What drives wellbeing inequality at the local level across Great Britain?

While researchers have often compared the average wellbeing of different demographic groups, the study of the level of wellbeing inequality in a place remains largely underdeveloped.

Our previous paper, Measuring Wellbeing Inequality in Britain, began with the question ‘what is wellbeing inequality?’ and used ONS Annual Population Survey data to explore which parts of the United Kingdom have higher or lower levels of wellbeing inequality.

This research builds on that work, diving into one aspect of wellbeing inequality – inequality in life satisfaction – to determine what drives it at a local level. Our research question was:

What is associated with inequality in life satisfaction in local authorities in Britain?

This briefing outlines the main findings from this research. Further information, including methodology and data sources, is available in the full research paper.
Between-group wellbeing inequality refers to differences in wellbeing between population groups defined by some other factor, for example between males and females, or between ethnic groups. We explored this type of wellbeing inequality in our previous report, Measuring Wellbeing Inequality in Britain.

The focus of this research, however, is overall wellbeing inequality, which is a measure of how much wellbeing varies within a population (in our case, a local authority), across the whole population, with no reference to any demographic or socio-economic groups. This type of inequality is similar to measures of income inequality such as the Gini coefficient.

Exploring the distribution of wellbeing across a population provides a richer and more valuable picture of how society is faring than averages alone. Figures 1 and 2 describe life satisfaction distributions in Lambeth and Sunderland. Both local authorities have similar average scores, but while Lambeth is one of the ten most equal local authorities in Great Britain according to its standard deviation of life satisfaction (1.55), Sunderland is ranked amongst the ten most unequal (2.04). This difference is statistically significant, meaning that it is unlikely to have happened by chance. By looking at the whole distribution, we can see that in Sunderland a sizeable minority of people report very low life satisfaction, lagging well behind the rest of the population.
**what did we do?**

Our analysis uses the data produced as part of the Measuring wellbeing Inequality in Britain report that provided an ‘inequality in life satisfaction’ score for 200 local authorities in Great Britain for the years 2011-2015. We used multi-level modelling to explore the relationship between those numbers and a range of different variables. These variables were chosen either because they are known to influence average wellbeing, or because they had been shown to be associated with wellbeing inequality at the national level in existing literature. In addition, we limited variables to those most conducive to policy intervention. For example, while watching television might be associated with life satisfaction, it is not necessarily something that can be influenced by policy at a local authority level.

However, we also had to account for a wide range of confounding factors that might be related to people’s life satisfaction, or to inequality in life satisfaction. For example, it could be that richer people live in more rural areas, and therefore report higher life satisfaction, or local authorities with larger populations are more likely to include pockets of wealth and deprivation and therefore more likely to display higher inequality in life satisfaction.

Building a variety of such factors into our analysis allows us to report the relationship between different local-level factors and inequality in life satisfaction over and above the effect of any confounding factors.

Further information about our methodology, including controls, results and limitations is included in our paper Drivers of Life Satisfaction Inequality in Great Britain.

**what did we find?**

1. **Deprivation, median income and unemployment are all associated with higher wellbeing inequality at the local authority level.**

   The most consistent and significant finding in this study was that areas with lower median incomes have higher levels of inequality in life satisfaction. Higher levels of deprivation and also of unemployment were also associated with higher levels of inequality in life satisfaction.

   These findings add to the existing literature on the vital importance for wellbeing of ensuring that basic needs are met. This is – rightly – already a key priority for most local authorities and should continue to be so.

2. **Although more rural areas have higher average wellbeing, this does not translate into lower wellbeing inequality as might be expected. When controlling for average wellbeing, rurality is associated with higher wellbeing inequality. Our analysis indicates that this might be due to higher impacts of unemployment in rural areas.**

   This could be because it is easier for people to ‘fall through the gaps’ in rural areas. If someone is experiencing a difficult life event, such as a bereavement or the loss of a job, the higher levels of geographic isolation, poorer public transport or poorer access to shops or services may mean they do not get the material or social support that could help to improve their wellbeing.
We explored this theory with further tests, and found that the association between unemployment and wellbeing inequality is greater for those living in rural environments. Further analysis at the individual level is needed to explore this further.

Higher levels of engagement in heritage activities and the use of green space for health or exercise is associated with lower wellbeing inequality in local authorities, even though increased engagement in these activities is not associated with improved average wellbeing.

This finding may be counter-intuitive for some readers. We might expect that engaging in heritage activities and using green spaces are pastimes most enjoyed by those who are already more likely to be satisfied with their lives, and so would be more likely to increase average life satisfaction than decrease wellbeing inequalities. Indeed, there is evidence of inequalities according to health and socio-economic groups in engaging in green space activities.

However, it is possible that, even if those with lower life satisfaction are less likely to engage in these activities, they yield greater wellbeing returns when they do. This study alone cannot demonstrate this association, but other studies have shown higher wellbeing benefits of using green space for those of lower socio-economic status or those with poor mental health and that access to green space appears important in relation to health inequalities.

Taken together, these results strengthen the case for increasing green space provision and addressing barriers for those with the lowest wellbeing to engage in activities in their communities and green spaces, indicating that this may support reductions in inequalities in wellbeing.

Higher female, but not male, life expectancy in local authority populations is associated with lower wellbeing inequality.

Further research is needed to unpick these effects. Does male life expectancy only predict average male life satisfaction, or does it also predict average female life satisfaction? And does female life expectancy only predict inequality in female life satisfaction, or does it also predict inequality in male life satisfaction? A second question is whether female and male life expectancy are actually substitutes for different sets of drivers that also drive life satisfaction and inequality in life satisfaction, for example, the level of deprivation in an area.
how do we turn this evidence into action?

This study adds to the existing evidence of the vital importance to wellbeing of ensuring that basic needs are met. Focussing on providing employment, a good income and reducing deprivation are all priorities for reducing wellbeing inequality.

Those in rural areas should be particularly mindful to explore local wellbeing inequality even if average wellbeing in the area is high. Inequalities could be due to the effects of unemployment and efforts should be taken to ensure that the unemployed do not ‘fall through the gaps’ in terms of social or material support in rural areas.

This evidence adds to the case for investment in green space activities and engagement in local heritage, suggesting these activities may be particularly important in reducing wellbeing inequality.

Take a deeper look at wellbeing inequality in your area. Our dataset [LINK] can help explore who is struggling most including inequalities according to ethnic and education-level groups. There could be a whole range of reasons why a particular local authority might have pockets of people with very low life satisfaction scores. Local authorities will undoubtedly be best placed to interpret these more local patterns. There is a lot of evidence to draw from at the individual level to support interventions to target these groups.

This is the first study to address this research question, and is therefore exploratory. We hope that it lays the ground for local actors to begin further exploration of wellbeing inequalities in their area, as well as producing insights worthy of further research to build understanding that, over time, can lead to policies to reduce wellbeing inequality.

Related reading from the Centre

Drivers of wellbeing inequality in Great Britain
Measuring wellbeing inequality across Britain
Measuring wellbeing inequality: a how-to guide

We are an independent organisation set up to produce robust, relevant and accessible evidence on wellbeing. We work with individuals, communities, businesses and government, to enable them to use this evidence make decisions and take action to improve wellbeing.

The Centre is supported by the ESRC and partners to produce evidence on wellbeing in four areas: work and learning; culture and sport; community; and cross-cutting capabilities in definitions, evaluation, determinants and effects.

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