





RACIAL DISCRIMINATION AND HEALTH: EXPLORING THE POSSIBLE PROTECTIVE EFFECTS OF ETHNIC DENSITY

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Areas with high levels of ethnic minority concentration, or ethnic density, have been hypothesised to provide ethnic minority residents with health promoting and protective effects on health. However, studies conducted in the UK have found mixed results for the effects of ethnic density on health.

This study investigated the ethnic density effect among ethnic minority people in the UK. It hypothesised that, after controlling for the negative effect of area deprivation, increased ethnic density would be associated with decreased reports of experienced racism, increased social support and community participation, and ultimately better health.

Key research findings

- After controlling for area deprivation and individuallevel sociodemographic characteristics, there is a decreased tendency to report psychotic symptoms among some ethnic groups as own-ethnic density increased (Bécares *et al.*, 2009a).
- There is a stronger ethnic density effect on psychological outcomes, as compared to that found for physical health outcomes (Bécares *et al.*, 2009a; Stafford *et al.*, 2009).
- Perceived ethnic density was more strongly and consistently related to limiting illness than was measured ethnic density. This reflects the possibility that perceived ethnic density is better at capturing individual experiences of frequency and intensity of contact with people with the same or similar ethnic origins (Stafford *et al.*, 2009).
- Experiences of interpersonal racism tended to be less likely in areas of high ethnic density (Bécares et al.,

2009a). Ethnic minority people who had experienced racism were more likely to report psychotic symptomatology and poor overall health. (Bécares *et al.*, 2009a).

- There was a suggestion that the detrimental association between racism and health decreased as ethnic density increased, suggesting that that ethnic density may buffer against the detrimental impact of racism on health (Bécares *et al.*, 2009a).
- Explorations of the association between ethnic density and social cohesion showed that after adjusting for area deprivation, there was a tendency for ethnic minority people to report higher social cohesion as ethnic density increased (Stafford *et al.*, 2010).

Aims, objectives, datasets and methods

The main aim of this study was to investigate the association between residential ethnic density, socioeconomic deprivation, interpersonal ethnic discrimination and health, and the explanatory pathways that might link these factors. Our specific objectives were to:

- Examine the associations between the residential ethnic density of an area and experiences of racism and discrimination, area deprivation, perceptions of the area's quality and amenities, social cohesion, civic participation, and health.
- Estimate how far living in an ethnically dense area moderates the impacts of racism and deprivation (i.e. has a protective effect for a given level of exposure).
- Examine whether the findings differ across ethnic groups.

Explore how far the relationships between ethnic density and individual experiences and perceptions are a consequence of own group density or overall ethnic minority density.

To achieve these objectives, we conducted secondary data analysis of three surveys: the 2005 and 2007 Citizenship Surveys (CS), the 1993/4 Fourth National Survey of Ethnic Minorities (FNS), and the 1999 and 2004 Health Survey for England (HSE).

Ethic density data were obtained from the 2001 Census and were linked to the HSE and CS using participants' postcodes. Middle Super Output Areas (MSOAs) were used to define area boundaries. Permission to link the 2001 census data on ethnicity to the data was approved by the ethics committee of the data holder (the National Centre for Social Research) with the constraint that up to 5% random error be added to each residential concentration variable. Ethnic density data from the 1991 Census were linked to the FNS at ward level.

The following analyses were conducted to explore the study aims:

- Multiple regression was also used to examine the associations between ethnic density and perceptions of the area, social cohesion and civic participation.
- In order to examine whether the association between ethnic density and hypothesised outcomes varied between ethnic minority groups, regression analyses were stratified by ethnic group.
- Separate models were conducted using alternative ways of capturing ethnic density in the area (described more fully below). All analyses took into account age, sex, individual socioeconomic position and area deprivation.

Defining and measuring ethnic density

Throughout the study, we operationalised ethnic density using three different methods:

As percent ethnic minority concentration. This was measured both for own-ethnic concentration and overall ethnic minority concentration. Own-ethnic density was calculated by dividing the number of residents from the respondent's ethnic group in an area by the total population in that area. Overall ethnic minority density was calculated by dividing the sum of residents from any non-white ethnic minority background (so, including Chinese, other Asian, other Black, and Mixed, but excluding Irish) by the total population in that area.

We expected the ethnic density effect to function slightly differently for own-ethnic and overall ethnic minority density, since the hypothesised operating mechanisms may be more relevant for one category than for the other. For example, whereas both ownethnic and overall ethnic density would fit the hypothesis that in areas of high ethnic density ethnic minority people will feel decreased stigma caused by their ethnic minority status (Pickett and Wilkinson, 2008) and less exposure to racism, it is possible that participation in community organisations is more likely to occur if these are orientated around the individual's own ethnic group, rather than targeted at any ethnic minority group.

- As perceived ethnic density. This was only done when analysing CS data, and was measured with a variable that asked respondents: "Now thinking about people in this local area (15/20 minutes' walking distance), what proportion of all the people in this local area are of the same ethnic group as you?".
- As a series of area typologies, which placed areas with similar ethnic profiles into the same cluster, yielding five different area types: White; Black; Pakistani and Bangladeshi; Mixed; and Indian area types.

Ethnic density effect on health

Explorations of the ethnic density effect on health were conducted with a range of objective and subjective health outcomes, as well as with health behaviours. Figure 1 presents results for the effects of own-ethnic and overall ethnic minority density on self-rated general health and psychotic symptomatology. It shows the likelihood of a poor outcome for each 10% increase in ethnic density. Ethnic density effects on health seemed to have a larger effect for own-ethnic density, although results were most often significant for overall ethnic minority density, due to greater statistical power.

After controlling for area deprivation and individual-level sociodemographic characteristics, there was a lower tendency to report psychotic symptoms among some ethnic groups as own-ethnic density increased. We did not find a protective association between ethnic density and psychotic symptoms for Pakistani people (Figure 1).



FIGURE 1: ASSOCIATION BETWEEN ETHNIC DENSITY AND HEALTH Source: FNS data; Adjusted for age, sex, SES and area deprivation

Throughout our analyses we found that the association between ethnic density and health differed by ethnic

group. There is a precedent for differing ethnic density effects in the literature, whereby studies have found protective ethnic density effects for some ethnic groups, but non-significant or detrimental effects for other groups (see, for example, Halpern and Nazroo, 1999). Ethnic minority groups in the UK differ greatly by their reasons for migration, settlement patterns, socioeconomic status and age structure. It is then possible that given these differences, living in an area with a higher concentration of people with the same or similar ethnicity does not have the same impact for all ethnic groups or for all health outcomes. Different groups may be more able than others to provide their members with the protective properties thought to operate behind the ethnic density effect.

Examinations of the ethnic density effect on alcohol consumption confirmed a protective effect for all measures of ethnic density analysed (Bécares *et al.*, 2009b). Figure 2 shows a consistent picture of decreased likelihood of reports of current drinking across ethnic minority groups for respondents living in all ethnic minority area types compared with the White area type, and in areas of higher own-ethnic density.



 FIGURE 2. ASSOCIATION BETWEEN ETHNIC DENSITY AND ALCOHOL

 CONSUMPTION
 Source: HSE data; Adjusted for age, sex, nativity, SES and area deprivation

Ethnic density and racism

A protective effect of own-ethnic density on reports of any experience of interpersonal racism (any experience in the past year of physical attack, verbal insult, or deliberate damage to property due to the respondent's 'race' or colour) was found for all ethnic minority groups except Indian people. The size of the effect was largest for Bangladeshi people, who were 31% less likely to report experiences of interpersonal racism for each 10% increase in ethnic density (Bécares *et al.*, 2009a). We found a consistently protective ethnic density effect on experienced racial attacks for all ethnic minority groups when we analysed the effect of overall ethnic minority density (Figure 3).



FIGURE 3. ASOCIATION BETWEEN ETHNIC DENSITY AND RACISM Source: FNS data; Adjusted for age, sex, SES and area deprivation

Figure 4 shows the likelihood of reporting poor health for those who have experienced interpersonal racism, relative to those who have not at varying levels of ethnic density. A (non-significant) buffering effect of ethnic density was observed for Bangladeshi, Indian and Pakistani people, for whom the detrimental association between experienced discrimination and poor health was smaller at higher levels of ethnic density (Bécares *et al.*, 2009a).



FIGURE 4. BUFFERING EFFECT OF ETHNIC DENSITY Source: FNS data; Adjusted for age, sex, SES and area deprivation

Ethnic density, social cohesion and civic participation

Our findings did not support the expected protective effect of ethnic density on overall civic participation. We found that in general, an increase in ethnic density was not associated with civic participation, or satisfaction with local services. However, a different association was found for informal activities, where, for example, African and Bangladeshi people tended to report greater participation in informal volunteering as their own-ethnic density increased. It is possible that associations between ethnic density and civic participation are not accurately portrayed with the measures found in the CS, and our hypotheses would be better tested using other measures of actual political and civic engagement (e.g., electoral participation) and community services (e.g., number of ethnic community-based organisations).

We used the Local Government Association (LGA) in their Guidance on Community Cohesion, which characterised a cohesive community as one where "there is a common vision and a sense of belonging for all communities; the diversity of people's backgrounds and circumstances are appreciated and positively valued; those from different backgrounds have similar life opportunities; and strong and positive relationships are being developed between people from different backgrounds in the workplace, in schools and within neighbourhoods" (LGA, 2002, p.6). Results showed that an increase in ethnic density was strongly associated with higher odds of reporting that people in the area respect ethnic differences, and get on well together (Figure 5). Among Pakistani and Bangladeshi people, an increase in ethnic density was also associated with increased odds of trusting one's neighbours.

We found a strong association between higher area deprivation and a decrease in reports of social cohesion. This was the case across all ethnic groups, and for measures of neighbourhood trust, getting on well together, and respect for ethnic differences. The implication is that ethnic density increases social cohesion and that the key driver of a decrease in social cohesion is, in fact, area deprivation.





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