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Child maltreatment and social welfare service involvement is linked to higher rates of criminal cautions and convictions by early adulthood

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ABSTRACT

Background: Child maltreatment is a major public health issue. Child welfare services are provided to many children at risk of maltreatment to try and prevent negative outcomes and serious long-term harm. The excess risk of criminal justice contact among children receiving these welfare services is not well established and less is known about differences between male and female children, making effective health policy responses difficult.

Methods: The study analyses linked whole-population administrative data from the Department for Education and Ministry of Justice in England $N = 1,708,565$ for children born between 1995 and 1998. Multilevel logistic regression models for the whole population, and male and female subgroups, predict the odds of receiving any criminal caution or conviction by 2020 across all levels of child welfare service involvement, while accounting for other covariates.

Findings: Children referred to or receiving any intervention from child welfare services have increased odds of contact with the criminal justice system, OR 1.86 [1.83, 1.93] to OR 4.21 [4.08, 4.33]. With higher odds for girls at all levels of social welfare involvement OR 2.15–5.69, compared to boys OR 1.75–3.52.

Conclusions: Risk of criminal justice involvement is increased for those referred to or receiving a child welfare service intervention. While this reflects the higher levels of need identified by child welfare services, it also indicates that engagement of child welfare services does not protect young people from criminalisation. Strategies are needed to address the consequences for these young peoples' health.

1. Introduction

Child maltreatment, including abuse, neglect and exposure to violence, is a major public health issue (Gilbert et al., 2009). Maltreatment can lead to death, physical injury, and serious long-term consequences for children (Astridge et al., 2023). The link between exposure to adversity in childhood and increased risk of later offending is consistent across five continents (Basto-Pereira

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et al., 2022). Children who receive an intervention from a child welfare service (CWS) have often been maltreated and exposed to higher rates of adversity than the general population (DfE, 2022a). The most common reasons for a CWS intervention in England is due to abuse and neglect, with domestic violence being the most frequently reported factor found at assessment (DfE, 2022a). The role of children's welfare services is to safeguard the health and development of children, however; children with involvement from a CWS often experience worse health and social outcomes than their peers (Bala et al., 2015; Youth Justice Board, 2015). One potential mechanism for this disadvantage can be their over-representation in the criminal justice system (CJS). Youth in the justice system having more complex health needs, display more health risk behaviours, and have a higher risk of premature death than their non-CJS involved peers (Borschmann et al., 2020). The risk of CJS contact is not well understood across gender, age, education, and geographic factors making it difficult to develop effective targeted interventions (Tzoumakis et al., 2024). In England, where guilt is admitted for a minor crime police can give a formal caution which is added to an individual's criminal record. Contested cases or more serious crimes can be heard at a magistrates or crown court, with guilty verdicts leading to a conviction (Government, n.d.-a, n.d.-c). Sentences for convictions vary depending on crime severity, a defendant's criminal record, and their age, with outcomes including a discharge (crime is added to criminal record), a fine, a referral order (where the individual must meet commitments for up to one year), rehabilitation order (such as keeping to a curfew), or custodial sentence (Council, 2025, n.d.). Possession of a criminal record can be a barrier for employment opportunities, securing a rental property, accessing financial services, international travel, and educational opportunities (Henley, 2018; Pager, 2003; Thacher, 2008). Many nations have a system through which criminal records can be checked, for example the Disclosure and Barring Service in the United Kingdom (Government, n.d.-b). As such any caution or conviction that results in a criminal record can impact an individual's life trajectory, irrespective of how severe the crime or prolific the offender.

Across western nations there is an elevated risk of offending when individuals receive an intervention from CWS (Cutuli et al., 2016; Youth Justice Board, 2015). In cases where familial and extrafamilial risks are highest, a child may be looked after in an out of home placement, with this group experiencing many of the worst health, education, and social outcomes (Youth Justice Board, 2015). Children who are referred to CWS but receive no intervention or are supported by a CWS while living with the birth family, also have an elevated risk of having a CJS caution or conviction, including custodial sentences (Baidawi et al., 2020; Jonson-Reid & Barth, 2000; Malvaso et al., 2017; Tzoumakis et al., 2024). Evidence for outcomes for children at lower tier CWS interventions does not consistently account for many of the shared determinants for CWS and CJS involvement for young people and is often limited to regional or urban populations from the USA and Australia (Alain et al., 2018; Berger et al., 2016; Goodkind et al., 2020; Malvaso et al., 2019, 2022; McGhee et al., 2012). This is a pertinent issue given that CWS practices may vary between and within nations. In England, CWS interventions for children living at home include home visits from a social worker, individual or family therapeutic services, support to alter parenting behaviours, and other early help services (MacAlister, 2022). Where children remain at home with a risk of significant harm, a child protection plan can mean that families receive closer monitoring, regular core group meetings, specific targets to safeguard children's welfare, and a plan for emergencies (MacAlister, 2022). Early help services, such as support with housing, debt management advice, or domestic abuse support, is also available to those who have a referral to but no intervention from CWS (MacAlister, 2022). There is variation in service provision for children placed in out of home care, as these can include kinship, foster, and residential placements, and often includes educational and health assessments, and ongoing individual support from CWS until age 21 (MacAlister, 2022; Mc Grath-Lone et al., 2016). Where services have been compared across the local government authorities of England, it is recognised that there is variation of both what services and interventions are provided and the use of different tiers of intervention (MacAlister, 2022). These differences have been explained by several factors including the perceived risk to the child, local level thresholds for interventions, and the degree of engagement from the family (MacAlister, 2022). A tiered service structure exists in many of the child protection systems globally, offering both protective and responsive interventions and support, although child protection systems are grounded in different *orientations* that can underpin international differences in service delivery and outcomes (UNICEF, 2013, 2021). For example, South Africa's Department of Social Development delivers a child protection service grounded in a *welfare model* (addressing systemic deprivation of children as a cause of child wellbeing or distress) in the offer of early and preventative interventions including parenting programmes (Doubt et al., 2018), alongside child protection assessments, and where needed out of home placements (Strydom et al., 2020). Another example is the child protection services of Canada, which are grounded in a *child protection model* (using legislation and statutory pressures to protect children from harm) as seen in England, employing maltreatment investigations, mandatory reporting, court ordered mandatory services (similar to the child protection plans in England), and variability in out of home placement types that include foster and kinship care, and group homes (Trocmé et al., 2013). The Canadian system also offers preventative interventions such as home-visiting programmes and parenting support (Chartier et al., 2018). The Canadian child welfare services are decentralised to a provincial, territorial, or federal level, leading to 13 sets of legislation and service delivery models, which leads to differences in area practices (Houston et al., 2024; Trocmé et al., 2019).

There are many shared social determinants that increase the likelihood of receiving a CWS intervention and being involved with the CJS, such as living in poverty, exposure to adversity, maltreatment, and low parental supervision (Ayano et al., 2024; Hughes et al., 2017). Boys are also more likely to offend than girls, however, girls who are abused or neglected have an increased risk of committing a criminal offence and of having prolonged offending trajectories compared to girls who are not maltreated (Tzoumakis et al., 2024). Children with CWS involvement or who experience high degrees of adversity in childhood, are more likely to disengage from education, present with challenging behaviour or absenteeism, and to have a special educational need (Houtepen et al., 2020). These same education factors are associated with increased likelihood of CJS contact in childhood and more prolific or serious offending across the life course (Justice, 2016). A systematic review of 62 studies included education as one of many potential factors that increase risk or protect children involved with a CWS from CJS contact (Malvaso et al., 2016). Of the studies that included measures of education, positive protective associations were found by two studies for greater education attainment and one study for greater school

engagement, three studies found no clear effect of education on CJS outcomes, and one study found education acted directly and indirectly (through other factors such as family attitudes) to protect against CJS contacts (Malvaso et al., 2016). Further complexity arises as early maltreatment can lead to lower educational performance and development of other special educational needs, which are risk factors for higher school absence rates and later school performance (Maclean et al., 2016). Although the role of education for CJS outcomes for children involved with CWS is unclear, the inclusion of measures of education in analyses is justified and education settings may be able to offer protective effects for children in some circumstances (Baidawi et al., 2024; Malvaso et al., 2016).

A key role of a CWS is to identify children at risk of these immediate and life course negative outcomes and alleviate or eliminate these risks through CWS interventions (Leyland, 2024). The present study uses novel linked whole-population administrative records for the first time, and contributes to the evidence base by taking account of all forms of CWS involvement, at home support and out of home placement, and male and female differences in CJS contact, while accounting for shared social determinants to answer the question:

What is the prevalence of one or more criminal cautions or convictions for children who were referred to or received a formal intervention from CWS, when other individual and systemic determinants are accounted for?

2. Methods

2.1. Data sources

Longitudinal person-level population administrative data for individuals between 2002 and 2020 from the Department for Education (DfE) and Ministry of Justice (MoJ) in England were analysed. The data included three cohorts of children born between 1995 and 1998. More details of the seven linked datasets and the data documentation can be found in the Supplemental material. The coverage of data items varies between and within the datasets as shown in Supplemental material Fig. 1. The sample selection sought to be sufficient to have large enough group sizes at every tier of CWS involvement and when the sample was split for gender analysis. Further, the administrative data access process required that sample and variable selection occurred without full disclosure of the data quality and as such a large sample covering several birth years was to protect against any data anomalies that may have occurred over time. To increase the possibility for the findings to inform policy and practice discussions in the context of England, wherever possible the structure and designations given in the administrative data were retained, for example categorical data used the same designation categories.

2.2. Measures

2.2.1. Education data

School attendance and attainment was measured using items from three DfE datasets (absences, exclusions and key stage 4). School absences were categorised as low (<10%), moderate (11–19%) and high (>20%) based on the number of reported absences against the maximum possible number of school sessions. The distribution of school absences was skewed such that around 95% of pupils had fewer than 10% missed sessions. In addition, the Department for Education set the threshold for concerning levels of absence as missing 10% or more of school sessions (classified as persistently absent). Thresholds were set to retain policy and practice relevance (for the Department for Education and education providers) while also being data driven, for example a further category was added for the small number of children who miss 20% or more of school sessions. Many of this group also fall within the Department for Education in England's category of severe absence (missing 50% or more of school sessions). School exclusions refer to disciplinary action where children are excluded from education, usually for a defined length of time but sometimes permanently, normally as a response to their behaviour. Temporary school exclusions during secondary school were categorised as no exclusions, one exclusion, or two or more exclusions. Key stage four (age 15–16 years) is the point in compulsory secondary education in England that children undertake their GCSE assessments. Binary groups were coded for whether an individual obtained a grade C or above in Maths and English, or not. GCSE grades C or above in Maths and English are typically treated as a minimum requirement for further study in tertiary education or for many areas of employment.

Demographic data for each case was taken from the spring census of the final secondary school year (year 11, age 15–16 years) or if missing, from the year 7 entry (age 11–12). Free school meal (FSM) eligibility in secondary school is commonly used as a proxy for low income due to it being a means-tested benefit. The *provision for a child's special educational need or disability* (SEN(D)) was categorised as 'SEN(D) supported by existing school resources' or 'statement of SEN(D)', with the remaining cases classified as 'no SEN(D)'. A statement of SEN(D) indicates that the child's needs have been investigated and diagnosed by specialist health practitioners or educational psychologists and that the educational needs or disability meets a threshold for a higher level of intervention and support. Sex is coded in the data as a binary category capturing 'male' and 'female'. *Ethnicity* was captured as a set of dummy variables indicating whether the respondent was 'White', 'Black', 'Asian', 'Chinese', 'Mixed ethnicity' or 'Other' ethnic group according to the Office for National Statistics in England ethnic group classification. In England, 152 *local authorities* with CWS responsibilities oversee school and CWS provision within their district. The local authority of the child's home address was used as a second level cluster variable. Cohort was created as a dummy variable to account for the school year in which the child was born.

2.2.2. Child Welfare Service data

Two datasets were used to identify those individuals who were involved with CWS: 'the Children in Need census (Section 83)' and

‘Children looked after statistics (SSDA903 returns)’. The categories of care in England are assessed on need from ‘child in need’ (CIN), to ‘child protection plan’ (CPP), to ‘child looked after’ (CLA). Classification as a child in need can be due to disability or because the child is unlikely to achieve good health and development without local authority intervention (Children Act, 1989). The child in need dataset also includes incidences of referrals to CWS where no further action was taken either following an assessment or where no assessment was deemed necessary (DfE, 2023a, 2023b). A child protection plan and placement of a child in an out of home placement and in the care of the local authority (child looked after) follows concerns that the child may suffer or is suffering significant harm (Children Act, 1989). Preparation of the data grouped cases into the ‘highest’ of five CWS involvement categories (no child welfare contact < referral only < child in need < child protection plan < child looked after). The research focus was to explore the association between the highest recorded CWS contact and likelihood of CJS criminal caution or conviction. The study does not report on the *care experience* or trajectory, for example the duration of CWS involvement, or age of first CWS contact, nor does the research seek to explore the type or severity of maltreatment on CJS contact. The version of the linked administrative data analysed was limited by coverage as to the age of first reporting year, and that only the most recent care episode in each reporting year was reported (Supplemental material Fig. 1).

2.2.3. Criminal justice data

The police national computer (PNC; 2000–2020) has information on all offenders in England with a conviction or caution for a recordable offence. The PNC data used in the present study were the offence, age of offence, and the offence disposal. Any offence recorded in error prior to the age of criminal responsibility in England (age 10 years) was removed.

Table 1
Descriptive statistics split for cautioned/convicted for a criminal offence and by gender.

Item	Male		Female	
	Not cautioned or sentenced	Cautioned or sentenced	Not cautioned or sentenced	Cautioned or sentenced
N (%)	747,828 (87.3)	108,680 (12.7)	787,146 (95.9)	33,857 (4.1)
<i>Birth year (cohort)</i>				
1995/96	241,990 (85.1)	42,240 (14.9)	257,640 (94.7)	14,460 (5.3)
1996/97	252,960 (87.6)	35,710 (12.4)	266,890 (96.1)	10,830 (3.9)
1997/98	252,880 (89.2)	30,730 (10.8)	262,620 (96.8)	8570 (3.2)
<i>Social welfare</i>				
None	669,670 (90)	72,590 (10)	679,850 (98)	16,390 (2)
Referral only	41,990 (72)	16,140 (28)	59,460 (90)	6690 (10)
Child in need	25,100 (70)	10,900 (30)	32,910 (85)	5700 (15)
Child protection plan	2510 (61)	1640 (40)	4130 (81)	970 (19)
Child looked after	8560 (54)	7420 (46)	10,810 (73)	4100 (28)
<i>Free school meals</i>				
Not eligible	536,750 (91.7)	48,770 (8.4)	545,330 (97.6)	12,670 (2.3)
Eligible	211,080 (77.9)	59,910 (22.1)	241,820 (91.1)	21,190 (8.1)
<i>Ethnicity^a</i>				
White	602,800 (87.8)	84,060 (12.2)	629,320 (95.7)	28,070 (4.3)
Asian	63,980 (89.3)	7630 (10.7)	66,070 (98.5)	1020 (1.5)
Black	31,440 (79.6)	8070 (20.4)	37,930 (95.0)	1980 (5.0)
Chinese	3130 (97.8)	70 (2.2)	3240 (99.4)	20 (0.6)
Mixed	25,500 (82.2)	5510 (17.8)	29,010 (93.8)	1920 (6.2)
Any other ethnic group	9900 (86.7)	1520 (13.3)	10,060 (97.6)	240 (2.4)
Unclear	11,080 (85.8)	1830 (14.2)	11,530 (95.0)	600 (5.0)
<i>School absences</i>				
Low (<10 %)	643,370 (90.7)	66,300 (9.3)	652,510 (97.6)	16,310 (2.4)
Moderate (11–19 %)	86,290 (74.9)	28,990 (25.1)	109,320 (90.9)	10,960 (9.1)
High (>20 %)	18,170 (57.6)	13,400 (42.4)	25,320 (79.3)	6590 (20.7)
<i>School exclusions</i>				
None	653,090 (93.1)	48,590 (6.9)	733,740 (97.6)	17,920 (2.4)
One	53,250 (75.2)	17,530 (24.8)	30,780 (86.1)	4950 (13.9)
Two or more	41,490 (49.4)	42,560 (50.6)	22,630 (67.3)	10,980 (32.7)
<i>SEN(D) provision</i>				
None	575,200 (90.6)	59,560 (9.4)	665,160 (96.9)	21,030 (3.1)
School support	134,790 (77.5)	39,200 (22.5)	105,990 (90.1)	11,650 (9.9)
SEN(D) statement	37,840 (79.2)	9920 (20.8)	16,000 (93.1)	1180 (6.9)
<i>Maths & English A-C</i>				
Achieved	440,860 (93.9)	28,670 (6.1)	518,360 (98.3)	9220 (1.7)
Not achieved	306,970 (79.3)	80,010 (20.7)	268,790 (91.6)	24,640 (8.4)

Note. SEN(D) = special educational needs and disabilities.

Rounding of counts and percentages in accordance with the data sharing agreement of the data owners, with more stringent rules applied to the most sensitive data.

^a Category of Chinese suppressed due to small counts in some columns.

2.2.4. Participants

The sample was individuals born 1st September 1995 to 31st August 1998 ($N = 1,708,565$). The population was derived from education datasets that exclude any individual who attended an independent school or were home educated throughout their schooling and have limited or no data on those who received some or all their schooling outside of England. Descriptive statistics for all variables disaggregated by CJS contact and CWS involvement are provided in [Table 1](#) and in Supplementary materials Table 4.

2.3. Statistical analysis

The model has the main predictor of CWS involvement on the outcome of one or more criminal cautions or convictions, when other observed covariates were included in the model (ethnicity, FSM eligibility, SEN(D) provision, school attendance, school exclusion, and school attainment). The role of the observed and unobserved (structural and interpersonal racial bias, exposure to adverse childhood experiences, and trauma) predictors were considered in a directed acyclic graph (DAG, Fig. 2 in the Supplementary materials). Direct and total effect models were estimated. The direct effect model coefficients represent the estimated effect of CWS referral or intervention on CJS outcomes for the given population *exclusive of* any mediated effect intervention may have on a child's educational outcome. Total effect model coefficients refer to the estimated effect of intervention *inclusive of* any positive or negative mediated effect on CJS outcomes via any potential effect on educational outcomes. Multilevel models were estimated with random intercepts at the local authority level to adjust for any confounding associated with differences in local authority CJS and CWS practice. Missing data was handled by listwise deletion. In the full case analysis 31,054 cases were removed (1.82 % of 1,677,505 cases). Those who received a CWS referral or intervention had a higher proportion of missing data 2.1–3.8 % than those who did not (Supplementary materials Table 1). Models were generated for the entire population, and for male and female child populations separately. Details of model building and model fit summaries are presented in the Supplemental material Table 2 along with details of statistical software and packages used for analyses.

3. Results

Compared to those without any CWS referral or intervention, children who were referred to a CWS were 1.94 times as likely to have received a criminal caution or conviction. Children with child in need status were 2.22 times more likely; children who had ever been on a child protection plan were 2.62 more likely and children who were looked after in an out of home care placement were 4.49 times as likely to have received a criminal caution or conviction. After removing the potential mediating effect of educational outcomes we observed similar but slightly diminished increases in the odds of criminal justice contact for children with CWS involvement ([Table 2](#)).

The same graduated increase in odds occurred when male and female populations were modelled separately, with the effect of CWS referral or intervention being higher on the odds of at least one criminal caution or conviction for girls than for boys ([Table 2](#)). More conservative estimates are presented in the direct effects models of CWS referral or intervention, however; the same pattern of relative differences between males and females remained ([Table 3](#)). As such, any ameliorative effect that CWS might have on criminal conviction rates after removing its negative association with educational outcomes is likely to be modest and potentially more substantial for girls.

When considering these relatively striking differences between boys and girls it is important to keep in mind that these differences are, in part, a consequence of the significantly lower baseline probabilities of cautions or convictions among girls, as can be seen in the marginal effects estimates ([Tables 2 and 3](#)). According to the total effect model, female children with no contact with CWS have a predicted probability of 5.7 % for receiving a caution or conviction, while male children have a probability of 12.3 % ([Table 3](#)). As such, boys with CWS contact still have a higher probability of receiving a caution or conviction overall (Referral: 21.4 %, CIN: 23.8 %, CPP: 26.9 %, CLA: 38.7 %) but have greater equality of experience with the CJS with their peers than girls who have received a CWS referral or intervention (Referral: 12.0 %, CIN: 14.8 %, CPP: 17.0 %, CLA: 27 %).

4. Discussion

This study uses novel linked administrative data and makes a significant contribution to the existing evidence of higher prevalence rates of criminal cautions and convictions for children and young adults who are or have been subject to a CWS intervention. The majority of children who receive a CWS intervention in childhood have experienced abuse or neglect, and many have been exposed to domestic violence (DfE, 2022a). While previous research has emphasised the overrepresentation of those children who are or were looked after in an out of home setting (Baidawi et al., 2020), our analyses presents evidence of an increased risk of criminal caution or conviction that is graduated in line with the level of CWS intervention received. Furthermore, this increased risk extends to those children below the threshold for intervention, who are referred to CWS but do not receive an intervention, who were nearly twice as likely to have a caution or conviction by early adulthood compared to those without CWS involvement. This evidence adds to previous research from New South Wales in Australia, which reported the same phenomenon for unsubstantiated child protection referrals (Malvaso et al., 2017).

These analyses demonstrate the direct effect of CWS involvement on the likelihood of a criminal caution or conviction after adjusting for a range of factors known to also increase risk of criminalisation, including low income, ethnicity and special educational needs (Hughes et al., 2017). The effect of a child having any degree of CWS involvement is expected to have a greater impact on their likelihood of a criminal caution or conviction than the same child becoming eligible for free school meals due to low income. Despite this, children living in poverty are overwhelmingly overrepresented in the CWS system (Bennett et al., 2022) and are therefore likely to

Table 2
Total effect model of child welfare service involvement on having at least one criminal caution or conviction.

Predictors	Full sample						Males						Females					
	Est.	SE	OR	95 % LCI	95 % UCI	MEM %	Est.	SE	OR	95 % LCI	95 % UCI	MEM %	Est.	SE	OR	95 % LCI	95 % UCI	MEM %
<i>(Intercept)</i>	-3.70	0.02					-2.54	0.02					-3.67	0.03				
Child welfare																		
Ref: No contact						12.3						21.1						5.7
Referral only	0.66	0.01	1.94	1.90	1.97	21.4	0.59	0.01	1.81	1.77	1.85	32.6	0.82	0.02	2.27	2.20	2.35	12.0
Child in Need	0.80	0.01	2.22	2.17	2.27	23.8	0.66	0.02	1.93	1.87	1.99	34.1	1.06	0.02	2.88	2.78	3.00	14.8
Ch. protection plan	0.97	0.03	2.62	2.48	2.77	26.9	0.82	0.04	2.27	2.11	2.44	37.8	1.22	0.04	3.39	3.12	3.68	17.0
Looked after child	1.50	0.02	4.49	4.36	4.63	38.7	1.32	0.02	3.73	3.58	3.88	50.0	1.81	0.02	6.13	5.85	6.43	27.0
Birth cohort^a																		
1995/96	-0.26	0.00	0.77	0.76	0.77	28.6	-0.23	0.01	0.79	0.79	0.80	39.9	-0.35	0.01	0.70	0.69	0.72	18.6
1996/97						23.6						34.5						13.9
199/98						19.2						29.5						10.2
Absence																		
Ref: Low 0 %–10 %						16.7						26.2						9.1
Moderate 11–19 %	0.48	0.01	1.61	1.59	1.64	24.5	0.44	0.01	1.55	1.52	1.58	35.6	0.56	0.02	1.75	1.70	1.80	14.8
High ≥ 20 %	0.81	0.01	2.24	2.19	2.29	31.0	0.74	0.02	2.10	2.04	2.16	42.8	0.88	0.02	2.41	2.32	2.51	19.4
Exclusion																		
Ref: no exclusions						9.1						14.7						5.0
1 exclusion	1.29	0.01	3.62	3.56	3.69	26.6	1.26	0.01	3.52	3.45	3.59	37.8	1.33	0.02	3.78	3.65	3.92	16.6
2 or more exclusions	2.09	0.01	8.06	7.93	8.19	44.7	2.10	0.01	8.13	7.98	8.28	58.4	2.03	0.02	7.59	7.35	7.84	28.5
SEN(D)																		
Ref: No SEN(D)						23.6						33.9						14.4
SEN(D) school support	0.25	0.01	1.29	1.27	1.31	28.5	0.27	0.01	1.31	1.29	1.33	40.2	0.22	0.02	1.24	1.20	1.28	17.2
SEN(D) statement	-0.26	0.01	0.77	0.75	0.79	19.2	-0.19	0.02	0.83	0.81	0.86	29.9	-0.34	0.04	0.71	0.66	0.76	10.6
Gender																		
Ref: Female						14.6												
Male	1.19	0.01	3.27	3.23	3.32	35.8	-	-	-	-	-		-	-	-	-	-	
Ethnicity																		
Ref: White						25.4						36.1						17.0
Asian	-0.14	0.01	0.87	0.85	0.89	22.9	-0.03	0.02	0.97	0.94	1.00	35.4	-0.66	0.04	0.52	0.45	0.55	9.6
Black	0.35	0.02	1.42	1.38	1.46	32.6	0.42	0.02	1.52	1.47	1.57	46.2	0.16	0.03	1.18	1.11	1.25	19.4
Chinese	-1.21	0.11	0.30	0.24	0.37	9.3	-1.23	0.012	0.29	0.23	0.37	14.2	-1.17	0.23	0.31	0.20	0.49	6.0
Mixed	0.26	0.02	1.29	1.25	1.33	30.6	0.26	0.02	1.30	1.25	1.34	42.2	0.25	0.03	1.28	1.21	1.35	20.7
Any other	0.01	0.03	1.01	0.95	1.07	25.5	0.09	0.03	1.09	1.03	1.16	38.2	-0.33	0.07	0.72	0.62	0.82	12.8
Unclassified	0.03	0.03	1.03	0.98	1.08	26.0	0.02	0.03	1.02	0.96	1.08	36.5	0.07	0.05	1.08	0.98	1.18	18.0
FSM																		
Ref: Not eligible						19.8						29.9						11.2
Eligible	0.44	0.01	1.55	1.53	1.58	27.8	0.42	0.01	1.52	1.50	1.55	39.4	0.49	0.01	1.63	1.59	1.68	17.0
Random intercepts																		
Local authority (SD)		0.20						0.18						0.28				

Note. Est = regression coefficient estimate; SE = standard error; OR = odds ratio; MEM = marginal effects of means; LCI = lower confidence interval, UCI = upper confidence interval.

^a Cohort estimated as linear effect.

Table 3
Direct effect model of child welfare service involvement on having at least one criminal caution or conviction.

Predictors	Full sample						Males						Females					
	Est.	SE	OR	95 % LCI	95 % UCI	MEM%	Est.	SE	OR	95 % LCI	95 % UCI	MEM%	Est.	SE	OR	95 % LCI	95 % UCI	MEM%
<i>(Intercept)</i>	-3.90	0.02	-	-	-	-	-2.76	0.19	-	-	-	-	-3.83	0.03	-	-	-	-
Child welfare																		
<i>Ref: No contact</i>	-	-	-	-	-	10.5	-	-	-	-	-	18.2	-	-	-	-	-	4.8
<i>Referral only</i>	0.62	0.01	1.86	1.83	1.90	17.9	0.56	0.01	1.75	1.71	1.79	28.0	0.77	0.02	2.15	2.08	2.23	9.9
<i>Child in need</i>	0.75	0.01	2.12	2.07	2.17	19.9	0.62	0.02	1.86	1.80	1.91	29.2	1.00	0.02	2.72	2.62	2.83	12.2
<i>Ch. protection plan</i>	0.93	0.03	2.54	2.40	2.68	23.0	0.80	0.04	2.22	2.06	2.39	33.0	1.17	0.04	3.23	2.98	3.51	14.1
<i>Looked after child</i>	1.44	0.02	4.21	4.08	4.33	33.0	1.26	0.02	3.52	3.38	3.65	43.9	1.74	0.02	5.69	5.43	5.97	22.5
Cohort^a																		
1995/96	-0.27	0.00	0.76	0.76	0.77	24.5	-0.24	0.01	0.79	0.78	0.80	34.9	0.77	0.02	2.15	2.08	2.23	15.6
1996/97	-	-	-	-	-	19.9	-	-	-	-	-	29.8	-	-	-	-	-	11.5
1997/98	-	-	-	-	-	15.9	-	-	-	-	-	25.1	-	-	-	-	-	8.3
Absence																		
<i>Ref: Low 0–10 %</i>	-	-	-	-	-	14.9	-	-	-	-	-	23.5	-	-	-	-	-	8.1
<i>Moderate 11–19 %</i>	0.38	0.01	1.46	1.44	1.48	20.3	0.35	0.01	1.41	1.39	1.44	30.3	0.45	0.02	1.56	1.52	0.45	12.1
<i>High ≥ 20 %</i>	0.67	0.01	1.95	1.91	2.00	25.5	0.62	0.02	1.85	1.80	1.91	36.3	0.73	0.02	2.07	1.99	0.73	15.4
Exclusion																		
<i>Ref: no exclusions</i>	-	-	-	-	-	7.9	-	-	-	-	-	12.8	-	-	-	-	-	4.3
1 exclusion	1.20	0.01	3.33	3.27	3.39	22.2	1.18	0.01	3.25	3.19	3.32	32.4	1.24	0.02	3.44	3.32	3.57	13.5
2 ≥ exclusions	1.98	0.01	7.27	7.15	7.38	38.4	2.00	0.01	7.36	7.22	7.50	52.0	1.92	0.02	6.80	6.59	7.02	23.6
GCSE A-C grade																		
<i>Ref: Not Attained</i>	-	-	-	-	-	15.0	-	-	-	-	-	23.2	-	-	-	-	-	8.5
Attained	0.68	0.01	1.97	1.94	2.00	25.8	0.68	0.01	1.96	1.93	2.00	37.3	0.68	0.02	1.97	1.92	2.03	15.4
SEN(D)																		
<i>Ref: No SEN(D)</i>	-	-	-	-	-	22.1	-	-	-	-	-	32.1	-	-	-	-	-	13.3
SEN(D) school support	0.08	0.01	1.08	1.07	1.10	23.5	0.09	0.01	1.09	1.08	1.11	34.1	0.07	0.02	1.07	1.04	1.10	14.1
SEN(D) statement	-0.48	0.01	0.62	0.60	0.63	14.9	0.41	0.02	0.98	0.64	0.68	23.8	-0.57	0.04	0.57	0.53	0.61	8.0
Gender																		
<i>Ref: Female</i>	-	-	-	-	-	12.2	-	-	-	-	-	-	-	-	-	-	-	-
Male	1.17	0.01	3.21	3.17	3.26	30.8	-	-	-	-	-	-	-	-	-	-	-	-
Ethnicity																		
<i>Ref: White</i>	-	-	-	-	-	21.3	-	-	-	-	-	30.9	-	-	-	-	-	13.9
Asian	-0.12	0.01	0.88	0.86	0.91	19.3	-0.02	0.02	0.98	0.96	1.01	30.6	-0.64	0.04	0.53	0.49	0.57	7.9
Black	0.35	0.02	1.41	1.37	1.45	27.6	0.41	0.02	1.51	1.46	1.56	40.3	0.17	0.03	1.18	1.12	1.25	16.0
Chinese	-1.14	0.11	0.32	0.26	0.40	8.0	-1.17	0.12	0.31	0.25	0.40	12.3	-1.09	0.21	0.34	0.22	0.53	5.2
Mixed	0.29	0.02	1.33	1.29	1.37	26.5	0.29	0.02	1.34	1.29	1.38	37.4	0.28	0.03	1.32	1.25	1.40	17.6
Any other	-0.01	0.03	0.99	0.94	1.05	21.1	0.07	0.03	1.08	1.01	1.14	32.5	-0.33	0.07	0.72	0.62	0.82	10.4
Unclassified	0.03	0.03	1.04	0.99	1.09	21.9	0.02	0.03	1.02	0.96	1.08	31.4	0.08	0.05	1.09	0.99	1.19	14.9
FSM																		
<i>Ref: Not eligible</i>	-	-	-	-	-	17.1	-	-	-	-	-	26.2	-	-	-	-	-	9.6
Eligible	0.37	0.01	1.45	1.43	1.47	23.0	0.35	0.01	1.43	1.40	1.45	33.6	0.40	0.01	1.50	1.46	1.54	13.7
Random intercepts																		
Local authority (SD)	-	0.19	-	-	-	-	-	0.18	-	-	-	-	-	0.27	-	-	-	-

Note. Est = regression coefficient estimate; SE = standard error; OR = odds ratio; MEM = marginal effects of means; LCI = lower confidence interval, UCI = upper confidence interval.

^a Cohort estimated as linear effect.

face a compounded risk of CJS involvement due to experiencing both factors. This implies that children with similar backgrounds have different criminal justice outcomes depending on their involvement with CWS. This is particularly the case for girls for whom the odds of a caution or conviction by early adulthood were significantly higher at all levels of CWS intervention.

This degree of increased risk of criminalisation for children who are involved with CWS warrants attention. While the increased risk of a criminal caution or conviction associated with greater CWS involvement is understandable given the relationship of vulnerability, harm, or childhood adversity, we might also expect that heightened intervention from CWS should serve to mitigate the risk through greater levels of support. However, the risk of criminalisation is a product of not only childhood adverse life exposures and social disadvantages, but also from increased service scrutiny, educational disadvantages, and systemic perceptions of a child's risk (Brännström et al., 2017; Day, 2021; Hughes et al., 2020; McCarter et al., 2020). To interrupt these associations, children subject to formal CWS involvement may benefit from earlier preventative interventions intended to reduce risk of criminalisation. An umbrella review of 156 reviews gave support for home visiting as an effective early intervention to reduce maltreatment (Casillas et al., 2016), and emerging support was given from a systematic review of interventions to reduce maltreatment and improve child development within low- and middle-income countries (Efevbera et al., 2018). Mixed effects were reported by an umbrella review of 25 reviews of interventions, such as cognitive-behaviour therapy and parent training, to support those exposed to adverse childhood experiences for outcomes for child behaviour, mental health, and CJS contact (Lorenc et al., 2020). However, two systematic reviews measuring effectiveness of interventions to reduce CJS contact for looked after children, found mixed effects for case management and parent training (Ziviani et al., 2012). A representative systematic review of 33 studies that covered high-, middle-, and low-income countries, assessed the impact of socioeconomic interventions (often targeting low-income households) on adverse childhood exposures, there were mixed findings for effectiveness of the interventions that included income supplementation and cash transfers (Courtin et al., 2019).

Children subject to maltreatment and CWS intervention should not be made subject to criminalisation. Indeed, there is momentum for diversion away from the CJS for marginalised and overrepresented groups, including those in receipt of CWS interventions (Robin-D'Cruz et al., no date). However, at all stages of the CJS, from policing to the delivery of sentences, practitioners can only consider CWS backgrounds where there is effective knowledge sharing between agencies, and in practice unequal opportunities for diversion can increase inequities in criminal justice settings (Robin-D'Cruz et al., no date; Robin-D'Cruz, and Innovation, 2023). While such efforts at diversion may miss those who are referred to CWS but do not receive an intervention and are therefore not subject to ongoing CWS support. Moreover, this knowledge can only be of benefit to children and young people where practitioners respond compassionately and without bias towards this vulnerable group (Robin-D'Cruz, and Innovation, 2023).

4.1. Limitations

The use of novel, linked, whole population administrative data for England. administrative data meant that there was full representation of children who had had an intervention from CWS from the age of 5, a population that is often underrepresented by cohort and other survey measures. However, any child who was looked after but then ceased to be looked after prior to school age will not be present in the data. Use of an administrative dataset allowed cases who were referred to CWS but did not receive an intervention to be identified, something that would be unlikely to be captured through other measurements (DfE, 2023a, 2023b). However, grading CWS intervention by the highest intervention received does not capture the heterogeneity of care experiences, including differences in duration, types of care placement, and reasons for CWS intervention. Further, for the purposes of this study the criminal justice outcome was reduced to a binary indicator of presence or absence of at least one criminal caution or conviction. The overrepresentation of children who have had an out of home care placement becomes more pronounced with the severity of CJS outcomes, for example in prolific offenders and custodial sentences (DfE, 2022a, 2022b, 2023b). As such the binary indicator of CJS contact is likely a conservative estimate of the increased risks faced by those children receiving any CWS intervention. The study design does not allow for consideration to the possible causes of this overrepresentation, such as the impact of abuse, neglect of other forms of adversity on subsequent behaviour, or any discrimination against children with care experience within practices in the CJS. The way in which care experiences may impact on likelihood of CJS contact is hugely complex and not well understood by the existing research in this field (Malvaso et al., 2016). The authors of a systematic review of 62 studies concluded that the evidence showed no meaningful consistent association between exposure to maltreatment and CJS contact, with weak evidence for maltreatment severity and the cumulative effect of maltreatment over time. They also concluded that the timing of maltreatment appeared to only be significant for selected types of crime, and the age of offending (childhood or adulthood). The authors did conclude that there was consistent evidence for an association being exposure to maltreatment at an older age and greater risk of CJS contact, and that a focus on other mediating and moderating factors was important (Malvaso et al., 2016). A sensitivity analysis on these data including only cases where CJS contact occurred more than a year after the CWS intervention, found similar effect estimates, although further exploration of the impact of different care experiences would be of benefit to the field (ADD REF). The study benefits from being the first to control for poverty and differences related to ethnicity and structural and interpersonal racism, as well as inclusion of several education factors. The present study design was specified to explore how different tiers of involvement with a CWS may be associated with CJS contact, but the design did not set out to explore in detail the more complex interactions with other factors nor the impact of heterogeneous care experiences. Although these are important future lines of enquiry that deserve to be rigorously and intentionally researched to build on this growing body of evidence.

5. Conclusions

Children who had any involvement from a CWS in childhood face increased odds of having at least one criminal caution or conviction by early adulthood. These greater risks exist despite controlling for other known social, demographic, and educational risk factors. This study adds evidence that those referred to CWS that do not receive an intervention, are more likely to have a criminal caution or conviction than those without any CWS involvement. The study also highlights the greater risk posed by CWS intervention for girls and adds to the existing evidence that those who are looked after in an out of home placement experience the greatest risk for CJS contact. Individuals who have CWS involvement face multiple and compounding social and health disadvantages across the life course. There is a need for a review of practices and policies that may be contributing to the criminalisation of vulnerable children and for targeted interventions that may redress these inequalities and mitigate the adverse outcomes associated with them.

CRedit authorship contribution statement

Anna Leyland: Writing – review & editing, Writing – original draft, Visualization, Project administration, Methodology, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Calum J.R. Webb:** Writing – review & editing, Writing – original draft, Visualization, Methodology, Funding acquisition, Formal analysis, Conceptualization. **Nathan Hughes:** Writing – review & editing, Writing – original draft, Supervision, Funding acquisition, Conceptualization. **Matthew Bennett:** Writing – review & editing, Writing – original draft, Supervision, Methodology, Funding acquisition, Conceptualization.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.chiabu.2025.107789>.

Data availability

The authors do not have permission to share data.

References

- Alain, M., Marcotte, J., Desrosiers, J., Turcotte, D., & Lafortune, D. (2018). The thin line between protection and conviction: Experiences with child protection services and later criminal convictions among a population of adolescents. *Journal of Adolescence*, *63*, 85–95. <https://doi.org/10.1016/j.adolescence.2017.12.010>
- Astridge, B., Li, W. W., McDermott, B., & Longhitano, C. (2023). A systematic review and meta-analysis on adverse childhood experiences: Prevalence in youth offenders and their effects on youth recidivism. *Child Abuse & Neglect*, *140*, Article 106055. <https://doi.org/10.1016/j.chiabu.2023.106055>
- Ayano, G., Rooney, R., Pollard, C. M., Dantas, J. A., Lobo, R., Jeemi, Z., ... Millar, L. (2024). Risk and protective factors of youth crime: An umbrella review of systematic reviews and meta-analyses. *Clinical Psychology Review*, *102479*.
- Baidawi, S., Newton, D., Mendes, P., Bollinger, J., & Purtell, J. (2024). From care to corrections: A scoping review of pathways from child protection to adult criminal justice systems. *Trauma, Violence & Abuse*, *26*(3), 403–419.
- Baidawi, S., Sheehan, R., & Flynn, C. (2020). Criminal exploitation of child protection-involved youth. *Children and Youth Services Review*, *118*, Article 105396.
- Bala, N., Finlay, J., De Filippis, R., & Hunter, K. (2015). Child welfare adolescents & the youth justice system: Failing to respond effectively to crossover youth. *Canadian Criminal Law Review*, *19*(1), 129–151.
- Basto-Pereira, M., Gouveia-Pereira, M., Pereira, C. R., Barrett, E. L., Lawler, S., Newton, N., ... Sakulku, J. (2022). The global impact of adverse childhood experiences on criminal behavior: A cross-continental study. *Child Abuse & Neglect*, *124*, Article 105459. <https://doi.org/10.1016/j.chiabu.2021.105459>
- Bennett, D. L., Schlüter, D. K., Melis, G., Bywaters, P., Alexiou, A., Barr, B., ... Taylor-Robinson, D. (2022). Child poverty and children entering care in England, 2015–20: A longitudinal ecological study at the local area level. *The Lancet Public Health*, *7*(6), e496–e503.
- Berger, L. M., Cancian, M., Cuesta, L., & Noyes, J. (2016). Families at the intersection of the criminal justice and child protective services systems. *The Annals of the American Academy of Political and Social Science*, *665*(1), 171–194. <https://doi.org/10.1177/0002716216633058>
- Borschmann, R., Janca, E., Carter, A., Willoughby, M., Hughes, N., Snow, K., ... Love, A. (2020). The health of adolescents in detention: A global scoping review. *The Lancet Public Health*, *5*(2), e114–e126.
- Brännström, L., Forsman, H., Vinnerljung, B., & Almqvist, Y. B. (2017). The truly disadvantaged? Midlife outcome dynamics of individuals with experiences of out-of-home care. *Child Abuse & Neglect*, *67*, 408–418.
- Casillas, K. L., Fauchier, A., Derkash, B. T., & Garrido, E. F. (2016). Implementation of evidence-based home visiting programs aimed at reducing child maltreatment: A meta-analytic review. *Child Abuse & Neglect*, *53*, 64–80.
- Chartier, M., Nickel, N. C., Chateau, D., Enns, J. E., Isaac, M. R., Katz, A., ... Brownell, M. (2018). Families First Home Visiting programme reduces population-level child health and social inequities. *Journal of Epidemiology and Community Health*, *72*(1), 47–53.

- Council, S. (2025). Types of sentence. <https://www.sentencingcouncil.org.uk/sentencing-and-the-council/types-of-sentence/>.
- Council, S. Types of sentences for children and young people (types of sentence, issue). <https://www.sentencingcouncil.org.uk/sentencing-and-the-council/types-of-sentence/types-of-sentences-for-young-people/> (n.d).
- Courtin, E., Allchin, E., Ding, A. J., & Layte, R. (2019). The role of socioeconomic interventions in reducing exposure to adverse childhood experiences: A systematic review. *Current Epidemiology Reports*, 6, 423–441.
- Cutuli, J., Goerge, R. M., Coulton, C., Schretzman, M., Crampton, D., Charvat, B. J., ... Lee, E. L. (2016). From foster care to juvenile justice: Exploring characteristics of youth in three cities. *Children and Youth Services Review*, 67, 84–94.
- Day, A.-M. (2021). Experiences and pathways of children in care in the youth justice system. In *Academic insights*. Her Majesty's Inspectorate of Probation.
- DfE, D. f. e. (2022a). Characteristics of children in need. Retrieved from gov.uk. <https://explore-education-statistics.service.gov.uk/find-statistics/characteristics-of-children-in-need>.
- DfE, D. f. e. (2022b). Education, children's social care and offending: Descriptive statistics. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1059556/Education_children_s_social_care_and_offending_descriptive_stats_FINAL.pdf.
- DfE, D. f. e. (2023a). Children in need: Methodology. Retrieved from <https://explore-education-statistics.service.gov.uk/methodology/characteristics-of-children-in-need-methodology>.
- DfE, D. f. e. (2023b). Education, children's social care and offending: Local authority level dashboard. Retrieved from gov.uk. <https://explore-education-statistics.service.gov.uk/find-statistics/education-children-s-social-care-and-offending-local-authority-level-dashboard/2019-20>.
- Doubt, J., Loening-Voysey, H., Blanc, D., Cluver, L., Byrne, J., & Petersen, T. (2018). *Delivering a parenting programme in rural South Africa: The local child and youth care worker experience*.
- Efevbera, Y., McCoy, D. C., Wuermli, A. J., & Betancourt, T. S. (2018). Integrating early child development and violence prevention programs: A systematic review. *New Directions for Child and Adolescent Development*, 2018(159), 27–54.
- Gilbert, R., Widom, C. S., Browne, K., Fergusson, D., Webb, E., & Janson, S. (2009). Burden and consequences of child maltreatment in high-income countries. *The Lancet*, 373(9657), 68–81.
- Goodkind, S., Shook, J., Kolivoski, K., Pohl, R., Little, A., & Kim, K. (2020). From child welfare to jail: Mediating effects of juvenile justice placement and other system involvement. *Child maltreatment: journal of the American Professional Society on the Abuse of Children*, 25(4), 410–421. <https://doi.org/10.1177/1077559520904144>
- Government, H. Courts, tribunals, and appeals: Being charged with a crime. gov.uk. Retrieved from <https://www.gov.uk/charged-crime> (n.d.a).
- Government, H. Disclosure and barring service: About us. <https://www.gov.uk/government/organisations/disclosure-and-barring-service/about> (n.d.b).
- Government, H. Your rights and the law: Police cautions, warnings and penalty notices. Retrieved from <https://www.gov.uk/caution-warning-penalty> (n.d.c).
- Henley, A. (2018). Mind the gap: Sentencing, rehabilitation and civic purgatory. *Probation Journal*, 65(3), 285–301.
- Houston, E. A., Fallon, B., Hélie, S., & Trocmé, N. (2024). Comparative analysis of child protection investigations in Ontario and Quebec, Canada. *Child Protection and Practice*, 1, Article 100012.
- Houtepen, L. C., Heron, J., Suderman, M. J., Fraser, A., Chittleborough, C. R., & Howe, L. D. (2020). Associations of adverse childhood experiences with educational attainment and adolescent health and the role of family and socioeconomic factors: A prospective cohort study in the UK. *PLoS Medicine*, 17(3), Article e1003031.
- Section 17: Provision of services for children in need, their families and others, § Section 17. <https://www.legislation.gov.uk/ukpga/1989/41/section/17>, (1989).
- Hughes, K., Bellis, M. A., Hardcastle, K. A., Sethi, D., Butchart, A., Mikton, C., ... Dunne, M. P. (2017). The effect of multiple adverse childhood experiences on health: A systematic review and meta-analysis. *The Lancet Public Health*, 2(8), e356–e366. [https://doi.org/10.1016/s2468-2667\(17\)30118-4](https://doi.org/10.1016/s2468-2667(17)30118-4)
- Hughes, N., Ungar, M., Fagan, A., Murray, J., Atilola, O., Nichols, K., Garcia, J., & Kinner, S. (2020). Health determinants of adolescent criminalisation. *The Lancet Child & Adolescent Health*, 4(2), 151–162.
- Jonson-Reid, M., & Barth, R. P. (2000). From maltreatment report to juvenile incarceration: The role of child welfare services. *Child Abuse & Neglect: The International Journal*, 24(4), 505–520. [https://doi.org/10.1016/s0145-2134\(00\)00107-1](https://doi.org/10.1016/s0145-2134(00)00107-1)
- Justice, M. o. (2016). Understanding the educational background of young offenders. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/577542/understanding-educational-background-of-young-offenders-full-report.pdf.
- Leyland, A. (2024). What came first?: A sensitivity analysis to assess whether there is a causal role of child welfare service intervention to increase odds of a criminal caution or conviction (data insights, issue). <https://www.adruk.org/>.
- Lorenc, T., Lester, S., Sutcliffe, K., Stansfield, C., & Thomas, J. (2020). Interventions to support people exposed to adverse childhood experiences: Systematic review of systematic reviews. *BMC Public Health*, 20, 1–10.
- MacAlister, J. (2022). Independent review of children's social care: Local deep dives. Retrieved from <https://www.gov.uk/government/groups/independent-review-of-childrens-social-care>.
- Maclean, M. J., Taylor, C. L., & O'Donnell, M. (2016). Pre-existing adversity, level of child protection involvement, and school attendance predict educational outcomes in a longitudinal study. *Child Abuse & Neglect*, 51, 120–131.
- Malvaso, C., Montgomerie, A., Pilkington, R. M., Baker, E., & Lynch, J. W. (2022). Examining the intersection of child protection and public housing: Development, health and justice outcomes using linked administrative data. *BMJ Open*, 12(6), Article e057284. <https://doi.org/10.1136/bmjopen-2021-057284>
- Malvaso, C. G., Delfabbro, P. H., & Day, A. (2016). Risk factors that influence the maltreatment-offending association: A systematic review of prospective and longitudinal studies. *Aggression and Violent Behavior*, 31, 1–15.
- Malvaso, C. G., Delfabbro, P. H., & Day, A. (2017). The child protection and juvenile justice nexus in Australia: A longitudinal examination of the relationship between maltreatment and offending. *Child Abuse & Neglect*, 64, 32–46. <https://doi.org/10.1016/j.chiabu.2016.11.028>
- Malvaso, C. G., Delfabbro, P. H., Day, A., & Nobes, G. (2019). Young people under youth justice supervision with varying child protection histories: An analysis of group differences. *International Journal of Offender Therapy and Comparative Criminology*, 63(2), 159–178. <https://doi.org/10.1177/0306624X18791735>
- Mc Grath-Lone, L., Harron, K., Dearden, L., Nasim, B., & Gilbert, R. (2016). Data resource profile: Children looked after return (CLA). *International Journal of Epidemiology*, 45(3), 716–717.
- McCarter, S., Venkatasubramanian, K., & Bradshaw, K. (2020). Addressing the school-to-prison pipeline: Examining micro- and macro-level variables that affect school disengagement and subsequent felonies. *Journal of Social Service Research*, 46(3), 379–393. <https://doi.org/10.1080/01488376.2019.1575323>
- McGhee, J., Alice, L., & Waterhouse, M. (2012). Massachusetts and Scotland: From juvenile justice to child welfare? *Child Welfare*, 91(5), 169–191.
- Pager, D. (2003). The mark of a criminal record. *American Journal of Sociology*, 108(5), 937–975.
- Robin-D'Cruz, C., & Innovation, C. f. J. (2023). Exploring the responsiveness of youth diversion to children with SEND. <https://justiceinnovation.org/publications/exploring-responsiveness-youth-diversion-children-send>.
- Robin-D'Cruz, C., Whitehead, S., & Innovation, C. f. J. Disparities in youth diversion – An evidence review. https://www.justiceinnovation.org/sites/default/files/media/document/2021/disproportionality_diversion_lit_review.pdf.
- Strydom, M., Schiller, U., & Orme, J. (2020). The current landscape of child protection services in South Africa: A systematic review. *Social Work*, 56(4), 383–402.
- Thacher, D. (2008). The rise of criminal background screening in rental housing. *Law & Social Inquiry*, 33(1), 5–30.
- Trocmé, N., Esposito, T., Nutton, J., Rosser, V., & Fallon, B. (2019). Child welfare services in Canada. In *National systems of child protection: Understanding the international variability and context for developing policy and practice* (pp. 27–50).
- Trocmé, N., Fallon, B., Sinha, V., Van Wert, M., Kozłowski, A., & MacLaurin, B. (2013). Differentiating between child protection and family support in the Canadian child welfare system's response to intimate partner violence, corporal punishment, and child neglect. *International Journal of Psychology*, 48(2), 128–140.
- Tzoumakis, S., Whitten, T., Laurens, K. R., Dean, K., Harris, F., Carr, V. J., & Green, M. J. (2024). Levels of involvement with child protection services associated with early adolescent police contact as a victim and person of interest. *Journal of Interpersonal Violence*, Article 8862605231223468. <https://doi.org/10.1177/08862605231223468>
- UNICEF. (2013). *A Better Way to Protect ALL Children: The theory and practice of child protection systems. Conference report*.

- Unicef. (2021). *Child Protection Systems Strengthening: Approach, benchmarks, interventions*.
- Youth Justice Board, Y. (2015). *Keeping children in care out of trouble: An independent review chaired by Lord Laming*. London: Prison Form Trust, Issue.
- Ziviani, J., Feeney, R., Cuskelly, M., Meredith, P., & Hunt, K. (2012). Effectiveness of support services for children and young people with challenging behaviours related to or secondary to disability, who are in out-of-home care: A systematic review. *Children and Youth Services Review, 34*(4), 758–770.

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Corrigendum

Corrigendum to “Child maltreatment and social welfare service involvement is linked to higher rates of criminal cautions and convictions by early adulthood” [Child Abuse & Neglect, 2025, volume 170, article number 107789]

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The authors regret that errors occurred with some references, citations, and descriptions of data coverage in the published article. The corrections are as follows:

1. DfE 2022a has an incorrect hyperlink, the correct web location is <https://explore-education-statistics.service.gov.uk/find-statistics/children-in-need/2022>
2. The following reference has been updated online, and the date of publication is 2024: DfE 2023a, Children in need: Methodology Retrieved from <https://explore-education-statistics.service.gov.uk/methodology/characteristics-of-children-in-need-methodology>
3. In section 2.2.2 we incorrectly refer in brackets to the Children in Need census as ‘Section 83’. This is incorrect and should be disregarded.
4. In section 2.2.3, we incorrectly report the coverage of the police national computer (PNC), which should have stated that the PNC has information on all offenders in England and Wales.
5. In section 4 we state, “The majority of children who receive a CWS intervention in childhood have experienced abuse or neglect, and many have been exposed to domestic violence (DfE, 2022a)”. Following discussion with the data owners, we would like to change this wording to be “Many children who receive...”.
6. In section 4.1 we omitted one in text citation, Leyland (2024), for a section that reads: ‘A sensitivity analysis on these data including only cases where CJS contact occurred more than a year after the CWS intervention, found similar effect estimates, although further exploration of the impact of different care experiences would be of benefit to the field’ (Leyland, 2024). The citation is already referenced correctly in the reference list.

The authors would like to apologise for any inconvenience caused.

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