

The relationship between poverty, affluence and area

This study addresses aspects of inequalities in the UK using data from the 2001 Census. The work focused on five themes: health, education, housing, employment and poverty. The research reveals the broad locations, circumstances and numbers of those most disadvantaged in society by contrasting their opportunities and resources with those available to people more advantaged. The study uncovers the geographical relationship between poverty, affluence and area. The research was carried out by Ben Wheeler, Mary Shaw, Richard Mitchell and Danny Dorling. Some of the key findings were:

- Areas with the highest levels of poor health tend to have the lowest numbers of doctors and other health professionals (other than nurses).
- However, areas with high levels of poor health tend also to have high numbers of their population providing informal care for family and friends, in almost direct proportion to the apparent need for that care.
- Areas with the highest proportions of unqualified young people tend to have the lowest number of teachers per head of population.
- In England, Wales and Northern Ireland, young people are more likely to obtain good qualifications if their area has a well-qualified older population, but in Scotland young people's chances of good qualifications are more even.
- Overcrowding and under-occupancy vary widely across the UK. There tend to be few under-occupied households in areas with high levels of overcrowding, suggesting that local housing shortages are not often caused by small families occupying large houses.
- The Census recorded 185,000 unoccupied second homes and holiday residences. In areas where these are prevalent – particularly remote rural areas – more local people are still renting their homes at ages when they would be expected to have entered the housing market.
- High status jobs, which are usually the best paid, are very unevenly distributed across the UK, with most in London and the South East. Someone's location is sometimes more important than their qualifications in influencing what kind of job they do.
- The country appears to be divided between 'work rich' and 'work poor' areas: in low unemployment areas there tend to be many people working long hours; conversely, in high unemployment areas there tend to be few people working long hours.
- Around a million households have three or more cars. About the same number of households that might need a car (those with dependent children) have none. The two groups of households tend to live in very different places.



Background

This study covers five issues – health, education, housing, employment and poverty. These have long been important themes of interest. They closely reflect the five ‘Giant Evils’ identified by William Beveridge (architect of the UK welfare state) in 1942: disease, ignorance, squalor, idleness and want. This project provides an illustration through ten short reports, two for each of the five themes, of the overall picture of these social inequalities in the UK.

All of the data analysed for this project are from the 2001 Census. Census data were aggregated to 142 areas across the UK: unitary authorities, counties and the former metropolitan authorities (Northern Ireland was counted as a whole). The reports take pairs of variables derived from the Census data, most pairs representing one measure of need and one measure of availability, and compare them across the areas. In comparing measures across areas, the study demonstrates associations rather than proving causes. However, these simple methods demonstrate

that clear and obvious social inequalities in the UK remain and are associated with Beveridge’s five evils, despite over six decades of social policy intervention to reduce inequalities in opportunities and outcomes in the UK.

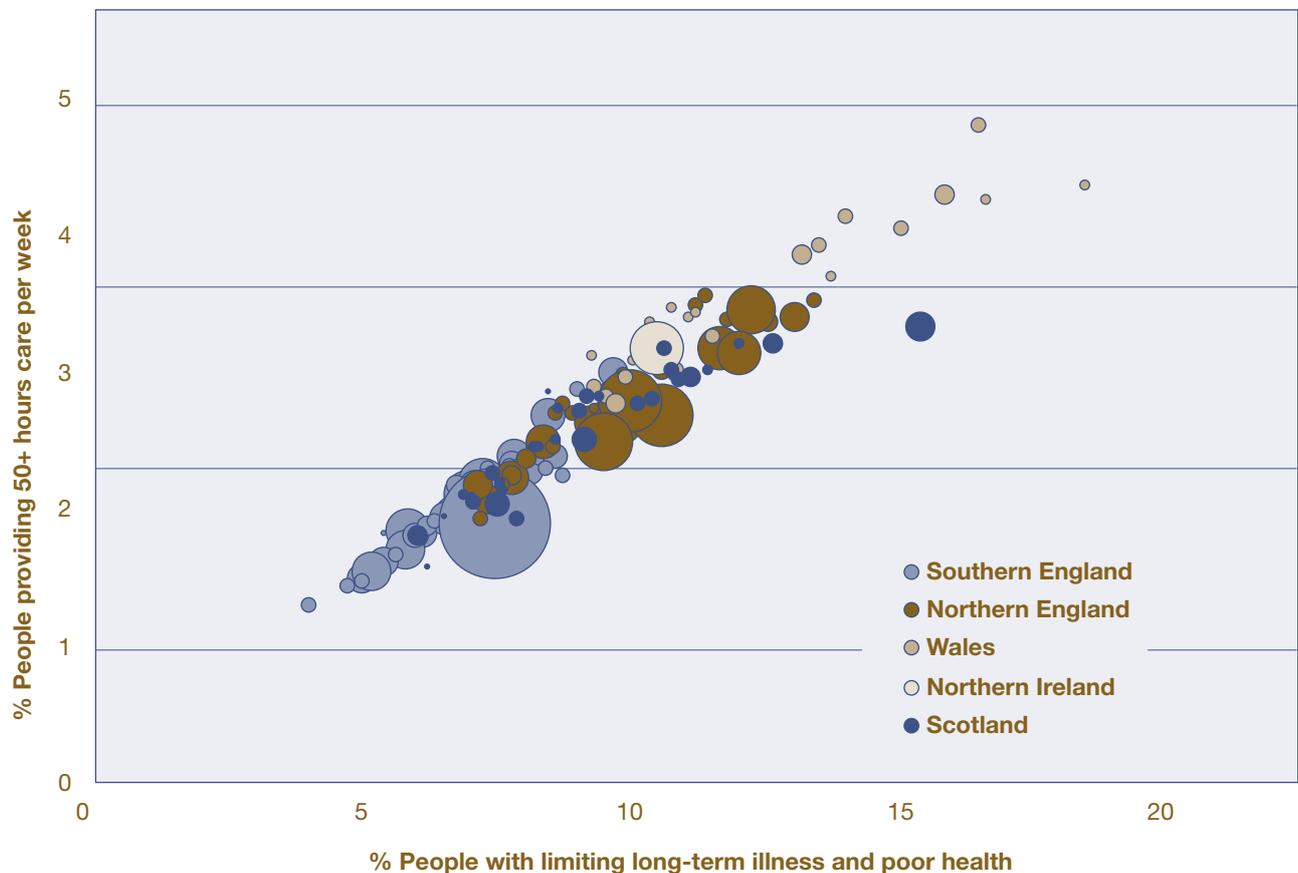
Results

The results presented here summarise the findings of the ten short reports.

Health

4.5 million people in the UK reported that they had both poor health and a limiting long-term illness in 2001. 5.9 million people said they provide care to family and friends on an informal basis. The amount of this informal care is provided in direct proportion to the rate of poor health in areas across the UK (see Figure 1). However, higher numbers of practising, qualified medical practitioners tend to live and work in areas where the rates of illness are lower. This is an example of what has been called the ‘inverse care law’.

Figure 1: **Association between the percentage of people providing care for 50 or more hours per week and percentage of people with poor health and limiting long-term illness across all areas. Each circle on the graph is drawn in proportion to the area’s population.**



Note: the correlation coefficient for this relationship is 0.96, $p < 0.001$.

Education

An 'inverse education law' also appears to exist in the case of education. Areas which have the highest proportions of young people with no qualifications tend to have the fewest teachers available.

The proportion of 16- to 17-year-olds with GCSE-level qualifications varies widely across England, Wales and Northern Ireland. Areas with a higher proportion of qualified young people tend to have many adults (around the age of these young people's parents) with degree-level qualifications. The situation in Scotland is different – here, the proportion of young people with qualifications is similar in each area, and there is no relationship with the proportion of the parental-age generation who have good qualifications.

Housing

Overcrowding and under-occupancy vary widely across the UK. Areas with high levels of overcrowding tend not to have many under-occupied households, which indicates that local housing shortages are not often

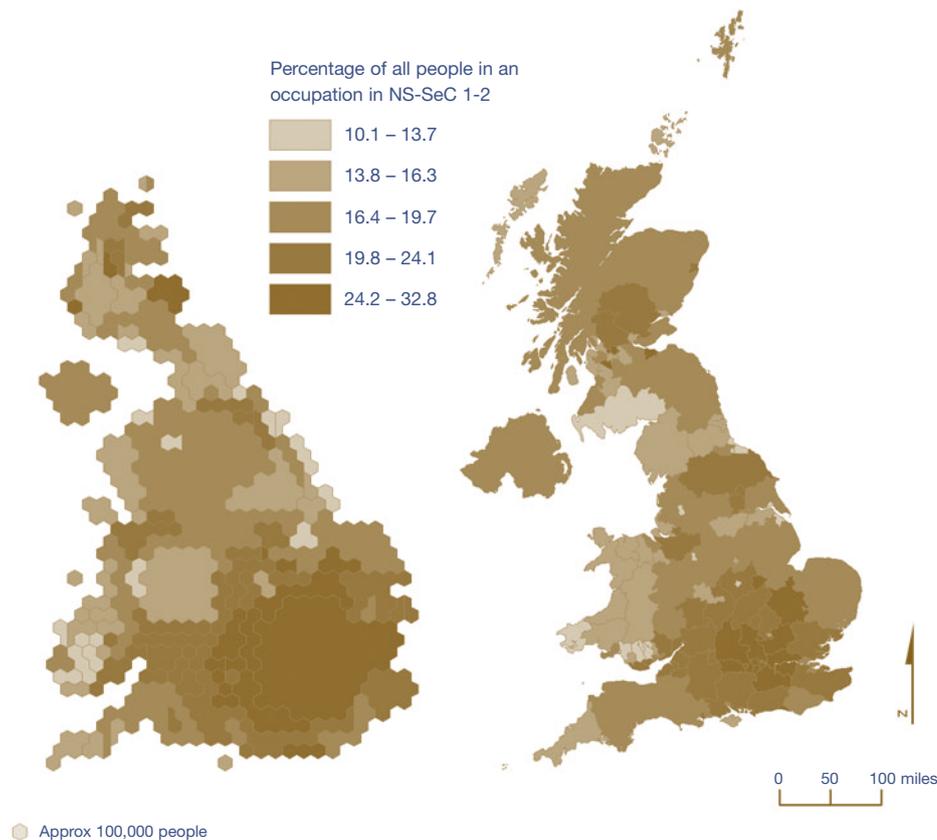
caused by small families occupying large houses. However, the Census also recorded 185,000 unoccupied second homes and holiday residences. In areas where these are prevalent – particularly remote rural areas – there are more local people still renting their homes at ages when they would be expected to have entered the housing market.

Employment

Well-paid, high status jobs are most likely to be found in London and the South East (see Figure 2). In areas without many high status jobs available, people with very good qualifications are more likely to be working in lower status jobs. This suggests that someone's location is sometimes more important than their qualifications in influencing what kind of job they do.

Areas with low levels of unemployment tend also to have many people working long hours; conversely, areas with high unemployment tend to have few people working long hours. The country appears to be divided between 'work rich' and 'work poor' areas.

Figure 2 **Percentage of people in top level professional and managerial occupations, 2001.**



Note: Both maps are shaded identically; the map on the left shows each area in proportion to its population in 2001, so the biggest area is London. The occupations are defined as in the top levels of the National Statistics Socio-economic Classification (NS-SeC 1-2, professional and managerial occupations).

Poverty

Not owning a car is often (though not always) a good marker of material deprivation. The number of households in the UK which don't have a car, but which might be said to need one because they have dependent children, is about equal to the number of households which have three or more cars. Nearly two-thirds of households that have three or more cars contain just two or fewer employed people and one in five consists of just one person or a couple. These are households which might be said to have more cars than they need. The two groups of households tend to live in very different places. Of course, some households do not want a car, and some really do need three, or four or more. However, the disparity in ownership is clear.

Areas where many families have no parents in paid employment tend also to have many young people providing care on an informal basis. Children living in poverty also appear to be more likely to be acting as carers for their families.

In summary

This project shows the nature and extent of geographical and social inequality in the UK at the beginning of the twenty-first century. It takes ten focused examples of the relationship between need and supply for very specific services or opportunities. It demonstrates the power of the Census to provide easily interpreted data that consider the entire population and make obvious the continued unequal distribution of resources and prospects across the country.

How to get further information

The research is published as a pack consisting of a series of ten short reports, a supporting technical report, summary document and five posters. The statistics and maps in the reports and posters are brought to life by contemporary photography. The results are then commented upon and illustrated with the photographs and a discussion of contemporary trends is made, with reference also to the situation a century ago.

The A4 folder pack is published by The Policy Press (ISBN 1 86134 773 1). A single copy costs £49.99; orders of 10 copies or more cost £30.00 per pack. View sample material and order from www.policypress.org.uk or from Marston Book Services, PO Box 269, Abingdon, Oxon OX14 4YN, Tel: 01235 465500, Fax: 01235 465556, email: direct.orders@marston.co.uk. (Please add £2.75 p&p for first pack and 50p per pack thereafter.)

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About the project

The study was carried out by Dr Ben Wheeler and Professor Danny Dorling from the University of Sheffield, Dr Mary Shaw from the University of Bristol and Dr Richard Mitchell from the University of Edinburgh.

The research uses a selection of data from the Census, analyses them with simple methods and uses areas which are familiar and that have political and social meaning. The project uses simple quantitative methods, the most complex being correlation coefficients. The methods used in each of the ten short reports are broadly the same. The characteristics, opportunities and resources representing the 'supply and demand' of interest were selected. Appropriate Census data were extracted from the Census database and their distribution explored using maps, graphs and charts. In determining which were the most appropriate data to use the researchers have often had to fall back on their experiences of working with the last three Censuses before 2001 and thus their findings will be both influenced by and may benefit from their past work.

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