorders and alcohol misuse in the household: an electronic birth cohort study. *The Lancet Public Health*;3(6):Pe279-e288.
- Sebba J, Berridge D, Luke N, et al. (2015) The Educational Progress of Looked After Children in England: Linking Care and Educational Data. UK: REES Centre: Research in Fostering and Education, University of Oxford.
- Vinnerljung B, Hjern A, Lindblad F. (2006). Suicide attempts and severe psychiatric morbidity among former child welfare clients--a national cohort study. *J Child Psychol Psychiatry*;47(7):723-33.

KS4 cohort: social services level of intervention and disability during age 12-15 years

