

## Neighbourhood Effects Symposium: mechanisms, methods and policy

25th June G306A

Jean Macfarlane Building (University of Manchester)

A body of literature has found that characteristics of neighbourhoods, such as the level of deprivation or the nature of local food availability, have influence on social outcomes. At the same time, it is well known that there are serious methodological challenges that make identification of such neighbourhood effects problematic. For example, how can we separate the characteristics that determine residence from those that have influence on social outcomes such as health? What are the specific mechanisms through which neighbourhood characteristics influence social outcomes?

A recent [ESRC seminar series and book](#), developed in part by researchers at the Cathie Marsh Institute for Social Research (CMIST), laid out [ten challenges](#) for researchers involved in neighbourhood effects research. This exciting interdisciplinary symposium provides a response to some of these challenges with a showcase of the latest research of neighbourhood health effects at The University of Manchester. The seminar will focus on the idea of neighbourhood effects operating differently for different population groups (including older people and ethnic minority groups) and in different national contexts, the impact of policy on neighbourhood effects and the latest methodological perspectives, both qualitative and quantitative, within the research field.

### Timetable

Time	Session
9.30am	<b>Registration and coffee</b>
10 - 10.45am	<b>Welcome: <a href="#">Professor Tarani Chandola</a></b> <b>Keynote presentation (Professor <a href="#">Ana Diez Roux</a>: Dean of the School of Public Health Drexel University, Philadelphia)</b> Neighbourhood Health Effects: an overview of the current state of research and future challenges
10.45-11am	<b>Coffee break</b>
11 - 12.30pm	<b>Neighbourhood health effects: segregation and inequality</b> <b>Chair: <a href="#">James Nazoo</a></b> <a href="#">Laia Becares</a> : <i>The contrast between ethnic density and area deprivation: Findings from international studies.</i> <a href="#">Alan Marshall</a> : <i>Does the level of wealth inequality within an area influence the prevalence of depression amongst older people?</i> <a href="#">Pierre Walthery</a> : <i>Health trajectories in regeneration areas in England: The impact of New Deal for Communities intervention</i>
12.30-1.30pm	<b>Lunch break</b>
1.30-3pm	<b>Neighbourhood effects: methodological and theoretical perspectives</b> <b>Chair: <a href="#">Alan Marshall</a></b> <a href="#">Vanessa May</a> : <i>Creating an embodied sense of belonging to place in time</i> <a href="#">Frensis Bras</a> : <i>Exploring Neighbourhood effects through Agent-Based Models</i> <a href="#">Brian Kelly</a> : <i>Individual belonging to local neighbourhoods; neighbourhood effects and individual mobility.</i>
3-3.15pm	<b>Coffee break</b>
3.15-4.15pm	<b>Neighbourhood effects and policy: a case study of Manchester age friendly communities initiative</b> <b>Chair: <a href="#">Laia Becares</a></b> <a href="#">Tine Buffel</a> : <i>Developing Participatory Research Approaches to Explore the Age-Friendliness of Neighborhoods. Reflections, Challenges and Opportunities</i> Paul McGarry (Manchester City Council): <i>Age Friendly Cities: Manchester</i>
4.15-5pm	<b>Closing presentation: Professor <a href="#">Chris Phillipson</a></b>
5.00pm	<b>Close</b>

## Abstracts

### ***Does the level of wealth inequality within an area influence the prevalence of depression amongst older people?***

***Alan Marshall, Lecturer in Social Statistics, University of Manchester***

This paper considers whether the extent of inequality in house prices within neighbourhoods of England is associated with depressive symptoms in the older population using the English Longitudinal Study of Ageing. We consider two competing hypotheses: first, the wealth inequality hypothesis which proposes that neighbourhood inequality is harmful to health and, second, the mixed neighbourhood hypothesis which suggests that socially mixed neighbourhoods are beneficial for health outcomes. Our results are supportive of the mixed neighbourhood hypothesis, we find a significant association between neighbourhood inequality and depression with lower levels of depression amongst older people in neighbourhoods with greater house price inequality after controlling for individual socio-economic and area correlates of depression. The association between area inequality and depression is strongest for the poorest individuals, but also holds among the most affluent. Our results are in line with research that suggests there are social and health benefits associated with economically mixed communities.

### ***The contrast between ethnic density and area deprivation: Findings from international studies.***

***Laila Bécares, Joint Hallsworth/ESRC Research Fellow, University of Manchester***

International evidence suggests that ethnic minority people are healthier when they live in areas with a higher concentration of people from their own ethnic group, a so-called ethnic density effect. However, findings on the ethnic density effect are varied, and some studies report no association between ethnic density and health, or a detrimental association between increased ethnic density and poor health. This discrepancy in results may arise because of numerous study differences: variations in national and migration contexts have led to a wide range of racial/ethnic groups and densities being investigated; studies have used a variety of area definitions to operationalise ethnic density; and have adjusted for different demographic and socioeconomic confounding factors. In addition, area-level deprivation is often not adjusted for, or is measured as a single variable (i.e., median household income). This is problematic because ethnic density effects are concealed by the detrimental effect of area-level concentrated poverty, which result from processes of racialisation and exclusion that have led to concentrated disadvantage in the form of lower income, more precarious employment conditions, lower educational qualifications, and ultimately, residence in more deprived neighbourhoods.

This presentation will review studies on ethnic density in the UK, the US, and in New Zealand, to highlight the differences in the association, and direction of effect, of ethnic density and area deprivation on the health and social outcomes of ethnic minorities. Findings of these two concepts have contrasting policy and research implications, and their independent effects on health and social outcomes should be adequately modelled, recognised, and addressed.

### ***Health trajectories in regeneration areas in England: The impact of New Deal for Communities intervention***

***Pierre Walthery, Research Fellow, Oxford University***

This presentation will examine the determinants of individual health transitions between 2002 and 2008 among residents in 39 deprived areas of England which benefited from targeted regeneration policy interventions under the umbrella of the New Deal for Communities (NDC) programme. Its main aim is to describe trajectories of self-rated, mental health and life satisfaction, and assess whether these differed by social groups defined by baseline socioeconomic factors, ethnicity and life-stage. The health outcomes of residents in the NDC areas was also compared with those from residents from other similarly deprived areas that were not part of the intervention. Data come from a longitudinal sample of about 500 respondents in each NDC area and modelling relied on latent growth modelling. Results show no overall improvement in the three outcomes, nor significant differences in changes in

health between respondents in NDC versus comparator areas. However, we found a significant gap in life satisfaction and mental health between high and low SES individuals in comparator areas which widened over time to a greater extent than in NDC areas. Results from these individual trajectories will then be contrasted to findings from an ecological analysis of similar outcomes in the same areas.

### **Creating an embodied sense of belonging to place in time**

**Vanessa May, Senior Lecturer in Sociology, University of Manchester**

When trying to understand the relationship between neighbourhood characteristics and social outcomes, it is vital to appreciate the multidimensional relationship that people have with their surrounding social, cultural and material environments. In this paper, I explore this relationship through the lens of people's sense of belonging to their neighbourhood by drawing from a range of qualitative studies focusing on ageing and place, including findings from our study 'Inter/generational Dynamics' on how people over 50 years of age experience belonging to place (May & Muir, 2015). My aim is to illustrate how people, place, time and cultural context are intertwined as people individually and collectively create a sense of place, and how these might be experienced in the context of ageing. Two key aspects that I focus on are embodiment and temporality. First, I suggest that because people's experiences of their surroundings are always embodied, it is important to remain attuned to their sensory engagement with the world. Second, I explore how people create a sense of belonging in time with a specific focus on the temporal movement, even displacement, that older people can experience in relation to their cultural and material surroundings.

### ***Exploring Neighbourhood effects through Agent-Based Models***

***Frensis Bras, PhD researcher, University of Manchester***

The complexity and dynamic nature of neighbourhoods have raised methodological concerns when it comes to studying neighbourhood effects. Agent-Based Models (hereafter ABM) may offer an alternative solution to some of the problems that are currently being faced in the neighbourhood effects research. ABM's are simulated environments where individuals are represented as agents. Agents are entities that have heterogeneous characteristics and interact with other agents and the environment according to simple rules, and in this way generate complex patterns of group behaviour that can then be analysed. This relatively novel technique can take into account the complex ways in which communities develop over time and help to untangle the different causal relationships, which makes it particularly applicable to researching neighbourhood effects yet this methodology has not been embraced by the social science community. Through looking at the ABM I use for my research on the relationship between neighbourhood characteristics and racism I will demonstrate how ABM's can contribute to the neighbourhood effects literature, and what the potential pitfalls are that need to be considered.

### ***Individual belonging to local neighbourhoods; neighbourhood effects and individual mobility.***

***Brian Kelly, Statistician, Bradford Institute for Health Research***

One of the central methodological challenges for any study looking to determine the extent and nature of neighbourhood effects is the 'endogenous group membership problem'. Selection bias is often seen as a problem for estimating causal effects, but there is also increasing interest in the nature of selection mechanisms themselves, and how these mechanisms lead to the clustering of certain individuals within certain neighbourhoods. Multilevel models, that can accommodate clustered data and estimate contextual effects, have proved useful. However, there is a recognised need for more longitudinal studies, able to address neighbourhood effects in relation to individual change over time.

This presentation will outline an approach to combining multilevel and longitudinal models, to estimate neighbourhood effects on individual belonging to local neighbourhoods. The central challenge is to construct models that are able to deal with the imperfect hierarchy that arises from individual mobility between neighbourhoods, and to estimate neighbourhood effects when individuals can be in different neighbourhoods at different time points.

Results from these models suggest that individual belonging is lower in neighbourhoods with higher levels of material deprivation. However this neighbourhood effect appears conditional, it is low income individuals who remain in, or move to, materially deprived neighbourhoods that have lower levels of belonging. More affluent individuals have higher levels of belonging regardless of neighbourhood deprivation or individual mobility. There are implications for the understanding of belonging in relation to individual lack of choice and constraint to deprived neighbourhoods over a life course. Also, if the selection mechanisms that lead to the clustering of certain individuals within certain neighbourhoods are related to choice and constraint, then it may be that this constraint, the selection mechanism itself, is conceptually equivalent to the notion of neighbourhood effect.

### **Developing Participatory Research Approaches to Explore the Age-Friendliness of Neighborhoods. Reflections, Challenges and Opportunities**

*Tine Buffel, Marie Curie Research Fellow, School of Social Sciences, University of Manchester, UK and Vrije Universiteit, Brussel, Belgium*

**Background:** Developing environments responsive to the aspirations of older people has become a major concern for social and public policy. The model of ‘age-friendly cities’ initiated by the World Health Organization reflects attempts to develop supportive urban communities for older citizens. These have been defined as encouraging ‘active ageing by optimizing opportunities for health, participation and security in order to enhance quality of life as people age’ (WHO, 2007).

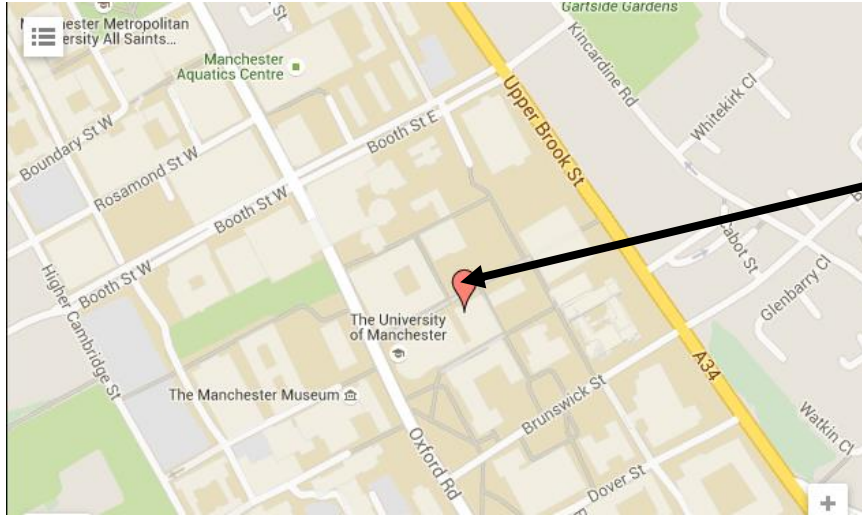
**Methods:** This paper explores conceptual and empirical aspects of the age-friendly cities debate, with a particular focus on the potential and challenges of participatory research approaches to explore the age-friendliness of neighbourhoods.

**Results:** Findings are reported from a participatory research project in three neighbourhoods in Manchester, UK, which aimed to identify the issues older residents themselves view as important regarding the issue of developing the age-friendliness of their neighbourhood. Community stakeholders and older residents were involved in all stages of the research. They played a crucial role in the planning, the design, and the realisation of the research project. A key element involved the training of older residents to become community researchers in their own neighbourhoods and their involvement in interviewing other older residents about their experiences of living in deprived urban environments.

**Conclusions:** The paper concludes by providing a critical assessment of the methodology used in the project, in particular in relation to the opportunities, challenges and lessons to be learned from such an approach.

## Location

The event is being held in room G306A of the Jean Macfarlane Building (Jean McFarlane Building, Oxford Road Manchester M13 9PL). A map is below:



Jean Macfarlane building