Ethnicity and Neighbourhood Attainment in England and Wales

Carolina V. Zuccotti

Migration Policy Centre
Robert Schuman Centre for Advanced Studies
European University Institute

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Context
Main ethnic minority groups

Ethnic minorities in England and Wales (1971-2011); % of tot. pop.

Source: Author’s own calculations based on aggregated census data obtained from: casweb.mimas.ac.uk and www.neighbourhood.statistics.gov.uk.

Components of population growth (2001)

UK-born:
Caribbean (60%); Indian/Paki/Bang (30-40%); African (15%)

Note: the percentages refer to the growth relative to 2001. Source: Figure 1 in Simpson (2013). Census briefs: www.ethnicity.ac.uk.
Spatial distribution & deprivation

80% of non-whites in metropolitan areas
50% in London

- Indian & Pakistani are more dispersed
- Black populations and Bangladeshis are mostly located in London
- Pakistani and Bangladeshis: highest segregation (seg. indices)

Carstairs deprivation (unemployment, #cars, social class, overcrowding)

- High concentration of non-whites → high deprivation
- Pakistani and Bangladeshis: most deprived

Source: Author’s own calculations based on aggregated census data.
Research context

- **Spatial segregation** (Catney 2016a, Catney 2017, Simpson 2007, Simpson 2012)
- **Internal migration rates** (Simpson and Finney 2009)
- **Relationship between ethnic concentration and deprivation** (Harris, Johnston and Manley 2017, Jivraj and Khan 2013)
- **Residential mobility/internal migration** (Finney and Simpson 2009)
- **Neighborhood attainment** (Coulter and Clark 2016)

**BUT:**
- This research does not answer whether, given similar ‘initial conditions’, ‘similar outcomes’ are observed in terms of neighborhood characteristics
- This is a question typical from the social stratification & social inequality literature
- If inequality is observed → what explains the ethnic gap? Preferences? (self-segregation?) Constraints (discrimination?)
Theoretical background
&
research questions
Spatial assimilation model

- Initially developed by the Chicago School (Burgess 1925; Park 1925); formalized later on by Massey (1985)
- Upon arrival
  - Immigrants located in areas with high share of migrants (or ethnic minorities) → usually deprived areas
- Over time
  - Integration (acculturation, socio-economic improvement)
  - Residential mobility to ‘better areas’: more white; less deprived (the suburbs in the US)

- Gains in terms of integration are transformed into residential gains
- Stricter definition: equality of opportunities in terms of where individuals choose to live or equality of neighbourhood outcomes given equality of individual and background characteristics
Alternative models

• **Place stratification**
  – Hierarchy of neighbourhoods
  – More affluent groups or groups with certain ethnic characteristics separate themselves
  – Sustained through discrimination in the housing market or harassment
  – Constraints

• **Ethnic enclave**
  – Cultural bonds will not weaken over time
  – Benefits of living close to co-ethnics
  – Preferences
  – Asian ethnic minorities
Locational attainment model
(Alba and Logan 1993)

\[ Y = a + b_1 X_1 + b_2 X_2 + e \]

Amenities of a neighborhood

Indicators of cultural and socio-economic assimilation

A: Spatial assimilation (strong)
B: Spatial assimilation (classic)
C: Place stratification / ethnic enclave (weak)
D: Place stratification / ethnic enclave (classic)
E: Place stratification / ethnic enclave (strong)
E: Place stratification / ethnic enclave (very strong)

\( x = \) socio-economic and cultural resources
\( y = \) characteristics of neighborhood of destination (e.g. % white population)

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Majoritarian (white) population
Ethnic minority group
The role of origin neighborhoods

• Information on neighborhood characteristics at different time points

• Two ways of studying neighborhood attainment:
  1. As the probability of being in a neighborhood with certain characteristics
     • No controlling for neighborhood in childhood
     • Controlling for neighborhood in childhood
  2. As the probability of changing from an X type of neighborhood to an Y type of neighborhood

→ Possibility to identify ethnic enclave mechanisms
Research objectives

1) Study ethnic groups’ propensities to reside in neighborhoods with less ethnic concentration and less deprivation, given individual, social origin and origin neighborhood characteristics (Question 1).

2) Explore whether the role of education and that of social class play out differently on neighborhood attainment for different groups (Question 2).

3) Explore the role of origin neighborhood characteristics on ethnic groups’ neighborhood attainment (Question 3).
Data, sample and variables
The ONS Longitudinal Study


5 Censuses

- 1% individuals followed
- Attach household & neighbourhood information

- Origin
  - Young (0-15 years old)

- Education & occupation
  - Adults (20-45 years old)

- Neighborhood attainment
  - Adults (30-55 years old)

- Around 500,000 per Census-wave; around 400,000 in 2 waves; around 200,000 in 5 waves

- Sample: around 150,000 cases
- Considered more than one origin time-point, if available
- White British and second generation ethnic minorities who were born or arrived to the UK before age 15
Variables

Neighbourhood (non-white) ethnic concentration & Neighbourhood deprivation
(Wards: 8850; pop. 4,000)
- Based on Quintiles (pop-weighted):
- DV = Probability of being in Q1-2 (2011) & Prob. Q1-4 (low deprivation)
- IV = Individuals raised in Q4-5 (1971/1991) → good proxy of co-ethnic neighbourhoods / Raised in Q5 (deprivation)

Ethnicity
Based on self-identification in 2011 (2001 if missing)

Education & occupation
- Education (3 categories; effect of university)
- Occupation (4 categories NS-SEC; effect of professional/managerial position)

Other controls:
Origin neighbourhood deprivation + share of non-white
Origin household: tenure, number of persons per room, number of cars, parental social class
Age, gender, origin year and number of census points
Analysis & Main findings
## Three equations

### Main effects

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<tbody>
<tr>
<td>i</td>
<td>( Y_{(2011)} = a + b_1 \text{ethnicity} + b_2 \text{education}<em>{(2001)} + b_3 \text{social class}</em>{(2001)} + b_5 \text{origin neighbourhood} + b_6 \text{social origins} + e )</td>
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### Interactions with key mediating variables

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<tr>
<td>ii</td>
<td>Equation i + ( b_7 \text{ethnicity} \text{education}<em>{(2001)} + e ) and ( b_7 \text{ethnicity} \text{social class}</em>{(2001)} + e )</td>
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### Interactions with origin neighbourhood: a test for ethnic enclave

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<tr>
<td>iii</td>
<td>Equation i + ( b_6 \text{ethnicity} \text{origin neighbourhood} + e )</td>
<td></td>
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Table 3: Probability of being in a neighbourhood with low ethnic concentration and middle/low deprivation in 2011. AME

<table>
<thead>
<tr>
<th></th>
<th>Non-white Q1-2</th>
<th>Deprivation Q1-4</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td><strong>Ethnic group (ref. white British)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian</td>
<td>-0.128</td>
<td>-0.072</td>
</tr>
<tr>
<td></td>
<td>(0.009)***</td>
<td>(0.007)***</td>
</tr>
<tr>
<td>Pakistani</td>
<td>-0.227</td>
<td>-0.146</td>
</tr>
<tr>
<td></td>
<td>(0.016)***</td>
<td>(0.014)***</td>
</tr>
<tr>
<td>Bangladeshi</td>
<td>-0.226</td>
<td>-0.137</td>
</tr>
<tr>
<td></td>
<td>(0.030)***</td>
<td>(0.023)***</td>
</tr>
<tr>
<td>Caribbean</td>
<td>-0.198</td>
<td>-0.125</td>
</tr>
<tr>
<td></td>
<td>(0.014)***</td>
<td>(0.011)***</td>
</tr>
<tr>
<td>African</td>
<td>-0.173</td>
<td>-0.097</td>
</tr>
<tr>
<td></td>
<td>(0.032)***</td>
<td>(0.024)***</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>161168</td>
<td>161168</td>
</tr>
</tbody>
</table>

**Other controls**

|                      |                |                  |               |               |
|----------------------|----------------|------------------|               |               |
| Origin neighbourhood share of non-whites | X              | X                |               |               |
| Origin neighbourhood deprivation |               |                  |               |               |
| Household of origin characteristics<sup>1</sup> | X              | X                |               |               |
| Individual characteristics<sup>2</sup> | X              | X                |               |               |

Note: All models control for age, gender, origin year, and number of census points.
<sup>1</sup> Tenure, number of persons per room, number of cars and parental social class.
<sup>2</sup> Education, social class, civil status and presence of children in the household.
* p-value<.10 ** p-value<.05 *** p-value<.01; robust (clustered) standard errors in parentheses

Population: Individuals between 30 and 55 years old (2011)
Source: Author’s own calculations based on ONS-LS
Figure 5: The role of education and social class on the probability of being in a neighbourhood with low ethnic concentration in 2011
Figure 6: The role of education and social class on the probability of being in a neighbourhood with a lower deprivation (Q1-4) in 2011.
A: Spatial assimilation (strong)

B: Spatial assimilation (classic)

C: Place stratification / ethnic enclave (weak)

D: Place stratification / ethnic enclave (classic)

E: Place stratification / ethnic enclave (strong)

E: Place stratification / ethnic enclave (very strong)

\[
x = \text{socio-economic level of individuals}
\]

\[
y = \text{percentage of white population}
\]

---

Majority (white) population

Ethnic minority group
Figure 7: The role of origin neighbourhood on the probability of being in a neighbourhood with low ethnic concentration and middle/low deprivation (Q1-4) in 2011

Neighborhood with low ethnic concentration in 2011 (by neighborhood ethnic concentration in origin)

Neighborhood with middle/low deprivation in 2011 (by neighborhood deprivation in origin)
Conclusions

• Equality of outcomes given equality of initial conditions? NO

• ‘Weak’ place stratification: education and social class play a role in positioning individuals in the space
  – More tolerance to diversity among higher educated
  – Less discrimination in the housing market for those with higher resources → ethnicity is less relevant

• The characteristics of ‘origin neighborhood’ also play a role, for both outcomes:
  • Evidence of ethnic enclave mechanisms
  • Parents’ choice of a neighborhood can be crucial for individuals’ neighborhood career
Thank you!
The problem of reverse causality
## Average % of ethnic groups in Wards by non-white quintiles (row %)

<table>
<thead>
<tr>
<th>Wards</th>
<th>White British</th>
<th>Non-white</th>
<th>Indian</th>
<th>Pakistani</th>
<th>Bangladeshi</th>
<th>Caribbean</th>
<th>African</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>7258</td>
<td>93.1</td>
<td>2.6</td>
<td>0.6</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Q2</td>
<td>700</td>
<td>68.7</td>
<td>18.2</td>
<td>4.2</td>
<td>2.8</td>
<td>0.9</td>
<td>1.4</td>
</tr>
<tr>
<td>Q3</td>
<td>304</td>
<td>48.9</td>
<td>33.0</td>
<td>5.9</td>
<td>5.3</td>
<td>1.8</td>
<td>3.5</td>
</tr>
<tr>
<td>Q4</td>
<td>189</td>
<td>32.6</td>
<td>49.4</td>
<td>8.9</td>
<td>8.4</td>
<td>3.8</td>
<td>5.7</td>
</tr>
<tr>
<td>Q5</td>
<td>119</td>
<td>17.3</td>
<td>71.4</td>
<td>21.9</td>
<td>18.7</td>
<td>7.6</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Source: Aggregated Census data (2011)
### Deprivation quintiles by non-white quintiles (row %)

<table>
<thead>
<tr>
<th>Non-white quintiles</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Total Wards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>34.8</td>
<td>23.9</td>
<td>20.0</td>
<td>14.3</td>
<td>7.0</td>
<td>7253</td>
</tr>
<tr>
<td>Q2</td>
<td>9.9</td>
<td>21.3</td>
<td>23.1</td>
<td>26.5</td>
<td>19.2</td>
<td>694</td>
</tr>
<tr>
<td>Q3</td>
<td>2.3</td>
<td>5.3</td>
<td>11.2</td>
<td>33.6</td>
<td>47.7</td>
<td>304</td>
</tr>
<tr>
<td>Q4</td>
<td>2.7</td>
<td>1.1</td>
<td>4.3</td>
<td>12.8</td>
<td><strong>79.3</strong></td>
<td>188</td>
</tr>
<tr>
<td>Q5</td>
<td>0.0</td>
<td>0.0</td>
<td>5.0</td>
<td>10.1</td>
<td><strong>84.9</strong></td>
<td>119</td>
</tr>
</tbody>
</table>

Source: Aggregated Census data (2011)
The second generation: education & labour market
(Zuccotti & Platt, 2017)

• All ethnic minority groups are more likely to attain a university degree than the white British, on equality of individual, household and social origin characteristics varies between 14% points to 50% points, highest for Chinese, African (mainly women) & Indian

• This advantage is not translated in the access to jobs (high penalties especially for women)

• For some groups, this advantage seems to be translated (at least in part) in a higher probability of accessing qualified occupations, compared to the white British (Indian, Bangladeshi & Chinese men; Indian and Caribbean women)