Does income inequality cause health and social problems?
LSE seminar
February 8th 2012

Karen Rowlingson
School of Social Policy
The Spirit Level
Why More Equal Societies Almost Always Do Better
Richard Wilkinson and Kate Pickett
'Research by Richard Wilkinson and Kate Pickett has shown that among the richest countries, it's the more unequal ones that do worse according to almost every quality of life indicator.'
Ed Miliband, speech to Labour party conference on becoming Labour leader, 28th September 2010

‘The gap between rich and poor does matter. It doesn't just harm the poor it harms us all'.

UNIVERSITY OF BIRMINGHAM
DEAR 1%,
WE FELL ASLEEP
FOR A WHILE.
JUST WOKE UP.
SINCERELY, THE 99%
99% of the world's cookies are consumed by 1% of the monsters

# OCCUPY SESAME STREET
Beware False Prophets
Equality, the Good Society and The Spirit Level

By Peter Saunders, edited by Natalie Evans

The Spirit Level Delusion
Fact-Checking the Left’s New Theory of Everything

Christopher Snowdon

UNIVERSITY OF BIRMINGHAM
JRF study

- Intended as a short, independent review
- Expanded to cover broader literature
- Advisory group
- Discussions with Kate Pickett and Richard Wilkinson
Objectivity and balance in carrying out reviews

- Political values
- Prior knowledge/assumptions
- Disciplinary perspectives
- Personal feelings
- Advisory group
  - Mike Brewer, Natalie Evans, Jane Falkingham, Suzanne Fitzpatrick, John Hills, Donald Hirsch, Kelvyn Jones, Ken Judge, Ruth Lupton, Stephen McKay, Jonathan Portes, Steve Pudney
Key points

☐ This is a contribution to an ongoing debate
☐ There is a correlation between inequality and health and social problems
☐ Causal effects are difficult to establish but there is some evidence for this
☐ Also evidence about other factors
☐ Need better theories, methods and data
☐ Policy implications?
  – Should we tackle poverty and/or inequality? And how?
Life expectancy for men and women by social class 2002-5 in England/Wales
Early research on income inequality

- No link between average income and average health in rich countries
- Is there a link between income inequality and health?
Health and Social Problems are Worse in More Unequal Countries

Index of:
- Life expectancy
- Math & Literacy
- Infant mortality
- Homicides
- Imprisonment
- Teenage births
- Trust
- Obesity
- Mental illness – incl. drug & alcohol addiction
- Social mobility

<table>
<thead>
<tr>
<th></th>
<th>Correlation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social immobility</td>
<td>0.93</td>
</tr>
<tr>
<td>Teenage births</td>
<td>0.73</td>
</tr>
<tr>
<td>Imprisonment</td>
<td>0.67</td>
</tr>
<tr>
<td>Trust</td>
<td>-0.66</td>
</tr>
<tr>
<td>Mental illness</td>
<td>0.59</td>
</tr>
<tr>
<td>Obesity</td>
<td>0.57</td>
</tr>
<tr>
<td>Homicides</td>
<td>0.47</td>
</tr>
<tr>
<td>Educational performance</td>
<td>-0.45</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>-0.44</td>
</tr>
<tr>
<td>Infant mortality</td>
<td>0.42</td>
</tr>
<tr>
<td>Overall index</td>
<td>0.87</td>
</tr>
</tbody>
</table>

*Source: Wilkinson and Pickett (2009b)*
Aspects of the correlation analysis

- The independent variable: income inequality
- The dependent variables: health and social problems
- The sample of countries
- Outliers
Independent variable: income inequality

- Proxy for social distances
- Goldthorpe questions approach to stratification
- Best data available
- Which measure of inequality?
- Which dataset?
<table>
<thead>
<tr>
<th></th>
<th>UN data quoted in <em>The Spirit Level</em></th>
<th>OECD data quoted on Equality Trust website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social immobility</td>
<td>0.93</td>
<td>0.83</td>
</tr>
<tr>
<td>Teenage births</td>
<td>0.73</td>
<td>0.64</td>
</tr>
<tr>
<td>Imprisonment</td>
<td>0.67</td>
<td>0.51</td>
</tr>
<tr>
<td>Trust</td>
<td>-0.66</td>
<td>-0.66</td>
</tr>
<tr>
<td>Mental illness</td>
<td>0.59</td>
<td>0.32*</td>
</tr>
<tr>
<td>Obesity</td>
<td>0.57</td>
<td>0.41*</td>
</tr>
<tr>
<td>Homicides</td>
<td>0.47</td>
<td>0.44</td>
</tr>
<tr>
<td>Educational performance</td>
<td>-0.45</td>
<td>-0.46</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>-0.44</td>
<td>-0.27*</td>
</tr>
<tr>
<td>Infant mortality</td>
<td>0.42</td>
<td>0.54</td>
</tr>
<tr>
<td>Overall index</td>
<td>0.87</td>
<td>0.7</td>
</tr>
</tbody>
</table>

* Means *not* statistically significant
Dependent variables: health and social problems

Variables chosen were those which had a social gradient within a country

Trust, mental illness, life expectancy, infant mortality, obesity, children’s educational performance, teenage births, homicides, imprisonment rates, social mobility

Are these all problems, with a gradient?

Data-driven list?

Operationalisation
Choice of countries

- Developed countries ($25,000 GNI per capita)
- Excluding countries with populations less than 3 million and those without income data
- Could expand analysis to other countries
Outliers

- Saunders discusses this in detail
- Outliers and clusters of countries
- Some further analysis of outliers would be helpful
From correlation to causation

- Difficulties ‘proving’ causation (eg smoking and lung cancer)
- Need to combine theory with expert judgement and multi-variate/multi-level/longitudinal/experimental analysis
- Controlling for the right variables
- Is the aggregate level link a ‘statistical artefact’ of the composition of individual incomes?
Reviews of multi-level studies
(Leigh et al 2009: 399-400)

‘While the currently available evidence suggests to us that the relationship between inequality and health is either small or inconsistent, readers should bear in mind that not everyone agrees, especially social epidemiologists. Achieving more consensus will require more work with better data and better methods than have been usual in the past.’
Further reviews

Wilkinson and Pickett (2006) reviewed 168 analyses, finding:
– 52% wholly supportive
– 26% partially supportive
– 22% not supportive

Kondo et al (2009:1) concluded 'the results suggest a modest adverse effect of income inequality on health'.
‘Modest’ but highly important effects

□ 1.5 million deaths could be averted in 30 OECD countries by reducing the Gini coefficient to 0.3 (Kondo et al 2009)

□ Loss of life from income inequality in 1990 equivalent to combined loss of life from lung cancer, diabetes, car accidents, HIV, suicide and homicide (Lynch et al 1998)

□ Scope for further panel and experimental studies
The role of psycho-social mechanisms

- Status anxiety – the context in which people live has a psycho-social impact independent of individual circumstances
- Frank (2007) talks of an ‘expenditure cascade’ and an income/consumption ‘arms race’
- Status may be accepted and low status may not lead to low self esteem
Other potential causes of health and social problems

- Neo-materialist/absolute income framework (Lynch)
  - Poverty in a wealthy country
- History and culture
- Ethnicity
- Welfare institutions
Does income inequality harm everyone?

- Do people in the same class/income group in more equal societies do better than their equivalents in less equal societies?

<table>
<thead>
<tr>
<th></th>
<th>Income terciles in England</th>
<th>Income terciles in the US</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bottom third</td>
<td>Middle third</td>
</tr>
<tr>
<td>Diabetes</td>
<td>8.1</td>
<td>7.7</td>
</tr>
<tr>
<td>Hypertension</td>
<td>37.9</td>
<td>35.8</td>
</tr>
<tr>
<td>All heart disease</td>
<td>14.3</td>
<td>9.1</td>
</tr>
<tr>
<td>Myocardial infarction</td>
<td>6.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Stroke</td>
<td>3.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Lung disease</td>
<td>7.6</td>
<td>6.3</td>
</tr>
<tr>
<td>Cancer</td>
<td>5.7</td>
<td>5.1</td>
</tr>
</tbody>
</table>
Key points

☐ This is a contribution to an ongoing debate
☐ There is a correlation between income inequality and health and social problems
☐ Causal effects are difficult to establish but there is some evidence for this
☐ Also evidence about other factors
☐ Need better theories, methods and data

☐ Policy implications?
  – Should we tackle poverty and/or inequality? And how?