

Living apart, losing sympathy: how attitudes to redistribution and to welfare recipients depend on where you live

Paper presented at the Social Policy Association/East Asia Social Policy Research Network conference, 16-18 July 2012, York

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Rising levels of income inequality have been directly linked to rising levels of spatial segregation – the tendency for rich and poor to live in different areas. In this paper, we explore whether rising segregation may in turn erode support for the redistributive policies of the welfare state, further increasing levels of inequality – a form of positive policy feedback. We theorise that neighbourhood context may shape attitudes because it is an important source of knowledge, experience and understanding about inequality and its consequences. We test this through multilevel modelling of data on individual attitudes from a nationally-representative sample survey for England to which measures of neighbourhood context have been attached. The paper explores how context shapes attitudes both to inequality and redistribution in general, and to welfare benefit recipients in particular. We show that the factors shaping these attitudes are quite different and that the influence of neighbourhood context varies as well. Nevertheless, the findings support the idea that increasing spatial segregation acts to erode support for redistribution – ‘positive’ policy feedback.

Key words:

Attitudes; inequality; redistribution; spatial segregation

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Acknowledgement

The research on which this paper was based was funded by an ESRC grant, “The impact of neighbourhood context on attitudes to inequality and redistribution” (RES-000-22-4192).

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1. Introduction

It has long been recognised that policies may be subject to ‘path dependent’ development processes (Pierson 1993, 2000). There are a number of aspects to this concept but the critical one here is the idea of ‘inertia’ or ‘lock in’. Small changes, once established, may prove difficult to reverse due to positive feedback. One implication is that, from the same initial starting point, a number of possible outcomes or end-states are possible. Such arguments have been highlighted in the literature on welfare regimes (Esping-Andersen 1999) where path dependence is seen as limiting convergence in the face of homogenising forces such as ‘globalisation’. At the same time, this path dependence can also be seen as a major constraint on policy choices within a particular country. A particular concern is whether, once societies begin to become more unequal, it becomes increasingly difficult for political parties committed to a redistributive agenda to get elected as the social bases for redistribution – trust, social cohesion or solidarity – have been eroded (Bowles and Gintis 2000; Uslaner 2010).

The strength of such feedback processes and the mechanisms by which they occur are therefore significant issues. Pierson (1993) argues that too much attention has been paid to the role of bureaucratic interests, politicians or organized groups, and relatively little to the role of the general public. In relation to the latter, two kinds of process may operate. First, there are processes connected to the material resources or incentives arising from particular policies or institutional arrangements. Pierson argues that this is the area which Esping-Andersen (among others) focuses on in examining the interaction between welfare states and labour markets. Second, there are parallel processes operating through political or attitudinal mechanisms as policies or institutions reinforce particular attitudes or beliefs, or downplay others. Pierson argues that this area has been relatively under-explored.

The aim of this paper is to examine whether spatial segregation may be part of the picture, helping to produce ‘positive feedback’ from rising inequality, through its impact on political attitudes. In common with many developed countries, Britain has been witnessing rising levels of income inequality in recent decades, notwithstanding the modest fall in the most recent data (OECD 2011; DWP 2012). This has been accompanied by increasing spatial segregation, which is also apparent in many developed countries (OECD 1998; Dorling and Rees 2003). The two are linked through the operation of the housing system. The rise in spatial segregation reflects the increased ability of higher income groups to outbid lower income groups in the competition for more ‘desirable’ neighbourhoods (Cheshire et al 2003). Allocations policies within social housing also operate along parallel lines. At the same time, the role of housing and urban policy should not be neglected. Most significant has been the Right to Buy for tenants of social housing which has contributed so dramatically to the residualisation of the sector and its concentration into less desirable areas. The weakness of planning controls on social mix in new developments and the limited success of policies to promote greater social mix in more deprived neighbourhoods have also been important factors.

An extensive literature on neighbourhood effects has already explored the material consequences of this segregation by examining the impacts of neighbourhood context on individual welfare and hence on economic efficiency (Durlauf 2004; Galster 2007; van Ham et al 2012). This paper explores whether segregation also impacts on political attitudes in ways which may undermine future support for redistribution or welfare benefit recipients, potentially fuelling the rise in inequality.

The paper starts by examining theories about the individual determinants of attitudes to redistribution and to welfare recipients before exploring the possible role for the neighbourhood in shaping these. It then discusses the data sources and analytical approach, before presenting the results of multi-level modelling. It concludes with a discussion of the findings.

2. Segregation and political attitudes

This paper focuses on attitudes to two distinct aspects of welfare policy: more general attitudes to inequality and redistribution by the state, on the one hand; and more specific attitudes to welfare recipients on the other. There has long been a recognition that the public hold rather different attitudes on these two topics (Golding and Middleton 1982; Taylor-Gooby 1982; Hasenfeld and Rafferty 1989; Coughlin, 1980). There is fairly widespread support for the idea that inequality is too high and the Government should do more to redistribute incomes or wealth but those attitudes coexist with low levels of support for increasing welfare expenditures and low levels of trust in welfare recipients themselves. And the gap appears to have widened in recent years. According to data from the British Social Attitudes Survey series, there is still majority support for view that inequality in Britain is too great although it has fallen slightly since the peak in 1995 (about 12 percentage points). On the other hand, attitudes to welfare recipients and welfare benefits have hardened significantly (Taylor-Gooby and Martin, 2008; Clery 2012; Taylor-Gooby 2012).

Attitudes to inequality and redistribution

Three broad theories attempt to explain why individuals hold particular attitudes towards inequality and redistribution. The first suggests that a key driver of attitudes is *self-interest*: more affluent people are less likely to express concern about inequality and less likely to support redistributive policies as they stand to lose personally from any changes (Piketty 1995; Svallfors 1997; Linos and West 2003; Sefton 2005). Those with more to gain – ‘transfer groups’ such as welfare benefit recipients or those in social housing, for instance – are more likely to support redistributive policies (Hasenfeld and Rafferty 1989; Papadakis and Bean 1993). Other socio-demographic or life stage factors are also important as they shape the risks of low income (Svallfors 1997).

Second, researchers have emphasised the importance of *personal values, and of other attitudes and beliefs*. *Values* are moral principles which an individual holds and which are important influences on attitudes, and ultimately on behaviours (Rokeach, 1968, 1973). Values are formed largely through socialisation, and are seen as relatively durable and resistant to influence by later experience or knowledge (Stern et al, 1995). In relation to redistribution, the critical values are those concerned with altruism – where one places concern for others compared with concern for oneself (Hedges 2005; Sefton 2005; Park et al 2007; Castell and Thompson 2007). Many studies have also cited the importance of *other attitudes or beliefs*, notably views about the causes of inequality or about the consequences of it (Castell and Thompson, 2007; Park et al 2007; Bowles et al 2001; Piketty 1995; Linos and West 2003). In contrast to values, however, attitudes and beliefs

more easily re-shaped by current experiences or new knowledge (Thøgersen and Grunert-Beckmann, 1997). One problem with this work is that it is difficult to identify the direction in which causality works: do attitudes to inequality flow from beliefs about the causes of inequality, or are the two simultaneously determined, and influenced by other factors? Previous research in this area has been inconsistent (Hasenfeld and Rafferty 1989).

The third theory is that attitudes are shaped by the *knowledge* we derive from our personal networks, social relationships and daily experiences. Runciman's (1966) relative deprivation thesis argued that people make comparisons with their 'reference group' comprised of close friends and acquaintances rather than with society as a whole. Reference groups are shaped by proximity in a social sense and are therefore quite limited. One consequence is that people tend to underestimate the extent of inequality in society (Sefton 2005). Furthermore, Bamfield and Horton (2009) found that, when presented with evidence on the true scale of inequality, support for redistribution tended to increase. From the literature on social networks, there is evidence of how personal social relationships shape attitudes (Boletti, 2012). Little if any past empirical work on public attitudes to inequality has tried to measure the effects of reference groups or networks directly. It is perhaps assumed that it is captured by the combination of material position (which shapes 'reference groups' membership) and by other attitudes or beliefs (which may reflect the knowledge gained).

Attitudes to welfare recipients

The literature on attitudes to welfare recipients emphasises a rather different set of factors. First, the effect of income or material position appears quite different. One might expect higher income groups to be more remote and hence less sympathetic. In practice, it appears that lower income groups often hold more critical views (van Oorschot 2000, 2006). This may reflect a more direct sense of competing for scarce resources or perhaps a greater desire to differentiate themselves from a stigmatised group.

Values and other attitudes or beliefs are seen as important, although different ones are identified. Several studies challenge the view that support for welfare benefits or welfare recipients is driven by altruistic concerns. Instead, they emphasise the importance of notions of reciprocity and hence of beliefs about the 'deservingness' of welfare recipients (Bowles and Gintis 2000; Horton and Gregory 2009). Beliefs about the factors which have caused need or poverty, and hence claims for welfare support, are therefore critical (Park et al 2007). Such views on desert underpin the well-established hierarchy of deservingness between groups (van Oorschot, 2000).

In general, policies in the UK have both reflected the hardening of attitudes and shaped them by shifting from universalism to conditionality and selectivity (Horton and Gregory 2007; Sefton 2009).

Neighbourhood and attitudes

One possibly neglected factor in this work is the neighbourhood. Increased mobility and ease of communication may have produced more spatially-extensive social networks (Savage et al 2005) but neighbourhoods are still important places in people's daily lives. They shape opportunities for personal interaction and the building of social relationships or networks, as well as for more impersonal observation and experience. Both mechanisms have been highlighted in previous studies on neighbourhood effects in relation to socio-economic outcomes (Galster 2012) and in relation to political activity (Marschall and Stolle 2004; Johnston et al 2005a). This is not to argue that the neighbourhood is the only sphere in which attitudes or beliefs may be re-shaped. Places of employment, education and leisure are also important.

In the case of attitudes to inequality, we therefore hypothesise that exposure to higher levels of poverty or deprivation would tend to lead to greater awareness of inequality and hence to greater support for redistribution. The impact is likely to be rather different for those on different incomes. People on lower incomes do not need to live in a deprived neighbourhood to know about the existence of material disadvantage. So whether there is an aggregate effect of neighbourhood deprivation on attitudes, we might also expect the effect to be greater for more affluent individuals. Conversely, we might expect low income groups to express greater dissatisfaction with inequality where they live in a more affluent area.

As well as deprivation, we might expect neighbourhood density to be a factor. First denser neighbourhoods might be expected to increase the frequency of contact with neighbours. Second, denser neighbourhoods tend to be found in larger urban areas so density at the neighbourhood scale can also be seen as an indicator of placement within the urban system. Larger towns and cities provide greater opportunity to witness the diversity in living standards, with possible consequences for attitudes.

One issue is the direction of the relationship between neighbourhood context and attitudes. Work on political attitudes argues that contact may lead to 'assimilation' or 'consensus' as individuals are drawn towards majority views in their neighbourhood but 'reaction' or 'conflict' may also occur (Miller, 1978; Huckfeldt, 1986). The direction of impact that neighbourhood context has on attitudes to redistribution or to welfare recipients cannot be taken for granted. Different groups may respond to the same context in different ways and we need to take this into account.

3. Data and Analysis

Individual data

Individual data come from the 2009 British Social Attitudes Survey (BSAS), a long-running independent social survey. The 2009 data were chosen because that year included a module on inequality and redistribution as well as long-standing questions on welfare recipients. The BSAS is constructed to provide a random sample of the population 18 and over living in private households (Park et al, 2010). The sample has a clustered design with Primary Sampling Units (PSUs) chosen by a stratified random sample of postcode sectors. Within each PSU there is a random selection of addresses and then a random selection from the adults in the dwelling. The survey applies weights to the correct for the unequal chance of being selected and for non-response, matching the sample to the known population distribution in terms of age, sex and region. The weights are used throughout the paper.

In 2009, the achieved sample for England was 2948 (weighted) cases; for the whole sample, the response rate was 55 per cent for the face-to-face questionnaire and 47 per cent for the self-completion section. Many of the questions of interest to us were only put to random subsample of those interviewed. The questions on redistribution were only asked of two-thirds of those interviewed, reducing the potential sample to 1923 cases, while the questions on welfare recipients were only asked of half this group, reducing the potential sample for those analyses to 972. Item non-response across all the variables included in the analyses reduced the number of cases in the final models to 1146 and 576 respectively (59 per cent of the potential sample in both cases).

Dependent variables

The BSAS has a range of questions which were potentially relevant. Exploratory factor analysis on a large number of these suggested that four questions formed a coherent group, reflecting the same underlying attitudes to inequality and redistribution, while another four tapped attitudes in relation to welfare recipients (Table 1). Internal consistency was tested using Cronbach's Alpha giving 0.76 and 0.82 respectively, values generally considered 'acceptable' and 'good'. Since variable loadings for the both factors were quite similar, indices were constructed based on the average of the four scores rescaled to run from 0 to 100. Where one of the four responses was missing, the index is based on the average for the remaining three; these represent 2 and 1 per cent of cases respectively. The welfare scale is inverted so that higher values indicate more sympathetic attitudes to welfare recipients. The resulting indices are labelled "support for redistribution" and "support for welfare recipients". They have means of 62 and 44 (standard deviations 19 and 20) and, in both cases, scores range from 0 to 100. The correlation between them is just 0.17, which reinforces the point that these two sets of attitudes are quite distinct.

Fielding (1999) suggests that ordinal variables such as the ones underlying our scales should ideally be analysed using ordinal rather than linear regression. The latter assumes that the gap between categories in each scale is the same which clearly may not be the case. Multiple questions can be accommodated using a multivariate response design. Such an approach would, however, add greatly to the complexity of the design, leading to a five-level rather than a three-level hierarchical model. Fielding (1999) also suggests that problems are reduced in combined scales which may smooth errors to some extent. The paper is therefore based on linear regression models.

Table 1: Questions underlying the dependent variables

	Variable
Support for redistribution	Differences in income in Britain are too large. [IncDiffs]
	Ordinary working people do not get their fair share of the nation's wealth. [Wealth]
	Government should redistribute income from the better-off to those who are less well off. [Redistrb]
	It is the responsibility of the Government to reduce the differences in income between people with high incomes and those with low incomes. [IncDiff]
Support for welfare recipients	Around here, most unemployed could find job if really wanted [UnempJob]
	Many who get social security don't really deserve help [SocHelp]
	Most people on dole fiddling [DoleFidl]
	If benefits not so generous, people would stand on own two feet [WelfFeet]

Note: Variable names from BSAS shown in brackets. Response scales have five items 'Strongly agree' to 'Strongly disagree'.

Independent variables

The BSAS provides data on a range of individual characteristics, including demographic characteristics (gender, age, household situation), education and housing tenure. The survey collects data on household incomes through a single question with 17 pre-set response bands. Incomes were equivalised using the standard modified OECD scales and band mid-points.

The BSAS includes a measure of how altruistic respondents consider themselves to be. People are asked to indicate their support for the statement in Table 2. In the analysis, respondents in one of the first two categories were contrasted with those in the last two. On other attitudes and beliefs, the survey includes a number of potentially relevant questions. For inequality and redistribution, four separate questions ask for views about income inequality (Table 3). Each is converted to a dummy, contrasting those who agree with those neutral or disagreeing. In relation to attitudes to welfare recipients, the question which came closest to capturing alternative explanations is shown in Table 4. It had four exclusive response categories which are used to create three dummy variables in the models; the first response is the default category.

Table 2: Survey question on altruism

Altruism	Question	%
	“Some people think it is important to put yourself first whilst other people think it is more important to think about others” [SelfFrst]	
Less altruistic	Put yourself first and leave others to do the same	4%
	Put yourself first but also consider other people's needs and interests	32%
More altruistic	Consider everyone's needs and interests equally, including your own	53%
	Put other people's needs and interests above your own	11%

Note: Variable name from BSAS shown in brackets. ‘Don’t knows’ excluded (0.3 per cent of cases). Percentages are for those providing one of the first four responses.

Table 3: Survey questions underlying the other attitudes and beliefs variables

Variable	Question	% agree or agree strongly
	Large differences in people’s incomes:	
Inequality - immoral	... are morally wrong. [IncWrng]	64%
Inequality - inevitable	... are inevitable whether we like them or not. [IncInev]	77%
Inequality - incentive	... give people an incentive to work hard. [IncWrk]	61%
Inequality - necessary	... are necessary for Britain’s prosperity. [IncNec]	28%

Note: Variable names from BSAS shown in brackets. Alternative responses were ‘neither agree nor disagree’, ‘disagree’ and ‘disagree strongly’. ‘Don’t knows’ are excluded from our analysis. Percentages are for those providing one of the first five responses.

Table 4: Survey questions underlying the other attitudes and beliefs variables

Variable	Question	%
	“Why do you think there are people who live in need? Of the four views on this card, which one comes closest to your own?” [WhyNeed]	
Need – luck	Because they have been unlucky	12%
Need - effort	Because of laziness or lack of willpower	28%
Need - injustice	Because of injustice in our society	20%
Need - inevitable	It's an inevitable part of modern life	40%

Note: Variable names from BSAS shown in brackets. Other responses (‘none of these’ or ‘don’t know’) were excluded (5.4 per cent of cases). Percentages are for those providing one of the first four responses.

Neighbourhood context

Permission was obtained for the researchers to attach neighbourhood contextual variables to the individual respondent data in an anonymised form. Matching was carried out by the data custodians and a small amount of random error added to the neighbourhood variables before the anonymised data was made available.

This paper uses Lower Super Output Areas (LSOAs) in England as its ‘neighbourhood’ unit. Only data from England have been used because of the incompatibility of data and geographic areas between England and the rest of the UK. LSOAs were chosen because: they were designed to be relatively homogeneous in terms of levels of socio-economic characteristics; they have a fairly consistent size; and they are the smallest units for which a wide variety of data is available, not just Census data. Although there have been many debates about the subjectivity of neighbourhood boundaries and about how different neighbourhood mechanisms may operate at different scales, previous research suggests that there is very high correlation between measures at different scales (Johnston et al 2004; Gannon et al 2012). In other words, the scale at which neighbourhood is measured makes relatively little difference in practice.

A database of neighbourhood characteristics was compiled for all LSOAs in England (32,482). Data came from a number of sources, including the 2001 census and other sources of neighbourhood statistics such as the Government’s Indices of Multiple Deprivation (IMD) (Noble et al, 2006) and the General Land Use Database (GLUD). At the neighbourhood level these were reduced to five factors by the use of factor analysis. Three of these factors represented socio-economic differences and are omitted. The remaining two identified deprivation (loading on a familiar set of variables including unemployment, lone parent households, low educational attainment and social housing) and density (loading on population density and greenspace). They had a modest correlation (around 0.4) as might be expected.

Analysis

Data were analysed in multilevel models using MLWin (version 2.25) with Restricted Iterative Generalised Least Squares estimation (Rasbash et al, 2010). At time of writing, the weights facility in MLWin is not considered fully validated but, as the BSAS weights make the sample substantially more representative, they have been used in all analyses here

The models have three levels: the individual (Level 1); the neighbourhood (LSOA) (Level 2); and the PSU (Level 3) to adjust for the clustered sample. Neighbourhood characteristics of deprivation and density are therefore included at the second level. The data is relatively sparse at level 2 and there is a relatively high proportion of ‘singletons’ (level 2 units with just one level 1 case). Simulation research suggests that this design does not affect the validity of the modelling approach. Where the number of higher level units is large (500 or more), neither point nor interval estimates appear biased even with high proportions of singletons and complex data structures (Maas and Hox, 2005; Bell et al, 2008).

For each dependent variable, models are produced based on: (i) individual socio-demographic characteristics and durable value of altruism; (ii) those characteristics plus neighbourhood context; and (iii) those characteristics plus other attitudes and beliefs. As noted previously, it is less clear that the last additions can legitimately be considered as exogenous or causally prior to our dependent variables. It is possible that neighbourhood context shapes attitudes and beliefs about the

causes of inequality or welfare receipt at the same time as it shapes attitudes to our two dependent variables. Including these variables in the models may, to some extent, mask the effect of neighbourhood. Separating out the analyses in this way allows results to be judged with and without these factors included.

The key methodological issue which confronts any study of contextual effects is the problem of selection which can also be seen as a special case of omitted variable bias (Galster et al 2008). Characteristics which affect individual attitudes may also affect the choice of neighbourhood. If we fail to control for all of these characteristics, estimates of the impacts of neighbourhood on attitudes may be biased; the direction of any bias is disputed. Various econometric techniques have been implemented to respond to these challenges, mostly based on longitudinal data (Galster et al 2008). This paper is restricted to the analysis of cross-sectional data. The extensive range of controls at the individual level, reflecting the theoretical discussions above, is designed to reduce the potential for such bias although it cannot eliminate it.

4. Results

Individual-level models

We start with models which include only individual-level socio-demographic characteristics plus the measure of altruism (Model 1 in Tables 6 and 7 below, for attitudes to redistribution and to welfare recipients respectively).

As expected, the individual determinants of attitudes to redistribution and to welfare recipients are quite different. As expected, economic resources have a strong influence on attitudes to redistribution but not attitudes to welfare recipients. Support for redistribution declines sharply as incomes rise but is also lower for those with access to a car which can be seen as an additional indicator of wealth. Source of income does not appear to influence attitudes to redistribution but social renting does, as does being currently employed in the public sector. Both can be seen as reflecting material interests in redistribution through service receipt or employment, though the latter may also be seen as either a socialisation effect or as selection.

With attitudes to welfare recipients, educational attainment stands out as the main determinant. Those with higher levels of qualifications express markedly higher support for welfare recipients. Support is also higher among those in social housing. It is markedly lower for those whose main source of income is employment, perhaps reflecting the emphasis on activation policies and workfare in public discourse.

In contrast to much previous work, women do not report higher levels of support on either variable once other factors have been taken into account. Other demographic characteristics have modest or negligible influence on attitudes.

Those who identify themselves as more altruistic express higher support for redistribution and for welfare recipients. The former is certainly what we expect but the latter runs contrary to several papers which have argued that support for welfare recipients is driven by a sense of reciprocity or the 'deservingness' of recipients based on past contributions or current efforts, rather than the one-way transaction implied by altruism.

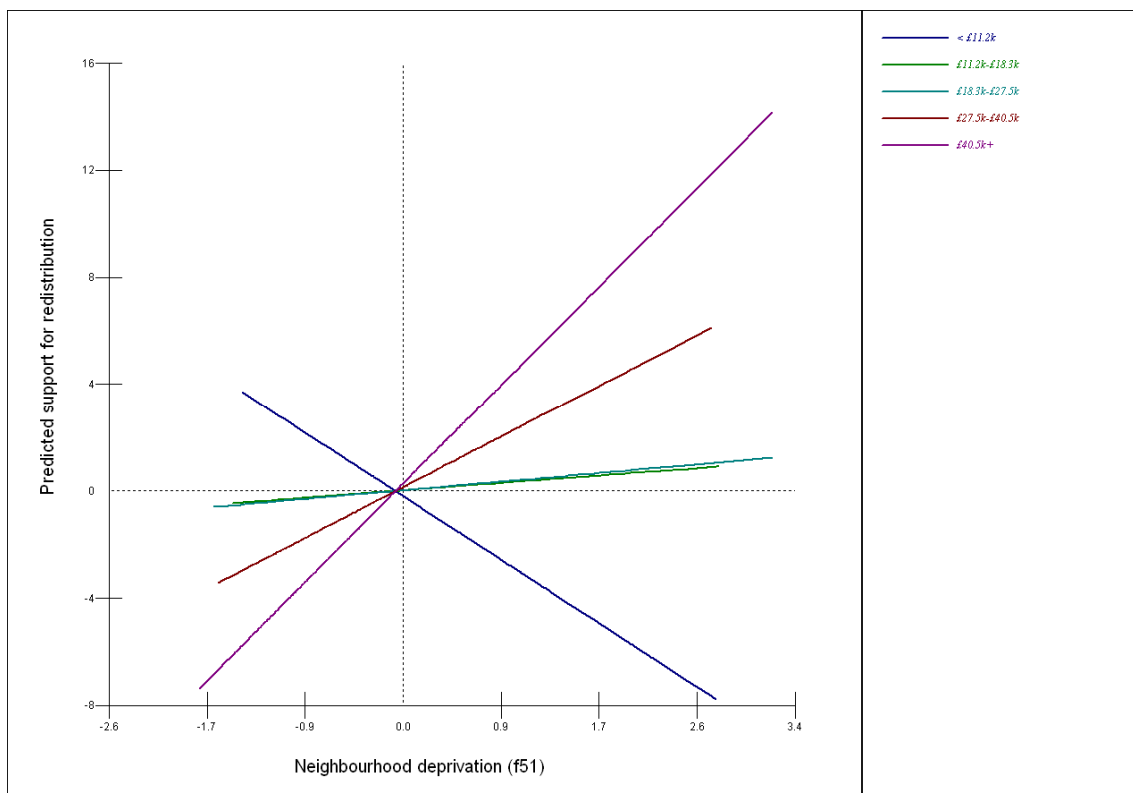
Overall, the fit of these models is modest at best (14 and 9 per cent of variance respectively) but in line with previous research in this area.

Neighbourhood context

In the second pair of models (Model 2 in Tables 6 and 7), we add measures of neighbourhood deprivation and density. We also allow the effects of neighbourhood context to vary by income level and by altruism through interaction terms.

With support for redistribution, the results appear to support our hypotheses. Support is greater in more deprived neighbourhoods and in those which have higher density. The effect of deprivation is much greater for those on higher incomes (Figure 1). Indeed, the attitudes of those on a low income to redistribution do not appear to be significantly affected by the level of deprivation in their neighbourhood.

Figure 1: Support for redistribution by neighbourhood context and income (Model 2)



Note: Based on version of model where interaction between deprivation and income based on banded income

While the effects of deprivation are essentially the same for people who are more or less altruistic, density only changes attitudes for those who express lower levels of altruism (Figure 2). Including neighbourhood context does little to change the impact of individual characteristics discussed above but it does improve the overall fit of the model which now explains around 16 per cent of the variance.

Attitudes to welfare recipients appear to be much less sensitive to neighbourhood context. Adding measures of neighbourhood context improves the fit of the model by less than one per cent. If anything, there is a suggestion that living in denser, more deprived neighbourhoods may lead to lower levels of support; although not significant overall, the coefficients for both terms are negative. The effects do not vary by income groups but the interaction with altruism indicates that these effects apply only to those with low altruism (Figure 3). Those with higher altruism have consistently higher support for welfare recipients, while those with lower altruism have lower support which may fall further in denser or more deprived neighbourhoods.

Figure 2: Support for redistribution by neighbourhood context and altruism (Model 2)

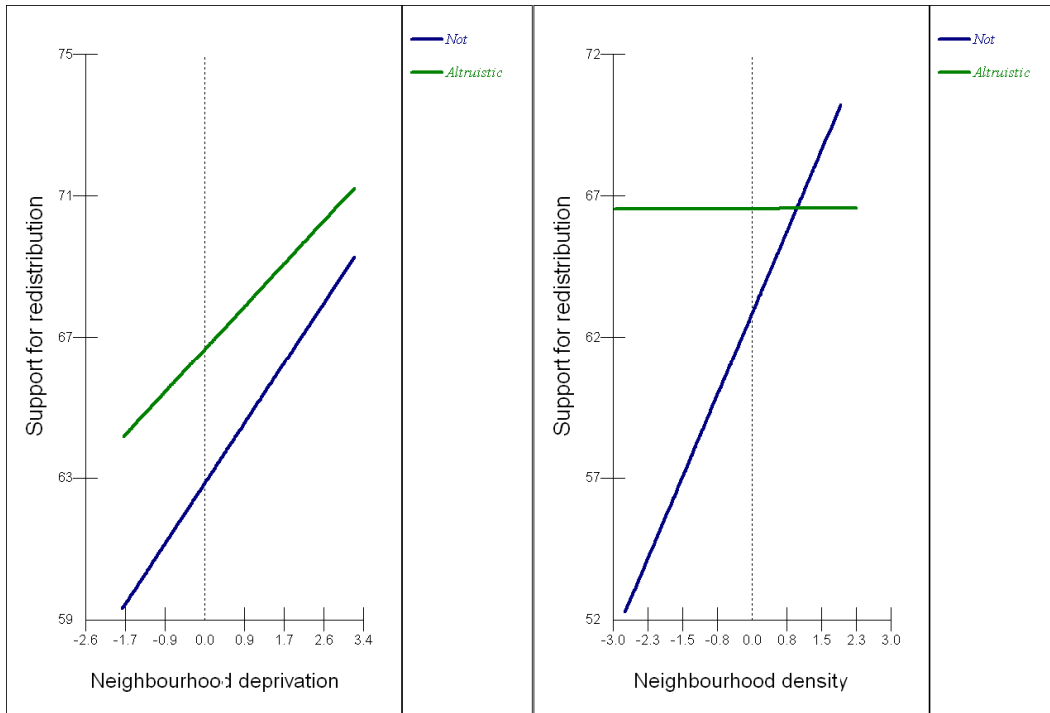
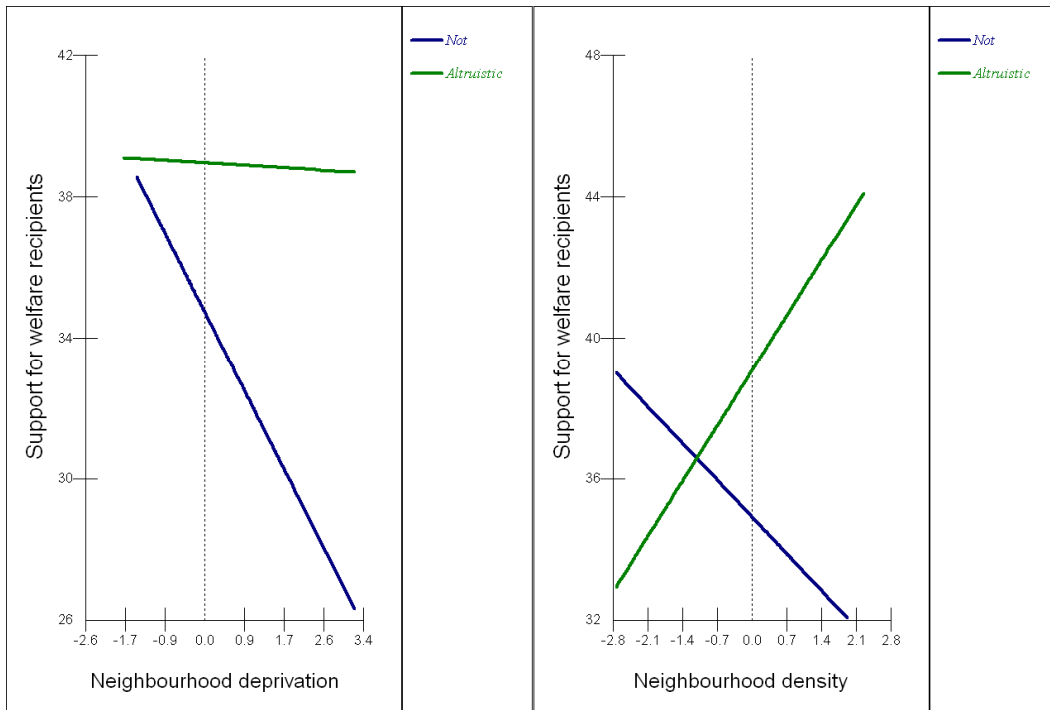


Figure 3: Support for welfare recipients by neighbourhood context and altruism (Model 2)



Other attitudes and beliefs

In the last stage, we add measures of the other attitudes and beliefs which are thought to be directly relevant to support for either redistribution or welfare recipients (Model 3 in Tables 6 and 7). As discussed above, a different set of variables is added in each case. To the model of support for redistribution, we add views about the causes of inequality (whether inevitable or necessary for national prosperity or to provide an incentive to work) and about the morality of inequality. To the model for support for welfare recipients, we add views about the causes of need: whether it reflects lack of effort, injustice in society or is simply inevitable with the contrast case that need results from bad luck. As with altruism, interaction terms were tested for each term with both neighbourhood deprivation and density. For simplicity, only two significant terms were retained – both appear in the model for redistribution.

The explanatory power of both models increases substantially (to 32 and 22 per cent respectively) and the direction of the relationships is as expected in every case, with the majority of terms significant. Support for redistribution is higher where inequality is viewed as morally wrong and lower where inequality is thought to be necessary or beneficial for work incentives. Support for welfare recipients is reduced substantially where respondents believe that need arises from lack of effort rather than bad luck.

In both cases, controlling for these other attitudes or beliefs reduces the apparent effect of altruism. In other words, altruists are more likely to see inequality as wrong and less likely to believe that need is the result of lack of effort. With support for redistribution, these other attitudes and beliefs also absorb some of the effect of income (and car ownership), suggesting that one reason that support is lower among high income groups is that they are more likely to perceive inequality as necessary or justified on other grounds, and less likely to see it as morally wrong. It seems more plausible to argue that these beliefs flow from socio-economic status rather than the other way around. With support for welfare recipients, a similar process is at work. Controlling for beliefs about the causes of need results in the effects of educational attainment weakening, suggesting that those with higher qualifications were more likely to ascribe need to bad luck or injustice in society.

In relation to neighbourhood effects, there are rather mixed effects. Looking at support for redistribution (Figure 4), the effect of neighbourhood deprivation remains broadly the same in the sense that groups which express lower support on average (e.g. those who view inequality as inevitable) tend to express greater support when living in more deprived neighbourhoods. On the other hand, those who view inequality as morally wrong may express greater support overall but that support weakens when they live in more deprived neighbourhoods. The relationship between altruism, density and support for redistribution remains the same.

Looking at support for welfare recipients (Figure 5), controlling for views about the causes of need does not change the impacts of neighbourhood context but it does strengthen them in every case. Neighbourhood deprivation and density again appear to have a greater impact on those with lower altruism but, in contrast to attitudes to redistribution, the effect of living in denser or more deprived neighbourhoods is to widen the gap in judgements between those with higher and lower altruism.

Figure 4: Support for redistribution by neighbourhood deprivation and other beliefs (Model 3)

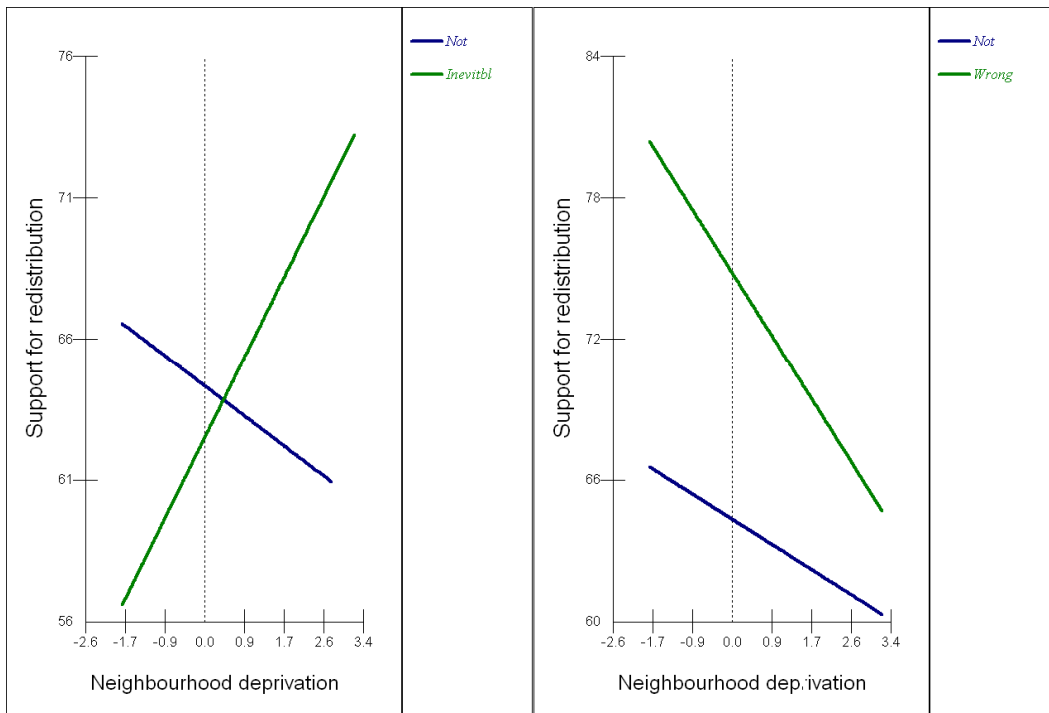


Figure 5: Support for welfare recipients by neighbourhood context and altruism (Model 3)

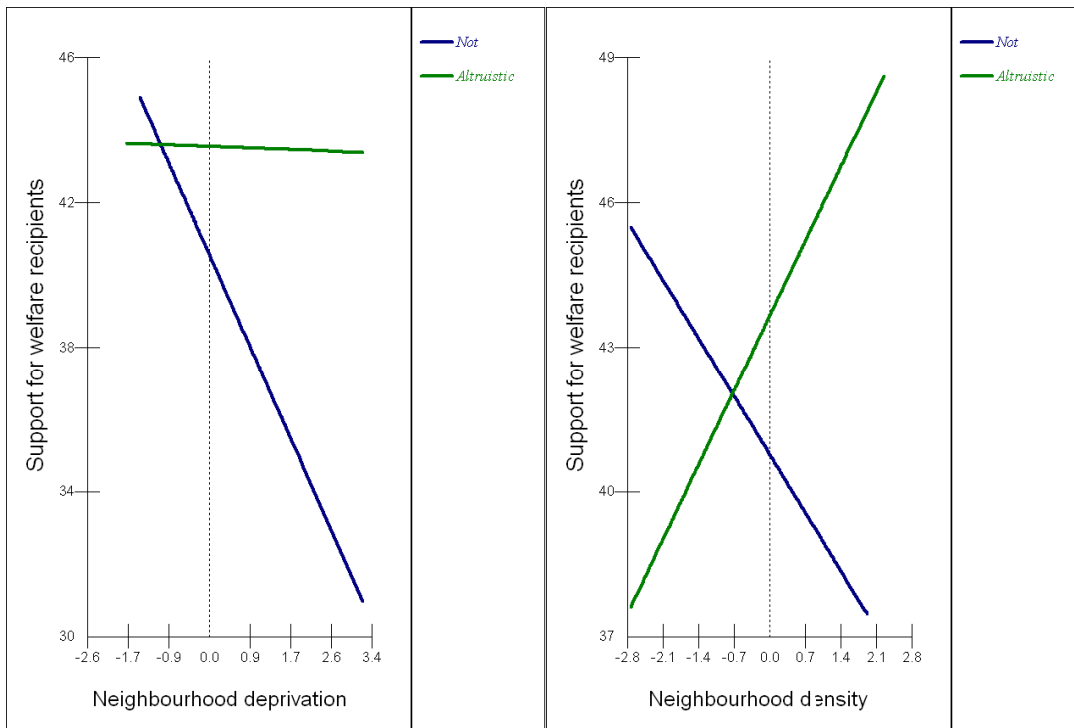


Table 6: Support for redistribution – models

		0. Null		1. Individual		2. Nhd context		3. Other attitudes	
		Regressor	S.E.	Regressor	S.E.	Regressor	S.E.	Regressor	S.E.
Fixed part:									
Constant		62.044	0.659	63.870	2.243	62.711	2.176	64.434	2.339
Gender (male)	Female			-1.611	1.045	-1.577	1.047	-1.786	0.955
Age	Years			0.017	0.044	0.032	0.043	-0.009	0.040
	Years sqrd			-0.005	0.002	-0.005	0.002	-0.004	0.002
Hhld type	Children in hhld			-3.500	1.300	-3.164	1.286	-2.250	1.214
	Couple hhld			1.691	1.238	2.325	1.215	2.299	1.055
	Non-dep adults in hhld			1.640	1.621	2.061	1.602	2.445	1.368
Region (South)	North			1.164	1.288	1.432	1.351	0.457	1.227
	Midlands			2.220	1.338	2.972	1.343	2.173	1.192
Education (no/low qualifications)	Degree			-1.308	1.924	-1.527	1.905	-2.819	1.682
	Mid-level qualifications			-2.136	1.416	-1.771	1.386	-1.607	1.268
Tenure (OO/PRS)	Social rent			4.645	1.371	3.929	1.464	4.426	1.415
Main income source (Employment)	Private Pension			-2.412	2.103	-1.944	2.075	-1.213	1.917
	State benefits			-0.085	1.819	0.418	1.796	0.946	1.776
	Other			0.089	4.586	0.349	4.894	1.683	3.615
Occupation (Other)	Intermed/prof			0.418	1.194	0.660	1.206	-0.039	1.147
Public sector currently (not)	Yes			3.248	1.554	2.897	1.483	1.899	1.347
Public sector previously (No)	Yes			2.182	2.005	2.110	2.038	2.574	1.762
Car access (No)	Yes			-4.505	1.229	-4.010	1.220	-2.734	1.188
Income (equivalised)	£ 000s pa			-0.394	0.075	-0.340	0.077	-0.264	0.075
	=- sqrd			0.003	0.002	0.003	0.002	0.003	0.002
Altruism (low)	High			3.689	1.146	3.837	1.106	1.849	1.049
	Altruism x Income			0.032	0.074	0.004	0.078	-0.018	0.073
Neighbourhood	Deprivation					2.005	0.883	-1.254	1.301
	Density					3.855	1.097	3.986	0.953
	Income x Nhd depvn					0.107	0.036	0.052	0.034
	Income x Nhd density					0.026	0.032	0.035	0.026
	Altruism x Nhd depvn					-0.578	0.994	-0.493	0.921
	Altruism x Nhd density					-3.849	1.311	-4.235	1.181
Inequality -	Inevitable							-2.164	1.164
	Necessary							-6.623	1.242
	Incentive							-2.433	0.992
	Wrong							10.608	1.032
Inequality interactions	Inevitable x Nhd depvn							4.599	0.962
	Wrong x Nhd depvn							-1.899	0.900
Random Part									
Level: SPoint		19.5	8.7	6.1	6.7	6.8	6.6	2.0	4.8
Level: IsoaAnon		44.5	16.8	33.6	14.5	25.6	14.4	13.8	10.5
Level: Serial		294.5	19.6	269.8	17.8	268.1	18.0	229.4	14.2
-2*loglikelihood:		10136.4		9956.4		9917.9		9680.5	
Units: SPoint		194		194		194		194	
Units: IsoaAnon		774		774		774		774	
Units: Serial		1162		1162		1162		1162	
Change in deviance				180.0		38.6		237.4	
D.f.				22		6		6	
Significance (chi square)				0.000		0.000		0.000	
R sqd				13.7%		16.2%		31.6%	

Notes: Shading indicates significance at 5% level.

Table 7: Support for welfare recipients – models

		0. Null		1. Individual		2. Nhd context		3. Other attitudes	
		Regressor	S.E.	Regressor	S.E.	Regressor	S.E.	Regressor	S.E.
Fixed part:									
Constant		44.594	0.838	35.058	3.698	34.999	3.650	40.859	4.473
Gender (male)	Female			0.432	1.662	0.750	1.653	0.554	1.548
Age	Years			0.063	0.061	0.067	0.063	0.013	0.060
	Years sqrd			-0.011	0.003	-0.011	0.003	-0.010	0.003
Hhhd type	Children in hhhd			-1.265	1.905	-1.001	1.911	-0.343	1.787
	Couple hhhd			1.169	1.923	0.863	1.934	0.949	1.866
	Non-dep adults in hhhd			3.255	2.456	2.953	2.550	2.847	2.384
Region (South)	North			-0.018	1.897	0.224	1.941	0.334	1.892
	Midlands			0.924	2.001	1.298	1.991	0.955	1.834
Education (no/low qualifications)	Degree			13.039	2.775	13.036	2.766	8.066	2.611
	Mid-level qualifications			6.707	2.232	6.536	2.202	4.275	2.105
Tenure (OO/PRS)	Social rent			7.592	2.611	8.161	2.837	6.643	2.722
Main income source (Employment)	Private Pension			8.076	3.195	8.102	3.261	8.650	2.877
	State benefits			8.439	3.345	8.111	3.311	9.496	3.138
	Other			-0.496	2.728	0.113	3.484	3.710	3.135
Occupation (Other)	Intermed/prof			0.389	1.920	0.126	1.933	-0.674	1.805
Public sector currently (not)	Yes			-0.472	2.244	-0.248	2.181	-0.682	1.987
Public sector previously (No)	Yes			-0.567	3.120	-0.229	3.140	-0.969	3.023
Car access (No)	Yes			-3.190	2.476	-2.718	2.472	-2.000	2.313
Income (equivalised)	£ 000s pa			-0.064	0.095	-0.102	0.101	-0.057	0.095
	=- sqrd			0.005	0.002	0.004	0.002	0.003	0.002
Altruism (low)	High			4.225	1.631	3.970	1.614	2.696	1.489
	Altruism x Income			0.058	0.085	0.111	0.089	0.106	0.083
Neighbourhood	Deprivation					-2.627	1.542	-2.988	1.470
	Density					-1.491	1.502	-1.725	1.539
	Income x Nhd depvn					-0.047	0.054	-0.063	0.053
	Income x Nhd density					0.015	0.046	0.002	0.043
	Altruism x Nhd depvn					2.547	1.787	2.939	1.676
	Altruism x Nhd density					3.732	1.860	3.937	1.839
Need -	Effort							-13.440	2.959
	Injustice							5.620	2.866
	Inevitable							-2.348	2.620
Random Part									
Level: SPoint		11.9	13.2	5.6	11.2	6.0	11.4	4.9	9.8
Level: IsoaAnon		0.0	0.0	0.0	0.0	0.0	0.0	12.3	26.6
Level: Serial		372.0	23.0	345.4	21.9	341.8	21.2	291.5	29.6
-2*loglikelihood:		5198.7		5124.3		5112.8		5039.1	
Units: SPoint		183		183		183		183	
Units: IsoaAnon		495		495		495		495	
Units: Serial		591		591		591		591	
Change in deviance				74.4		11.5		73.7	
D.f.				22		6		3	
Significance (chi square)				0.000		0.074		0.000	
R sqd				8.6%		9.4%		19.6%	

Notes: Shading indicates significance at 5% level.

5. Discussion

The analyses presented here make a number of contributions to our understanding of the factors which shape attitudes to redistribution and to welfare recipients. At the individual level, the analyses highlight the very different determinants of attitudes to these two particular issues, re-emphasising their distinctiveness in most people's minds. Self-interest or socio-economic status is a key determinant of support for redistribution but education plays the key role in relation to support for welfare recipients. The core value of altruism appears to increase support for both redistribution and welfare recipients, partly because it makes people less inclined to individualistic explanations for inequality or for need, and to see them as necessary or inevitable.

Once individual factors are taken into account, the nature of the 'neighbourhood' in which individuals live does appear to have some additional influence on their attitudes. Support for redistribution rises with neighbourhood deprivation and density as expected. This may suggest that social contact and observation are affected both by the immediate neighbourhood but also by the wider urban context in which one lives. The effect of exposure to deprivation through the neighbourhood is largely confined to groups less inclined to support redistribution in the first place (those on higher incomes and those who are less altruistic). When controls are added for beliefs about the causes of inequality, the effect appears largely confined to those who see inequality as inevitable or as morally acceptable.

With attitudes to welfare recipients, the impacts of neighbourhood context overall are much weaker. Where there are impacts, they appear to run in the opposite direction to that observed with redistribution. As with redistribution, the effects appear to be largely on less altruistic individuals who express lower support for welfare recipients on average and for whom that support ebbs further when they live in denser, more deprived neighbourhoods.

The overall implications of this work are that urban form does appear to have consequences for political attitudes to redistribution and to welfare recipients but in slightly contradictory directions. Segregation and sprawl appear to erode support for redistribution but, to a lesser extent, they may support more positive views towards welfare recipients. Overall, this suggests that there is a positive feedback effect from inequality through urban form. Urban and housing policies may have impacts on a much broader set of social attitudes. Policies to promote 'mixed communities' and 'compact cities' may have important political as well as social or environmental impacts.

These results come from an analysis of cross-sectional data and it is therefore impossible to discount the influence of selection effects. Even if they do not actively choose to live in "deprived" neighbourhoods, people more sympathetic to redistribution or to welfare recipients may be more prepared to move to or remain in more urban and more mixed areas. Those less sympathetic may put a higher spending priority of acquiring housing distant from such areas. The range of controls for socio-economic and attitudinal characteristics does reduce the scope for such selection but does not eliminate it. The logical extension of this work would therefore be a move to longitudinal tracking of attitudes in relation to places of residence.

Acknowledgements

The research on which this paper was based was funded by an ESRC grant, "The impact of neighbourhood context on attitudes to inequality and redistribution" (RES-000-22-4192).

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