

**Does poor neighbourhood reputation
create a neighbourhood effect on employment?**

The results of a field experiment in the UK

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Abstract

There are substantial variations in employment rates between neighbourhoods, and concentration of unemployed people in certain neighbourhoods, particularly those with poor reputations, relative deprivation or concentrations of social housing. One potential explanation is that residents of such neighbourhoods face discrimination from employers. The potential adverse effect of negative outsider perceptions on the life chances of residents of particular areas is one of the main putative mechanisms for 'neighbourhood effects'. Convincing evidence of a poor neighbourhood reputation effect on a measurable and significant outcome such as employment would make a major contribution to the evidence for area effects overall.

Many studies of deprived areas have recorded resident and local worker perceptions of discrimination by employers. A smaller number of studies have identified negative employer perceptions of certain areas, and employer admissions of preferences for people not from neighbourhoods with poor reputations. Quantitative studies have explored correlates of neighbourhood employment rates. However, until now there has been no direct evidence on the question of whether employers treat job applicants from different areas differently.

This paper reports a unique experiment to test for a poor neighbourhood reputation effect on employment. Drawing on precedents from investigations into employer preferences exploring ethnicity, gender and age, the 2,001 applications were made to 667 real jobs by fictional candidates nominally resident in neighbourhoods with poor and bland reputations. The experiment was complemented by labour market analysis and interviews with employers and job seekers.

The experiment found no statistically significant difference in employer treatment of applicants from areas with bland and with poor reputations. In this case, people living in neighbourhoods with poor reputations did not face 'post code discrimination' in the labour market or a poor neighbourhood reputation neighbourhood effect. A poor neighbourhood reputation effect in employment might exist outside scope of experiment (and/or outside employment), but it seems unlikely to be a large and salient neighbourhood effect or explanation for variations in employment rates between neighbourhoods. Interviews found limited evidence that disadvantaged job applicants, many from areas with poor reputations, and local workers, believed employers showed preferences for people from areas without poor reputations, despite substantial difficulties finding work. Interviews, however, revealed overt employer preference for residents from neighbourhoods within easy access of the workplace, which is circumstantial evidence for neighbourhood effects via spatial mismatch. We also found strong circumstantial evidence for skills mismatches and the effects of poor individual skills and intense competition.

Does poor neighbourhood reputation create a neighbourhood effect on employment? The results of a field experiment in the UK

Variations in employment rates between neighbourhoods within labour markets

There is a longstanding academic and policy interest in the existence and persistence of geographical variations in employment, economic inactivity and unemployment rates. These concerns encompass a whole range of geographical scales – from the regional scale, to the local labour market area, local authority district and neighbourhood scales (see Green and Owen, 2006, for an overview).

This paper focuses on variations between neighbourhoods and variation between neighbourhoods within single labour markets. In the UK, the National Equality Panel (2010) highlighted that in the most deprived tenth of neighbourhoods (Lower Super Output Areas) only 55 per cent of adults were employed compared with more than 80 per cent in the least deprived half of neighbourhoods nationwide (National Equalities Panel 2010). Comparing neighbourhoods within a single city, in the 1970s McGregor studied the higher rate and longer duration of unemployment in Ferguslie Park than in Paisley, within Glasgow (1977). In the 1990s Lawless highlighted variations between inner city and suburban areas in the impact of economic restructuring within a single city, Sheffield (1995). Employment rates in the case study neighbourhoods reported later in this paper varied from??.

Concerns about uneven employment rates between neighbourhoods, and about the (relatively) low absolute employment rates in some areas, have been part of the motivation successive generations of urban policy in the UK and elsewhere from the 1960s onwards. They were part of the motivation behind the National Strategy for Neighbourhood Renewal (in England) from 1998-2008 (ref). and part of the underlying rationale for the City Strategy Pathfinders (in Great Britain) and the Working Neighbourhoods Fund (in England) (refs). Areas with higher unemployment and lower employment tend to overlap with areas with poor reputation.

Explaining variations in employment rates between neighbourhoods within labour markets

There are three broad categories of explanation for variation within labour markets: first, skills mismatch, as a result of residential sorting; secondly, spatial mismatch; and thirdly, neighbourhood effects. These explanations are not seen as exclusive, and could operate together for additive or interacting effects.

First, residential sorting, the impact of housing policy, and changes in the skills required of labour, can result in spatial concentrations of individuals who are at

greater risk of non-employment or unemployment due to poor skills, lack of qualifications, ill health, lack of recent work experience, belong to groups who experience discrimination, or other factors in certain neighbourhoods (Houston, 2005; Green and Owen 2006). (Other neighbourhoods may have concentrations of people with low risk of non-employment or unemployment, and high rates of employment). Hence, spatial variations in employment and non-employment rates are a function of the spatial variation individual characteristics and a mismatch between the skills (and other characteristics) required or preferred by the labour market and those held by people in certain neighbourhoods. There could be a skills mismatch between labour supply in one neighbourhood and labour demands across the labour market, even if there is a rough balance across the labour market as a whole. Variations between neighbourhoods due to skills mismatches could be reduced by limiting or reverse sorting, or by improving individuals' relative skills (and other characteristics). Neighbourhood-based programmes could be used to deliver either or both of these interventions.

Secondly, the spatial mismatch hypothesis explains variations in non-employment through deficiencies in demand for labour as a result of a mismatch between the location of some jobs and the location of some potential employees (see Kain, 1968; Holzer, 1991; Houston, 2005). This hypothesis can be applied at regional level, to explain variations between labour markets, but can also be applied within what are defined as 'single' labour markets. Definitions of single labour markets rely on gross travel to work patterns, but in practice patterns will vary. In the UK, relatively self-contained labour markets are defined by the Office for National Statistics through their Travel to Work Areas (TTWAs) (Coombes and Bond 2008). These are statistical units, for which least 75 per cent of the resident economically active population of a TTWA work in the area and at least 75 per cent of employees live in the area.

Some employers and some job seekers will search across travel to work area boundaries. Some employers will only search across a fraction of the labour market, because travel is impossible or difficult or for other reasons. If TTWAs definitions included the travel horizons of those currently unemployed or economically inactive, or if they focussed on particular groups of workers, they would be of different size and shape. Young workers, those with lower incomes and those not using a car commute less far than others (DFT 2011). Reasons include the cost of transport relative to wages, anti-social hours or split shifts, combining paid work with caring responsibilities and having more limited travel horizons (Green and White, 2007, McQuaid, 2009; Rivas-Perez, 2010). They are also more likely to have to rely on public transport. There is no up-to-date data source on commuting times by age and at a neighbourhood level, but analysis of the 2001 Census showed that on average 78 per cent of 16-24 year olds in the disadvantaged, 'poor reputation' neighbourhoods within the three local labour markets selected for the experiment (discussed below) travelled less than 10km.

Regional and local spatial mismatch may have developed through residential sorting, the impact of housing policy, industrial location, and uneven geographical impacts of economic restructuring. For instance, at the intra-urban scale in a case study of the

inner London borough of Camden, Watt (2003) described how many local authority tenants were in effect marooned as over a period of 30 years, as while their homes stayed in place, the immediate area lost almost all its manual employment. Over time those in employment travelled longer distances to work. Variations between neighbourhoods due to spatial mismatches could be reduced by limiting or reverse sorting, by moving employment and employees closer together or by helping employers and employees to search across more of the labour market, for example, through improved transport links or information. Neighbourhood-based programmes could be used to deliver part of these interventions.

Thirdly, when applied in relation to employment outcomes, the area or neighbourhood effects hypothesis suggests that spatial variations in non-employment are not reducible to compositional effects (i.e. characteristics of residents) but rather that there is an additional area related effect on employment (or on other outcomes) that results from spatial concentrations of individuals who are at greater risk of non-employment or unemployment or who have other disadvantage (Syrett, 2008), or from other characteristics of the area (eg Lupton 2003a, van Hamm et al. 2012). Arguable, spatial mismatch could be seen as one type of employment-specific neighbourhood effect.

Potential pathways for neighbourhood effects are often described as internal to the neighbourhood, or endogenous, or due to the relationship between the neighbourhood and outside people or institutions (??). In the most comprehensive typology of mechanisms, Galster prefers the categories of social interactive; environmental; geographical; and institutional. Amongst 'social contagion' mechanisms, Galster identifies collective socialization, social networks, the operation of social cohesion and control, competition, relative deprivation and parental mediation. Amongst 'environmental' mechanisms, he lists exposure to violence, the nature of physical surroundings: and exposure to toxins. As 'geographical' mechanisms he lists spatial mismatch with job opportunities, and worse quality public services: Under 'institutional' mechanisms he lists local institutional resources, the existence and behaviour of local market actors and private services, and stigmatization (2012). Variations between neighbourhoods due to neighbourhood effects could be reduced by limiting or reverse sorting, or by addressing any one of these pathways more directly. Neighbourhood-based programmes could be used to deliver part of these interventions.

Explaining variations in employment rates between neighbourhoods within labour markets through neighbourhood effects

Research into neighbourhood effects has so far has tended to use multivariate analysis of quantitative data on the characteristics of and outcomes for residents of different neighbourhoods (eg??). Qualitative research is also widely used, sometimes overlooked, but particularly important in generating hypotheses, and in developing and testing ideas about pathways (Lupton 2003). Where examining variations in employment rates between neighbourhoods within labour markets, qualitative

research might involve residents, employers and intermediaries in different neighbourhoods and across the labour market. Some research has combined the two. Another approach with potential is the use of randomised control trials or experimental methods.

Each of these methods described is independently valid. However, combinations of methods offer the potential to confirm and accumulate evidence. While econometric analysis is broadly seen as the 'gold standard' within neighbourhood effects research, in the field of discrimination research, employer preferences, this kind of data analysis seen as secondary to experiment studies. Research into neighbourhood effects has so far has tended to explore neighbourhood effects without focusing on specific mechanisms. Doff argues that research needs to distinguish between neighbourhood effects via exogenous and endogenous mechanisms (2010). It has often explored several outcomes at once.

Finally, however, combinations of methods offer the potential to confirm and accumulate evidence. Evidence suggesting that one or more of the causal mechanisms does or does not exist or is more or less salient may help narrow down the search for effects or particular population sub groups they influence. Where neighbourhood effects are found, as is beginning to be the case, a comprehensive research approach requires that evidence of neighbourhood effects from quantitative studies is complemented firstly by hypotheses about causal mechanisms, for which we are now spoilt for choice (Galster 2012) and secondly by evidence which positively identifies one or more causal mechanisms necessary and sufficient to produce the effect.

This paper explores neighbourhood effects as an explanation for variations in employment rates between neighbourhoods within labour markets. It focuses on Exploring one pathway as an explanation: 'stigma', or poor neighbourhood reputation. It exploits a method less commonly used: a field experiment, supported by contextual qualitative and quantitative evidence, through case studies of three labour markets and nice neighbourhoods in England and Wales. It focuses on one outcome: employment.

The hypothesis it aims to test is that:

Residents of neighborhoods with poor reputations fare worse when applying for relatively low-skilled jobs than residents of neighborhoods in the same labour market with better reputations, all other things being equal

If evidence is found for this hypothesis, it is evidence of a neighbourhood effect operating through the 'stigma' pathway (although it is possible that neighbourhood effects might also be operating through one or more of Galster's other fourteen pathways). It suggests that neighbourhood effects at least contributes to some extent to variation in employment rates between neighbourhoods (although skills mismatch and spatial mismatch may also operate).

Existing evidence for poor neighbourhood reputation and its role in explaining variations in employment rates between neighbourhoods within labour markets through neighbourhood effects

Evidence that some neighbourhoods have worse reputations than others is ubiquitous in urban studies (eg??). Neighbourhoods with poor reputations often are the same neighbourhoods that have lower rates of employment and high rates of non-employment and unemployment.

Relatively poor reputations may be held by outsiders including the general public, key public and private sector decision-makers and service providers, or potential residents. These reputations may affect the behaviour of all these groups towards the neighbourhoods, for example in decisions to provide services or to employ residents. Existing residents are likely to be aware of these poor external reputations and this in itself may affect their attitudes and behaviours, including decisions to apply for jobs and their behaviour in the job application process. There is also a wider literature on the influence of poor reputation on the provision of private and public services to residents of neighbourhoods with poor relations: a form of 'postcode discrimination' beyond employment (eg. Christie and Rolfe 1992).

Over 30 years ago McGregor used the multivariate analysis technique now established as the core approach to investigating neighbourhood effects, to explore the role of stigma in explaining variations in employment rates between neighbourhoods within labour markets through neighbourhood effects. McGregor examined unemployment rates and unemployment duration for men in Ferguslie Park, a neighbourhood with a poor reputation, and Paisley, a neighbourhood with a better reputation, in Glasgow, controlling for age, skill, industry, marital status, and length of time in previous job, preference for light, medium or heavy work, preferences for local or more distant work, and presences for day or any hours (McGregor 1977) He concluded: *"although the Ferguslie Park sample would experience relatively high unemployment duration no matter where they lived, the fact of their residence in Ferguslie Park significantly adds to the disadvantages associated with their individual characteristics"* (McGregor, 1977: 311). To date, no other studies appear to have used these techniques to explore the stigma pathway for neighbourhood effects on employment, although some studies looking at neighbourhood effects generally have included areas with poor reputations and have examined employment outcomes (ref).

Studies using other methods have added important information. Although employer statements may not fully reflect practice and do not preclude unconscious preferences, several studies provide insights into potential neighbourhood preferences from an employer perspective (Pager and Quillian 2005). Writing about four US metropolitan areas, Tilly *et al.* (2001: 304) noted that: *"each manager forms his or her own mental map of ... [their] environment. Employer's maps, in turn, have important effects on the labor market"*. A majority of employers in this study thought there were systematic differences between urban and suburban workers (across neighbourhoods) within a labour market, although in the US context it should be

noted that spatial differences are also heavily racialised. Negative attitudes about particular groups of workers could feed into spatial mismatch, if they affect employers' location decisions and the pattern of employment opportunities. In the UK some studies have found at least some self-reported preference for individuals not from areas with poor reputations (for example, Hastings and Dean, 2003; Aleksandraviciene *et al.*, 2005). Interviews with employers with recent experience of recruitment in less skilled occupations in various cities in Great Britain about their selection and recruitment procedures suggested that employers did prefer workers from areas without poor reputations, but the effect was only at the margin, and in specific conditions (Nunn *et al.*, 2010). Employers were generally aware that some local neighbourhoods had poor reputations. Employers generally talked of individuals' personal characteristics as the main factor in recruitment decisions. Address could be an issue but this mainly related to travel-to-work considerations, particularly where jobs involved anti-social hours). A few indications of a lack of willingness to employ applicants from certain areas, or an intention to subject them to special attention. In their study of Nottingham, Green *et al.* (1991: 273) found evidence of a preference amongst some employers for local workers, regardless of neighbourhood reputation: "[they] preferred their employees to be locally based, since this was thought to make them more reliable." Zenou (2002) and Lupton (2003) also uncovered similar preferences. This suggests a potential 'spatial match' effect or positive neighbourhood effect for people in local neighbourhoods.

Qualitative research can contribute to understanding of how pathways for neighbourhood may work, and the circumstances in which they may not operate. Nunn *et al.* suggested that neighbourhood effects by area reputation required on 'local knowledge' amongst employers, discretion and ability to deviate outside automated or rigid processes, amongst those involved in recruitment and, like the exercise of other forms of employer preference or discrimination, may have been influenced by the state of the labour market, with more choice for employers resulting in more screening (Nunn *et al.* 2010).

Another source of information is interviews with job applicants and those working with them. This is a weaker source, as these informants have only indirect insight into employer preferences and no oversight of patterns. However, numerous studies have recorded the belief that 'postcode discrimination' is taking place, in the UK (for example, Lawless and Smith, 1998; Social Exclusion Unit, 1998; Taylor 1998, Fieldhouse 1999, Roberts 1999; Dean and Hastings, 2000; Speak 2000, Mellor 2002; Hastings and Dean 2003; Taylor 2003?; Aleksandraviciene *et al.*, 2005; Sanderson, 2006;; Green and White, 2007; Fletcher, 2007, Dewson *et al.* 2007, Barnes *et al.* 2007, Fletcher *et al.* 2008) and beyond (for example, in France [Waquant 1993, Recchia 2008], in Australia [Atkinson and Jacobs, 2008] and in the USA [Tilly *et al.*, 2001]). For example, some social housing tenants interviewed in four different areas about employment in 2008 thought that there was postcode discrimination against them (Fletcher *et al.*, 2008). In a study of working class women in Scotland and Northern England, Taylor (2003: paragraph 7.4) reported: "*Several... explained their long-term unemployment by having specific, devalued postcodes.*" Bates *et*

al. (2007: 14) found at least one allegation in a study of employment in rural areas. A study of high unemployment areas in Coventry reported: “Although they could not easily always provide evidence for it, many project workers felt that ‘postcode discrimination’ against people from areas of high unemployment who are stereotyped as unreliable workers undoubtedly operated” (Aleksandraviciene et al., 2005: 64-65). In the evaluation of the twelve Working Neighbourhood Pilots covering areas of high unemployment and inactivity, interviewees said,

“Employers tar everyone with the same brush. It’s just not fair ... the area definitely goes against you”, and “if you put [this area] as your address on your application that puts employers off” (Dewson et al., 2007: 32)

In a rare example of direct evidence, albeit at second hand and for a single case, Speak (2000) reported that a resident from Benwell, in Newcastle upon Tyne had been interviewed for a job but was not given it ,and was told: “It’s not you, we think you’d do the job fine . . . but if you live in [Benwell] you either know a villain or you are a villain...”.

In summary, existing evidence from the UK on the role of stigma in explaining variations in employment rates between neighbourhoods within labour markets through neighbourhood effects was described recently as “thin” (Dewson et al., 2007). Houston summed up the situation for the UK as follows: “direct evidence of ‘postcode discrimination’ is difficult to find” (2005: 229). The pattern is similar for other countries.

Exploring the role of poor neighbourhood reputation in explaining variations in employment rates between neighbourhoods within labour markets through neighbourhood effects using an experimental method

Given the difficulties establishing direct evidence of neighbourhood effects linked to a particular pathway through multivariate analysis, or through interviews alone, we decided to use an experimental method, supported by contextual quantitative and qualitative research (ref). This would allow us to test the hypothesis (above), through establishing the following:

1. Variations in employment rates between neighbourhoods; and
2. Variation in reputation between neighbourhoods; and
3. Employers awareness of neighbourhood reputations, attitudes to different neighbourhoods, assessment of neighbourhood reputation as a factor in decision-making; and
4. Variations in success in applying for employment amongst residents of neighbourhoods with different reputations, al other factors being equal (same jobs; equivalent applicant characteristics).

There is very limited experimental evidence on neighbourhood effects and in fact limited experimental evidence in urban studies generally. There are ethical, legal, and political and cost problems creating experimental policy design in urban and social policies (refs, Stafford et al. 2001). There has been some use of randomized

control trials in housing and urban interventions linked to mental and physical health outcomes, for example in support for homeless people (Goering et al. 2011), and the impact of walking for health (Countryside Agency 2003). The use of quasi-experimental methods, eg control populations or neighbourhoods, is more widespread, particularly in the US, and increased over the 2000s in the UK. Overt hypothetical experimental games have been used to explore some issues related to urban policy potential behavioural reactions to different circumstances for example, to study, locational decisions of entrepreneurs (Timmermans 1986). In a few cases policy design has enabled Randomised Control Trial methods in housing and urban policy, most notably the Moving to Opportunity (MTO) program for the relocation of public housing residents in the US (ref??). Studies of MTO have been among the most quoted studies in reviews of evidence on neighbourhood effects (??). In addition, there has been some use of randomized assignment to different treatment groups in welfare-to-work interventions (Eardly and Thompson 1997) in the US from the 1980s onwards (Kornfeld et al. 1999; Rangarajan and Novak 1999), and in the UK (Walker 2000, Stafford et al. 2001, Stratford et al. 2005; Purdon et al. 2006, Burns et al. 2007).

The field experiment method

(This section provides a substantial amount of detail which some readers may wish to skip). This experimental method we used was the 'correspondence test', involving sending out multiple applications to real jobs, differing as far as possible only in terms of the variable being tested; here, the reputation of the applicant's neighbourhood. This has been used before in studies of employer references or discrimination in employment by ethnicity, age, gender, and disability status (Jowell and Prescott-Clark, 1970, Riach and Rich 2004, Pager 2007, McGinnity et al. 2009, Wood et al. 2009).

Labour market and neighbourhood case studies

Three local labour markets across the UK were selected. The criteria for selecting the three local labour markets for the study were that they should be:

- Each with at least some neighbourhoods with markedly poor local reputations.
- Each large enough to generate sufficient vacancies but small enough that local neighbourhoods within them might be known to employers (as suggested by the qualitative evidence on the poor reputation pathways, Nunn et al. 2010);
- To include weaker and stronger labour markets in terms of absolute and relative unemployment rates, in case competition affected the neighbourhood effects (eg. Nunn et al. 2010);

- Each with low minority ethnic populations, to distinguish any effects of ‘minority ethnic’ neighbourhood reputation from ‘poor’ neighbourhood reputations, and to rule out any effects from employer preference for different ethnic groups (eg. Fieldhouse 1999, Tilly et al. 2001).

This led to an initial selection as follows:

Table 1: Case study local labour markets

Case study labour market name	Approximate population of working age, 2010	JSA claimant rate 2010	Rank by unemployment rate out of UK TTWAs, 2010
Weak	250,000	6 per cent	Top 10 per cent (by population??)
Medium	500,000	4 per cent	Top 20 per cent
Strong	250,000	3 per cent	Top 50 per cent

Source: NOMIS, www.nomisweb.co.uk, accessed March 2011

Three neighbourhoods were selected in each local labour market. The criteria for selecting neighbourhoods within these areas were as follows:

- Three per local labour market, of which two should be particularly deprived and have well-established ‘poor’ reputations, and one not should not be particularly deprived and should have a ‘bland’ reputation, to serve as a comparator;
- Each had relatively strong local identities, which were linked to identifiers including neighbourhood name, main street name, or postcode. Unlike in other neighbourhood studies we did not have to establish neighbourhood boundaries (other than to provide data for proxies, Table 2).
- Each had relatively small minority ethnic populations, to distinguish any effects of ‘minority ethnic’ neighbourhood reputation from ‘poor’ neighbourhood reputations, and to rule out any effects from employer preference for different ethnic groups (eg. Fieldhouse 1999, Tilly et al. 2001)..
- All three in each labour market were at a similar distance and public transport travel time from the centre, to limit (although not exclude) any effect of employer preference for more accessible employees (eg. Green *et al.* 1991, Zenou, 2002, Lupton, 2003; Nunn et al. 2010).

Neighbourhood selection involved desk research and field visits, including street interviews, on deprivation levels and ethnic mix, local identity and reputations, and distance and accessibility, which we used to confirm the poor reputation and bland reputation of short listed areas.

Field visits included interviews with 81 members of the public. This involved what appears to be the first evidence of the perceptions of the general public on potential neighbourhood reputation effects, In each of the three local labour market areas, just over half of those interviewed who thought that the case study neighbourhoods were undesirable places to live (53 per cent in total) thought it was ‘very’ or ‘fairly likely’ that local employers would look less favourably on people from these or similar areas. Only a minority (23 per cent in total) thought that it was ‘very’ or ‘fairly unlikely’ that employers would look unfavourably on applicants from the neighbourhoods.

This led to an initial selection as follows:

Table 2: Data for statistical proxies for case study neighbourhoods

Case study labour market name	Poor reputation 1	Poor reputation 2	Bland reputation
Weak			
Medium			
Strong			

Source: NOMIS, www.nomisweb.co.uk, accessed March 2011

Thus we had established variations in employment rates between neighbourhoods, and variation in reputation between neighbourhoods

Interviews with employers

To explore employers’ awareness of neighbourhood reputations, attitudes to different neighbourhoods, assessment of neighbourhood reputation as a factor in decision-making we interviewed 14 employers and 11 labour market intermediaries such as employment agencies and job seekers’ advisors.

Interviewees were based in the three case study local labour markets, and who had recently recruited people to one or more of the job types we were examining in the experiment (below). Interviewees were selected to cover employers of different sizes, predominantly from the private sector but also from the public and voluntary sectors, and from different industrial sectors with jobs that young people with intermediate or lower level qualifications might fill.

Interviews were also used to confirm our understanding of employers’ recruitment methods and the realism of the applications used in the experimental method (below).

All employers and labour market intermediaries interviewed were aware of certain neighbourhoods with poor reputations, which overlapped with the assessment of the general public and our own desk research (below). Three of the eleven labour

market intermediaries we interviewed thought that neighbourhood reputation effects on employment might exist. One intermediary in the medium local labour market reported some cases of applicant perceptions of neighbourhood reputation effects (without committing to belief in these effects themselves): *“there have been instances where people have said: ‘Because of where I live, I won’t get a job. They won’t trust me.’”*. Another, from the weak local labour market said that she had had belief in neighbourhood reputation effects strong enough to promote action,

“we used to take address off applications ... We worked in deprived wards so we remove address to remove a stigma”.

However, this practice had ceased. In the strong local labour market, another said ,

“employers would say no to the idea that they discriminate on area – but privately the answer is ‘yes’”.

This respondent subsequently significantly amended the point, *“it’s not necessarily about prejudice, but the majority of people have barriers to entry”*. While this evidence it is strong enough to support the hypothesis that neighbourhood reputation effects might form a partial and subsidiary explanation for variations in employment rates, it is not strong enough to support a hypothesis that they are a major explanation.

Almost all employers stated unambiguously that they looked equally on applications from all areas. However, one private sector employer from the strong local labour market explicitly showed awareness of the potential for discrimination, but claimed that he would not apply it in practice, at least up to interview stage:

I am not going to be that prejudiced on areas ... So you get ‘em in, and see what they’re like...[emphasis added].

One of the employers interviewed in the ‘medium’ labour market, for example, admitted to ‘thinking twice’ about applicants from some neighbourhoods:

There are areas where you sort of think, hmm, you know, not too sure about that ... where you have a large number of unemployed people, where you have council accommodation.

Some of the employers stated preferences on other grounds such as distance to work, clothing, accent, which, like address *per se*, while not illegal, might also be seen as illegitimate, such as accent. These characteristics would be likely to be found in higher concentrations in areas with poor reputations.

Interviews with job seekers

We carried out interviews with young people from the three local labour markets who had limited education and skills were looking for work, or who had been doing so recently. We spoke to a total of 57 young men and women, mostly in their early twenties, in a combination of group and individual interviews. Almost all faced disadvantages in the labour market compared to many of their age peers in the same areas and nationwide. Importantly, they were generally less well qualified and experienced candidates than the fictional personas in the experiment, enabling us to report on a wider range of experiences. Interviews were also used to confirm our

understanding of applicant practices and the realism of the applications used in the experimental method (below).

Some of the young people thought that employers might exert preferences on other grounds which, like address, while not illegal, might also be seen as illegitimate, such as accent, or criminal record. However, in contrast to at least some other earlier studies, and despite the fact that some of them lived in named areas members of the public and some labour market intermediaries thought might be subject to employer discrimination, none of the 57 young people we interviewed thought that employers would discriminate against them on grounds of where they lived.

The experiment

(This section provides a substantial amount of detail which some readers may wish to skip).

The jobs search and application strategy of the fictional job applicants

We searched for and applied to real jobs in the three labour markets that fitted the following criteria:

- Jobs advertised on www.direct.gov.uk, gumtree.com and number of other employers and aggregator sites
- Advertised August 2010-June 2011
- For which the job site appeared to be within the Travel-to-Work Area boundaries
- Of job types which did not require degrees or vocational qualifications or substantial experience, but were prevalent enough to give a good overview of the low skilled labour market and included jobs principally held by men, by women and neither gender. These include office admin, cleaner, security guard, sales assistant, accounts clerk, kitchen hand and chef jobs.
- Which did not appear to be offers of self employment.

The majority of jobs we applied for in the experiment, 512 or 77 per cent, were sourced from the www.direct.gov.uk website. This run by the UK government's department for Work and Pensions via its JobCentre Plus agency which provides employment benefits and job information and support via offices nationwide. The www.direct.gov.uk website advertises all vacancies notified to JobCentre Plus, estimated to be 40 per cent of total vacancies, with higher coverage of lower-skilled vacancies. It is the single largest source of job vacancies in the UK.

We supplemented this source with the independent website gumtree.com, which was particularly fruitful in the strong local labour market, as well as a number of other employers' and aggregator sites. Most individuals use multiple job search methods, including searching for vacancies on the Internet (used by 84 per cent of job seekers in April-June 2009), answering adverts in journals and newspapers (55 per cent), asking friends and relatives (52 per cent), applying directly to employers

(51 per cent) and using a Jobcentre or similar (43 per cent) (Green *et al.*, 2010). There is a positive association between use of the Internet and highest qualification and younger age (Green *et al.*, 2010).

Then we selected jobs that met the requirements of the experimental method:

- For which main recruitment/selection decision-maker appeared to be based in the local labour market, and was likely to be aware of local neighbourhood reputations (eg. Nunn *et al.* 2010)
- Could be applied to without face to face or phone contact, such as via email, upload to website or post
- For which any closing date was at least 2-3 days in the future when we found them, to allow us to make three applications that did not arrive simultaneously.

In some cases only a minority of all jobs in the chosen job types available via www.direct.gov.uk met these experimental constraints.

The jobs applied to

Between August 2010 and June 2011, we applied to a total of 667 jobs. We made three applications in each case, resulting in a total of 2001 applications.

We applied to 197 office admin jobs, 139 retail jobs, 97 chef jobs, 75 cleaner jobs, 74 kitchen hand jobs, 73 accounts clerk jobs, and 12 security guard jobs. This pattern reflected the variation in job supply between job types in the three local labour markets, and variations in the extent to which jobs fitted experimental constraints.

Box 1: Selected job titles of jobs applied to in the experiment

Office trainee, receptionist, secretary, clerical assistant, administrator, office clerk, business administrator, data entry assistant Sales assistant, shop floor sales, shop supervisor, legal cashier, estate agent assistant, delivery/sales assistant Grill chef, chef, commis chef, trainee chef, chef de partie, pizza chef, cook, breakfast chef Kitchenhand, kitchen porter, catering assistant, food prep assistant, pot washer, fish fryer Cleaner, cleaner driver, oven cleaning assistant, housekeeper, room attendant Book keeper, accounts producer, accounts assistant, accounts administrator, sales controller Security operative, security officer

Source: Experiment

We applied to 246 jobs in the strong local labour market, 261 in the medium local labour market, and 159 in the weak local labour market. The variation between the three areas was partly driven by the availability of vacancies which were in the selected jobs types and which met the requirements of the experiment.

The majority of jobs we applied to did not offer a traditional full-time, '9am-5pm' work schedule (we included other 7, 8 or 9 hour days that started 8-10am in this group). 505 or 76 per cent of vacancies applied for offered other schedules. A large proportion were part-time, including in office admin and accounts posts. Others offered full-time hours but included early morning work (especially for cleaning) or evening or night work. (especially for kitchen hand, chef and security jobs). This largely reflects the supply of jobs available via www.direct.gov.uk in the three local labour markets, rather than the constraints of the method..

In 2011 the UK national minimum wage, which applies to those aged 21 and older, was £5.93 an hour. The alternative 'living wage' proposed by a number of voluntary groups for the UK outside London was £7.20 an hour (Hirsch and Moore, 2011). 54 per cent of the jobs with wage data available paid at the minimum wage level. Minimum wage pay was found across all of our job categories and all our local labour markets. However, it was most common for kitchen hand, sales and cleaning jobs, and also for office assistant jobs. 78 per cent of the jobs with wage data available paid under £7 per hour, and so under the 'living wage'. Only a handful of the jobs stated pay close to or at the national median pay rate. None stated above average pay. We encountered four employers who appeared to be offering pay below the standard national minimum wage.

The characteristics of the fictional job applicants

We created 'personas' for each of the job types we applied to, with fictional names, addresses, dates of birth, educational and work histories and real phone numbers and email addresses which were used as the basis of CVs and covering letters, which were then slightly tailored to individual jobs. The personas were intended to represent people who would be relatively attractive candidates for jobs that required limited education and skills (and clearly more promising than most or all of the young job seekers we interviewed). The aim was to limit the number of cases in which none of our three applicants was successful, which would hinder our investigation of discrimination, and to provide a clear contrast and limiting case for more disadvantaged job seekers.

For each job selected for the experiment, we made three applications. In order to rule out any employer preference for other characteristics, all three applicants for any one job had the same gender. All had names chosen to avoid signalling minority ethnicity (see Wood et al. 2009 for more discussion of this issue). All three were in their early twenties.

The three applications differed in terms of neighbourhood of residence. One of the three appeared to be living in each of the three local neighbourhoods selected. The applicant address, including a fictional numbered home in a real major street in the area likely to be well known, the area name and postcode, was prominently stated at the top of each CV. They also differed slightly in age (aged 22, 23 and 24 years), exact qualifications and work experience, and CV typeface and layout, in order to maintain as much similarity with between candidates as possible without raising the

suspicious of employers. Addresses in each of the three neighbourhoods were allocated randomly to the three prepared CVs and covering letters as the final stage of the process in application to every job. CVs' contents were placed on one of three CV templates with different fonts and layouts, which we endeavoured to make equally attractive (and tested on a number of advisors). Age, qualifications and work experience were rotated between CV templates at intervals throughout the experiment. This random allocation ensured that any differences in employers' responses to candidates living in different neighbourhoods could not be attributed to their age, the style of their CV, exact qualifications or differences in work experience.

Most other applicant characteristics were largely determined by job type, and were intended to create candidates for the various jobs who were promising but not exceptionally overqualified, which might overcome any discrimination, affect response rates or possibly appear suspicious to employers. They were very similar, if not identical, for all three candidates in one set. In 286 or 43 per cent of the jobs, all three applicants were male. In 57 per cent, all the applicants were female. All the security guard, kitchen hand and chef applicants were male, as were some of the retail applicants (depending on the kind of shop). All the cleaner, office admin and accounts clerk applicants were female, as were some of the retail applicants. This reflects the reality that these jobs, with the exception of retail work, more than 70 per cent of employees are of one gender. The slight predominance of female applicants in the experiment overall partly reflects the availability of job types advertised by *www.direct.gov.uk*. It partly reflects the availability of jobs which we could apply to using our methods. A large proportion of all security, chef and cleaning jobs and some retail jobs advertised on *www.direct.gov.uk* could only be applied to through a phone call or by dropping in to the office.

20 per cent of the total applicants, mainly applicants to accounts clerk and office admin jobs, had 6-10 GCSEs and two or three A' levels. (GCSEs and A' levels are qualifications typically taken by 16 year olds and 18 year olds respectively in England and Wales. In the 1990s, when the fictional candidates were 16, ?? of the cohort nationally gained 6+ GCSEs, and ?? gained one or more or two or more A' Levels. University entrance usually required three A' levels). A small number of cases were given A' levels and vocational qualifications. 34 per cent of all applicants had 5-9 GCSEs and a vocational qualification relevant to the post they were applying for, usually a one-year course such as an NVQ level 1 or 2, a City and Guilds Diploma, a BTEC or an accounting qualification. These were mainly applicants to accounts clerk, office admin and chef jobs. 44 per cent of applicants had 5-10 GCSEs but no other qualifications. These included applicants to security, kitchen hand and cleaner posts.

All of the applicants had continual work records since they had completed education, and some were given Saturday job experience before this. Thus although they were aged 22-24, they had between 4 and 9 years' work experience.

Wherever a job required a car and a clean driving licence we gave them to all three applicants. We also gave cars and licenses to candidates for any jobs with unsocial

hours. Because we wanted to distinguish between any discrimination by employers based on 'travelability' rather than discrimination against people from areas with poor reputations, we also gave all applicants to jobs with late or night shifts, mainly security guards, kitchen hands, chefs and cleaners. In total, we gave cars and clean driving license to all applicants in two thirds of all jobs. Thus our candidates had a much higher rate of private transport mobility than the more disadvantaged young people we interviewed, and than might be typical for applicants for these types of jobs.

Making applications

The majority of applications took the form of a CV or a CV and covering letter. We used covering letters in many cases, even if they were not explicitly demanded by employers, in order to maximise positive response. Over 85 per cent of applications were made over the internet. We used local assistants to put the remainder of applications in the post, to achieve local postmarks. In most of these cases we avoided sending all the applications on the same day in order to reduce employer suspicion. In most cases applications were made very rapidly after advertisements were first posted on the internet. More than half were sent within three days of the advert first appearing. This involved searching every day and responding the same or next day.

Recording the results for the fictional candidates

After sending off three matched applications to any one job, we monitored specially established email and voicemail accounts to receive employer responses. We were not able to monitor any employer responses that might have been made by post to applicants' home addresses, but employer and job seeker interviews suggested that communication by post was exceptional. As the addresses used were false ones, any employer writing to one of our candidates would have had mail returned, and could then have tried another means to get in touch, but we did not learn of any such experiences.

31 per cent of the total applications or 620 in total resulted in responses from potential employers, mostly to our personas' email addresses and in a small number of cases to their mobile phone numbers. When we received a positive response, we responded as fast as possible, and in most cases on the same day, via email, to withdraw our applicants from consideration, stating that the candidates had already accepted another offer or that their circumstances had changed. Where more than one application received a positive response from employers, we varied the style and content of our responses to employers. One month after the application, we stopped monitoring for responses.

The experiment was concerned with positive responses at the first selection stage. Thus the experimental results *cannot* be applied directly to subsequent stages, such as interviews, any or to the selection process as a whole.

Results of the field experiment

'First stage' positive response rates

17 per cent of the 2,001 applications received one of a range of first-stage positive responses. This share of positive responses is higher than that achieved in another recent experimental study (Wood *et al.*, 2009). This may reflect differences in the mix of jobs applied for, the local labour markets studied, or the quality of experimental applications relative to that of real candidates. 69 per cent of applications received no response at all from the employer.

Three applicants were offered a post right away. However, most first-stage positive responses did not lead directly or with any certainty to job offers. 13 per cent of applicants were invited to meet employers. 2 per cent of applicants were asked for further information - for example what days and hours they might be able to work. Thus fewer than one in five of the experimental candidates got through the first round of selection, for jobs that required limited skills and experience, and which generally paid close to the minimum wage. Young people with fewer labour market advantages would be likely to experience lower, possibly much lower, first-stage positive response rates when applying for the same sorts of jobs. 13 per cent of applications received one of a range of responses we classified as negative, including an acknowledgement of application but no further correspondence, notice they had been unsuccessful. 69 per cent of applications received no response of any kind.

Previous studies using an experimental method to test for discrimination in employment have discussed several possible methods of conceptualising discrimination and analysing results (see e.g. Riach and Rich 2002). The key issue is how to deal with jobs in which none of the candidates received a positive response, and those in which all of the candidates did. The first case suggests none met some minimum standard, or that no appointment was actually made, and offers no sign of preference between the experimental candidates. Wood *et al.* (2009) who conducted the most recent experiment of this type in the UK, and Bovenkerk *et al.* (1992), who have prepared a manual for the conduct of these tests and analysis, argue that non-response to all candidates could not be treated as positive evidence of non-discrimination by employers. In the second case, all met some minimum standard, and while all appear to have been preferred over any other real candidates applying, there is not sign of preference between them.

In 475 or 71 per cent of the 667 jobs we applied for, none of our three candidates received a first-stage positive response. In the remaining 192 or 29 per cent of all jobs, employers gave a positive response to one, two or three of our candidates for the same post. In this sub-set of applications, a single employer showed a preference for one or more of our three candidates over one or more of the others, in a situation where they were in direct competition with each other for exactly the same job. These are the cases used to explore employer preferences and discrimination, following Bovenkerk (1992) and Wood *et al.* (2009).

‘First stage’ positive response rates where employer showed a preference for one or more candidates

In accordance with the experimental methodology deployed, in each of the 192 sets of applications with at least one first-stage positive response, one of the applications was for a candidate from a bland reputation neighbourhood. Of these, 140 or 62.5 per cent applications received a first-stage positive response (Table 3). The other two applications in each of the 192 sets were from candidates from poor reputation neighbourhoods, totalling 384 applications. Of these, 230 or 59.9 per cent of applications received a positive response. The 2.6 percentage point difference between the success percentages for the two neighbourhood types provides a measure of aggregate net ‘postcode discrimination’. However, the net discrimination was small, compared to gaps between other categories, and it was *not* statistically significant.

Table 3: Employers’ preference for applicants from different neighbourhood types

Total sets of applications with one or more positive responses	(A) Positive response: bland reputation neighbourhood		(B) Positive response: poor reputation neighbourhood		Net preference percentage point difference (A-B)
	Number	per cent	Number	per cent	
192	120	62.5	230	59.9	2.6

Source: Experiment

Note: As there were twice as many poor reputation as bland reputation neighbourhood applications (384 compared to 192), the denominator for column B is the number of sets of applications with one or more positive responses multiplied by two (384)

In each of the three local labour markets, there was a difference between the positive response rates for the two neighbourhood types, with applications from the bland reputation neighbourhood having a slightly higher positive response rate in each one. The level of net preference found was highest in the medium local labour market, at 4.5 per cent, but in no area was it statistically significant.

We examined sub-sets of the results for evidence for ‘postcode discrimination’ in any particular job or employer type. In some cases there was evidence of a small amount of net preference, but no cases was the difference in positive responses between those from neighbourhoods with different reputations statistically significant.

In summary, we find statistically significant evidence that employers do not prefer those living in neighbourhoods with bland reputations compared to those living in neighbourhoods with poor reputations (or visa versa), in the case of attractive candidates, looking for work in selected jobs requiring limited education and skills, in

three contrasting local labour markets, for these jobs. We did see some net preference for candidates from neighbourhoods with bland reputations but it was small in size and not statistically significant.

Thus the hypothesis (*residents of neighborhoods with poor reputations fare worse when applying for relatively low-skilled jobs than residents of neighborhoods in the same labour market with better reputations*) was disproven in this case.

The experiment tested extreme cases, looking at very competitive labour markets at a weak point for the UK economic. However, as ever, it is difficult to conclusively prove a negative and it remains possible that poor neighbourhood reputation might create neighbourhood effects on employment in parts of these local labour markets or parts of the recruitment and selection process that were outside the scope of this experiment. The experiment only included relatively well-educated and experienced candidates. It only examined the selection process up to the first-stage. It only included jobs that could be applied to electronically, rather than face to face or over the phone.

Nonetheless, the result does suggest that well-qualified candidates from areas with poor reputations should not fear postcode discrimination, at least up until the interview stage of the recruitment process. On the basis of this evidence, there is no argument for policy interventions, including policies to reduce sorting and/or to address this neighbourhood effect pathway more directly.

Discussion

Reviewing the sources for the ideas about the 'stigma' neighbourhood effects pathway

The ideas that poor neighbourhood reputation might provide a pathway through which neighbourhood effects might operate appears to have developed through qualitative research on neighbourhoods and employment which indicates variations in reputation coinciding with variation in employment, and the presence of belief about neighbourhood effects amongst at least some residents and local labour market intermediaries and other workers. One of the irreplaceable functions of open ended, qualitative and open-ended work is to explore new areas of social enquiry and to generate hypotheses. However, not all such hypotheses are the same, and the strength of evidence behind them, and the indications of the prevalence and salience of the processes they identify may vary.

Most existing qualitative studies which have produced evidence of potential or perceived neighbourhood reputation effects on employment have not been focussed on neighbourhood reputation effects (Lawless and Smith, 1998; Social Exclusion Unit, 1998; Taylor 1998, Fieldhouse 1999, Roberts 1999; Dean and Hastings, 2000; Speak 2000, Mellor 2002; Taylor 2003; Aleksandraviciene *et al.*, 2005, Dewson *et al.* 2005; Sanderson, 2006; Green and White, 2007; Fletcher, 2007, Fletcher *et al.* 2008). Many have not asked explicitly or directly about neighbourhood reputation effects,

but have recorded references that emerged as in open-ended enquiries or as interesting by-products of research into other issues. Thus they have tended to record mentions of potential neighbourhood reputation effects without taking into account their prevalence or salience as potential explanations for individual employment status or neighbourhood employment rates, or the extent to which direct experience is reported.

In a study of young unemployed people in Newham in London, Roberts (1999) found that almost a third of young people from the most deprived parts of the borough thought that employers were put off by the area in which they lived. The converse finding was that a majority of residents did not think that poor neighbourhood reputation might create neighbourhood effects on employment. The evaluation of Working Neighbourhood Pilots found that just over one in ten residents thought that 'employers don't want to employ local people' (Dewson *et al.*, 2007). The converse is that almost nine in ten did not agree with this idea. In both cases, the context of the research might have encouraged respondents to point to barriers to employment other than their own characteristics and behaviour.

The additional qualitative work on beliefs about and experience of neighbourhood reputation effects carried out as part of this research conforms with and to some extent adds to the findings of existing studies. In this work, we interviewed a total of 163 people in the three local labour markets used in the experiment. Each group explicit specific questions about the potential for neighbourhood reputation effects on employment. This additional qualitative work carried out as part of this research conforms with and to some extent adds to the findings of existing studies, as we found some evidence of beliefs in neighbourhood reputation effects.

However, like Roberts (1999) and Dewson *et al.* (2007), we found that that only a minority supported the neighbourhood reputation effects hypothesis (Table 4). The members of the public were most likely of those we interviewed to think that neighbourhood reputation effects on employment might exist, but they were also the group least likely to have direct experience or evidence of neighbourhood reputation effects.

Table 4: Interviewees who thought residents of neighborhoods with poor reputations fare worse when applying for relatively low-skilled jobs than residents of neighborhoods in the same labour market with better reputations, all other things being equal

	Maximum who thought residents of neighbourhoods with poor reputations <u>might</u> fare worse..		Total interviewed
	Number	Percentage	
Members of the public	43	53%	81
Employers	2	14%	14
Labour market intermediaries	3	27%	11
Young job seekers	0	0	57
Total	48	29%	163

Source: Text above; interviews

Overall, if taken alone, the interviews might be seen provide some evidence to support HI (some residents of neighbourhoods with poor reputations may fare worse when applying for relatively low-skilled jobs than residents of neighborhoods in the same labour market with better reputations, all other things being equal), but also some to refute it.

It is possible that neighbourhood effects may be specific not only to national or neighbourhood contexts, but also to particular time periods. Another important point about hypothesis generation is that hypotheses may age before they can be tested. This may be particularly true in relation to the labour market, which is changing rapidly, partly in response to industrial reorganisation and technology.

We had to exclude large number of potential jobs from the experiment because all or part of the decision was being made by a remote processing or personnel section where no staff would have had the local knowledge necessary to create neighbourhood effects of employment opportunities. To gain some insight into the probable location of those making decisions on which staff to select for interview and to identify jobs where 'local' decision making was greatest, we analysed vacancies advertised on the *direct.gov.uk* website in the jobs focused on in this research project in the three local labour markets advertised in three labour markets via *direct.gov.uk*, in March-April 2011. We categorised vacancies according to the apparent physical location of key recruitment decision makers relative to the sites of employment in question, and whether key decisions were apparently mainly taken by local staff who were future line managers. Decision-making was categorised as 'local' if applicants were to be sent to a local site or local site manager and it thus appeared that all or most of the decision was taken at the employment site. For example, of the security jobs advertised, only 15 per cent had clearly local decision makers. For cleaners the figure was 23 per cent, for office assistances 62 per cent and for kitchen hands 62 per cent. This means that there was either no pathway, or at most, an obstructed pathway for neighbourhood reputation to create a

neighbourhood effect on these jobs, and to contribute to explanations of neighbourhood variations in employment. Even if we had found evidence of substantial neighbourhood reputation effects within the experiment, the majority of security, and cleaner jobs and a large minority of office assistant and kitchen hand jobs would be outside its scope and likely to be unaffected.

Over the past five years, employers even for low-skilled, low paid and manual work have switched from paper and mail to electronic applications. This practice was reflected in employers interviewed for this project, with the partial exception of those employing kitchen hands. This has meant that circumventing any poor reputation neighbourhood effect by using a false postal address is both virtually costless and practically redundant. As noted, in contrast to much previous research, none of the young people we interviewed thought that employers would discriminate on address grounds. Two young men from poor reputation neighbourhoods in the weak local labour market said that in any case, if there was any danger of this, addresses could be left off or altered – another consequence of the new dominance of the internet and email in job application and employer response - “*you can say you’re from anywhere*”.

These arguments may apply to others of the remaining 14 potential neighbourhood effects pathways identified by Galster (2011).

Conclusions

In summary, this paper has found evidence to contradict the hypothesis:

Residents of neighborhoods with poor reputations fare worse when applying for relatively low-skilled jobs than residents of neighborhoods in the same labour market with better reputations, all other things being equal

The result does suggest that well-qualified candidates from areas with poor reputations should not fear postcode discrimination, at least up until the interview stage of the recruitment process. It remains possible that poor neighbourhood reputation might create neighbourhood effects on employment in parts of these local labour markets or parts of the recruitment and selection process that were outside the scope of this experiment. However, centralised and electronic recruitment may be reducing the scope for these effects in large parts of the labour market.

On the basis of this evidence, there is no argument for policy interventions, including policies to reduce sorting and/or to address this neighbourhood effect pathway more directly, on the grounds of neighbourhood effects on employment. Nonetheless, there may be other arguments for these policies on areas reputation; for example, that residents of areas with poor reputations are made unhappy by them.

The paper demonstrates the value of investigating the sources of ideas about neighbourhood effects pathways, as well as for testing pathways themselves. It

demonstrates the value of experimental methods in exploration of neighbourhood effects. It also demonstrates how mixed methods approaches may add to the value of individual elements of research

Note

Although not reported in this paper, the multi-method research here has thrown up evidence of skills mismatch (via data on neighbourhoods, employer and job seeker interviews), and spatial mismatch (via data on job locations and travel times from neighbourhoods, and employer and job seeker interviews). These neighbourhoods might also be affected by 'social contagion', 'environmental' factors, other 'geographical' factors and 'institutional' mechanisms. However, at a glance, the skills mismatch and spatial mismatch appear to be substantial in size and probably likely to dwarf the effects of neighbourhood effects operating via any of the remaining 14 pathways referred to by Galster (2012), in explaining of variations in employment rates between neighbourhoods within labour markets.

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