

Factors affecting the social gradient in children's social care

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Abstract

The social gradient in children's social care refers to the relationship between socio-economic status and the likelihood of a child welfare intervention. This article reports on a quantitative study of national administrative data, aiming to identify social gradients across all local authorities in England and to examine the factors affecting their relative strength. An anonymised extract of case-level information on all school-aged children involved with statutory social care services in 2018–2019 was combined with income deprivation data for 32,837 small neighbourhoods. Poisson regression models were used to calculate how much intervention rates could be expected to rise for each 10 percent increase in neighbourhood deprivation. This produced a single number indicator of the social gradient that could be compared for different groups of children. The strongest social gradients were found for younger children, White children, children assessed with neglect and children on protection plans under the category of neglect. For children receiving statutory services the social gradient increased at every threshold of intervention. Findings suggest the shift from prevention to intervention in children's social care is exacerbating inequalities and encouraging a disproportionate focus on poorer families. Implications are discussed for reforming child welfare services in the context of widening social inequalities.

Keywords: child protection, child welfare, inequalities, interventions, quantitative analysis, social gradient

Accepted: November 2021

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Introduction

The social gradient is a term used primarily by public health researchers to describe the relationship between people's socio-economic status and their health and well-being. In particular, it refers to the phenomenon that people who are more disadvantaged in socio-economic terms tend to have worse health (and shorter lives) than people who are more advantaged (Donkin, 2014). The well-known 'Whitehall studies' carried out with UK civil servants in the 1960s and 1980s showed that mortality rates, along with various indicators of poor physical and mental health, were strongly and inversely associated with people's socio-economic position as measured by their grade of employment (Marmot *et al.*, 1991), and that such graded differences persisted well into retirement and old age (Marmot and Shipley, 1996). Since the Whitehall study, the idea of a social gradient has underpinned analysis of health inequalities in the general population. For example, insecure and poor quality employment has been linked to higher risks of poor physical and mental health, attributable in part to the relationship between people's status at work and the degree of control and support they experience (Marmot *et al.*, 2010). Social gradients are also a core element of research into income equality, which has found life expectancy and other health outcomes to be significantly affected by the distribution of income and wealth within countries (Wilkinson and Pickett, 2010; Pickett and Wilkinson, 2015).

Although well established in public health, an inequality perspective has only recently started to become prominent in the field of child welfare. Deprivation is widely considered a key driver of rates of protective interventions and admissions to state care (Oliver *et al.*, 2001; Dickens *et al.*, 2007), whilst the complex links between poverty and child maltreatment are increasingly recognised as a fundamental concern (Cancian *et al.*, 2013; Bywaters *et al.*, 2016). In the UK, children from disadvantaged backgrounds are found to be at higher risk of child abuse and neglect, whether self-reported (Radford *et al.*, 2011) or substantiated by professionals (Sidebotham *et al.*, 2006; Mok *et al.*, 2010). Research in other countries has similarly found that poor families are much more likely to be in contact with child welfare services (Sedlak *et al.*, 2010; Cancian *et al.*, 2013; Doidge *et al.*, 2017; Lefebvre *et al.*, 2017; Slack *et al.*, 2017; Witte *et al.*, 2019). These findings connect with the literature showing significant ethnic disparities in intervention rates (Roberts, 2014; Blackstock *et al.*, 2020; Dettlaff and Boyd, 2020; Harnett and Featherstone, 2020). Such disparities point to the way in which structural biases within child welfare systems (Hill, 2004) are fundamentally connected to wider social inequalities emerging from interconnecting forms of disadvantage, discrimination and prejudice.

A substantial body of evidence on child welfare inequalities was gathered by the Child Welfare Inequalities Project, which conducted mixed methods research with a representative sample of local authorities (LAs) in all four UK countries (Bywaters, 2020; Bywaters *et al.*, 2020; Webb *et al.*, 2020). The study found a steep social gradient, with 'children in the most deprived 10% of small neighbourhoods in the UK over 10 times more likely to be in foster or residential care or on protection plans than children in the least deprived 10%' (Bywaters, 2020, p. 4). Social gradients varied in degree both within and between the constituent countries of the UK and were steeper for younger children than for older children, whilst the intersection of deprivation with other factors, particularly ethnicity, was found to play a key role in unequal rates of intervention. There was also evidence of an 'inverse intervention law', which meant that less deprived LAs tended to have lower intervention rates on average than more deprived LAs, but higher intervention rates when comparing neighbourhoods that were equally deprived across LAs. Related research undertaken by (Hood *et al.*, 2020a) investigated the link between inverse intervention and system conditions in children's social care, finding evidence of differential screening and rationing among LAs with different levels of spending power relative to the level of demand. Analysis of intervention rates in six LAs suggested that the social gradient of intervention was particularly steep for children who were young, White British, and who were assessed in relation to concerns about neglect. There was also some evidence that inequalities increased as children progressed through the system from the point of referral. Given the limited sample of LAs, further research was necessary to test the generalisability of these findings.

With the COVID-19 pandemic drawing attention to the inequalities in children and young people's health and welfare, there was also need for more evidence on the factors affecting the strength of the social gradient for children referred to statutory services. The empirical work described below contributes to the knowledge base through a study of the national datasets for children's social care (CSC), which is an umbrella term for statutory child welfare services provided by local governments in England. The research questions were:

1. what is the social gradient for CSC services at different thresholds of intervention?
2. for which children is the social gradient most pronounced? and
3. in which areas is the social gradient most pronounced?

Methods

The research was designed as a quantitative analysis of secondary data from the Children in Need (CIN) Census, which is an administrative

dataset of children referred to CSC services in England. The CIN Census is controlled by the Department for Education and an extract is held by Ofsted, the inspectorate for CSC. Ethical approval for the study was provided by the Research Ethics Committee of the authors' university and research governance approvals obtained from both the Department for Education and Ofsted. Access was via an encrypted Ofsted computer so that all data storage and processing remained within the Ofsted secure environment. Analysis proceeded in three stages: creation of a tailored dataset, regression analysis to calculate social gradient scores and stratification to study the impact of key variables.

First, anonymised administrative data were extracted for all children recorded on the CIN Census in 2018–2019. The data included all 152 LAs in England with a responsibility for providing children's services; however, two of them, Isles of Scilly and the City of London, were omitted from the analysis due to very small population sizes. The extract included information about every episode of provision, including all referrals and assessments. LAs have a duty to provide services to children who are assessed as being 'in need', which is defined under the Children Act 1989 as 'a child who is unlikely to reach or maintain a satisfactory level of health or development, or their health or development will be significantly impaired, without the provision of services, or if the child is disabled' (Children Act, 1989). A minority of CIN become subject to protective interventions under Section 47 of the Act, including investigations of suspected harm. The main types of episode were therefore categorised as referrals, assessments, CIN, Section 47 investigations, child protection (CP) conferences and CP plans. A CP conference is a multi-agency meeting that is convened when a Section 47 investigation concludes that a child may not be safe or their needs are not being met. The conference decides whether a protection plan coordinated by a social worker is necessary to ensure the child's safety and well-being.

Data on income deprivation from the national Index of Multiple Deprivation (IMD) were then added to the quantitative dataset on CIN. The income domain of IMD is the proportion of individuals on a low income living in small geographical areas called lower layer super output areas (LSOAs). Each LSOA has an average of 1,700 residents. LSOAs can be aggregated to larger areas called middle layer super output areas (MSOAs), which comprise an average of 7,800 residents, and to whole LAs. The income deprivation domain includes individuals on income support, income-based jobseekers' allowance and income-based employment and support allowance (MHCLG, 2019). Because LSOA codes are not recorded in the CIN Census, this information had to be obtained from the School Census on the basis of a Pupil Matching Reference—an anonymised child-level identifier based on Unique Pupil Number (UPN). The match rate was 81 percent for children aged five to fifteen years, with much lower match rates for under five and over sixteen. It

was therefore decided to restrict the cohort for analysis to the five to fifteen years age group in order to minimise the risk of a skewed sample. The non-matches were mostly due to missing data on UPN in the CIN census which are manually recorded for each child referred. Some of this missing data was due to the fact that privately educated or exclusively home-schooled children are not included in the School Census (and therefore do not have UPNs) whilst the rest is unexplained. It is reasonable to assume that missing UPN data on the CIN census might have some implications for the findings i.e. they could skew the data towards a slightly more or less deprived population. The match rate was slightly higher amongst White children (85 percent) compared to all other ethnic groups. Variation between LAs was unconnected to other variables such as intervention rates, average deprivation, spending levels or workforce indicators. Overall, the dataset comprised 300,000 referrals, 186,000 CIN episodes (starting during the year) and 34,000 CP plans (starting during the year). This included multiple episodes; for example, there were 260,000 children referred during the year. Rates per 10,000 children (aged five to fifteen years) were calculated at different levels of aggregation (LSOA, MSOA and LA), using the 2019 mid-year population estimates published by the Office for National Statistics (ONS, 2019b). The data on ethnicity were adjusted to 2019 levels based on the overall population growth since the 2011 census (ONS, 2019a), as population growth by ethnicity at MSOA level is not routinely published by the ONS. Given that ethnic populations will have varied since the 2011 census (i.e. due to variations in birth rates and migration) the results for ethnicity should be treated with some caution.

The second stage was to calculate the social gradient of referrals to CSC and subsequent assessments and interventions. A measure of multiplicative rather than additive change was required to make comparisons between different areas and groups. Poisson regression models were used to calculate the incidence rate ratio (IRR), or the increase in intervention rates that could be expected with every increase of ten percentage points in IMD income deprivation. By way of illustration, an IRR of two would mean that rates of intervention could be expected to double for every ten percentage point increase in the percentage of children living in income deprivation; for example, if CP Plan rates were thirty per 10,000 they could be expected to increase to sixty per 10,000. When comparing IRRs for different groups we are able to see where the social gradient (i.e. the effect of deprivation on rates of intervention) is the steepest. A multilevel framework was employed to adjust for LA membership, with group-mean centring of LSOA-level deprivation and grand-mean centring of LA-level deprivation to separate the within- and between-LA effects of deprivation (Enders and Tofighi, 2007). The lack of a reference category for children not involved with CSC services

meant using count regression to estimate rate ratios on the basis of population data published by the ONS.

The third stage was to compare the IRRs of interventions for different children in different geographical areas to identify the factors affecting the strength of the social gradient. Limitations of the data stemming from a lack of counterfactual data on individuals not in the CIN census data and a lack of any individual-level measure of income meant that the data needed to be analysed after aggregation to LSOA and MSOA levels. As a consequence of this, each of the child characteristics (i.e. age, gender and ethnicity) and case characteristics (i.e. factors recorded at assessments and CP Plan categories of abuse) needed to be considered in turn as it was not possible to include all indicators within a single model. Interaction terms were used to test the effect of contextual indicators such as LA-level deprivation and urban/rural classification on the social gradient. The results on ethnicity were based on MSOA-level population data and so were not directly comparable with social gradient findings on age and gender, which were based on LSOAs.

Findings

Social gradients were calculated for all 150 LAs in relation to referrals, assessments, CIN plans, Section 47 investigations, CP conferences and CP plans. The social gradient score is calculated in the regression models as an IRR. It shows how much rates of each type of involvement with services can be expected to rise with every 10 percentage point increase in the proportion of low-income families in the neighbourhood. [Figure 1](#) shows the social gradient score for referrals plotted against LA-level income deprivation for all 150 LAs. It illustrates the variation between LAs, with the social gradient ranging from 1.2 to 2.4, as well as the strong negative association with LA-level deprivation. In other words, less deprived LAs tended to have a stronger social gradient. The average social gradient across all LAs was 1.62 for referrals. This means that in an averagely deprived LA, the rate of referrals in a neighbourhood was predicted to rise by 62 percent for every 10 percent increase in the proportion of households on low incomes. It also means that in more affluent LAs, where the social gradient was higher, the level of neighbourhood deprivation had a greater influence on referral rates than in more deprived LAs.

A social gradient was also found for all other types of CSC intervention, as summarised in [Table 1](#). The social gradient score for children receiving a social work assessment was similar to referrals. For children receiving a statutory service, the social gradient score increased at every threshold of intervention. There was a particularly marked rise at the point where children are made subject to a CP conference or CP plan.

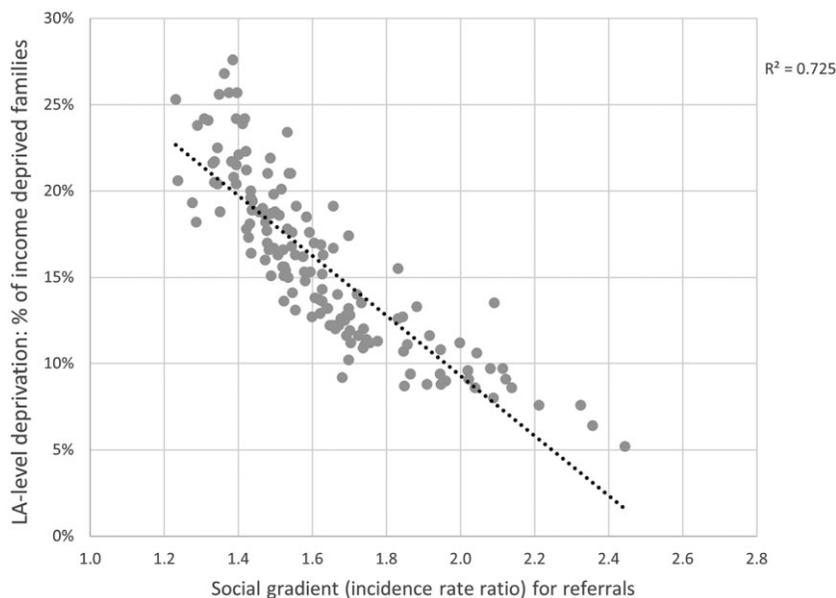


Figure 1: Social gradient of referrals and income deprivation for LAs in England.

For episodes involving CP plans, the average social gradient score was 1.80, so that in an averagely deprived LA the rate of referrals in a neighbourhood was predicted to rise by 80 percent for every 10 percent increase in the proportion of households on low incomes. LA variation in the social gradient for CP plans was greater than for referrals, ranging from 1.1 to 3.1 (data not shown in the table), and was also negatively associated with LA-level deprivation. Neighbourhood deprivation therefore had a much stronger influence on rates of CP plans if the LA was, on average, less deprived. In [Table 1](#), the relationship between LA-level deprivation and the social gradient is shown by the interaction coefficient in the final column. This coefficient can be multiplied or divided by the average score to estimate the social gradient in LAs whose overall context is either 'low' (minus 10 percent overall income deprivation) or 'high' (plus 10 percent overall income deprivation). For example, in a high-deprivation context, rates of CP plans were predicted to increase 1.39 times for every decile change in neighbourhood deprivation, whereas in a low-deprivation context, the predicted rate of increase was 2.33.

The same type of analysis was carried out for child characteristics, namely gender, age and ethnicity. The results are summarised in [Table 2](#) for referrals. For gender, no significant differences between male and female children were found in the social gradient of episodes at any level

Table 1. Rates of provision and social gradients at different thresholds

Measure	N (percentage of episodes referred)	Rate per 10,000	Social gradient (IRR) scores	Social gradient (IRR) scores in different LA contexts		Interaction effect
				Low IMD	High IMD	
Referral	300,830 (100.0)	400.3	1.62 (1.62–1.63)	2.03	1.29	0.80***
Assessment	295,591 (98.3)	393.3	1.62 (1.61–1.63)	2.06	1.27	0.79***
CIN	186,112 (61.9)	247.6	1.64 (1.63–1.64)	2.05	1.31	0.80***
S47	98,517 (32.7)	131.1	1.69 (1.68–1.70)	2.16	1.32	0.78***
CP Conference	33,685 (11.2)	44.8	1.80 (1.78–1.82)	2.38	1.36	0.76***
CP Plan	31,380 (10.4)	41.8	1.80 (1.78–1.82)	2.33	1.39	0.77***

*** $p < 0.001$.

of contact or provision. For example, the average social gradient score for referrals was 1.62 for both males and females. However, differences were found in relation to age, also summarised in Table 2. The average social gradient score for referrals was found to be higher for younger children and decreased gradually for episodes in each year group from age five years onwards. However, the confidence intervals (in brackets next to the average) show that differences between age groups only became statistically significant when comparing children aged five to six years with children aged thirteen plus years. The lack of data on under 5s was an obvious limitation for this part of the analysis.

Further differences emerged in the analysis of ethnicity, which was restricted to broad categories to protect the anonymity of areas with small numbers of children from minority groups. The overall child population was 78 percent White children, of whom 95 percent were White British. The next largest groups were Asian (9.8 percent) and Black (5.2 percent) children. These are broad and heterogeneous categories, which obscure significant differences between different communities and cultures

Table 2. Rates of provision and social gradient scores for categories of gender, age and ethnicity

Measure	Total population (%)	N (rate per 10,000)	Social gradient (IRR) scores	Social gradient (IRR) scores in different LA contexts		Interaction effect
				Low IMD	High IMD	
Gender						
Males	3,851,406 (51.2)	152,945 (397.1)	1.62 (1.62–1.63)	2.03	1.3	0.80***
Females	3,664,378 (48.8)	147,554 (402.7)	1.62 (1.61–1.63)	2.03	1.29	0.80***
Age, years						
5	690,987 (9.2)	22,540 (326.2)	1.67 (1.64–1.69)	2.09	1.33	0.80***
6	706,617 (9.4)	26,966 (381.6)	1.65 (1.64–1.67)	2.02	1.36	0.82***
7	727,796 (9.7%)	28,431 (390.6)	1.64 (1.62–1.66)	2.02	1.33	0.81***
8	712,064 (9.5)	28,642 (402.2)	1.64 (1.62–1.66)	2.07	1.3	0.79***
9	700,084 (9.3)	28,634 (409.0)	1.62 (1.60–1.64)	2.01	1.3	0.80***
10	689,618 (9.2)	28,434 (412.3)	1.65 (1.63–1.66)	2.12	1.28	0.78***
11	695,642 (9.3)	27,776 (399.3)	1.63 (1.61–1.65)	2.03	1.31	0.80***
12	673,685 (9.0)	27,158 (403.1)	1.63 (1.61–1.65)	2.07	1.28	0.79***
13	660,846 (8.8)	27,298 (413.1)	1.61 (1.59–1.63)	1.99	1.3	0.81***
14	633,942 (8.4)	27,826 (438.9)	1.60 (1.58–1.61)	2	1.27	0.80***
15	624,503 (8.3)	27,125 (434.3)	1.61 (1.59–1.63)	2.03	1.28	0.79***
Ethnicity						
Asian	736,865 (9.8)	23,423 (317.9)	1.29 (1.25–1.32)	1.54	1.07	0.83***
Black	390,289 (5.2)	20,823 (533.5)	1.27 (1.23–1.31)	1.6	1.01	0.79***
Mixed	375,954 (5.0)	21,659 (576.1)	1.63 (1.60–1.66)	2.21	1.2	0.74***
Other	133,247 (1.8)	6,426 (482.3)	1.71 (1.63–1.78)	2.31	1.26	0.74***
White	5,879,430 (78.2)	216,225 (367.8)	1.91 (1.90–1.92)	2.57	1.42	0.74***

*** $p < 0.001$.

living in the UK. Table 2 summarises the results for referrals. It shows that rates of referrals were the highest for children of Mixed Heritage (576/10,000) and the lowest for Asian children (318), with similar disparities evident in the rates of CIN and CP provision. On average, the social gradient of referral was the strongest for White children (1.91) and the lowest for Black children (1.27). The interaction effect meant that LA-level deprivation exacerbated these differences, so that the lowest social gradient was found for Black children in high-deprivation contexts (1.01) and the highest social gradient was found for White children in low-deprivation contexts (2.57). A similar pattern obtained for other types of provision, with White children also having the strongest average social gradient for CIN episodes (1.93) and CP plans (2.20).

The next stage of analysis examined the effect of episode characteristics on the social gradient, focusing on the needs and risks identified in social work assessments ('factors at assessment') and categories of CP plans. Table 3 summarises the results for factors at assessment, which can be single or multiple within an episode, i.e. social workers can specify more than one. The table shows that the most common risk factor was domestic violence concerning the parent, i.e. concerns that the child's parent or carer is being subjected to domestic violence and abuse. This factor was identified in 30.2 percent of assessments. The least prevalent was gang involvement, which was identified in 1.9 percent of assessments. The factor with the highest social gradient of assessment was neglect, which had a social gradient score of 1.84, followed by parental drug misuse (1.80). The factors with the weakest social gradient were child's physical disability (1.47) and child's learning disability (1.51). The interaction effect with LA-level deprivation exacerbated these differences, so that the weakest social gradients were found among children in high-deprivation contexts assessed with a learning disability, and the strongest social gradients were found among children in low-deprivation contexts assessed in relation to neglect.

The results for CP plans are also summarised in Table 3. The majority of CP plans were for neglect (43.9 percent) or for emotional abuse (40.8 percent). The strongest social gradients were found for the neglect category (1.98) and the weakest for sexual abuse (1.63). The interaction effect with LA-level deprivation was not present for the sexual abuse category, which means that unlike other types of CP plan, variations between LAs in the social gradient for sexual abuse were not significantly associated with LA-level deprivation. Otherwise, the strongest social gradients were found in low-deprivation contexts among children with CP plans for neglect (2.57) and the weakest were found in high-deprivation contexts among children recorded under multiple categories of abuse (1.15).

The final part of the analysis examined the effect of urban/rural classification on the social gradient in combination with LA-level deprivation.

Table 3. Rates of provision and social gradient scores for factors at assessment and CP plan categories

Measure	N (%)	Rate per 10,000	Social gradient (IRR) scores	Social gradient (IRR) scores in different LA contexts		Interaction effect
				Low IMD	High IMD	
Factors at assessment						
Child's alcohol misuse	5,109 (2.3)	6.8	1.63 (1.59–1.67)	2.21	1.21	0.74***
Parent's alcohol misuse	33,153 (14.7)	44.1	1.63 (1.61–1.64)	2.11	1.26	0.77***
Child's drug misuse	9,046 (4.0)	12	1.67 (1.64–1.70)	2.21	1.26	0.76***
Parent's drug misuse	27,685 (12.3)	36.8	1.80 (1.78–1.82)	2.46	1.33	0.73***
DV concerns (child)	26,681 (11.8)	35.5	1.66 (1.64–1.68)	2.16	1.27	0.77***
DV concerns (parent)	68,179 (30.2)	90.7	1.67 (1.65–1.68)	2.17	1.28	0.77***
Child's mental health	29,671 (13.1)	39.5	1.56 (1.54–1.57)	1.96	1.24	0.80***
Parent's mental health	60,564 (26.8)	80.6	1.66 (1.65–1.68)	2.11	1.31	0.79***
Child's learning disability	23,792 (10.5)	31.7	1.51 (1.49–1.53)	1.92	1.19	0.79***
Parent's learning disability	4,776 (2.1)	6.4	1.78 (1.73–1.82)	2.38	1.33	0.75***
Child's physical disability	11,822 (5.2)	15.7	1.47 (1.44–1.50)	1.76	1.22	0.83***
Parent's physical disability	12,020 (5.3)	16	1.68 (1.66–1.71)	2.21	1.28	0.76***
Young carer	9,627 (4.3)	12.8	1.73 (1.70–1.76)	2.06	1.45	0.84***
Going/being missing	6,979 (3.1)	9.3	1.66 (1.62–1.69)	2.13	1.29	0.78***
Child sexual exploitation	8,683 (3.8)	11.6	1.63 (1.60–1.66)	2.15	1.23	0.76***
Gangs	4,240 (1.9)	5.6	1.76 (1.70–1.81)	2.27	1.36	0.78***
Social unacceptable behaviour	19,763 (8.8)	26.3	1.70 (1.68–1.73)	2.19	1.33	0.78***
Self-harm	10,792 (4.8)	14.4	1.53 (1.50–1.56)	1.79	1.31	0.85***
Neglect	40,485 (17.9)	53.9	1.84 (1.82–1.86)	2.51	1.35	0.73***
Emotional abuse	50,475 (22.4)	67.2	1.64 (1.62–1.65)	2.1	1.28	0.78***
Physical abuse	33,951 (15.0)	45.2	1.63 (1.61–1.64)	2.02	1.31	0.80***
Sexual abuse	15,120 (6.7)	20.1	1.58 (1.56–1.61)	1.96	1.28	0.81***
Other	42,663 (18.9)	56.8	1.60 (1.58–1.61)	2.01	1.27	0.79***
CP plan categories						
Emotional	12,798 (40.8)	17	1.67 (1.64–1.70)	2.12	1.31	0.79***
Neglect	13,780 (43.9)	18.3	1.98 (1.95–2.01)	2.57	1.52	0.77***
Physical	2,287 (7.3)	3	1.72 (1.66–1.79)	2.14	1.39	0.81***
Sexual	1,530 (4.9)	2	1.62 (1.54–1.70)	1.74	1.5	0.93
Multiple	985 (3.1)	1.3	1.65 (1.56–1.75)	2.38	1.15	0.69***

*** $p < 0.001$.

The results are summarised in Table 4, which shows that social gradients were higher in more affluent LAs and in more rural LAs. Both effects were found to be statistically significant ($p < 0.001$) for referrals, CIN episodes and CP plans. For example, the strongest social gradient for CP

Table 4. The effect of LA deprivation and urban/rural classification on the social gradient (referrals)

Urban/Rural classification	Referrals			CIN			CPP		
	Low dep.	Mid dep.	High dep.	Low dep.	Mid dep.	High dep.	Low dep.	Mid dep.	High dep.
Rural	2.31	1.88	1.53	2.30	1.87	1.52	2.78	2.20	1.74
Urban	1.96	1.59	1.30	1.98	1.61	1.31	2.23	1.76	1.40

plans was found among children living in low-deprivation rural areas (2.78) and the weakest social gradient for CP plans was found among children living in high-deprivation urban areas (1.40).

Summary of findings

- Social gradient scores (or IRRs) represent the multiplicative ('times') increase in rates of referral, assessment or intervention that can be expected for every ten percentage point increase in the proportion of low income families living in the neighbourhood.
- Social gradients were calculated for all LAs in England at six different thresholds for CSC involvement: referral, assessment, CIN plan, Section 47 investigation, CP conference and CP plan.
- The social gradient for all types of provision was negatively associated with LA-level deprivation, i.e. the more affluent the LA, the higher the social gradient.
- For children who received statutory services following referral and assessment, the social gradient increased at every subsequent threshold. The rise was particularly significant for children who were subject to CP conferences or CP plans.
- There were no significant gender differences in the social gradient scores for referrals or other interventions.
- Social gradients for referrals, as well as subsequent interventions, were steeper for younger children and decreased gradually with each successive year group.
- Using broad categories of ethnicity, the social gradient was the steepest for White children and the lowest for Black children. However, these results mask differences between people of distinct ethnicities within those broad categories.
- Based on factors identified in social work assessments, social gradient scores were the highest for children who were assessed with neglect and the lowest for children with a disability.

- Based on categories of CP plans, social gradient scores were the highest for children who were on a CP Plan because of neglect, and the lowest for children under a CP plan because of sexual abuse.
- Social gradients were higher amongst children living in rural areas. This effect was found to be statistically significant after controlling for LA-level deprivation.

Discussion

Social inequalities are reflected but also exacerbated by the activities of the child welfare system. The study shows this by comparing the effects of income deprivation for different children living in different neighbourhoods and LAs, demonstrating that the social gradient of provision is affected by factors such as the circumstances and needs of children, the demographics of children, the characteristics of local neighbourhoods and the characteristics of areas for which LAs are responsible. Its main limitations are the exclusion of children under five- and sixteen-/seventeen-year-olds and the lack of a reference group for children not referred to CSC. The analysis of ethnicity was limited to broad categories recorded by the Department for Education, which means that important differences between ethnicities could not be examined. Access to household-level socio-economic data on families receiving services, which is not routinely collected by CSC, would also have greatly improved the granularity of analysis. The strength of the analysis lies in its use of a national dataset to test and extend findings from previous work based on samples of up to eighteen LAs. The findings provide a comprehensive picture of the social gradient in CSC at different thresholds of involvement and in relation to key factors of interest.

One of the key findings from this study is that a strong social gradient is already present at the point of referral to CSC, and then increases as children progress through the system before reaching a peak at the stage of a CP conference or CP plan. In other words, statutory services start off with steep inequalities in demand and then see those inequalities exacerbated at every threshold of intervention. There are two main implications to this. One is that the impact of social inequality accumulates well before the point of a statutory referral and so addressing the social gradient will require sustained investment in preventative services at the universal and community level. Unfortunately, social policy over the last decade has headed in exactly the opposite direction, with a progressive shift to late intervention accompanied by large cuts to youth services, children's centres and community-based family support (Kelly *et al.*, 2018; Action for Children, National Children's Bureau, The Children's

Society and Barnados, 2020; YMCA, 2020). LAs in England have tried to compensate for these cuts by investing in targeted prevention under the umbrella of ‘Early Help’, which includes a range of services such as family hubs, children’s centres, parenting groups, mentors, positive activities for young people and relationship support (Frost *et al.*, 2015; Lucas and Archard, 2021). However, research suggests that Early Help has increasingly become a tertiary service for children and families with complex needs, replicating the ‘screen-and-intervene’ model of statutory social care with processes geared around assessment and short-term casework (Lucas and Archard, 2021). A similar trend has been observed in Sure Start children’s centres, which have become fewer in number and more focused on families referred by professionals (Smith *et al.*, 2018). The findings from this study suggest that adding layers of targeted prevention might actually serve to exacerbate the disproportionate focus on poorer families in the statutory system. Reversing such trends would therefore require not only a change in funding priorities but also a strategic change in direction.

A second point concerns the significant strengthening of the social gradient around the transition to CP. It highlights the difference that living in a more deprived neighbourhood makes to a child’s chances of being on a CP plan, which has also been demonstrated by other research into welfare inequalities (Bywaters, 2020; Webb *et al.*, 2021). One way to interpret this finding is to point to the role of poverty and deprivation as risk factors for child maltreatment (Bywaters *et al.*, 2016), as progressively revealed by the filtering of substantiated cases of abuse and neglect. However, supply-side factors are clearly important too, as evidenced by the ‘inverse intervention’ effect and the strengthening of the social gradients in low-deprivation LA contexts. It is worth noting that the threshold to CP marks a decisive shift in the power of the state to monitor and intervene in private family life. It is hardly coincidental that the point at which statutory agencies decide that families need policing is also the point at which they decide more than ever to concentrate their attention on poorer families. Much of the increase in CP activity over the past decade has been driven by neglect, which accounts for over half of all CP plans reported annually (Department for Education, 2020). The findings from this study confirm that the strongest social gradients are found for children who are assessed and receive services in relation to neglect. Indeed, identifying neglect can often make the difference between children who receive services as CIN and those who go on to have a CP plan (Hood *et al.*, 2020a). Professional responses to concerns about neglect therefore lie at the heart of the disproportionate focus on poor families in the CP system.

Researchers in the critical realist tradition sometimes point to the value of ‘exceptional cases’ as a way of studying structures and mechanisms that elsewhere may be partially obscured by other contextual

conditions (Danermark *et al.*, 2002). In this sense, the highly disproportionate focus on poor families in affluent rural LAs may be seen as an extreme form of the tendency that exists in all LAs. Arguably rural areas have particular characteristics likely to incur hardship for households on low incomes. For example, government statistics show that the cost of living and food is higher in rural areas (ONS, 2017) and that basic amenities and services are geographically more dispersed, making it harder for families to access them (Department for Environment Food and Rural Affairs, 2016). Austerity policies have had a severe impact on the infrastructure for family support in rural England, including the mass closure of children's centres (Smith *et al.*, 2018). Moreover, the generally prosperous self-image of rural England produces even more stigma for families who are struggling financially (May *et al.*, 2020) and live in pockets of deprivation in otherwise well-off communities. Mounting financial pressures on LAs over the past decade present a huge challenge for providing effective coverage of preventative services in large, sparsely populated rural countries; as noted by Hood *et al.* (2020b) in their study of drivers of demand in an affluent rural LA, the statutory response to the difficulties faced by families has become increasingly geared towards CP interventions, particularly around neglect.

Financial and demand pressures, combined with a realignment towards 'core' protective services, have come to define the sector over the past decade (Association of Directors of Children's Services, 2021). Government austerity policies have had a particularly severe impact on deprived areas, with knock-on effects on the performance of services (Webb and Bywaters, 2017). The 'investigative turn' in CSC (Bilson *et al.*, 2017) marked by increasing numbers of court ordered removals to care have had a huge impact on poor and deprived communities (Broadhurst and Mason, 2017). At the heart of such trends lies a legalistic and individualistic approach to child welfare that has long dominated the English system (Gilbert *et al.*, 2011). Practice has become centred around identifying risk factors in the child's immediate family environment and addressing them through changes in parenting and (for older adolescents) in children's own behaviour. The system works to protect children from harm but at the cost of ignoring the social context of demand and exacerbating social inequalities for families inside the system. A social model of CP, as advocated by Featherstone *et al.* (2018), would require substantial resources to be directed towards ameliorating the socio-economic conditions that lie at the heart of the disproportionate rates of intervention in deprived neighbourhoods. In other words, child welfare must be set within a broader framework of social policies to address problems such as the crisis in public housing, burgeoning food poverty and precarious, low-paid employment. Evidence from this study also suggests that changes in local area income deprivation, which might be expected from changes in levels of benefits and employment, for

example, might have implications for future levels of intervention. Proactive mapping of the social context of demand is therefore in the interests of senior leaders and administrators, to ensure that processes to ensure effective decision making and tailored support and intervention for children and families can be combined with concerted action to address root causes.

Conclusion

This article has reported on a study of the national datasets for CSC in England, which investigated concentrations of inequality in the child welfare system. Findings showed a steep social gradient at the point of referral to statutory services, which became stronger at each threshold of provision and was particularly steep among children receiving CP interventions for neglect. The highest social gradients were found among young children and White (British) children in affluent and rural LAs. Overall, the findings suggest that services in their current form are ill-equipped to understand and respond to the social context of demand, and that a reliance on individualised interventions to identify risk and protect children from harm is magnifying social inequalities in the child population. A social model of CP may help to reorient social care towards supporting, as opposed to targeting, children, families and communities.

Acknowledgements

The authors would like to acknowledge the support and advice provided by Adam King and Ed Jones at Ofsted, Calum Webb at the University of Sheffield and Paul Bywaters at the University of Huddersfield.

Funding

This research was funded by the Nuffield Foundation, grant number JUS/43238.

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