

0163

Disadvantage, ethnicity, gender and educational attainment: The case of White working class pupils

Steve Strand

University of Warwick, Coventry, United Kingdom

Background

Perhaps the most prevailing inequalities in educational attainment in the UK are those associated with social class, ethnicity and gender. Concerns about unequal attainment within these groups are long standing, and recent topic reviews from the DCSF highlight the continued attainment gaps in England in relation to these dimensions (DfES, 2006; DCSF, 2007; DCSF, 2009). The national "narrowing the gap" agenda is raising awareness, but it is important to stress that not all gaps are of the same size, for example the social class gap at age 14 is six times larger than the gender gap (Strand, in press). However relatively little research has sought to compare the size of these gaps or to explore the interactions between these factors. Ethnicity, class and gender do not necessarily combine in a simple additive fashion, for example the educational attainment of White British and Black Caribbean working class boys is particularly low (Strand, in press). This paper presents an analysis of national test and examinations results at age 11 and age 16 for an ethnically diverse inner London Local Authority which highlights the importance of teasing out the interactions between these factors. The overall aim is to identify which groups of pupils (defined by combinations of ethnicity, gender and economic disadvantage) have low attainment or make poor progress at school.

Research Questions

Can measures of economic disadvantage commonly available to Local Authorities (entitlement to FSM and the Income Disadvantage Affecting Children Index - IDACI) be combined to create a single measure reflecting both advantaged and disadvantaged ends of the economic spectrum?

What are the relationships between these factors and educational attainment? Are additive models sufficient to explain the data or is it necessary to consider the intersection of socio-economic disadvantage, ethnicity and gender?

Which groups of pupils (defined by combinations of disadvantage, ethnicity and gender) have the lowest and highest attainment? Which groups make above or below average progress at school?

Methods

The paper approaches equity issues from a quantitative perspective. The paper asks whether there are measurable differences in educational attainment between different pupil groups (defined by economic disadvantage, ethnic group or gender) and to what extent various factors can account for these gaps. The dataset consists of the 2008 test and examination results for approximately 2,500 pupils aged 11 and 1,500 pupils aged 16 attending 69 schools in an ethnically diverse inner London borough.

Frame

The data are analysed in a hierarchical multiple regression framework. These analyses identify the unique (net) contribution of particular factors to variations in pupil outcomes, while other background factors are controlled. This is important because much of the difference in attainment between ethnic and social groups may be attributable to the impact of socio-economic and demographic factors. The report adopts a hierarchical approach by sequentially entering blocks of variables. The analysis proceeds in four steps, each associated with a particular analytic model:

1. First the associations of ethnicity, gender and disadvantage with attainment are assessed in a simple main effects (additive) analysis. What is the association between each factor and educational attainment?
2. Next interactions between ethnic group, gender and disadvantage are introduced. The statistical significance of the interaction terms are assessed to determine whether a simple additive model is adequate or whether allowing for interactions provides a better, but still parsimonious, model of the data.
3. The third model examines whether any relationships between ethnicity, gender, disadvantage and attainment remain significant when controls are included for a range of further contextual variables both at the individual pupil level (e.g., age, SEN, stage of fluency in English, mobility) and measures of school composition (e.g. school mean disadvantage score, % of mobile pupils, % of girls etc).
4. The final model examines associations with pupil progress by also including prior attainment at the end of KS1 for an analysis of progress during primary school (age 7-11) and prior attainment at the end of KS2 for an analysis of progress during secondary school (age 11-16).

Research findings

The results revealed that:

- Educational attainment cannot be adequately explained solely through reference to class, ethnicity or gender: It is necessary to look at the interactions between these factors to identify the groups that have low attainment or make poor progress at school.
- White British pupils are the ethnic group most polarised by economic disadvantage. White British pupils are simultaneously both the lowest attaining ethnic group (among those from disadvantaged homes) and the highest attaining ethnic group (among those from advantaged homes). The low attainment of White British pupils from disadvantaged homes is as much of a concern as the low attainment of Portuguese, Black Caribbean, Black African and Bangladeshi/Pakistani pupils from similar circumstances.
- Adding further controls for SEN, fluency in English, pupil mobility and school composition accounts for the low attainment of Portuguese pupils from disadvantaged homes. White British, Black Caribbean and Black Other pupils from disadvantaged homes remain the lowest attaining groups.
- Absolute levels of attainment at age 11 are important, since low attainment at age 11 is key risk factor for subsequent low attainment at school leaving age, for continuing in education post-16, and for long term employment and occupational outcomes. However there is also evidence of significant underachievement among Black pupils from middle and advantaged homes, relative to their similarly advantaged White British peers.
- In most minority ethnic groups advantaged and disadvantaged pupils make roughly similar progress. However White British pupils from advantaged homes make substantially more progress than White British pupils from disadvantaged homes, increasing the socio-economic gap further over time. Part of the greater progress of White British pupils from advantaged homes arises from attending schools with a high proportion of advantaged pupils and a low proportion of mobile pupils. However these factors do not fully account for their better progress.

Overall the results do not support accounts of educational success or failure that focus exclusively on class, ethnicity or gender and challenge researchers to develop more nuanced interpretations of educational attainment.