# Spring 2011

# CCSRNew

The Cathie Marsh Centre for Census and Survey Research (CCSR)

# 2011 Census Quality Assurance Research

Independent Review of 2011 Census Coverage Assessment, Adjustment and Quality Assurance Methods



In October 2010 the National Statistician, Jil Matheson, asked Ian Plewis to lead a review of methods for coverage assessment, coverage adjustment and quality assurance of the 2011 Census population estimates for **England and Wales.** 

These methods are crucial to the accuracy of final Census population estimates, which will underpin official statistics and be used by researchers,

decision makers and policy makers for years to come. The review team included Ludi Simpson and Paul Williamson.

In total, the review team made twenty three recommendations: eleven relating to coverage assessment; three to coverage adjustment; eight relating to quality assurance and one relating to Census field work. The full report can be found at: http://bit.ly/eQUcUO

# Teaching Link with Xi'an University in China

Ian Plewis and Yaojun Li recently accompanied Fiona Devine (Head of the School of Social Sciences) on a visit to Xi'an Jiaotong University. Our host in Xi'an was Professor Yanjie Bian and we met his colleagues in the Sociology department and also visited the Institute for Empirical Social Science Research (IESSR). Both Ian and Yaojun gave talks in a seminar for staff and students in IESSR. The main purpose of the visit was to establish research links and also to establish connections between the Masters in Sociology in Xi'an and our own Social Research Methods and Statistics Masters course. As a result of our discussions, and the signing of an

agreement between the Universities of Manchester and Xi'an Jiaotong, we hope to see at least three students from Xi'an joining our course from 2012/13 onwards.



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# Staff changes at CCSR

Administrative staff are crucial to the successful running of a research centre. A thank you to Margaret Martin who has played a central role at CCSR since 1994. Margaret recently moved to a new post on Human Resources in the Faculty of Medical and Human Sciences.

We would also like to thank Katey Mathews, our short course administrator, who has left this post to begin studying for a PhD at CCSR, after completing her MSc here.

Nasira Asghar has been appointed as the short course administrator, Philippa Walker is taking on the role of CCSR administrator, and we are also joined by Jo Garsden, who is project coordinator for the Manchester Interdisciplinary Collaboration for Research on Ageing (MICRA) and an ESRC funded pathfinders project. We have also been joined by Dr Maria Pampaka, who has taken up a lectureship in social statistics and Pierre Walthery, who has taken a post as research associate.

# Postgraduate Training Centre News

An important and exciting piece of news has been the establishment of a North West Doctoral Training Centre (NWDTC) involving the Universities of Manchester, Lancaster and Liverpool, created by the ESRC and the largest centre in England for social science postgraduate training. This helps to ensure that we can maintain the number of studentships we offer in the foreseeable future and creates an exciting opportunity to build on our existing postgraduate programme in partnership with our Social Statistics and Sociology colleagues in Lancaster and Liverpool, including real opportunities to develop interdisciplinary work.

# Neighbourhood Population Projections – Three Approaches

### Ludi Simpson and Harvey Snowling

The past two governments have stressed local responsibility for planning. But how can the best plans be made for the future needs of neighbourhoods? One ingredient is a robust population projection. A project funded by Fife Council and the General Register Office of Scotland (GRO-S) has evaluated three approaches to small area population projections.

Demographic information for the great variety of neighbourhood boundaries used to deliver local services is usually not available. When available, the information is based on so few events that it either threatens to reveal confidential detail, or is insufficient to provide reliable estimates for forecasting. If there is too little local information the forecaster has to assume that neighbourhoods are alike, which is clearly often not the case.

This project investigated and improved a third strategy, which calibrates demographic rates for local authorities using only the population, births and deaths recorded for each neighbourhood on an annual basis. Migration can be successfully estimated indirectly by deducting births and deaths from population change. The results are fertility and mortality rates, and age-sex patterns of migration, for each recent year.

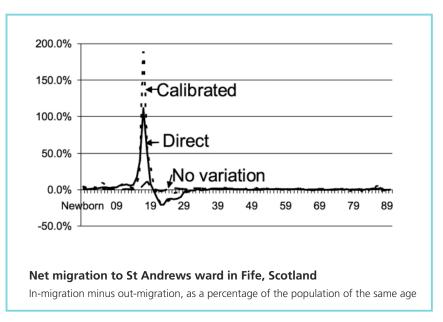
The figure opposite shows each method's estimate of in-migration to the University town of St Andrews in Scotland. The assumption of no variation between wards does not capture the high level of in-migration of students at age 17 and 18. The indirect (calibrated) estimate from successive population estimates provides a more plausible estimate of migration. Although it is not as accurate as the direct estimate, it is sufficiently convincing to be used for local demographic projections.

As a result of the project, GRO-S has made available to local authorities and independent researchers a Scotland-wide dataset for standard Data Zones, with advice about how to use it for neighbourhood population and household projections.

This evaluation is reported in Simpson, L. and Snowling, H. (2010) Estimation Of Local Demographic Variation In A Flexible Framework For Population Projections. CCSR Paper 2010-05. A final version will be published in a special issue of the *Journal of Population Research* devoted to forecasting for small areas.



Figure 1. Net migration in Fife, Scotland.



# Why Focus On Ethnic Composition? It's Deprivation That Matters!

### Nisha Kapoor

As segregation reappeared as a subject of high profile discussion on the political agenda, it prompted considerable debate regarding its nature, causes and consequences. It is segregation that was attributed as the cause of the 2001 riots in the Northwest of England and is regarded as a fundamental obstacle to realising community cohesion. In this political context, segregation has come to symbolise cultural difference. Moreover, the separation of cultures and lack of inter-cultural contact have been the focus of attention amongst policy makers at the expense of other issues such as housing allocation practices and unemployment.

While there has been much quantitative analysis of residential segregation, such approaches often assume ethnic minority concentration to be a causal factor, laying emphasis on ethnic minority groups rather than structural factors, such as housing, employment and income deprivation, which all have material impacts on individual life chances. We know, for example, that Pakistani and Bangladeshi communities are disproportionately concentrated in the most deprived neighbourhoods across the country.

In light of this, using data from the 2001 Census and the 2005 Citizenship Survey, this project set out to examine whether neighbourhood deprivation was more strongly associated with education, employment and health outcomes for South Asian ethnic groups than the ethnic composition of the neighbourhood in which they live. Neighbourhood deprivation was measured using a neighbourhood income deprivation score and ethnic composition was measured by the concentration of an individual's ethnic group within their neighbourhood.



The results show neighbourhood deprivation to be more important in explaining poor outcomes in education, employment, and health than levels of co-ethnic concentration. Furthermore, the findings showed that the negative association that is often reported between ethnic minority concentration and education and employment outcomes became insignificant when levels of neighbourhood deprivation were considered. Figure 2 shows that there is little relationship

between probability of having no qualifications and co-ethnic concentration for three ethnic categories when levels of neighbourhood deprivation are taken into account.

In contrast, Figure 3 shows that for the same three categories the levels of neighbourhood deprivation are clearly related to the probability of having no qualifications after adjusting for co-ethnic group density.

Figure 2. Predicted probability of no qualifications by level of neighbourhood co-ethnic concentration for the South Asian populations, and ethnic minority concentration for the White population.

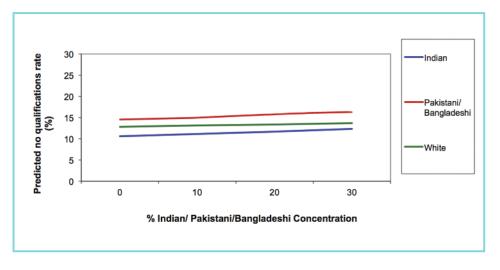
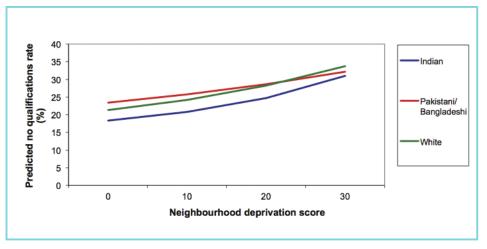


Figure 3. Predicted probability of having no qualifications for ethnic minority populations by level of neighbourhood deprivation.



For more information see Kapoor, N. (2010) Deconstructing 'Segregation': Exploring South Asian Geographies and Inequalities in the UK. PhD Thesis CCSR, University of Manchester.

# Neighbourhood Characteristics and Social Cohesion in the UK

### Laia Bécares



Research in the USA has suggested that increased immigration and ethnic diversity are associated with reduced solidarity and social capital. However, studies in Europe have for the most part disproved this finding, and in the UK the association between ethnic diversity, social capital and social cohesion is not yet clear. For example, some studies have found that ethnic diversity is negatively associated only with neighbourhood attitudes, but it does not impact negatively on socialisation with other residents, or on tolerance to diversity. Ongoing debates reflect concerns that increased ethnic and cultural diversity can undermine community cohesion. But are diversity and migration the actual drivers of low social cohesion?

Using data from the 2005 and 2007 Citizenship Survey linked to the 2001 Census, we examined the association between neighbourhood ethnic profile and social cohesion, exploring whether these associations differ by ethnic group. We also explored whether the association between neighbourhood ethnic profile and social cohesion changes once the effects of area deprivation are taken into account, with the aim of establishing what are the neighbourhood characteristics that promote, or erode, social cohesion.

As seen in Figures 4 and 5, our results show that although an area's ethnic diversity was found to be associated with lower social cohesion for some ethnic groups, once the effect of area deprivation was adjusted for, the association between ethnic diversity and social cohesion changed direction becoming a positive association, whereby increased diversity was associated with increased social cohesion.

The results also consistently show that an increase in area deprivation was associated with a decrease in measures of social cohesion, showing that whereas ethnic density increases social cohesion, the key driver of a decrease in social cohesion is, in fact, area deprivation.

For more information see Bécares, L., Stafford, M., Laurence, J., & Nazroo, J. (2011) Composition, Concentration and Deprivation: Exploring Their Association With Social Cohesion Among Different Ethnic Groups In The UK. *Urban Studies*.

This research was sponsored by the Economic and Social Research Council. Laia Bécares is supported by an ESRC/MRC postdoctoral fellowship.

Figure 4. Likelihood of reporting that people in the area get on well together as the proportion of ethnic minorities in the neighbourhood increases by 10%.

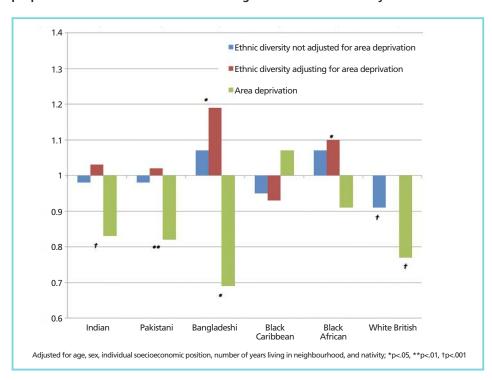
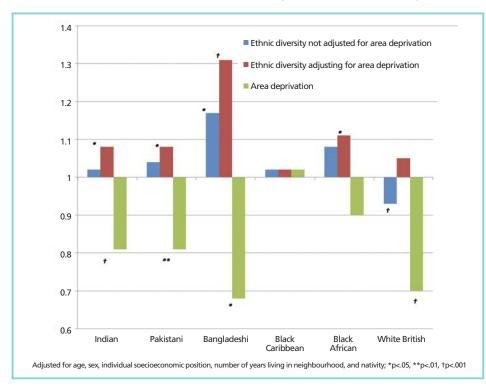


Figure 5. Likelihood of reporting that people in the area respect ethnic differences as the proportion of ethnic minorities in the neighbourhood increases by 10%.



# Secular Values, Religious Beliefs and Civic Life

## Kingsley Purdam and Ingrid Storm

Religion is seen by many as a key aspect of civic society in terms of shaping individual morality, underpinning personal support networks and in the provision of welfare services. Religion is often given a legally privileged status alongside other aspects of people's identity such as age and gender. It has been argued that prosocial behaviour, defined in general terms as voluntary actions to help others (for example, organising a local community event or providing support to a neighbour) is integral to religious identities. However, to whom and to what effect such helping attitudes and behaviour are directed and how they compare with the behavior of secular populations is subject to some debate. Such questions need to be examined in the context of debates around civic society and what has been described as the mobilization of responsible citizenship.

Using data from the European Social Survey (ESS) we compare the importance people attach to helping others (value help), the extent to which they help with or attend activities in their local area (local help) and how often they help people other than in their family, at work and in voluntary organizations (helping others). We compare people who state they are not religious, people who state they belong to a religion but do not attend regularly and those who attend religious services regularly.



Our analysis highlights that across all groups there are sizeable differences between the proportion of people stating that helping others is important and the proportion of people who state that they actually help in practice. People who attend religious services regularly are the most likely to state that they think helping other people is important and also to state that they actually help people in practice (as shown in Figure 6). (The differences were found to be statistically significant). Nonetheless, only just over two thirds

of regular attenders state that they think helping other people is important. The higher levels of helping in practice (local help) amongst regular attenders could be highlighting the organizational aspect of this type of helping. It may be that the social networks associated with regular attending could lead people to help in this way, but it is also possible that the activities and events that they are helping to organise are in fact religious or religious related activities. Thus this could also be seen as evidence of what can be termed "bounded helping" where helping takes place within the infrastructure and under the name of their religion. Though it should be added that the activities of religious organizations are often about reaching out to those in need and not necessarily only helping people of the same religion.

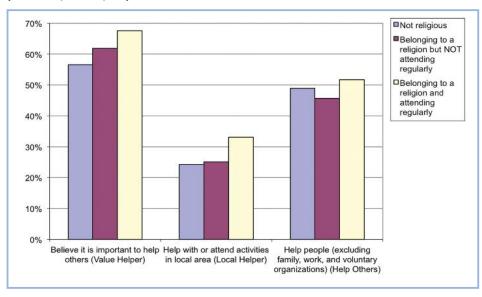
In terms of helping people other than one's family, at work and in voluntary organizations, the lowest levels of helping are reported amongst those who state that they belong to a religion but do not regularly attend services. The differences between people who state they do not belong to a religion and those that attend regularly are also smaller compared to other measures of helping. After controlling for key demographics (including education), belonging to a religion but not regularly attending is negatively associated with helping people other than one's family, at work and in voluntary organizations compared to those people who state they are not religious. It seems that simply belonging to a religion, or stating

one's affiliation to a religion, is not acting as a vehicle for this form of civic participation.

Comparing across countries and across secular and religious populations within these countries there are striking differences in the overall levels of people stating that it is important to help others, the extent of helping with or attending local activities in their local areas and helping people (excluding family, at work and in voluntary organizations). It is likely that contextual differences across countries such as the welfare infrastructure, civic tradition and the roles played by the state and religious organisations, would explain some of the variations in the patterns of helping. The local context of help where people live is clearly important. For all populations the extent to which people think other people in their local neighbourhood are helpful is positively associated with the extent to which they think helping others is important and the extent to which they actually help in practice

Although general, self reported measures of helping have limitations they provide a rich source of evidence and our findings have potentially far reaching implications for our understanding of debates about civil society and responsible citizenship amongst both secular and religious populations. The gap amongst all populations between seeing helping as important and helping in practice is clearly a focus for renewed policy development.

Figure 6. Religion, non belief and attitudes to and rates of helping others (ESS 2006; N = 46,612)



For more information see Purdam, K and Storm, I. (forthcoming) Secular Values, Religious Beliefs and Civic Life. In Halman, L. and Dekker, P. (eds) *Religion and Civil Society*. Springer 2011.

# Stress At Work During A Recession

### Tarani Chandola

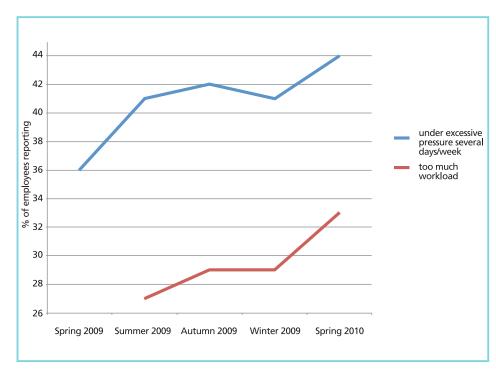
"Sustainable job growth" is an often repeated message for governments, especially in the aftermath of a recession. The question of the quality of jobs available is less seldom addressed and is sometimes seen as hindering job growth. If the balance between improving the quality of existing jobs and creating new jobs becomes greatly imbalanced towards the latter, this could increase work stress among current and future workers, which in turn has health, economic and social costs. Work stressors such as job insecurity, bullying at work and work intensity are psychosocial working conditions that generate physiological, psychological and behavioural stress responses. A recent British Academy Report Stress At Work highlights these concerns while describing the context, determinants and consequences of work related stress in Britain.

The 2008-09 recession has already resulted in increased levels of psychosocial work stressors in Britain. There has been an increase in job insecurity, work intensity and bullying at work (see Figure 7). Job insecurity among public sector workers has doubled since 2009. Public sector workers also report higher levels of and a greater increase in work hours, work intensity, work conflicts and bullying by managers compared to private sector workers, who also report an increase in work related stressors. Even before the onset of the last recession, work stressors had been increasing in Britain since 1992, although this increase has become particularly marked after 2009. Furthermore, the increase in work stressors is greater among female employees who report a tripling of "job strain" between 1992 and 2006, compared to a 50% increase among male employees over the same time period.

Reviews of previous studies suggest strong links between psychosocial work stressors and depression/anxiety disorders and sickness absence, and moderate links with workplace injuries, accidents and cardiovascular risk. The economic costs of work stress to society have been estimated to lie between 0.5% and 1.2% of UK GDP. Despite these consequences of work stress, Lord Young's recent review of Health and Safety in the UK does not mention the word "stress" The review proposes replacing complicated procedures for risk assessment in office environments (including employee well-being) with a short risk assessment form by managers. This is at odds with standard methods of measuring work stressors through employee surveys. The future of policies to deal with work stress appears to be in doubt, just as levels of work stress are increasing in the workforce with a concomitant impact on GDP.



Figure 7. Trends in the percentage of employees reporting they are under excessive pressure several days of the week and have too high a workload: Spring 2009 to Spring 2010, CIPD Employment Outlook Surveys.



For further information see Chandola, T. (2010) Stress at Work. British Academy Report, London.

# On-line Campaigning at the 2010 General Election

## Rosalynd Southern

For a number of years political commentators have been predicting an 'Internet election'. However, in both the 2001 and 2005 General Elections, parties and candidates did not to fully engage in dialogue with voters over the Web, tending to see the costs (both in terms of material resources and the potential for negative consequences) as outweighing any benefit. But in the run up to the 2010 Election, with the rise of social media tools such as Facebook and Twitter, and the success of Barack Obama's interactive online campaign, there was an expectation that it would be the first election where candidates would truly engage with potential voters via the Web.

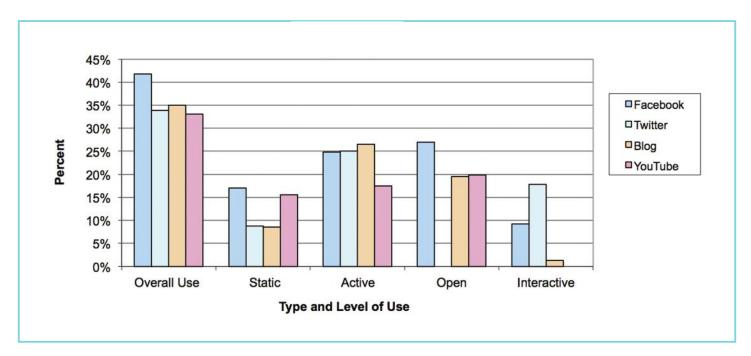
To examine whether this was the case, original data from candidates websites, Facebook, Twitter, blogs and YouTube were collected during the 2010 General Election campaign. The different levels of engagement were categorised as: Static, Active, Open and Interactive. Candidates use of each type of social media was recorded alongside whether the candidate had updated their page in the past week and, if so, how regularly. It was also recorded whether the candidates' pages allowed comments. Finally, any actual responses the candidates posted were analysed.

The findings reveal there was a widespread overall use of Web 2.0 tools by candidates: 42% of candidates studied were using Facebook, 35% were blogging, 34% were using Twitter and 33% were using YouTube. However, there were far fewer candidates who had updated the tools in the past week: Facebook 25%, blogs 27%, Twitter 25% and YouTube 18%. Examining the level of interactive use of these media tools showed a much lower level of use – only 9% of candidates replied to comments on their Facebook page, 18% responded to Tweets and only 1% replied to comments left on their blog.

It seems that electoral candidates remained reluctant or unable to fully exploit the Web in order to engage in a dialogue with voters. From these headline figures it appears that although candidates were adopting the technology as part of their campaign in a limited manner, the vast majority of candidates using Web 2.0 during their campaign were either unaware of how to use the technology to its full potential, or were not choosing to do so. Further analysis is now ongoing following research into candidates' responses to emails during the election campaign.



Figure 8. 2010 General Election Candidates Web 2.0 use by type and level (n=758).



For more information see Southern, R. and Ward, S. (2010) Below the Radar? Online Campaigning At The Local Level In The 2010 Election. In Geddes, A and Tonge, J. (eds) *Britain Decides: The UK General Election 2010*. Palgrave, London.

## **Training**

# MSc Social Research Methods and Statistics (SRMS) Study (Full or Part Time) 2011/2012

Places are available on the SRMS MSc course for September 2011. The MSc provides a thorough grounding in advanced quantitative methods, taught within an applied social science framework. The course is available full-time over one year or part-time over two-years. See

#### www.ccsr.ac.uk/masters

There is an increasing need for well-trained social scientists who are able to apply advanced methods of analysis to complex data. Graduates of our programme in Social Research Methods and Statistics are in a good position to obtain employment in central government, the academic sector, local government and within the commercial research sector.

See www.ccsr.ac.uk/masters/grad\_dest.htm

For further details about the SRMS MSc course, contact: Dr K. Purdam,

Postgraduate Teaching Director, CCSR.

email kingsley.purdam@manchester.ac.uk

# **Upcoming CCSR Short Courses**

## May 2011 - Sept 2011

Our expanded Short Courses Programme provides a range of courses in research design and analysis, all with a practical emphasis and applied focus. The programme is structured so that participants may either select an individual course which meets their needs, or build up their expertise through a portfolio of courses. As well as academics, those working in local and central government, health and other public services and also the private sector use CCSR courses to update their research skills. Each course is supported by full documentation. To book a place visit:

#### www.ccsr.ac.uk/courses

Event History Analysis 11/5/2011

Multilevel Modelling 13/5/2011

Demographic Concepts and Methods 16-17/5/2011

Population Estimating and Forecasting

18/5/2011

**Demographic Forecasting** with POPGROUP 19-20/5/2011

**Longitudinal Data Analysis** 1-3/6/2011

Causal Analysis in STATA 6/6/2011

Fuzzy Set Analysis 7/6/2011

An Introduction to R 20/6/2011

## New Books by CCSR Staff

### Understanding Social Research: Thinking Creatively About Method

#### Jennifer Mason and Angela Dale

Understanding Social Research brings together a wide variety of research methods - both qualitative and quantitative - to help students and researchers to consider the relative benefits of adopting different

approaches for their own research work. The authors clearly identify the most appropriate methods for different research questions and highlight areas where it might be fruitful to compliment different methods with each other or exploit creative tensions between them. The book is therefore a highly practical guide which also seeks to draw readers outside their methodological comfort zones. Published by Sage.

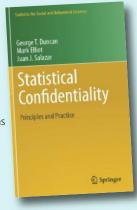


## Statistical Confidentiality - Principles and Practice

#### George T. Duncan, Mark Elliot and Juan J. Salazar

Statistical confidentiality embraces the responsibility for both protecting data and ensuring its beneficial use for statistical purposes. The eight chapters lay out the dilemma of data stewardship organizations (such as statistical agencies) in resolving the tension between protecting data from

snoopers while providing data to legitimate users. The book explains disclosure risk and explores the types of attack that a data snooper might mount, presents the methods of disclosure risk assessment, gives techniques for statistical disclosure limitation of both tabular data and microdata, identifies measures of the impact of disclosure limitation on data utility, provides restricted access methods as administrative procedures for disclosure control, and finally explores the future of statistical confidentiality. Published by Springer



## CCSR/ISC Social Statistics Seminars Spring 2011

Seminars cover quantitative methods and social statistics, social inequality and individual and social change. Seminars are on Tuesdays at 4pm and are open to all.

See www.ccsr.ac.uk/seminars/ for up to date details.

## **General Enquiries**

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