

# CSI 19: Inequality in children's mental health and behavioural problems: what are the trends?

## Summary

- Over the past half-century, social class inequality in the probability of an 11-year-old having a high level of conduct problems (in the top 10% of their cohort) has increased sharply
- Working class children now appear nearly four times as likely to be among those with the worst conduct problems, compared with those from the most advantaged backgrounds
- Similarly, the probability of an 11-year-old having a high level of emotional symptoms has become more closely linked to parental social class background, though the increase is less drastic. In 1969 the social classes had actually been equal in this respect
- Hyperactivity shows a similar pattern, with slight inequality among those born in 1958, and higher levels since
- Children of the unemployed or economically inactive (mostly in single-parent households) tend to fare worst in these areas, although we only have good data for the most recent generation

## Introduction

However much we might like them to be, no child is always happy, calm, and well-behaved. A certain amount of sadness, worry, restlessness and misbehaviour is entirely normal. But some children fare especially badly in one or more of these areas, and these characteristics are often – though certainly not always – carried with them through their lives.

More formally, research indicates substantial continuity in psychosocial wellbeing from childhood to adulthood<sup>i</sup>. Especially in the case of those who display antisocial behaviours, childhood problems often persist and inhibit one's life chances generally<sup>ii</sup>. For instance, behavioural problems often go together with poor performance in school<sup>iii</sup>.

How closely linked are such problems to a child's social class background, and has this link strengthened or weakened over the last half-century? These are the questions we attempt to address in this briefing note. We will look at three distinct aspects of children's psychosocial wellbeing: conduct problems, emotional symptoms, and hyperactivity.

## Methodological details

This note compares three nationally-representative UK birth cohorts, samples of thousands of children born at a particular time (1958, 1970, and 2001/2). We compare each of these cohorts at the age of 11 (10 in the case of the 1970 children). So our data come from 1969, 1980, and 2012/3.

Behaviour is rated by parents (usually the mother) using a standard questionnaire (the Rutter Behaviour Scales for the first two cohorts, the closely related Strengths and Difficulties Questionnaire for the latest). In 1969, this used a face-to-face interview, but the questionnaires were self-completion thereafter. Because there have been changes in the number of questions, their wording, and in the response categories, we do not look at absolute levels of particular problems (as defined, for instance, by having a certain number or severity of symptoms), but rather at the distribution between social classes of *those who have the highest ratings for these problems within their cohort*. Here, children are considered to have a high level of a given problem if they fall within the top 10% of scores in their cohort. This means that we are not able to tell, for instance, whether overall levels of conduct problems have increased or decreased, or whether those with high conduct problems from the first cohort are better- or worse-behaved than those from the most recent (see *What about absolute levels?*)<sup>1</sup>

With regard to the social class groupings, note that for the first cohort, social class is based upon the child's father's current or most recent job. For the latter two cohorts, however, it is based upon the father *or mother's* current or most recent job, taking the higher social class position. The most recent cohort also contains a category labelled 'not applicable.' In a quarter of these households it appears that at least one parent is employed – so there has been some difficulty in assigning their occupation to a social class. In the majority, however, the parent(s) is economically inactive or unemployed. About two-thirds of these workless households are single-parent. Comparable data on such 'not applicable' households are not available for the earlier cohorts.

## Conduct problems

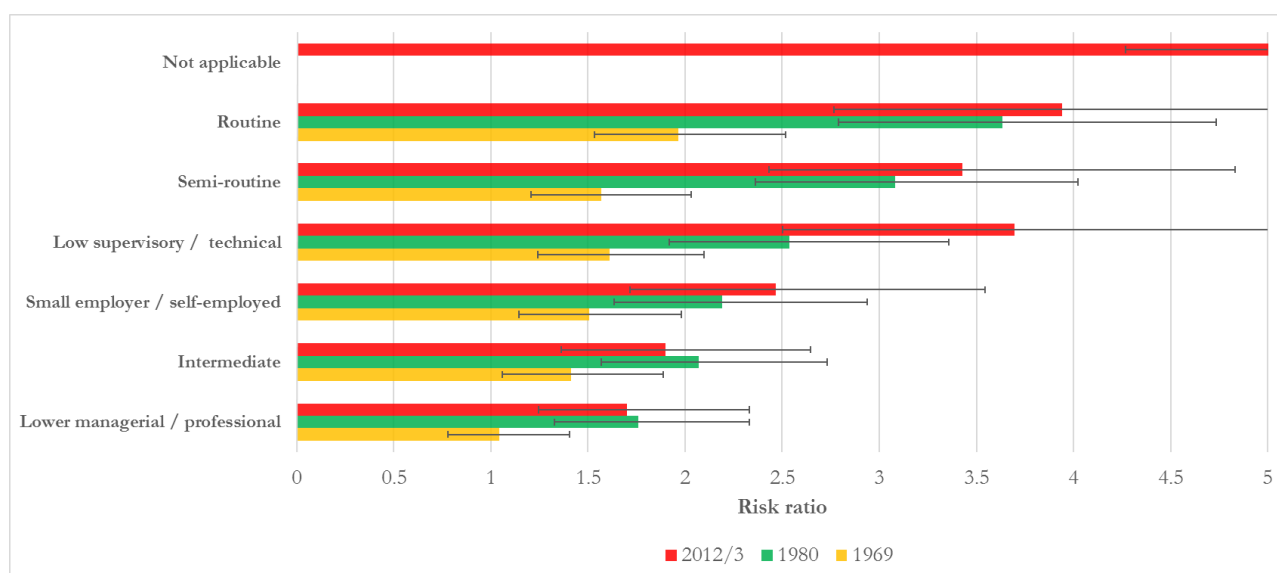
This dimension of children's behaviour corresponds to high ratings on questionnaire items such as 'often fights with other children or bullies them', 'often lies or cheats', 'is often disobedient', and 'often destroys own or others' belongings', and has also been referred to as 'antisocial' or 'hostile-aggressive'. In 1969, there was quite clear class inequality in children's conduct problems (Figure 1). The main contrast is between children with managerial or professional fathers, and the rest: children of fathers working routine, low-skilled jobs, for instance, were around twice as likely to be among the 10% with the worst conduct problems, according to parental report.

## Reading the figures

The bars for each social class group indicate *risk ratios* for each of our three cohorts. Risk ratios tell us how many times more likely it is that an event occurs (e.g. a child has a high degree of conduct problems) in one group compared with another group. In each case, the comparison (of how likely a child from that social class is to have a high degree of conduct problems) is between the social class group indicated, and the most advantaged group (higher managerial/professional). If the risk ratio is close to 1, this indicates that the risk is similar for the two groups. But if the risk of developing these problems is different for different classes, we will see high risk ratios reflecting this inequality. For example, a risk ratio of 2 means that an event is *twice as likely* to occur in this group as in the comparison group. By looking at the three different years in each case, we can see how inequalities have changed or stayed the same over time.

### Figure 1: Inequality in children's conduct problems since 1969: a sharp increase

Reference category is higher managerial/professional household social class. Error bars indicate 95% confidence intervals. The risk ratio for 'not applicable' in 2012/3 is 5.8 (confidence interval 4.3 – 7.8).



These inequalities, already large, appear to have widened greatly.<sup>2</sup> Just a decade later in 1980, ten year-olds in that same routine category were around *three and a half times* as likely as those from the most advantaged backgrounds to be showing the most severe conduct problems among those their age. By 1980, the level of inequality between the highest and lowest groups in 1969 now held between the highest group and children from the intermediate households. Inequality even appears between the higher and lower managerial or professional households.

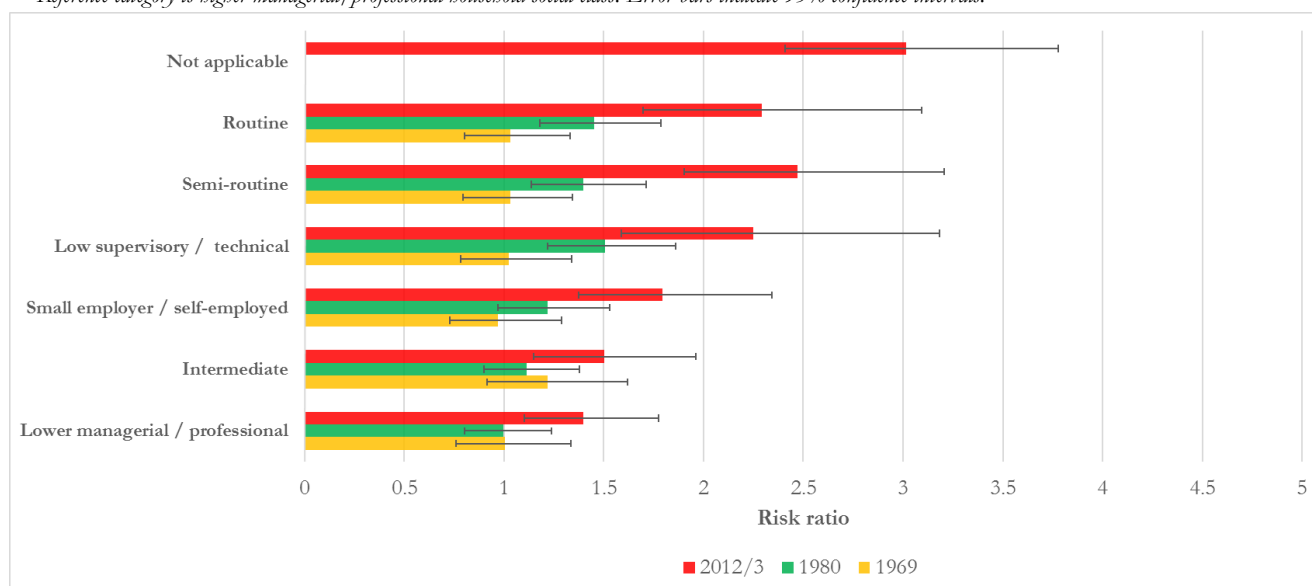
Looking at the children born in 2001/2, these wider inequalities appear to have persisted or even slightly increased<sup>3</sup>. For this cohort we also have data on children in households where a social class categorisation is not applicable (see *Methodological details*). These children (17% of the cohort) are a great deal more likely to be among the group with the most severe conduct problems in the cohort, with a risk ratio of 5.8 – off the chart.

## Emotional symptoms

Also referred to as a 'neurotic' or 'anxious-fearful' dimension, this aspect of children's wellbeing is concerned with depressive or anxious symptoms. Parents are asked to what extent they agree, for instance, that a child 'worries about many things', 'is miserable or tearful', and is 'nervous or clingy in new situations, easily loses confidence.' The 10% of children with the most severe emotional symptoms were remarkably equally spread between the social classes in 1969. In 1980, this had changed and those we would consider working-class children were moderately more likely to be faring badly in this respect.

**Figure 2: Inequality in children’s emotional symptoms since 1969: equality lost**

Reference category is higher managerial/professional household social class. Error bars indicate 95% confidence intervals.



Thirty years on in 2012/3, this inequality has widened further, with risk ratios now above 2 for children from three of the least advantaged class backgrounds. Again it appears that those in the ‘not applicable’ category may be faring even worse still, though we cannot confidently say that this is the case – there is a margin of error in these estimates since we are only sampling some of the children born in these years, not all of them. Nonetheless, this ‘not applicable’ group is clearly faring worse than the more advantaged classes.

### Hyperactivity

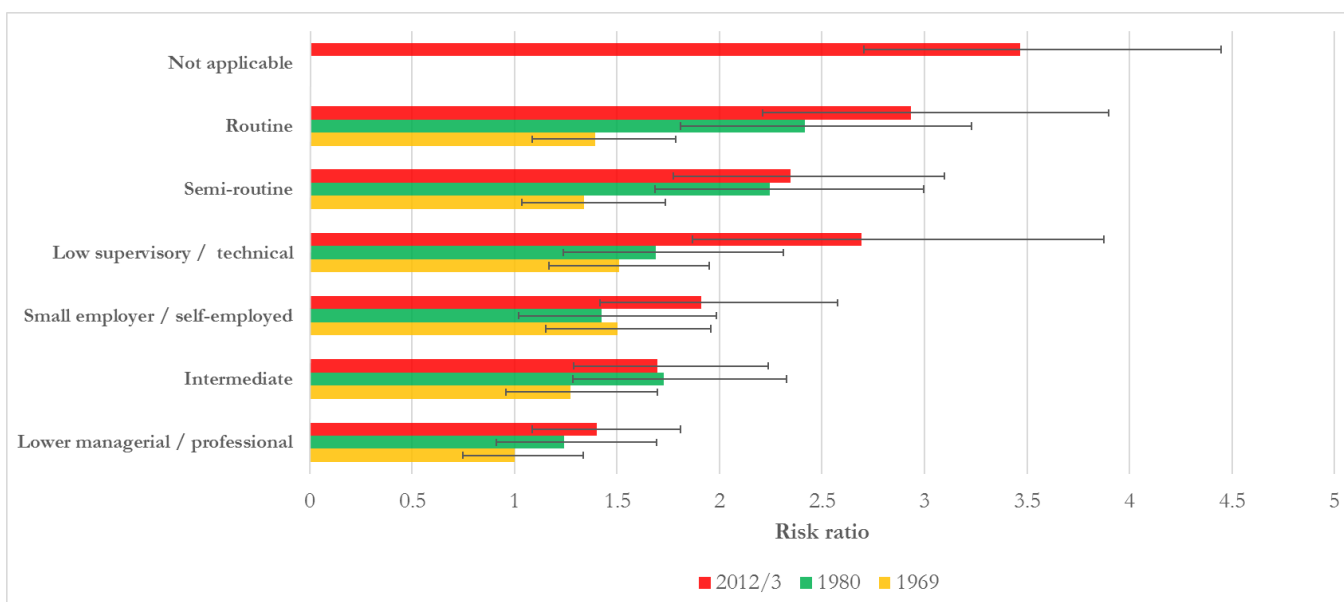
While ‘hyperactivity’ might bring to mind behaviours similar to those we have thought of as indicative of conduct problems, it is a distinct dimension of children’s behaviour in its own right, and may or may not go together with disobedience, destructiveness and the like. In other words, many hyperactive children have no particular problem obeying rules, and many children who often break rules are not hyperactive.

In this case, parents were asked to rate their children according to prompts such as ‘restless, overactive, cannot stay still for long’, ‘is squirmy or fidgety’, and ‘has difficulty in settling to anything for more than a few moments.’

Once again, we see clear increases in inequality over time. In 1969, children from backgrounds outside the managerial/professional classes were moderately more likely to be the most hyperactive in the cohort. The

**Figure 3: Inequality in children’s hyperactivity since 1969: a clear increase**

Reference category is higher managerial/professional household social class. Error bars indicate 95% confidence intervals.



increases that had occurred by 1980 are mainly in the routine, semi-routine and intermediate class categories, while by 2012/3 this pattern also showed for the lower supervisory/technical and small-employer/self-employed categories, and the risk ratio between the routine and higher managerial/professional categories grew to almost 3. Once again, children in the 'not applicable' category were most likely of all to be rated among the most hyperactive.<sup>4</sup>

### What about absolute levels?

What picture emerges if we try to look at changes in absolute levels of behaviour?<sup>1</sup> Here is an example, which also illustrates how changes in the wording of questions should make us wary of such comparisons. In 1969, 1.7% and 3.0% of children from higher managerial or professional, and routine households, respectively, were rated 'frequently' 'disobedient at home'. In 2012/13, this questions was asked in a different way and parents answered that it was 'not true', for 2.1% and 4.6% of children from those respective backgrounds, that they were 'generally obedient [and] usually [do] what adults request'.

### What might explain these findings?

The general pattern across all three outcomes is of rising inequality. There is no obvious and clear explanation, and indeed this change may be driven by a number of factors. As with adults, children's mental health is related to the stressors they (and their parents) experience in everyday life, so these findings may reflect a broader trend of growing inequality in life conditions over the past half-century. Children's conduct is also known to be related to – amongst many other factors – the amount and quality of parental supervision<sup>iv</sup>. So it may be that inequality has arisen through the differential impact of social change on parenting, for instance through rising numbers, especially in the less advantaged class categories, of parents with more unpredictable working patterns and longer working hours, as well as more single-parent households. A further potential explanation is that – bearing in mind how the class structure has changed<sup>3</sup> – there has been some form of selective upward mobility, whereby families in which such problems do not tend to occur have moved away from working-class jobs. Further research might usefully test these hypotheses.

#### Author: Lewis Anderson

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#### NOTES

<sup>1</sup> Others have attempted to analyse changes in absolute levels of these problems. Collishaw et al<sup>v</sup>, for instance, look at UK 15-16-year-olds from 1974, 1986 and 1999, and claim that 'results showed a substantial increase in adolescent conduct problems ... that has affected males and females, all social classes and all family types. There was also evidence for a recent rise in emotional problems, but mixed evidence in relation to rates of hyperactive behaviour' (2004: 1350).

<sup>2</sup> This is perhaps a surprising result, so the analysis was repeated using a top 20% cut-off instead of top 10%. The result was the same. This sensitivity test was performed on all analyses, with no discrepant results.

<sup>3</sup> We should note important changes in the class structure: over the period in question the proportion of workers in the higher class categories increased substantially. Correspondingly, by 2001/2, of the children living in households which could be assigned a class, only 5% were 'routine' and 9% 'semi-routine'. This compares with 24% and 18% respectively in 1969, and 15% and 17% in 1980.

<sup>4</sup> There were no clear gender differences in the analyses reported.

#### REFERENCES

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- <sup>v</sup> Collishaw, S., Maughan, B., Goodman, R., & Pickles, A. 2004. 'Time trends in adolescent mental health.' *Journal of Child Psychology and Psychiatry* 45:1350-1362.

