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EXPLORING THE GOODHART THESIS AT THE LOCAL SCALE: NEIGHBOURHOOD ETHNIC HETEROGENEITY AND PERCEPTIONS OF LOCAL AREA IN THE BRITISH CRIME SURVEY

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The political commentator David Goodhart (2004) argued that immigration to the UK posed a threat to the welfare state because the indigenous population was unwilling to share resources with newcomers. The 'Goodhart thesis' has received substantial attention and critical commentary.

Objectives

This project investigates whether or not there was evidence to support the contention that ethnic heterogeneity at the local scale was associated with variations in people's perceptions of social conditions in their neighbourhoods, after allowance was made for individual characteristics. With this in mind, our objectives were as follows:

- To create multilevel models to determine the importance of various area characteristics (deprivation, population turnover, crime rates, levels of teenagers, and whether the area is urban or rural) in the possible explanation of peoples' perceptions of their local area.
- To test the 'Goodhart hypothesis' by adding to the models local area measures of ethnic heterogeneity, having controlled for other area factors listed above.
- To investigate in more detail the relative importance of neighbourhood disadvantage over and above neighbourhood diversity.

Datasets and methods

We researched these objectives using the 2006/07 sweep of the British Crime Survey (BCS), to which other sources of data were linked including data from the 2001 UK Census (Office for National Statistics, 2004), the 2007 Indices of Deprivation (Department for Communities and Local Government, 2007) and the cross-government rural and urban area classification indicator (The Countryside Agency *et al.*, 2004). This project was amongst the first to utilise the Home Office's trial of attaching UK 2001 Census area codes to the BCS dataset, allowing us to link in area level characteristics within which the BCS respondents are located. We were able to identify the middle-layer super output area (MSOA) of residents of respondents. This allowed us to conduct a much more fine-grained analysis of the relationship between heterogeneity and perceptions of residents' local area than previously possible with this data.

We employed two different measures of peoples' views of their local area (i) their perceptions of the levels of antisocial behaviour and (ii) their perceptions of the levels of collective efficacy in their neighbourhood, the latter being split into two distinct dimensions, namely social cohesion and trust and informal social control. Box 1 outlines how we created Likert scales to measure these perceptions.

We also utilized two measures of ethnic heterogeneity. The first — the Theil entropy score — tells us how diverse an area is with the highest scores achieved in the most diverse areas. It is computed using the following formula:

$$E_i = \sum_{r=1}^r (\pi_{ri}) \ln \left[\frac{1}{\pi_{ri}}\right]$$

where *i* stands for a neighbourhood area and *r* stands for the following ethnic groups; White; Mixed; Asian or Asian British; Black or Black British; and Chinese or Other. Term π_{ri} represents the proportion of group *r* in area *i* as measured by the 2001 Census.

Although the Theil entropy score tells us about the ethnic diversity of areas, it does not tell us about their ethnic make-up. For example, an area with a 70% white and 30% Asian population would have the same Theil score as an area with 70% Asian and 30% white residents. To

Measure 1 Perceptions of anti-social behaviour (ASB)

How much of a problem are in your local area?

Noisy neighbours or loud parties

- Teenagers hanging around on the streets Rubbish or litter lying around
- Vandalism, graffiti and other deliberate damage to
- property or vehicles
- People using or dealing drugs
- People being drunk or rowdy in public places Abandoned or burnt out cars
- "Very big problem" scored three "Fairly big problem" scored two
- "Not a very big problem" scored one
- "Not a problem at all" scored zero

Those scoring 11 or more overall were classified as perceiving high levels of anti-social behaviour.

Measure 2 Perceptions of the levels of collective efficacy split into

(a) Informal social control (ISC)

- How likely is it that people in your neighbourhood would... Do something about a group of local children who were playing truant from school and hanging around on a street corner?
- Do something about children who were spray-painting graffiti on a local building?
- Do something about a fight near their home and someone was being beaten up or threatened?
- Tell off a child who was being rude to an adult? Participate if they were asked by a local organisation to help solve a community problem?

"Very unlikely" scored three

- "Unlikely" scored two
- "Likely" scored one "Very likely" scored zero

(b) Social cohesion and trust (SC&T)

How much do you agree or disagree with the following statements about your local area?

People are willing to help their neighbours This is a close knit community People do not share the same values Different backgrounds get on well together

How many people in the neighbourhood can be trusted?

Respondents' answers were again scored from three for the most negative response through to zero for the most positive response.

BOX 1. MEASURES OF PEOPLES' PERCEPTIONS OF THEIR LOCAL NEIGHBOURHOOD

be able to model for these differences, we introduced a second measure - a typology based on the ethnic mix of the neighbourhood created using cluster analysis (Figure 1).

The Theil score can be regarded as a 'pure' measure of heterogeneity (i.e. the degree of mixing of different ethnic groups) whereas the cluster groups tell us more about the degree to which a particular group is dominant in a specific locality. If there is any evidence that heterogeneity per se influences perceptions of one's locality, then we would expect perceptions to worsen with higher Theil scores reflecting higher levels of diversity, irrespective of the nature of that diversity. In contrast, if there was a relationship between individual ethnicity and the majority or dominant ethnicity in an area, we would expect more negative perceptions of a person's local area for those living in areas with the characteristics of clusters 3, 5, and 6 (where the dominant ethnicity proportion is just over or below half of the total neighbourhood population).

Asian or Asian British White Cluster 7 dominant group(s) = Asian **Cluster 6** — dominant group(s) = White & Black Cluster 5 — dominant group(s) = White & Asian **Cluster 4** — dominant group(s) = White (mixture of other groups) **Cluster 3** — dominant group(s) = White (significant fgroup = Asian) **Cluster 2** — dominant group(s) = White (significant group = Black) **Cluster 1** — dominant group(s) = White (least diverse areas)



0 10 20 30 40 50 60 70 80 90 100 Mean percentage in neighbourhoods

FIGURE 1. SEVEN CLUSTER SOLUTION FOR THE ETHNIC MIX IN NEIGHBOURHOODS

To investigate the research questions set out above, we employed multilevel modelling. For both the ASB and the collective efficacy outcomes, two sets of multilevel models were developed. First, the neighbourhood Theil entropy score was added to a base model that contained all pertinent individual, household and area level variables. In the second model, Theil was removed and the cluster analysis information was added. This allowed us to determine whether there was a significant, independent effect for each of these measures of neighbourhood heterogeneity.

Key results

For reasons of brevity and because our focus centres on assessing the impact of neighbourhood heterogeneity on perceptions of ASB and collective efficacy, we do not include the results for individual and household level variables in Table 1. It should be noted however that the area level results shown in the table have been adjusted for these socio-demographic characteristics of the respondents within the neighbourhood. Information on the influence of individual and household level factors on perceptions of ASB and collective efficacy can be found at Taylor *et al*. (2010) and Twigg et al. (2010) respectively.

- In line with other research (e.g., Putnam, 2007), living in a less built-up area was strongly associated with higher levels of collective efficacy but we can also note that the effect of living in a rural area was significantly stronger statistically in relation to informal social control (ISC) than for social cohesion and trust (SC&T).
- Residence in villages, hamlets or isolated dwellings (i.e. rural locations) also significantly reduces the odds of perceiving high levels of perceived anti-social behaviour (ASB) compared with those living in urban settlements (with a population greater than 10,000).
- There was also a relatively strong effect for the proportion of young people in the area whereby higher levels of 10-19 year-olds increase the odds of perceiving high levels of ASB. We also found that the proportion of residents in a neighbourhood aged 10-19 years had a detrimental, albeit much weaker, effect on SC&T.
- Levels of population turnover also had a small negative effect on SC&T. Once all other area and individual factors

	Perceptions of anti-social behaviour			Perceptions of social cohesion and trust		Perceptions of informal social control	
	β	SE(β)	Εχρ(β)	β	SE(β)	β	SE(β)
Observed crime levels	0.25	0.03	1.29*	NA	NA	NA	NA
Rural & urban area classification (base=greater than 10k)							
Town & fringe	0.07	0.07	1.07	-0.43	0.10 [*]	-0.43	0.13*
Village, hamlet & isolated dwellings	-0.69	0.09	0.50*	-0.91	0.10 [*]	-1.30	0.13*
Teenagers (% aged 10–19)	0.08	0.02	1.08*	0.08	0.03 [*]	0.06	0.04
In (population turnover)	0.02	0.02	1.02	0.08	0.03 [*]	0.04	0.04
Level of deprivation	0.25	0.03	1.28*	0.36	0.03 [*]	0.35	0.04 [*]
Ethnic heterogeneity							
In (Theil)	-0.02	0.03	0.98	0.15	0.04 [*]	0.22	0.06*

 TABLE 1. AREA LEVEL INFLUENCES ON PERCEPTIONS OF THE LOCAL AREA Source: Authors' calculations based on the 2006/07 British Crime Survey.

Notes: Social cohesion and trust and informal social control were modelled simultaeously using a multivariate multilevel model.

* indicates statistically significant result at the 5% level.

NA indicates the independent variable was not included in the model.

All models also take into account pertinent individual and household level independent variables.

have been accounted for, population turnover does not influence levels of informal social control in a neighbourhood. Further, population turnover did not have an independent effect on perceptions of ASB.

- As expected, based on the findings of Sampson and Raudenbush (2004), the results indicate that observed crime levels (as measured here by the crime domain of the 2007 Indices of Deprivation) increase an individual's propensity to perceive high levels of ASB (regardless of whether they themselves have been a recent victim of crime).
- At the neighbourhood level, when personal background characteristics were controlled for, deprivation was strongly negatively associated with both dimensions of collective efficacy, a finding which is consistent with all other research in this field.
- Most pertinent to this research is the contested relationship between ethnic heterogeneity and potential adverse social consequences. Do our models support an argument that high levels of ethnic heterogeneity lead to negative perceptions of one's local area? Table 1 indicates that ethnic heterogeneity (as measured by the Theil entropy score) is associated with reduced levels of both dimensions of collective efficacy. It should be noted though that the standardised regression coefficients are substantially smaller than those for deprivation.
- On the other hand, with respect to perceptions of levels of anti-social behaviour we do not find significant results. The level of ethnic heterogeneity, as measured by the Theil entropy score, was not important in explaining high levels of perceived ASB.
- When Theil was substituted in the models with the ethnic cluster typology, none of the clusters were found to be significant (results not given here). In other words which ethnic group is dominant in a neighbourhood does not affect perceptions of the local area on the part of its residents.

Diversity versus deprivation

We then looked in more detail at the relationship outlined earlier between deprivation and diversity. The results presented above indicate that both deprivation and ethnic diversity have a statistically significant negative effect on the two dimensions of collective efficacy. However, a statistically significant finding does not necessarily imply a substantively important one. Having controlled for pertinent individual and area level variables, the Theil entropy score only explains 1% of the MSOA-level variation for social cohesion and trust and does not explain any of the MSOAlevel variation in the case of informal social control. This is not an impressive effect when compared with the influence of the level of deprivation in the local area which explains substantially more variation in people's perceptions of social conditions — 19% in the case of SC&T and 7% for ISC.

Further, the creation of an interaction term between diversity and deprivation suggests that the effect of ethnic diversity on levels of social cohesion and trust is dependent on the level of deprivation in an area (= -0.09(0.03)). The coefficient of the interaction term between deprivation and ethnic diversity is in the opposite direction to our a priori expectation — as deprivation increases, the negative relationship between diversity and SC&T diminishes. This is unexpected if we adhere to a conflict theory, since we would expect perceptions of negative effects to be greatest in deprived areas where there was greatest competition for resources. However, the result is consistent with Sturgis et al. (forthcoming) who found the same relationship to hold when researching trust, and Laurence and Heath (2008, 41) who found that areas with both high levels of disadvantage and high ethnic diversity record higher average cohesion scores than highly disadvantaged White areas, leading them to conclude it is "deprivation that undermines cohesion, not diversity". There is an attenuating effect of diversity on deprivation. As deprivation increases, the probabilities of perceiving low levels of social cohesion and trust converge, regardless of the level of diversity.

Although looking for causal pathways in cross-sectional survey data is inherently problematic, we employed a

further modelling strategy to try and unpick whether it is diversity or deprivation that drives negative perceptions of one's neighbourhood by focusing on any possible mediating effect of ethnic heterogeneity. Here we follow the modelling strategy explained in detail in Raudenbush and Sampson (1999) which involves looking at the total effect of deprivation in a model that does not contain a measure of heterogeneity. When the Theil entropy score is introduced, the resultant coefficients represent the direct effects, and the indirect effects can be derived by subtracting the direct effects away from the total effects. The coefficients for deprivation (0.36, 0.35 and 0.25 for SC&T, ISC and ASB respectively) remain unchanged in models with and without the Theil index, suggesting that ethnic heterogeneity does not mediate the relationship between either of the dimensions of collective efficacy or anti-social behaviour and neighbourhood deprivation. In other words, pure ethnic heterogeneity does not influence the observed significant associations between deprivation and negative perceptions of the local area.

Conclusion

We find very little evidence in support of the proposition that, after allowing for socio-economic characteristics of both individuals and areas, there is an independent effect — whether positive or negative — of heterogeneity on people's perceptions of anti-social behaviour or collective efficacy in their neighbourhoods. This is generally consistent with contemporary British findings from research on the relationship between deprivation, diversity and social cohesion. In other work, not reported here, we have found, unexpectedly, that not only was there no effect of heterogeneity (in this case on perceptions of national and local levels of crime) in fact there was a small positive effect of heterogeneity (in other words it was seen as leading people to be more, rather than less, optimistic about crime levels).

Such inconsistent results are problematic and call into question simplistic associations between heterogeneity and a decline in social cohesion. In particular, along with the findings of Sturgis et al. (forthcoming), our work provides a strong challenge to Putnam's views about the negative impacts of heterogeneity and the contention that it causes groups to 'hunker down' (i.e. withdraw from collective life and community participation). Our findings imply that neighbourhood deprivation is rather more important than community diversity as a driver of negative perceptions of one's local community.

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