

## School choice, admission, and equity of access

### Research Brief

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This research project, funded by the Nuffield Foundation, is concerned with how children are “matched” to secondary schools, via a *school choice* process – whereby the preferences for schools, that parents list, and the admission criteria, that schools use, result in particular children being admitted to particular schools. Little is known about parental preferences, and here we attempt the task of disentangling the relative importance of school quality, school proximity, and school admission probability that is driven by admission criteria and capacity.

Getting into the right school matters to parents. Parents appear to place a high weight on living near, and getting into, a ‘good’ school. But parents are also willing to make a trade-off between quality and proximity – parents value both attributes and they may choose a school further away providing it is sufficiently better than a closer one. We estimate this “willingness to travel” for higher quality, and we find that this willingness is greater for some types of parents than others.

In practice, a large majority of children *are* offered a place at their top listed school. And, if not, they are very likely to get an offer from their second listed school. Very few children end up not being able to attend *any* school that their parents have listed. This should be a cause for celebration, were it the case that the lists that parents create were true reflections of their preferences. But, parents might not list their most preferred school first, or even at all – because they are only allowed to list a small number of schools. Parents have an incentive to be “strategic” – that is, they will want to take into account the behaviour of other parents when constructing their choice list. If you think that many other parents are applying to your most preferred school and the chance of your child being admitted is small, it may be unwise to use one of your scarce choices on such a longshot even though you would love you child to go there. Had you been able to list more choices, then you might want to include this longshot in your list.

When we look closely at the data on families’ preferences, and the schools they attend, we uncover what appear to be important inequalities in access. In particular, minority ethnic families face lower chances, on average, compared to white families. However, oversubscription criteria embedded in the admission rules for schools, are tightly circumscribed by regulations intended to protect children from discrimination. So, it is unlikely that the observed patterns of the matching of children to schools reflect explicit discrimination in access. Rather, which children get matched to which schools, comes from differences in preferences and the cautiousness of choice strategies driven by the limit on list length.

We use National School Preferences data, linked to detailed records on pupil and school characteristics from the National Pupil Database, to ask the following questions:

- What weight do parents place on the factors that they trade-off against each other when evaluating schools: school performance, proximity, and admission chance?

- How much variation is there in the weights that parents use? In particular, do these weights, that determine preferences, vary across types of parent?
- To what extent does the design of the system affect the quality of choices that parents experience? By *design* we mean: school locations and capacities, the relevance and availability of information, and the nature of oversubscription priority rules.
- Does our analysis suggest simple interventions that can improve choices by parents?

The estimates, based on children applying to state-maintained secondary schools for entry in September 2014, reveal;

- Evidence that parents place a considerable weight on school performance (our proxy for quality). On average, we estimate, by observing parental listed choices, that parents would be prepared to allow their child to travel an additional 0.9 km (when the mean distance is around 2.5 km) to achieve a 10 percentage point better quality school. This is a considerable burden that households, on average, seem to be willing to pay.
- Holding other things fixed, minority ethnic groups are more willing to travel for incremental improvements in school performance than British white parents. The latter are willing to send their children only 11% further for a 10 percentage point improvement in our school performance measure (the proportion achieving 5+ good GCSE's), whereas minority ethnic parents are willing to travel 21% further for the same improvement.
- Minority ethnic families are, on average, 17% less likely to achieve their first-choice school (and more so for Black, than Asian or Other), and this pattern persists when looking only at London. Overall, Londoners are less likely to get their first-choice.
- Minority ethnic children are less likely to be admitted to schools on their rank order lists.
- After accounting for ethnicity, parents of children with attainment in the top tercile of Key Stage 2 (end of primary school) tests, are willing to travel 50% further for a 10 percentage point improvement, than the families of children in the bottom tercile.

Our data suggest that this may be due to admission-regarding preferences (parents of such children might be less risk-averse), or to variation in choice sets (they may live in an area that has very limited capacity in good schools), or there may be some variation in admission priorities at oversubscribed schools e.g. faith based priorities. Our modelling of admission reveals that having a sibling at a school greatly improves the chance of admission, as do having a statement of special educational needs (SEN), being a looked after child (LAC), and attending a faith primary school.

Our conclusions from the work are that:

- The estimates imply that allowing parents to rank more schools leads to an improvement in the expected quality of allocated schools of 0.12 percentage points, and increases the distance to the allocated school by just 15 metres. These are small effects but can be explained by the fact that in 2014 there was enough spare capacity in the system so that most children had access to reasonably good and reasonably local schools with spare capacity. In these cases, parents would be assigned by the LA to one of those schools, and if that school was also in the family's top three

preferences, then being able to rank more schools than three would not matter. However, there was heterogeneity across LAs. For example, Bristol had the largest counterfactual increase in allocated school performance, at 1.05 percentage points.

- The costs of **expanding list lengths** is likely to be tiny so we suggest that this should be implemented, even though the average effects in 2014 were small. They are likely to be bigger now because excess capacity in schools has been steadily decreasing since 2014 due to year-on-year rises in the size of the 11-year old cohort.
- Advice provided to applicants by LAs is very limited. Many seem to encourage conservatism in applicants by encouraging them to list schools that they are likely to be admitted to. None seem to provide diagrammatic visualisations of the possible choices and their respective qualities and proximities – the simple things that we have come to expect from hotel listings and the like. Providing such **information** could make an important difference – it could ensure that parents were well informed about the good schools that they are likely to gain admission to.
- Our own research could provide the basis of a *recommender algorithm* – if the LA websites were linked to existing National Pupil Database (NPD) information it may be possible to provide customised advice – after all, what is a good school for one child may not be so good for another. This might produce better matches at the individual level. Even in the absence of a link to NPD, it would be possible to provide less specific advice on the basis of postcode alone. For example, if provisional choices appear idiosyncratic, a check could easily be inserted to point out that, say, a better AND closer school was likely to be available. Indeed, if NPD were used to identify older sibling, school, and postcode, it would be possible to say which school might be able to (almost) guarantee a place. This would reduce the incentive on parents to strategize and could result in children being allocated to schools that are a better match in terms of their parents' true preferences.

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