Should you Meet The Parents? The impact of information on non-test score attributes on school choice*

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PRELIMINARY VERSION

Abstract

We study whether parents value non-test score attributes when choosing school. We exploit an intervention designed to provide hard-to-find information about school environment and day-to-day life at local public-sector institutions. School choice in London provides a unique setting where information on academic performance is already diffused and not shifted by the programme we study. Difference-in-differences estimates show the treatment increased enrolment in state-funded schools with respect to private institutions. We uniquely document that the information affected the choice of students with high socio-economic status. In addition, we find spillover effects on school choice of unexposed parents. Our results imply that relatively simple interventions may increase financial resources and peer quality at state schools, weakening concerns about educational inequalities driven by school choice expansion.

JEL Classification: I24, I28, H75

Keywords: School Choice, Hard-to-find Information, School Interventions

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1 Introduction

The past decades have witnessed a rapid and large expansion of school choice policies (Musset, 2012).[1] School choice is typically viewed as a 'market-based' approach that, by aligning school incentives with parental preferences, can raise school quality and ultimately student achievement through competition (Hoxby, 2003). However, a growing literature suggests that parental preferences are not systematically related to the school impact on test scores (MacLeod and Urquiola, 2019; Beuermann and Jackson, 2020; Rothstein, 2006; Abdulkadiroglu et al., 2020), questioning what attributes parents value the most in their choices.

The question on the extent to which observed choices reflect parental preferences rather than available information remains open. Information and marketing interventions in education settings have been shown to shift individual choices (Lavecchia et al., 2016) and have important effects on equilibrium levels of school quality (Andrabi et al., 2017). However, existing studies focus on information about school value-added and school performance (Ainsworth et al., 2020; Hastings and Weinstein, 2008; Hastings et al., 2016; Allende et al., 2019). Despite the relevance of non-test score dimensions of school quality for students' long-term outcomes (Jackson, 2018; Beuermann and Jackson, 2020; Beuermann et al., 2019), to the best of our knowledge, no intervention provides information on such attributes that might be equally valued by parents.

We study whether parents react to the provision of hard-to-find information on non-test score school attributes by changing their enrolment choices. We exploit an intervention targeting parents from relatively affluent backgrounds, in a context where information on school academic quality is already widespread. The programme, called "Meet The Parents" (hereafter, MTP), involves the organisation of meetings between primary and secondary school parents and students. Kicked off in 2012 in the London Borough of Camden, its main goal was to address the outflow of local students from the state to the private education sector by encouraging enrolment to local state institutions. MTP provides a unique setting to identify the impact of non-test score dimensions of school quality on school choice. In England, school choice within the public sector is well-established, and parents are used to collect information on schools at the time

[1] Examples of school choice policies are vouchers reducing tuitions at private schools (Epple et al., 2017), promotion of alternative state school models (e.g. charter schools in the US or academies in the UK) or 'open enrolment' programmes, whereby households can apply to any state school and are assigned based on preference. In England, open enrolment is in place since the 1980's and parents are allowed to rank up to 6 preferred schools at application.

of application. School Performance Tables are published every year to inform parents on standardised test scores and value-added indicators for each state-funded school, providing parents with direct access to information about academic school quality. In this context, MTP consists of a series of meetings discussing attributes hardly gathered elsewhere concerning day-to-day school life, such as school values and environment, discipline policy, safety, or inclusiveness.

We analyse 88 MTP meetings organised from 2012 to 2018, involving 29 different primary schools mostly located in the London borough of Camden. We link data on MTP meetings to individual-level administrative records from the National Pupil Database (NPD) on the universe of pupils enrolled in state-funded schools. We document that participating primary schools stand out in the district in terms of student academic achievement and socio-economic composition, consistently with MTP's aim of targeting parents with higher propensity to consider private education. At the same time, local secondary schools participating to the meetings are under-performing compared to other state-funded schools of the same school market. To guide the interpretation of our results, we present a simple conceptual framework where MTP affects the weight parents assign to hard-to-find attributes in their utility function for schools (Hastings et al., 2010).

We evaluate the impacts of MTP through a difference-in-differences design. Our research design compares changes in secondary enrolment outcomes between students in primary schools where an MTP meeting is organised (treatment) and those enrolled in schools that do not participate to MTP (control) before and after the start of the initiative. The control group consists of peers enrolled in unexposed schools in Camden or bordering districts, and therefore who are exposed to the same secondary school market. As admission depends on residential distance to school, we further exploit granular data on children residence and control for residential sorting across areas. The identifying assumption is that, absent MTP, changes in school choice behaviour would have been similar among students in treated and control schools. We show that enrolment outcomes of treated and control students follow a similar trend up to MTP start and that MTP effect on school enrolment before the treatment starts is equal to zero.

We show that MTP increases the probability of enrolling into a state-funded rather than private secondary school. The estimated effect is 2.4 percentage points (2.8% of the mean), corresponding to 1 more student per school-year opting for the public sector, and to a 24% reduction of the outflow to private education. Although the average impact of MTP on enrolment at schools represented at the meetings ('promoted schools') is positive but not statistically

different from zero, we show that capacity constraints play an important role in mitigating the policy effect on the latter. Our results suggest that, because of limited supply and competition among treated families, only parents residing in close proximity to the premises are able to secure a seat in promoted secondary schools.[2]

We find that MTP shifts parental preferences towards schools with similar attributes to those that can be found in private schools. Enrolment effects are concentrated on high-performing, single-sex schools and institutions enjoying higher degrees of autonomy. In addition, MTP increases enrolment at community schools and institutions with more ethnically diverse intake, suggesting that parents do not uniquely consider academic performance measures in their choice. Consistently with the intervention's target, results are driven by families with high socio-economic status (SES) and high-ability students. These findings imply a positive effect on peer quality at state-funded schools over and beyond the increase in enrolment count. At the same time, families likely to be less rooted in the local community – such as those belonging to ethnic minorities, not speaking English at home, or those who recently moved – exhibit larger effects. As they have arguably had less chance to learn about local schools, this result supports the interpretation of MTP as an information treatment.

Finally, we document spatial spillover effects of MTP. To assess whether the programme affects the desirability of local state schools over and above its direct effect on treated students, we follow Autor et al. (2014) and calculate an MTP exposure index for each census block as the fraction of resident peers exposed to MTP meetings. We find that parents unexposed to MTP meetings but residing in areas with a larger share of treated peers are substantially more likely to enrol at schools represented at the meetings. This result implies significant spillover effects of informational interventions in education, in line with Bettinger et al. (2021). Moreover, by estimating indirect effects of area-level exposure on treated parents, we show that enrolment effects are constrained by peer competition for school seats.

Using survey data collected during the meetings, we interpret MTP effects as evidence that parents respond to hard-to-find information on school values and environment. About 40% of parents reported MTP among the information sources they most rely on for school choice, twice more than School Performance Tables. Moreover, parents reported placing a high value on non-test score attributes, such as school atmosphere or inclusive ethos, which represent the main focus of MTP. About 90% of respondents reported changing their mind after the meeting

[2]Furthermore, the fact that parent located in the vicinity of school, and likely best informed on its attributes, exhibit the largest impacts supports our view that information provided by MTP is hard to find elsewhere.

and starting to look at local schools that they wouldn't have otherwise considered.

Our findings contribute to the literature on the effect of information on school choice, which has so far mostly considered low-SES households and children (Hastings and Weinstein, 2008; Hastings et al., 2015) and focused on the provision of 'hard' metrics of school performance (Jensen, 2010; Kessel and Olme, 2017; Allende et al., 2019). We focus on a policy that target medium- to high-SES households and a context where information on school performance is widely diffused, and show that parents value hard-to-find information on school attributes over and beyond school performance.

This paper also provides new evidence on parental preferences for schools. Parents consider different attributes, such as school peer quality and socio-economic composition, proximity and student long-term outcomes (Hastings et al., 2010; Burgess et al., 2015; Glazerman and Dotter, 2017; Beuermann et al., 2019; Beuermann and Jackson, 2020; Abdulkadiroglu et al., 2020). Our results suggest that parents also value additional non-test score dimensions, such as school values, environment and welcoming atmosphere, as inputs for their judgements. As treated parents are likely to be very informed on academic quality, our results highlight that parental choices - on which the effectiveness of school choice policies hinges - are not necessarily well-informed on such dimensions.

Our results have important policy implications, since the outflow of children towards private education may substantially affect state school students and increase educational inequality. State school funding is largely based on enrolment count, implying that any outflow from the state sector drives a decrease in the funding available. This can have detrimental effects on students remaining in the public sector, especially those from most disadvantaged contexts (Jackson et al., 2016; Gibbons et al., 2017). For schools participating to the program for 5 year, we estimate that MTP delivers a net increase in financial resources of about £318,945. In addition to a resource effect, the composition of the student body may affect educational outcomes per se (through e.g. peer effects, increased teacher effort, parental participation or even schools' ability to raise additional financial resources), and this effect is empirically sizeable (Altonji et al., 2015). As students opting for private education are likely to come from more advantaged backgrounds, MTP may benefit less-privileged students by increasing peer quality in the public sector. Overall, our findings imply that small and relatively cheap interventions targeting prospective parents may weaken concerns about adverse effects of school choice on educational stratification and inequality (Hsieh and Urqiuola, 2006; Laverde, 2020).

2 Background and data

2.1 The Education System and School Choice in London

State primary education in England is organised in two phases, Key Stage 1 (KS1) and Key Stage 2 (KS2). In the final year of KS2, when pupils are 11, they sit national standardized tests (SATs) in math and English. Secondary school lasts five additional years, at the end of which students sit the General Certificate of Secondary Education (GCSE) exams, which end compulsory education.

About 90% of primary school-age children are enrolled in state tuition-free schools (DfE, 2016). The majority of students enrolled in state-funded schools attend 'community' schools, which are managed by the school districts (local authorities, hereafter, LAs).[3] Community schools are fully controlled and funded by the LAs, which recruit teachers and staff, provide schools with all the services they need and administer the school budget set by the central government. The other most common state-funded schools are faith schools ('voluntary controlled' and 'voluntary aided' schools), which enjoy some degree of autonomy from the LA (e.g., on admission criteria). Finally, foundation schools and academies enjoy the greatest degree of independence from the LA. The latter, similar to US charter schools, are not bound by the National Curriculum and have considerable autonomy in management.

Every year, the Department for Education (DfE) publishes School Performance Tables to report the exam results of children in primary and secondary schools. These include information on standardised test scores and value-added measures for each state-funded school and are used to form school rankings. Student performance in the test, however, cannot be used by state secondary schools as an admission criterion.[4] Instead, admission to both primary and secondary state schools is largely based on home-school distance.[5] Primary schools are small, enrolling on average 55 students per cohort, and seats are typically rationed. This implies very narrow catchment areas, with an average of less than 1 kilometre home-school distance in London. Secondary schools, on the other hand, are three times bigger - the average grade enrolment is 165 - and enrol students located 1.4 kilometre from school on average.

[3] LAs provide public services in the local area such as education, policing, and social care. London includes 33 LAs.

[4] Grammar schools, the only exception to this rule, are virtually absent in our context. Other schools may prioritise applicants based on other criteria (e.g. faith schools typically admit based on religion).

[5] At the end of primary school, parents can express their preferences for up to 6 schools. In London, about 70% of parents obtain the first-choice secondary school and about 90% obtain one of their top 3 choices.

Private, often called 'independent' schools, are not bound by the national curriculum. They are generally organised in three phases: pre-preparatory (age 4 to 7), preparatory (age 8 to 11 or 13), and senior (age 11 or 13 to 18). Independent schools enjoy substantial freedom in terms of the subjects they teach and other educational practices. They typically feature smaller class size, high-quality facilities, and above-average academic performance (e.g. Independent Schools Council, 2019). Importantly, as private schools do not participate in the public centralised assignment mechanism, they do not admit students based on distance to school but may select them based on ability or other criteria.

2.2 The Meet The Parents Project

MTP was launched in 2012 by a group of parents concerned about the transition from primary to secondary school for the local community. In the London borough of Camden, the area where the project started, a substantial share of parents enrol their children outside the local state sector at the end of primary education. Before the intervention, on average, 10% of students opted for private education after attending a state primary school in Camden while around 25% enrolled in state schools in other districts (the corresponding figures for London are 9% and 17%, respectively).[6] The initiative was thus launched by a small community organisation of parents motivated to support local schools.

A stated concern that spurred the MTP initiative was that the outflow of students, typically involving children from more advantaged socio-economic backgrounds, could potentially have negative effects on local secondary schools, students, and communities. First, as school funding is mainly based on enrolment counts, it weakens financial stability and expenditure at state-funded schools. Lack of resources may especially harm disadvantaged students (Jackson et al., 2016). Additionally, the outflow of well-supported pupils worsens the socio-economic composition of local secondary schools. As a result, the school allocation efficiency may worsen if brilliant students are not retained in local schools, given that disadvantaged pupils benefit from proximity with well-supported peers without harming achievement of the latter, via non-linear peer effects (Carrell et al., 2009; Bertoni et al., 2020a).

MTP consists of primary-school-level meetings where parents and children from local secondary school talk to primary school parents and children about their school choice and expe-

[6] One potential explanation for the private school enrolment rate is that Camden residents have relatively high income (see public aggregate data).

rience. The events are typically one-hour long and involve a panel discussion and questions, guided by a moderator (see Figures A.1 and A.2). On average, meetings are attended by panellists from 4 different secondary schools. The typical participating secondary school is present at 1 or 2 different meetings per year, with substantial variation (average number of meetings per year ranges from 1 to 5). Meetings are scheduled at the beginning of the academic year, a few weeks before parents of last-grade students are required to apply for secondary school. The average event is attended by about 17 primary school parents, mostly with children in the two final grades, forming about 40% of the average cohort size.[7]

Each meeting follows a standardised outline. In the first part, panellists are asked the following questions: (i) why did you choose your secondary school; (ii) what do you like about your school; (iii) what would you change. In the second part, primary school parents have the opportunity to ask open questions. Panellists typically focus on their day-to-day school life, the reasons for choosing their secondary school, and the overall assessment of their decision, without any discussion on official rankings and statistics on school quality. Events are organised to provide a honest assessment of local secondary schools from "insiders" with no advertising intent that could be found (e.g., no advertisement of school open days, school leaders never attend MTP meetings). On the other hand, prospective secondary school parents provide first-hand information on the day-to-day experience at local institutions. In this sense, MTP aims at filling "a gap between slick open days and playground rumours".[8]

Importantly, MTP purposely focuses on more qualitative dimensions of the schooling experience, which are typically more difficult for parents to acquire, explicitly leaving aside discussions on school performance. Indeed, parents are already very well informed on peer quality indicators such as average achievement, since School Performance Tables are easily accessible and highly publicised by schools.[9] MTP provides therefore the ideal setting to explore the impact of providing information on additional school inputs, such as school environment, holding constant information about school performance.

[7] Data on parental participation are available for 67% of meetings. We impute parental participation in missing years using school-level average at schools with consistent availability of data, increasing coverage to 83% of the events.

[8] See the MTP website for details and further material.

[9] Typically, existing evidence examines the impact of providing information on peer quality measures and shows that parents strongly respond them (see, e.g., Burgess et al., 2015).

2.3 Data and Descriptive Statistics

The primary source of data we exploit is the National Pupil Database (NPD) which includes administrative records on the population of students in primary and secondary state-funded schools from 2006 to 2019. We track residence at the census block level and school enrolment for each student from the first year of primary school to the end of secondary school.[10] We observe background characteristics (gender, ethnicity, language spoken at home, eligibility for subsidised lunches, and special education needs), teacher assessments at the end of the first phase of primary school (Key Stage 1 scores, age 7), and test scores in math and language from national standardised tests at the end of primary school (Key Stage 2 scores, age 11).[11]

Students attending private schools are not recorded in the NPD. However, we can track each state school student from primary throughout secondary school. We then code a student attending the last grade of a state-funded primary school as enrolling into a private institution if not tracked in the dataset one year later. Hence, enrolment at private school is defined as a residual case.[12] Using this proxy, we estimate that every year about 10% of students enrol into a private secondary school on average.[13]

We complement administrative data with records on MTP meetings provided by the organisers. The MTP programme was initiated as a pilot in one school in 2012 and then rolled out at a broader scale starting from 2014. We gathered data on the time, location, secondary schools represented, and number of participants for each event.[14] In 2019, we further administered a survey to participating parents collecting their child's grade, their characteristics (following the same coding as in the NPD), and the type of schools they were considering. We also asked about the sources of information parents use, the school features they value the most, and how

[10] The census blocks used in our analysis are Lower Layer Super Output Areas (LSOAs). These geographical units were created by the Office for National Statistics (ONS) for census reporting purposes, and contain 800 households on average, which correspond to around 1/3 of the size of a US census block.

[11] In addition, the NPD is matched to administrative data on centralised assignment to school, including the list of preferred institutions for each student and the school offered as a result of the assignment. We use the latter to proxy school capacity and obtain over-subscription indicators. Since preference data are available from 2014 only, and exploiting records on pre-programme periods is crucial in our research design, we look at enrolment rather than school preferences as the main outcome in our analysis.

[12] Other reasons that would justify the disappearance from the dataset could be, e.g., that a student leaves the country or is taken out of school for medical reasons. Note that grade retention would not imply the disappearance from the dataset, as we would observe the student repeating the same school grade one year later. Any measurement error in private school enrolment is unlikely to be affected by MTP and is then controlled for in our difference-in-differences empirical strategy.

[13] This figure is consistent with the official statistics on pupils count, which report that 8% of students attend private secondary schools in England (breakdown by areas is not available).

[14] MTP participants cannot be individually linked to administrative data.

MTP changed their choice (see Figures A.3 and A.4). This was added to less detailed surveys administered by the MTP organisers in the years before 2019.

MTP was launched in 2012 and progressively rolled out, as shown in Figure 1. Initially run in a pilot school, the programme was extended to include up to 20 primary schools per year (Panel A). The treatment implementation is staggered, with schools possibly entering and exiting the initiative each year. Local primary schools were contacted in advance each year proposing to host an MTP event. The participation decision potentially depends on many variables such as the interest of parents or school leaders about secondary school choice.[15] However, there are no monetary incentives for primary schools to entry nor exit based on MTP effectiveness in increasing enrolment into local secondary schools.[16] We deal with potential systematic differences between treated and control schools in our research design, as detailed in Section 4.

The initiative is concentrated in the borough of Camden. As shown in Figure A.6, most participating primary schools are in Camden, adding up to about 50% of primary institutions in the LA.[17] Half of the 24 promoted secondary schools are in Camden, corresponding to 80% of the local secondary schools (16 out 20), while the other participating secondary schools are located in bordering LAs since, given the larger size of secondary schools, crossing LA borders is more common.

Panel A of Table 1 shows descriptive statistics for primary schools in our treatment (column 1) and control (columns 2 and 3) groups. Primary schools organising MTP events enrol students from relatively advantaged backgrounds. With respect to other schools in Camden, participating schools serve students that are less likely to be eligible for subsidised lunch (34% versus 47%).The difference is even more striking when considering white origin and whether English is the native language (51% and 60% versus 33% and 43%, respectively). Students in participating primary schools also have substantially better achievement at the end of elementary education compared to peers in Camden, scoring well above the London average in mathematics and English. Finally, primary schools organising MTP events are in higher demand by parents as the average distance to school is lower and enrolment count higher than

[15] Participation to MTP does not pose substantial costs on primary schools, as it essentially involves reserving a room for the meeting and spreading the word among parents.

[16] Still, 10 out of 29 participating schools exit the initiative (see Figure A.5). To alleviate concerns about selective exit, in Appendix B we show that Intention-to-Treat estimates are substantially unchanged.

[17] Not far from the border with Camden, two participating schools are located in the borough of Islington, and three in the borough of Haringey.

other local institutions.

On the other hand, secondary schools participating at the meetings display lower academic performance than other institutions in the area. Final year test scores in mathematics and English are 0.12 and 0.08 standard deviations (hereafter, σ) lower than non-participating schools, as can be seen in Panel B of Table 1. They also serve a more disadvantaged intake, with a 6 percentage points higher share of students eligible for free lunch. Overall, descriptive statistics are in line with the concerns of dissipating the investment in excellent primary schools that sparked the MTP initiative.

3 Interpreting the Effect of MTP on School Choice

We present here a stylised framework to outline how we interpret the effect of MTP on school choice. A sizeable literature has studied the different factors that parents value when choosing a school for their children (Hastings and Weinstein, 2008; Burgess et al., 2015; Beuermann et al., 2019; Beuermann and Jackson, 2020). Parents may consider both academic attributes, such as school test scores and effectiveness, and non-academic features of a school, such as peer socio-economic composition or proximity to residence. Attributes that are hard to measure may also play a role. For instance, Burgess et al. (2009) show that a "general good impression" of the school is the most frequently cited reason for choosing schools beside geographical proximity. Consistent with this view, Beuermann et al. (2019) and Beuermann and Jackson (2020) find that parents value school effectiveness on an array of long-run socio-economic outcomes, often uncorrelated with school impact on test scores. To assess such impacts, parents may look beyond measurable school characteristics.

Borrowing from Hastings et al. (2010), we describe school choice as a utility maximisation problem. Parent i chooses the secondary school j that maximises her utility function (U_{ij}) subject to a feasibility constraint. We describe preferences for schools as:[18]

$$U_{ij} = \beta_i^q \, Q_j + X_j' \, \beta_i^x + \beta_i^e \, E_j - C_{g(j)} + v_{ij}, \tag{1}$$

where v_{ij} is an idiosyncratic component. Measurable attributes are Q_j, denoting school academic quality, and X_j, summarising other characteristics such as peer quality and socio-economic

[18] We assume linearity and additivity for the sake of simplicity. In principle one can assume different functional forms, which would still depend on the same list of inputs.

composition, and distance from residence. The index E_j summarises a bundle of characteristics we label "school environment", on which information are hard to find. This includes attributes such as the discipline policy enforced in a school, school safety, food quality, and school atmosphere. Finally, private schools charge tuition fees that enter parental utility as a pecuniary cost, $C_{g(j)}$, where $g(j)$ indicates schools j's state or private sector and $C = 0$ at state-funded schools.

Parents enrol their children at the highest-utility school that is available. Formally, the chosen institution j is such that $U_{ij} > U_{ik} \forall k \in J_i$, where J_i is the set of schools that parent i can access based on parental demand and admission criteria. The choice set J_i is the combination of state-funded and private schools accessible to parent i:

$$J_i = J_i^{state} \cup J_i^{private}.$$

Even if applying for a place is always possible, parents may not have *de facto* access to some schools because of admission criteria or other entry barriers. For example, tuition fees must be paid to enrol in private institutions, and admission to state schools is prioritised by distance, penalising parents who cannot afford residence close to popular schools. We assume that each parent considers the full set of schools available to them and that J_i is fixed at the time of the intervention. MTP meetings, indeed, are organised close to the application deadline, when residential choice is likely fixed and it is reasonable to assume it cannot affect J_i.

Following Hastings et al. (2010), we interpret β's in equation (1) as the weights parents assign to each school attribute. These may reflect either genuine parental preference or the stock of available information on a particular trait. Intuitively, parents will not be able to properly account for a certain attribute when choosing a school if they have very limited information about it, regardless of their taste. Therefore, weak preference and lack of information for a school trait are observationally equivalent when analysing school choice. To visualise this distinction, for a generic school attribute a, parental weight can be written as:

$$\beta_i^a = \delta_i^a * \tau_i^a, \tag{2}$$

where δ_i^a reflects parent i's taste for attribute a, while τ_i^a represents the extent to which the parent is informed on a.

In this setting, we interpret the effect of MTP as providing hard-to-find information on

school environment, represented by E_j in equation (1). The intervention enables parents to learn about the environment at local state secondary schools through interactions with peers attending such institutions. Information on academic performance and other measurable attributes, instead, are already public and salient and parents, especially the relatively advantaged families targeted by MTP, are likely already aware of their distributions across local schools.[19] In addition, information on school performance or composition are never discussed at the meetings. At the same time, MTP cannot shift preferences over other important attributes such as distance to school. Therefore, we view its effect as working through increased information on school environment, holding other attributes valued by parents constant.

In conclusion, the potential impact of MTP on school choice would suggest that parents value school environment, as they react when provided hard-to-find information about it. In our framework, the only direct effect of MTP on parental utility is an increase of information on the school environment, τ_i^e in Equation (2). Parental utility described by Equation (1) can significantly change as a result of the intervention only if parents also have a genuine preference for E_j. Otherwise, the information shock provided by MTP would hardly shift parental utility enough to change their school choice.

4 Empirical Strategy

In this section, we present our empirical strategy, guided by the conceptual framework discussed in Section 3. Our goal is to estimate the causal treatment effect of MTP on parental enrolment choices. This raises important identification challenges as one needs to estimate a counterfactual which describes how the outcome would have changed absent the treatment. For this purpose, we design a difference-in-differences (DID) strategy that exploits variation in participation to MTP meetings across schools and over time.

We consider as control group all students attending a primary school that never participated to MTP and that is located in Camden or one of the bordering LAs. The choice of this control group is motivated by the fact that control schools operate in the same local school markets as treated schools. Therefore, despite displaying differences in the level of characteristics such as test scores and student composition (see Table 1), control schools are likely to be exposed to

[19] School Performance Tables provide information on school performance (Q_j in Equation 1), and a number of intake characteristics as a share of the total roll: pupils with a special educational need, gender, pupils whose first language is not English, pupils eligible for subsidised lunches (X_j in Equation 1).

similar changes in the local education system, to draw from the same student population and to have similar trends in terms of student outcomes.[20] This selection yields 224,637 control students, either completing primary education before MTP started or enrolled in one of the 328 control schools (Table A.1). We test the robustness of our choice by considering alternative control groups in Appendix B.

To internalise plausible spillovers, we define all students in a school-cohort with an MTP meeting as treated.[21] This choice is backed by survey evidence, as virtually all participating parents (97%) state that they plan to discuss the meeting's content with their peers: the implicit assumption is that information gathered through MTP spreads within a school-grade.[22] This criterion yields 3,990 students in our treatment group (Table A.1).

We estimate the following equation:

$$y_{islt} = \alpha_0 + \alpha_1 MTP_s \cdot T_{st} + X'_{islt}\gamma + W'_{st}\delta + \phi_s + \phi_l + \phi_t + e_{islt} \tag{3}$$

where y_{islt} is the outcome for pupil i enrolled in the last grades of primary school s in year t, and living in block l. Our main outcomes of interest are sector and characteristics of the secondary school where a student enrols. MTP_s is the treatment indicator, and takes value 1 for schools that organised at least one MTP meeting. T_{st} is a time indicator and takes value 1 if school s took part to an MTP meeting in year t. X_{islt} and W_{st} are vectors of individual and school time-varying controls, such as gender, ethnicity, subsidised lunch eligibility and school-year enrolment count. Finally, ϕ_s, ϕ_l, ϕ_t are school, block and year fixed effects respectively. The school fixed effects control for any unobserved attribute at the school level that may bias treatment effect estimates, such as correlated enrolment choices among schoolmates, or the presence of a head-teacher particularly motivated in engaging with parental decisions. We also include block-level fixed effects, which control for any unobserved effects of student residence on school enrolment. In our context, being school admission mostly determined by distance, residential sorting impacts the choice set of available state schools and it is crucial to account for it. The coefficient α_1 in equation (3) estimates the DID effect capturing the impact on

[20] 93% of students enrolling in MTP-promoted secondary schools attended primary school in Camden or bordering LAs.

[21] We consider as exposed students in grades 5 and 6. As MTP meetings are mainly addressed to students in final grades, these account for about 90% of the participants (Figure 3).

[22] Conducting an informational experiment on student behaviour, Bettinger et al. (2021) find large spillovers within classrooms, similar to treatment effects for directly-exposed students. We would expect similar spillovers as the typical primary school cohort has just one or two classes. We further provide empirical evidence of spillover effects in Section 5.4.

school enrolment of the introduction of MTP in school s with respect to the control group. We cluster standard errors at the school level to account for correlation in the treatment status.

In this formulation, the identifying assumption is that treated and control students would have followed a similar trend in secondary enrolment decisions absent MTP. Figure 4 bears out this expectation by plotting raw trends of the main enrolment outcomes we consider. Panel A shows the fraction of pupils enrolled into a state-funded secondary school by year for treated and control students. Trends in the two groups are substantially parallel up to the introduction of MTP, starting in a significant number of schools in 2014. As expected, treated students are systematically more likely to choose a private secondary institution.[23]

In order to assess the common trend assumption in a regression framework and the presence of heterogeneous treatment effects across groups and time, we conduct an event study analysis around the time of entry into the programme.[24] We follow Deshpande and Li (2019), Cengiz et al. (2019) and Fadlon and Nielsen (2019) and estimate:

$$y_{islt} = \sum_{k=-9}^{3} \gamma_k \cdot \mathbb{1}(t=k) + \sum_{k=-9}^{3} \beta_k MTP_s \cdot \mathbb{1}(t=k) + X'_{islt}\gamma_1 + W'_{slt}\delta_1 + \phi_s + \phi_l + \phi_t + e_{islt} \quad (4)$$

where the notation follows the one of equation (3). $\mathbb{1}(t=k)$ are event-time dummies, i.e. indicators equal to 1 if year t is k years after (or before, if negative) the entry into the MTP programme. The inclusion of a control group of never treated schools allows us to separately identify year and event-time fixed effects, eliminating event time trends that do not appear in calendar time (see Borusyak and Jaravel, 2017, for a clear description of the problem). We build 'placebo' events for control schools similar to Deshpande and Li (2019). First, we create a separate dataset for each of the treatment waves, i.e. for each year a school joined the MTP programme.[25] For each MTP wave separately, we assign to the control group the entry year of that wave's schools, and take deviations to/from this date for both treated and control schools.[26] In this context, a given school-year pair will serve as control at different event times. Second, we append all datasets into one. The leads in regression (4) can therefore be inter-

[23] Trends are parallel also when considering enrolment into MTP-promoted schools, Camden schools and institutions in bordering districts (see Panels B, C and D, respectively).

[24] A burgeoning and rapidly developing literature has recently emphasised that difference-in-differences designs with staggered treatment timing are likely to be biased in the presence of treatment effect heterogeneity. See, Borusyak and Jaravel (2017); Goodman-Bacon (2018); De Chaisemartin and d'Haultfoeuille (2020); Callaway and Sant'Anna (2020); Baker et al. (2021) for a clear explanation of the issue.

[25] We build four datasets, corresponding to the four treatment waves (see Appendix Figure A.5), excluding the first pilot primary school which started MTP in 2012.

[26] Note that this procedure ignores exit from treatment and implies the estimation of ITT effects.

preted as placebo estimates where we input the effect of MTP as taking place *before* the actual implementation of the programme.

Figure 5 plots the point estimates of β_k before and after the treatment. Placebo estimates of the impact of pre-programme effects are close to zero and statistically not significant in almost all cases, validating our empirical strategy. This finding is consistent with the observation that MTP started as a grassroots movement that was not part of broader school or neighbourhood policies that could have been anticipated by parents before their enrolment into primary school. As schools voluntarily decide to participate to the MTP programme year by year, parents are unlikely to self-select into primary schools based on the organisation of MTP meetings.

5 Results

5.1 Choice of school sector and location

We start by showing that exposure to MTP increases enrolment at state-funded rather than private secondary school. Panel A of Table 2 reports estimates of α_1 in equation (3) where the outcome is a dummy variable indicating enrolment at a state-funded secondary school. The raw correlation between MTP exposure and state school enrolment is close to zero and not statistically significant (column 1). We progressively include additional controls to isolate the enrolment impacts attributable to MTP. Block fixed effects and school fixed effects are included, respectively, in columns (2) and (3). While the former absorb time-invariant selection of families into neighbourhoods, parents in the same area who self-select into different primary schools have likely different preferences towards (private) education. Controlling for primary school choice is especially important as schools targeted by MTP serve relatively advantaged students. Parents exposed to MTP are 2.4 percentage points (2.8%) more likely to enrol their pupils into state-funded schools, corresponding to 1 additional student enrolling into state-funded schools per each MTP meeting.[27] Estimates are barely affected when including controls for individual and primary school characteristics, corroborating our research design (column 4). As covariates provide precision gains, we discuss the latter as our preferred specification in what follows.

We next consider specific sub-group of schools within the public sector. In Panel B,we focus

[27] This figure is obtained by applying the estimated coefficient to the average cohort size in last grade of treated schools (about 40 students).

on enrolment at secondary state-funded schools promoted during MTP meetings.[28] Exposure to MTP increases the probability of enrolling to a secondary school represented at the meetings by 1.4 percentage points, though the estimate is not statistically different from zero. A similar result is obtained when considering state-funded secondary schools in Camden (Panel C). The point estimate is somewhat lower, but still statistically insignificant, for public-sector enrolment in the neighbouring districts (Panel D). As expected, the sum of coefficients across panels C and D corresponds to the average estimate on public sector enrolment reported in Panel A, suggesting the program has null impact outside the districts we consider. Overall, results suggest that MTP increased public-sector enrolment homogeneously across schools in Camden and neighbouring districts.

The right-hand region of Figure 5 shows how the effect of MTP on student enrolment evolves over time after a school enters the programme. We report estimates of β_k's from our event study model in equation (4). Consistently with results in Table 2, the figure shows a clear increase in the differential likelihood of public-sector enrolment between treatment and control group after the introduction of MTP (Panel A). Similar results are found for enrolment at MTP-promoted schools, though less precisely estimated (Panel B).[29]

In conclusion, results show that MTP meetings increase enrolment at local state-funded schools.[30] Our findings are not negligible in magnitude, as they imply a 24% reduction of the primary-school student outflow to private education. Moreover, results are remarkable given the relatively simple nature of the intervention, the substantial parental investment into residential sorting or private education, and the long-lasting consequences of secondary school choice on students. Inflow of pupils in the public sector, however, is not necessarily directed towards local institutions discussed at the meetings. Though 4 to 5 secondary schools are represented at a typical meeting, the institution where a pupil enrols is obviously just one. Larger impacts on enrolment are expected at schools with attributes associated to parental demand, as we show in the next subsection.

[28] We consider here any secondary school participating to at least one MTP meeting over our sample period.

[29] The time dynamics of estimated effects might either reflect heterogeneous impacts across periods or a compositional effect, as we do not observe all participating schools for five consecutive periods.

[30] We show in the Appendix that our results survive a series of robustness checks addressing several potential concerns on our estimates.

5.2 Choice among state-funded schools

In this subsection, we dig deeper into the effect of MTP on school choice by considering quality, composition, type, and distance from residence of state-funded secondary schools.

School attributes

MTP increases enrolment at top-performing state-funded institutions, while leaving choice of low-performing schools largely unaffected. We present estimates similar to column (4) of Table 2 where the outcome considered is an indicator of school quality. In columns (1)-(2) of Table 3, we consider final-year test scores and investigate enrolment at schools in the top or bottom quartile of academic performance.[31] Parents exposed to MTP are about 5% more likely to enrol at a state-funded school with high academic performance (Panel A), doubling the average result in column (4) of Table 2. Result are similar for MTP-promoted schools (Panel B), suggesting the meetings induce parents to enrol at higher-performing schools among the one presented. Consistently, panels C and D show that the result is entirely driven by local schools, likely reflecting access barriers to high-demanded institutions located further away (see Panel C and D, column 1).[32]

The second index of school quality we consider is school popularity, measured by over-subscription. We consider a school oversubscribed if available seats are outnumbered by applicants ranking it as first choice, (37% of secondary schools in London).[33] In line with effects by school performance, results in columns (3) and (4) of Table 3 show that MTP increases enrolment to popular local state-funded schools, including those represented at the meetings, but not elsewhere, likely due to rationing of school seats.

These results imply that our estimates of the MTP impact on enrolment may be a lower bound of the effect on parental preferences as access to oversubscribed schools is rationed. To investigate this hypothesis, we estimate the effect of MTP on preferences submitted at application, a direct measure of parental demand.[34] Results in Table A.2 should be interpreted with

[31] We use is Year 11 test scores in mathematics, standardised to have zero mean and unit variance by year. We measure school academic performance at the time students enter secondary education.

[32] As detailed in Section 2, admission to oversubscribed schools is mostly based on distance. Top-performing schools are more likely to be oversubscribed as parents in England are found to reward them with higher demand (Burgess et al., 2015; Burgess et al., 2019).

[33] This is a lower bound of over-subscription as applicants excluded from higher-preference schools are in the list for admission as well. We proxy school-year capacity with the number of offers issued. The over-subscription indicator is computed at 2014, the first year where preference data are available.

[34] The mechanism employed for centralised assignment in London incentivises parents to rank schools in the true order of preference, although preference about non-ranked institutions cannot be inferred from observed

caution as preference data are only available from 2014.[35] Although we find no effect of MTP on parental preferences (columns 1-4), students exposed to MTP are about 3 percentage points less likely to enrol at a private institution despite receiving an offer for an MTP-promoted or any state-funded school (columns 5-7). Results suggest that parents request state school seats regardless of their preference for private education, as application is free of charge, and that MTP increases take up of the offered school with respect to opting out to private education.

We next focus on the choice of school type and socio-economic composition of school intake. In this analysis, we abstract from geographical location of state-funded schools. The outcome variables in Table 4 are enrolment indicator by type of state-funded school. The effect of MTP is concentrated on state-funded schools other than academies, increasing enrolment at community and voluntary aided schools by 5.2 and 7.1 percentage points, respectively (columns 1-2).[36] As faith, and particularly Catholic, schools are often among top-performing state-funded institutions (Pasini, 2019), the result is consistent with parents favouring high-performing schools (see Table 3). However, since community schools are on average lower-performing, results implies that school attributes learnt during meetings are not necessarily correlated with absolute achievement.[37] In addition, MTP has a substantial positive impact on enrolment at single-sex schools (6 percentage points, column 4).

Finally, we look at the socio-economic school composition. The outcome variables in Table 5 are the share of students with given background characteristics at the secondary school where a pupil enrols.[38] MTP decreases the share of students with special needs (of about 1 percentage point on average) and students entitled to subsidised lunch, though the latter result is not statistically different from zero (columns 1-2). Parents exposed to MTP also opt for schools with about 1 percentage point lower share of white students and of students speaking English at home, though the latter estimate is not statistically significant (columns 3-4).

Overall, our findings suggest that MTP increases enrolment at state-funded schools with

rankings (Fack et al., 2019).

[35] In Table A.2, we focus on schools entering the programme from 2015, together with the control group, so that at least one pre-period is available.

[36] Community schools are the most frequent secondary school type in Camden or bordering districts (38%), followed by academies and voluntary aided (mostly religious) schools (28% and 26%, respectively). Foundation schools, for which we also find a positive effect, represent just the 7.5% of institutions. As academies have experienced a steep expansion during the period we consider, mainly through conversion of community schools, we define school type at the time a student enters secondary education.

[37] In our sample, community schools perform slightly below the London average, while the other three types of school (religious, academies and foundation) similarly perform about 0.5σ above the mean.

[38] We measure school composition in 2009, before the first cohort exposed to MTP begins the final year of KS2 to hold constant time-varying school characteristics. Results do not change if we instead use contemporaneous outcomes.

specific attributes. Exposed students enrol at high-quality institutions, consistently with robust evidence in the literature (Hastings et al., 2010; Burgess et al., 2015; Glazerman and Dotter, 2017; Abdulkadiroglu et al., 2020), and at single-sex schools, two typical characteristics of private education. However, we also find that exposure to MTP shifts parents towards ethnically mixed and community schools. On the other hand, we find that what parents look for in a school is not simply summarised in academic performance measures. Results suggest that the impact of similar initiatives could possibly be even larger if state-funded schools invested in developing attributes associated with parental demand.

Distance to school

Distance to school is a crucial variable in parental choice, especially in our context. Proximity to residence is highly-valued by parents, so much that the literature often measures parental preferences in terms of willingness to travel (see, e.g., Bertoni et al., 2020b). In addition, distance to school determines access to state-funded schools, allowing us to investigate the impact of school feasibility. We then study the effect of MTP on secondary schools promoted at the meetings as a function of distance to student's residence.

We find that MTP significantly increases enrolment at promoted schools for parents located closest to the premises. We build a student-school level dataset stacking distance of a given pupils to each of the 22 MTP-promoted schools. Figure 7 plots estimated coefficients from specifications similar to equation (3) where the treatment dummy is interacted with a series of indicators for 500-meter-wide bands of distance to school. Estimates are plotted along with the 95% confidence interval at the central value of each band. Parents exposed to MTP are 4 percentage points more likely to enrol at a promoted school with respect to control parents residing within 500 meters (Panel A). This estimate is substantially larger than the average result in Table 2, and statistically significant. The effect fades out rapidly with distance, dropping to zero beyond 1 km from the school.

Parents are willing to accept longer travel to school to enrol their children at popular promoted institutions. Panel B of Figure 7 focuses on oversubscribed promoted schools (5 out of 22, which explains the drop in precision). These effects are likely constrained by feasibility, as seats are rationed and parents located too far from the school hardly get access.[39] Treatment effects for closest students are very similar to the estimates including under-subscribed

[39]Priority over distance is often granted to special categories of applicants such as siblings of current students, students from feeder primary schools, or religious students in case of faith schools.

schools in Panel A suggesting that, conditional on short distance to school ($\leq$ 1km), MTP increases enrolment at promoted schools regardless of over-subscription. However, MTP impact on oversubscribed promoted schools persists at farther distances, dropping to zero only after 2.5 km.

Overall, the analysis of MTP effects by distance to school suggests a trade-off between proximity and other school attributes valued by parents. When an MTP-promoted schools is available at a short distance, we observe an increase in enrolment regardless over-subscription. For popular schools, MTP impact is positive relatively further away from the school, suggesting higher willingness to travel. Interestingly, the fact that parents located in the vicinity of a school – likely the best informed on its attributes – exhibit largest impacts supports our view that information provided by MTP is hard to find elsewhere.

5.3 Heterogeneous effects

The impact of MTP is concentrated on relatively affluent students. Columns (1) and (2) of Table 6 show that students not eligible to subsidised lunch are 3.6 percentage points more likely to enter any state-funded school (Panel A), mostly local (Panel C), and about 3 percentage point more likely to choose a represented secondary (Panel B). As a further proxy of parental socio-economic status, we estimate MTP effects by local area (LSOA) deprivation, an index based on average income in the neighbourhood. Figure 6 shows that exposed parents in the lowest deprivation quartile are almost 6 percentage points more likely to enrol their children at any state-funded school (Panel A) or at a promoted secondary school (Panel B). Results for students residing in higher-deprivation areas are smaller and not statistically significant. Consistently, MTP impacts school choice of the highest-performing students. Columns 3 and 4 of Table 6 report estimates by mathematics test scores at the end of primary school. While we detect no effects for students in the bottom quartile, top-performing peers exhibit positive and large effects on enrolment to local state-funded school, especially those promoted at the meetings.

MTP effects are larger than average for students likely less rooted in the local education system. MTP increases enrolment of Asian students at any state-funded school and at promoted schools by 3.2 and 4.9 percentage points, respectively (columns 5-6). Larger effects of state-funded vis-à-vis private school enrolment are also estimated on students who are not native speakers (columns 7-8) and who have recently moved their residence (columns 9-10).[40] These

[40]We define movers here as pupils whose postcode of residence has changed during years 3 to 6 of primary

findings are consistent with the interpretation of MTP as an information treatment, as discussed more in details in Section 6.

Overall, the effect of MTP is highly heterogeneous based on students socio-economic background. The differential effects we find are consistent with the programme's target, composed of relatively advantaged student. We conclude that MTP has not only a quantitative effect on public-sector enrolment, but also a compositional one, increasing peer quality at local state-funded institutions.

5.4 Spillover effects

In this section, we investigate spillover effects of MTP by exploiting variation in the share of treated students across neighbourhoods. Geographical proximity to parents exposed to MTP may affect enrolment outcomes via two different channels. First, it could increase parental interest in local secondary schools through the spread of information about promoted institutions. In light of our results discussed above, this information channel would positively impact enrolment at local secondary schools. Second, if a school falls oversubscribed, proximity to treated parents could result in further rationing of seats. This competition channel would negatively impact enrolment at local secondary schools.

MTP spillover effects depend on the fraction of exposed parents in a local area. Following Autor et al. (2014), we measure the intensity of exposure to treatment by summing the number of students in a census block directly exposed to MTP, i.e. enrolled in a primary school participating to MTP, and dividing it by the number of peers living in the same block (including both treated and control students):

$$MTPI_l = \frac{\sum_i MTP_{s(i)} \cdot \mathbb{1}(L_i = l)}{\sum_i \mathbb{1}(L_i = l)},$$

where $s(i)$ is the primary school attended by student i, MTP indicates whether school s organised some meeting, and L_i denotes the census block where i resides in grade 6.

school. The 25% of students is defined as mover according to this criterion.

We estimate spillover effects via the following specification:

$$y_{islt} = \tau_0 + \tau_1 MTP_s \cdot T_{st} + \tau_2 MTPI_l \cdot T_{st} + \tau_3 MTP_s \cdot MTPI_l \cdot T_{st} + X'_{islt}\gamma_2 + W'_{st}\delta_2 + \phi_s + \phi_l + \phi_t + \varepsilon_{islt}. \quad (5)$$

In this formulation, τ_1 estimates the direct effect of MTP on exposed parents in hypothetical blocks where no other parent is exposed (Autor et al., 2014). The indirect effect of MTP, captured by our exposure intensity measure $MTPI$, is allowed to vary by treatment status: the indirect impacts on exposed and unexposed parents are estimated by τ_2 and τ_3, respectively. To interpret our results, we assume that exposed parents, who are directly provided with the information conveyed by MTP, are not affected by the spread of information from other exposed parents. It follows that the indirect effect τ_3 purely reflects the competition channel of MTP spillover, i.e. the fact that families living in the same block are likely to compete for a seat in the same schools, while the indirect effect τ_2 captures a combination of competition and information channels.

Competition for seats at local secondary schools plays a significant role. Estimation results from equation (5) are presented in Table 7. Consistently with our hypothesis, estimates of τ_3 for MTP-promoted schools are negative and statistically significant, implying that enrolment at schools presented during meetings was constrained by competition from other exposed parents (see column 1, Panel B). A one standard deviation higher intensity in local MTP exposure lowers the chance of being enrolled to an MTP-promoted secondary school by 1 percentage point. As expected, columns (2) and (3) show that competition effect is found only at oversubscribed schools. By definition, parental demand is not rationed at under-subscribed schools, and our estimates in column (3) are consistently close to zero and statistically insignificant. Similarly, if parents wish to opt for the public sector, a seat in a state-funded school is guaranteed by law. As expected, estimate of τ_3 on enrolment at any state-funded school (Panel A, column 1) is a precisely estimated zero.

Competition effects imply that the direct impact of MTP on enrolment at promoted schools is larger than net effects estimated in the main specification. Estimates of τ_1 in equation (5) is 3.6 percentage points in Panel B, column 1. Considering all secondary school in Camden (Panel C), yields a similar result. On the contrary, the direct impact of MTP on enrolment at any state-funded school is remarkably similar to the net effects (Panel A, column 1). Once

again, result is consistent with the absence of competition effect on this outcome.

The spread of information generated by MTP impacted the school choice of unexposed parents living in the proximity of treated peers. Estimates of τ_2 in Panel B are positive on average, and strongly significant for oversubscribed institutions (see columns 1 and 2, respectively). These results could reflect both channels of MTP spillovers, combining information and competition effect. As the latter are found to be negative, estimates of the indirect impact on unexposed parents can be interpreted as a lower bound for the information effect. If the average competition effect is similar in magnitude among exposed and unexposed parents, a one standard deviation higher intensity of MTP exposure increases enrolment of non-treated parents at MTP-promoted schools by 1.5 percentage points (i.e. 0.55+0.95). This is almost half the direct impact on exposed parents, suggesting that information interventions like MTP can easily propagate their effect through spillover on untreated peers.

We conclude that exposing parents to MTP meetings has significant spillover effects on untreated parents residing at close contact with exposed peers. Our results suggest that parents value their peers' opinion in school choice and resort to word-of-mouth to inform their decision. This conclusion is also in line with survey responses, indicating other parents are one of the mostly-cited sources of information (see Panel A of Figure 2). Investigating spillover effects also enable us to show how parental choice can be constrained by peer competition for seats, leading to a rationing of capacity at sought-after institutions.

6 Discussion and survey evidence

We discuss here potential mechanisms driving the treatment effects unveiled in Section 5, assisted by descriptive evidence from parental surveys administered at MTP meetings.[41] Though we can ultimately offer only suggestive evidence, our findings are in line with our interpretation of MTP as providing hard-to-find information on school values and environment (see the conceptual framework in Section 3).

First, MTP meetings are presented and perceived as an information treatment, and the results of our econometric analysis are consistent with this interpretation. Parents are invited to the meeting to listen to 'insider' information and honest opinion on local secondary institutions from parents and students who have chosen them as their school. Consistently, parents

[41] We report data for a survey administered in 2019. We collect a sample of 195 survey responses, reporting opinions for 20 primary schools, of about 50% of parents participating to the meetings.

rely on MTP as a source of information. Panel A of Figure 2, plots the share of respondents who answered 5 to the following question: *"How much do you rely on the following sources of information? 1 = not at all and 5 = a lot"*. About 40% of survey respondents list MTP as one of the sources they mostly rely on, with only school open days and other parents' opinion scoring higher. Learning about local schools reportedly has an impact on parents' choices, consistent with the results of our empirical analysis. 90% of respondents have reportedly changed their mind after attending the meetings.[42] Consistently, as discussed in Section 5, we estimate larger MTP effects for parents with likely weaker knowledge of the local school market, either because of their ethnicity, language, or residential location.

Second, MTP provides hard-to-find information on day-to-day life at local state schools that are hard to gather elsewhere. As discussed in Section 2, school performance or peer quality are already widespread through performance tables and never mentioned at the meetings. On the other hand, panel discussion focused on attributes such as school values to enforcement of discipline, safety or available outdoor space. Parents reportedly value a wide array of school attributes, not necessarily correlated with academic performance. Panel B of Figure 2 reports school traits that parents declare to seek in a school. Most sought-after school attributes include, e.g., welcoming atmosphere, inclusive ethos or pastoral care, while academic performance is among the ones least-frequently mentioned. Combined with results in Panel A of Figure 2, showing that the parents relying on MTP as a source of information sharply exceed those mainly looking at school performance, survey evidence suggests that parents seek to learn about hard-to-measure school attributes by participating to the meetings.

In conclusion, survey evidence, combined with our results, is consistent with parents responding to hard-to-find information on school values and environment. Although we do not observe any proxy of hard-to-find school attributes, our results are consistent with this interpretation as long as such attributes are correlated with academic performance, as MTP impact is concentrated on higher-performing schools. Once again, a simpler conclusion that parents learn about school performance at MTP is not backed by surveys, institutional background, and the content of the meetings.[43]

[42] Two-thirds of them report an improved perception of local secondary schools, while the remaining started to consider schools they had previously ruled out.

[43] Another possible mechanism explaining our results is that, through interaction with motivated peers that chose public-sector education, MTP may have relaxed parental prejudice against state-funded schools. Unfortunately, as we have no measure of prior beliefs of parents preceding the intervention, we cannot offer evidence about this channel.

7 Cost-Benefit Analysis

We end by presenting a back-of-the-envelope calculation of the benefits and costs of MTP from the perspective of the secondary state school system. This exercise is aimed at informing interested stakeholders, such as parental organisations, state schools and LAs, which could consider the possibility of implementing similar programs. Indeed, beyond providing parents with information they value, programs such as MTP could represent an opportunity for secondary schools to raise additional resources and improve their finances.

We begin by calculating the average benefits implied by our estimates. On average, 1 additional student enrols into state-funded schools per MTP meeting. Considering 2014, the first year where MTP was scaled up to reach a number of local primary schools, this would imply 10 additional students opting for the state sector (see Figure 1). The $2020-2021$ London average of the per-pupil secondary school funding allocation stands at about £$6,913$. Using this figure, we obtain an overall increase in state-school funding of $69,130$ for 2014. Assuming a constant effect of MTP throughout the period of our analysis after the pilot phase ($2014-2018$) implies an overall increase in funding available to secondary school of £$587,605$.[44]

Increased enrolment also drives an increase in school costs. However, it is reasonable to assume that, at least in the short-term, it is not possible for schools to expand capacity that is, responding to an increase in enrolment by increasing the number of classes and, therefore, teaching staff. Hence, we assume that one additional student i) does not drive an increase in school spending on teaching and general staff and ii) does not drive an increase in school 'fixed costs', such as building maintenance. We estimate that 'fixed costs' represent about 32% of 'running costs' that is, school expenses excluding staff.[45] Under these assumptions,

[44]The overall increase in resources is obtained multiplying £$6,913$ by the total number of meetings in $2014-2018$, which are 85 (Figure 1). Updated LA and school funding allocations can be found here: https://commonslibrary.parliament.uk/school-funding-2021-22-find-constituency-and-school-level-allocations/. This interactive website - and the data publicly available following the link - can be used to compute the increase in resources that corresponds to different funding allocations. To exemplify, using the average 2021 school funding allocation outside Greater London (about £$5,786$) would imply an overall increase in resources available of about $491,810$.

[45]We follow the categorisation of school expenditures provided by the DfE; see e.g. https://www.gov.uk/government/statistics/expenditure-on-education-children-and-young-peoples-services-academic-year-2011-to-2012. We calculate the share of 'fixed costs' over the total of running costs using aggregate figures for England available at the same link. Among running costs we include: cleaning and caretaking, water and sewerage, energy, rates, other occupation costs, learning resources (not ICT), ICT learning resources, examination fees, administrative supplies, other insurance premiums, catering supplies. We exclude: building and grounds maintenance and improvement, special facilities, agency supply teaching staff, bought-in professional services - curriculum, bought-in professional services - other, loan interest, community focused extended school staff and costs.

one additional pupil drives an increase of about £1,520 (£129,200 overall) in terms of running costs.[46] Finally, secondary schools pay £380 to enter the meeting.

Overall, this exercise suggests that the state school sector have largely benefited from MTP. Over the 5 years of the program, the state school sector experienced a net gain of about £318,945 on average.[47] Using the same assumptions, the *per school* net benefit would be £5,013 (6,913 − 1,520 − 380); however, as discussed not all students enrol into MTP-promoted schools. For schools enrolling the former, the net benefit implied by the calculations above would be £5,393 (i.e. net benefit without the participating cost). The increase in school resources can benefit all state-school students and mitigate concerns about schools' financial viability. This suggests that relatively simple and low-cost interventions providing parents with hard-to-find information on school attributes they value can improve state-school finances and weaken concerns about adverse effects of school choice on educational stratification and inequality.

8 Conclusion

In this paper we look at how the provision of hard-to-find information on non-test score attributes, such as school values and environment, affects parental school choice. We evaluate a policy-relevant information intervention in the London Borough of Camden, named Meet The Parents, designed to contain the outflow of students from the local public to the private school market. MTP provided parents with a range of information on the local state-funded secondary schools which is typically not possible to obtain from more traditional sources (e.g. School Performance Tables) and that goes well beyond information on school academic quality. We rely on a difference-in-differences design that compares enrolment decision of parents attending a primary school organising an MTP meeting to those of parents attending schools located in the same educational market, but which did not participate to MTP.

Our headline finding implies that MTP increased the probability of enrolling into state-funded secondary schools by about 2.8%. The results are mainly driven by students with high

[46] We use per-pupil estimates obtained here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/219504/sfr35-2012_001.pdf. We obtain £1,520 by multiplying £1,340 by 0.68 (share of non-fixed running costs) and then convert the resulting amount in 2021 pounds using the CPI deflator.

[47] This is obtained by subtracting total running costs and total participation costs from the total increase in funding available. Total participation costs are obtained multiplying £380 by the secondary school/meeting combination (= 367), since participating secondaries pay the entry fee *per-meeting*.

academic ability and coming from affluent socio-economic background. Importantly, the information treatment shits parental preferences towards schools that seem to be closer substitute to private schools, namely high-performing schools and those providing single-sex education. We interpret this evidence as showing that parents do not value private school *per se* but rather are interested in a number of school attributes such as discipline, inclusiveness or safety, and once provided with information on these traits they are more likely to choose state-funded schools.

Our results have important policy implications regarding the quality and long-run sustainability of the secondary public school sector. Indeed, a consistent outflow of students towards private institutions would drain public resources from state-funded schools, with possibly negative consequences on the quality of the education provision for those remaining within the public sector. In a back-of-the-envelope calculation, we estimate that the local public school system gained £580,000 over five years thanks to the programme.[48] Such results highlight that providing parents with information on a wide array of school attributes through less traditional sources can contribute to the financial sustainability of the public school sector. Our estimates imply that school districts struggling with an outflow of students from state school should incentivise similar low-cost programmes to provide parents with currently hard-to-find information on their local state-funded schools. Finally, as the composition of the student body may affect student outcomes through peer effects and several other channels (Altonji et al., 2015), a relatively cheap and simple intervention targeting prospective parents can benefit students remaining in the public sector, mitigating concerns that school choice can lead to stratification and educational inequality.

[48] We consider that for each pupil, secondary schools in Camden receive a budget of about £6,800. As the average effect of MTP translates into one more pupil enrolling in public schools per year, this would increase the budget by £34,000 over 5 years. Assuming that all participating secondaries attended MTP meetings for 5 years, this in turn would imply an overall rise in the budget to local schools of around £580,000.

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Table 1. Descriptive statistics for primary and secondary schools

	(1) Participating schools	(2) Non-participating Camden schools	(3) Schools in bordering LAs
		Panel A. Primary schools	
% FSM eligible	0.340	0.467	0.309
	(0.168)	(0.152)	(0.165)
% with special education needs	0.260	0.423	0.329
	(0.09)	(0.294)	(0.189)
% white	0.508	0.326	0.397
	(0.184)	(0.184)	(0.224)
% native speaker	0.603	0.428	0.575
	(0.205)	(0.179)	(0.212)
average English grade (s.d.)	0.203	-0.177	-0.054
	(0.367)	(0.373)	(0.425)
average math grade (s.d.)	0.131	-0.194	-0.059
	(0.318)	(0.339)	(0.435)
average school-home distance	0.895	0.994	1.08
	(0.409)	(0.599)	(0.516)
enrolment count per grade	39.652	30.331	45.838
	(13.638)	(16.482)	(21.674)
N	30	16	352
		Panel B. Secondary schools	
% FSM eligible	0.412		0.352
	(0.123)		(0.179)
% with special education needs	0.266		0.431
	(0.073)		(0.309)
% white	0.386		0.351
	(0.162)		(0.196)
% native	0.502		0.507
	(0.184)		(0.210)
average English grade (s.d.)	0.120		0.200
	(0.376)		(0.805)
average math grade (s.d.)	0.077		0.204
	(0.326)		(0.792)
average school-home distancea	1.693		2.739
	(0.627)		(1.666)
enrolment count per grade	165.541		143.719
	(42.861)		(83.716)
N	20		96

Note. This table shows descriptive statistics for schools considered in the analysis. Statistics are computed considering the 2007-2013 period, preceding the introduction of MTP. Panel A describes primary schools. Participating institutions (column 1) are state primary schools organising at least one MTP event between 2013-2018. Other primary schools in Camden and in bordering local authorities are described in column (2) and (3), respectively. Panel B describes state secondary schools promoted in at least one MTP meeting between 2013-2018 (column 1) or not participating to MTP and located in bordering local authorities (column 3). Presented are sample averages considering one observation per school. Standard deviations are reported in parentheses.

Table 2. Average effects of MTP

	Dependent variable: enrolment indicator at secondary school			
	(1)	(2)	(3)	(4)
		Panel A. State-funded school		
MTP	0.014	0.006	0.025**	0.024**
	(0.014)	(0.011)	(0.010)	(0.010)
		Panel B. MTP-promoted school		
MTP	0.551***	0.126***	0.015	0.014
	(0.035)	(0.022)	(0.013)	(0.012)
		Panel C. State-funded school in Camden		
MTP	0.592***	0.111***	0.013	0.013
	(0.044)	(0.020)	(0.010)	(0.009)
		Panel D. State-funded school in Camden's bordering LAs		
MTP	-0.499***	-0.096***	0.012	0.011
	(0.037)	(0.022)	(0.010)	(0.010)
Observations	180,398	180,398	180,398	180,398
Year FE	Y	Y	Y	Y
Census block (LSOA) FE	N	Y	Y	Y
Primary school FE	N	N	Y	Y
Individual and primary school characteristics	N	N	N	Y

Note. The table shows DID estimates of the impact of MTP on the probability of attending a secondary state-funded school (Panel A), a school promoted suring MTP meetings (Panel B), a state-funded school located in Camden (Panel C) or in bordering LAs (Panel D). Column (1) controls for year fixed effects only; column (2) adds block (LSOA) fixed effects; column (3) adds school fixed effects; column (4) adds controls for individual characteristics (gender, ethnicity, language spoken at home, subsidised lunches eligibility and special educational needs) and school and block characteristics (quadratic polynomials in enrolment and number of children, respectively). Standard errors are clustered on schools and reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 3. MTP effect by school quality

	Dependent variable: enrolment indicator at secondary school			
	School performance in top quartile	School performance in bottom quartile	Oversubscribed schools	Undersubscribed schools
	(1)	(2)	(3)	(4)
	Panel A. State-funded school			
MTP	0.048**	0.017	0.029*	-0.029*
	(0.022)	(0.020)	(0.016)	(0.016)
	Panel B. MTP-promoted school			
MTP	0.044**	0.002	0.038**	-0.051***
	(0.021)	(0.021)	(0.015)	(0.014)
	Panel C. State-funded school in Camden			
MTP	0.063***	-0.002	0.041***	-0.047***
	(0.017)	(0.021)	(0.014)	(0.015)
	Panel D. State-funded school in Camden's neighbouring LAs			
MTP	-0.027*	0.023**	-0.013	0.022*
	(0.015)	(0.011)	(0.009)	(0.012)
Observations	125,997	125,997	156,304	156,304
Year FE	Y	Y	Y	Y
Census block (LSOA) FE	Y	Y	Y	Y
Primary school FE	Y	Y	Y	Y
Individual and primary school characteristics	Y	Y	Y	Y

Note. The table shows DID estimates of the impact of MTP on the probability of attending a secondary state-funded school (Panel A), a school promoted suring MTP meetings (Panel B), a state-funded school located in Camden (Panel C) or in bordering LAs (Panel D). Dependent variables in columns (1) and (2) are enrolment into schools scoring in the top and bottom quartile of KS4 math tests, respectively. Dependent variables in columns (3) and (4) are enrolment into oversubscribed and undersubscribed schools, respectively. All columns control for year, block (LSOA) and school fixed effects, as well as controls for individual characteristics (gender, ethnicity, language spoken at home, subsidised lunches eligibility and special educational needs) and school and block characteristics (quadratic polynomials in enrolment and number of children, respectively). Standard errors are clustered on schools and reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 4. MTP effect by school type

	Dependent variable: enrolment indicator at secondary school				
	Community school	Volutary aided school	Academy	Foundation school	Single-sex school
	(1)	(2)	(3)	(4)	(5)
MTP	0.052***	0.071***	-0.192***	0.093***	0.059***
	(0.016)	(0.012)	(0.022)	(0.013)	(0.014)
Observations	180,398	180,398	180,398	180,398	180,398
Year FE	Y	Y	Y	Y	Y
Census block (LSOA) FE	Y	Y	Y	Y	Y
Primary school FE	Y	Y	Y	Y	Y
Individual and primary school characteristics	Y	Y	Y	Y	Y

Note. The table shows DID estimates of the impact of MTP on the probability of attending a secondary state-funded community school (column 1), voluntary aided school (column 2), academy school (column 3), foundation school (column 4) and single-sex school (column 5). All columns control for year, block (LSOA) and school fixed effects, as well as controls for individual characteristics (gender, ethnicity, language spoken at home, subsidised lunches eligibility and special educational needs) and school and block characteristics (quadratic polynomials in enrolment and number of children, respectively). Standard errors are clustered on schools and reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 5. MTP effect by school composition

	Dependent variable: school intake at baseline			
	Special needs share	Free lunch share	White share	English-speaking share
	(1)	(2)	(3)	(4)
MTP	-0.011***	-0.008	-0.011**	-0.006
	(0.003)	(0.006)	(0.005)	(0.005)
Observations	161,931	161,931	161,931	161,931
Year FE	Y	Y	Y	Y
Census block (LSOA) FE	Y	Y	Y	Y
Primary school FE	Y	Y	Y	Y
Individual and primary school characteristics	Y	Y	Y	Y

Note. The table shows DID estimates of how MTP affects the characteristics of the chosen secondary state-funded school. Column (1) considers the share of students with special educational needs; column (2) considers the share of students eligible for subsidised lunches; column (3) considers the share of white students; column (4) considers the share of native students. All columns control for year, block (LSOA) and school fixed effects, as well as controls for individual characteristics (gender, ethnicity, language spoken at home, subsidised lunches eligibility and special educational needs) and school and block characteristics (quadratic polynomials in enrolment and number of children, respectively). The sample includes only students attending state-funded schools. Standard errors are clustered on schools and reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table 6. Heterogeneous effects of MTP by student characteristics

	Dependent variable: enrolment indicator at secondary school									
	FSM eligible		Top achiever in Maths		Asian		English-speaking		Mover	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
					Panel A. State-funded school					
MTP	0.005	0.036***	0.117***	0.010	0.032***	0.022*	0.019	0.037***	0.033***	0.020*
	(0.008)	(0.012)	(0.029)	(0.007)	(0.012)	(0.011)	(0.012)	(0.010)	(0.009)	(0.011)
					Panel B. MTP-promoted school					
MTP	-0.005	0.027*	0.177***	0.002	0.049***	0.007	0.014	0.018	0.027	0.009
	(0.016)	(0.015)	(0.027)	(0.015)	(0.016)	(0.014)	(0.015)	(0.016)	(0.017)	(0.014)
					Panel C. State-funded school in Camden					
MTP	-0.009	0.029**	0.144***	-0.001	0.034**	0.006	0.005	0.023*	0.022	0.010
	(0.015)	(0.012)	(0.028)	(0.014)	(0.017)	(0.011)	(0.013)	(0.012)	(0.015)	(0.011)
					Panel D. State-funded school in Camden's neighbouring LAs					
MTP	0.022	0.003	-0.035	0.012	0.018	0.011	0.012	0.016	0.014	0.009
	(0.017)	(0.013)	(0.031)	(0.016)	(0.016)	(0.011)	(0.016)	(0.012)	(0.017)	(0.012)
Observations	50,052	130,018	36,596	117,943	29,779	150,326	101,464	78,512	52,028	128,008
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Census block (LSOA) FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Primary school FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Individual and primary school characteristics	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Note. The table shows DID estimates of the impact of MTP on the probability of attending a secondary state-funded school for different samples of children. Columns (1) and (2) consider subsidised lunches eligibility; columns (3) and (4) consider KS2 test scores; columns (5) and (6) consider asian ethnicity; columns (7) and (8) consider student's country of origin; columns (9) and (10) consider students who have changed residence during primary school; columns (11) and (12) consider gender. All columns control for year, block (LSOA) and school fixed effects, as well as controls for individual characteristics (gender, ethnicity, language spoken at home, subsidised lunches eligibility and special educational needs) and school and block characteristics (quadratic polynomials in enrolment and number of children, respectively). Standard errors are clustered on schools and reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

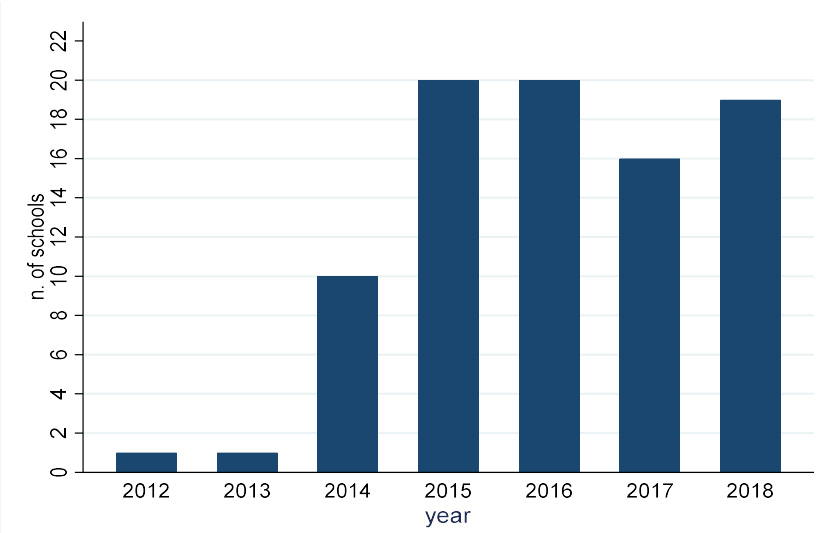
Table 7. Direct and indirect effects of MTP

	Dependent variable: enrolment indicator at secondary school		
	All schools	Oversubscribed schools	Undersubscribed schools
	(1)	(2)	(3)
	Panel A. State-funded school		
MTP	0.0228**	0.0302	-0.0302
	(0.0104)	(0.0248)	(0.0248)
MTPI	0.0008	0.0056	-0.0056
	(0.0014)	(0.0035)	(0.0035)
MTP*MTPI	-0.0002	-0.0056	0.0056
	(0.0024)	(0.0042)	(0.0042)
	Panel B. MTP-promoted school		
MTP	0.0361	0.0443**	-0.0293
	(0.0222)	(0.0218)	(0.0259)
MTPI	0.0055*	0.0090***	-0.0038
	(0.0032)	(0.0028)	(0.0044)
MTP*MTPI	-0.0095**	-0.0100***	-0.0005
	(0.0045)	(0.0034)	(0.0056)
	Panel C. State-funded school in Camden		
MTP	0.0371**	0.0425**	-0.0180
	(0.0148)	(0.0184)	(0.0227)
MTPI	0.0027	0.0096***	-0.0069*
	(0.0028)	(0.0026)	(0.0035)
MTP*MTPI	-0.0076**	-0.0094***	0.0004
	(0.0034)	(0.0030)	(0.0044)
	Panel D. State-funded school in Camden's neighbouring LAs		
MTP	-0.0084	-0.0105	-0.0035
	(0.0137)	(0.0148)	(0.0209)
MTPI	0.0002	-0.0032	0.0030
	(0.0031)	(0.0022)	(0.0032)
MTP*MTPI	0.0045	0.0025	0.0029
	(0.0035)	(0.0029)	(0.0041)
Observations	164,938	144,198	144,198
Year FE	Y	Y	Y
Census block (LSOA) FE	Y	Y	Y
Primary school FE	Y	Y	Y
Individual and primary school characteristics	Y	Y	Y

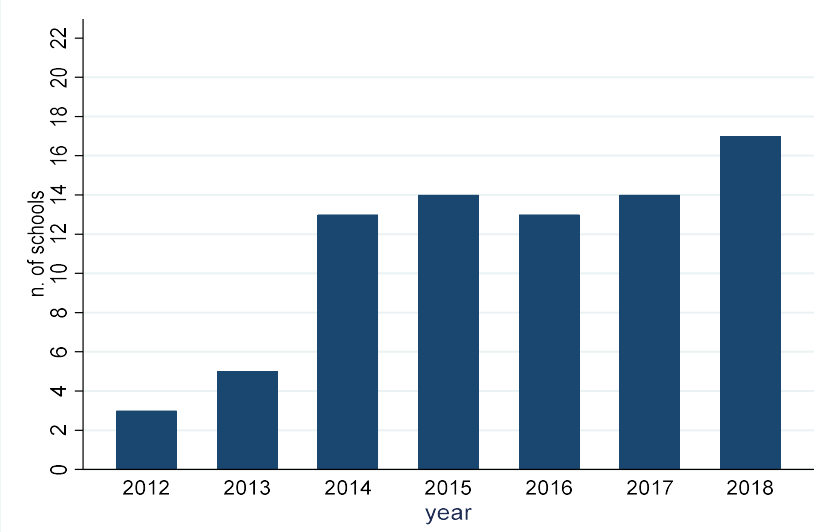
Note. The table shows DID estimates of the direct and indirect effects of MTP on the probability of attending a secondary state-funded school (Panel A), a school promoted suring MTP meetings (Panel B), a state-funded school located in Camden (Panel C) or in bordering LAs (Panel D). Dependent variables in columns (2) and (3) are indicators for enrolment into oversubscribed and undersubscribed schools, respectively. All columns control for year, block (LSOA) and school fixed effects, as well as controls for individual characteristics (gender, ethnicity, language spoken at home, subsidised lunches eligibility and special educational needs) and school and block characteristics (quadratic polynomials in enrolment and number of children, respectively). Standard errors are clustered on schools and reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Figure 1. Rollout of MTP

Panel A. Primary schools



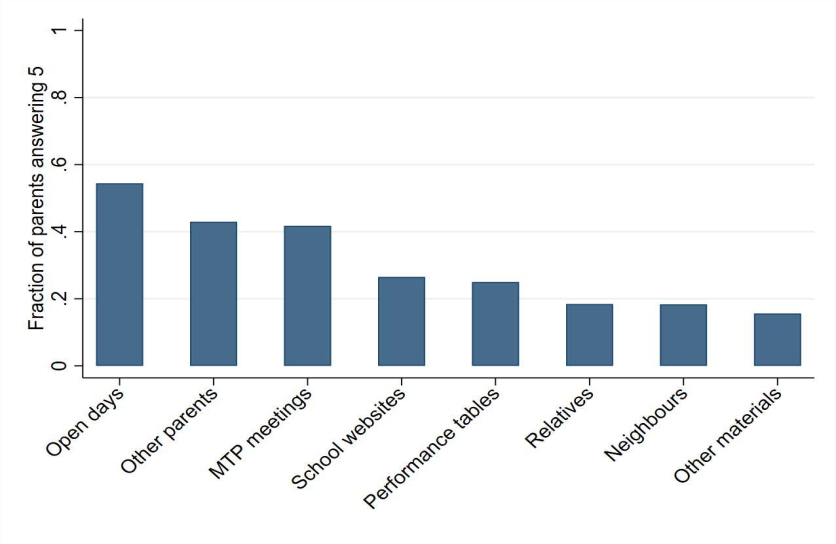
Panel B. Secondary schools



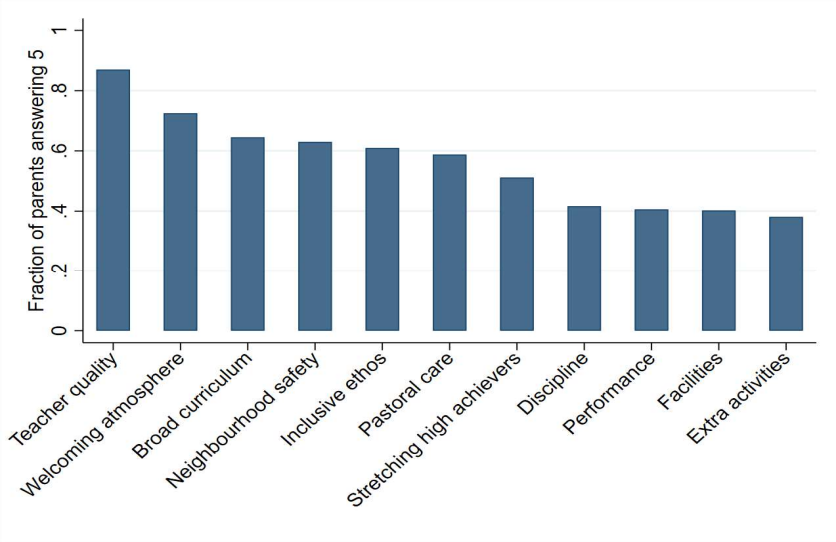
Note. The figure shows the number of primary schools (Panel A) and secondary schools (Panel B) participating to the MTP programme by meeting year.

Figure 2. The role of information sources and school attributes in parental choice

Panel A. Sources of information

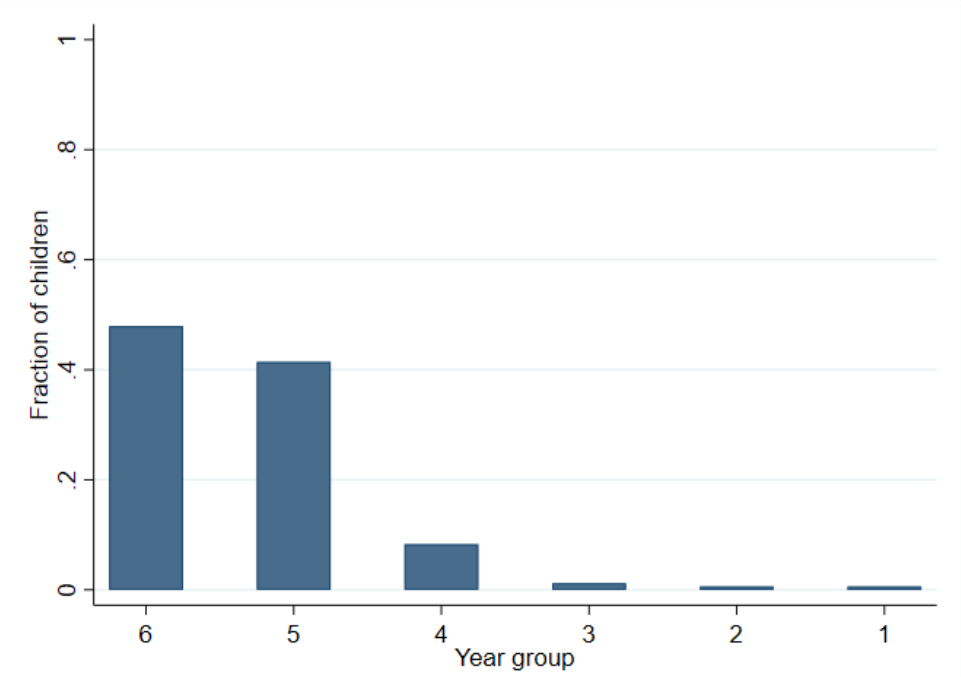


Panel B. School attributes valued by parents



Note. The figure shows the fraction of parents valuing different sources of information (Panel A) and different school attributes (Panel B) when they choose a secondary school for their children. Answers were collected through a survey administered to parents attending MTP meeting in 2019, the latest programme wave. See Sectiuon 6 for definitions and details.

Figure 3. Participation to MTP meetings by year group

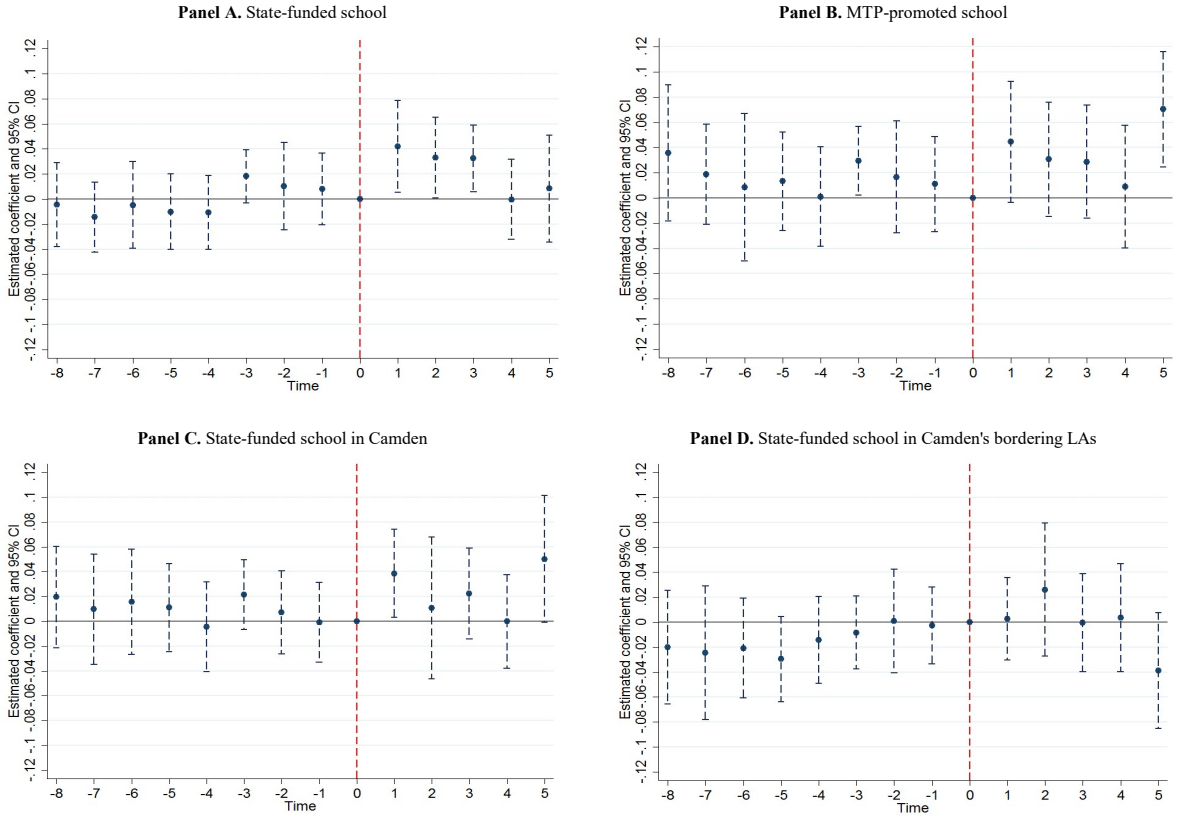


Note. The figure shows the fraction of children whose parents attended an MTP meeting by grade (year group) of enrolment. Answers were collected through a survey administered to parents attending MTP meeting in 2019. See Section 2.3 for details.

Figure 4. Pre-trends for enrolment into a state-funded secondary school

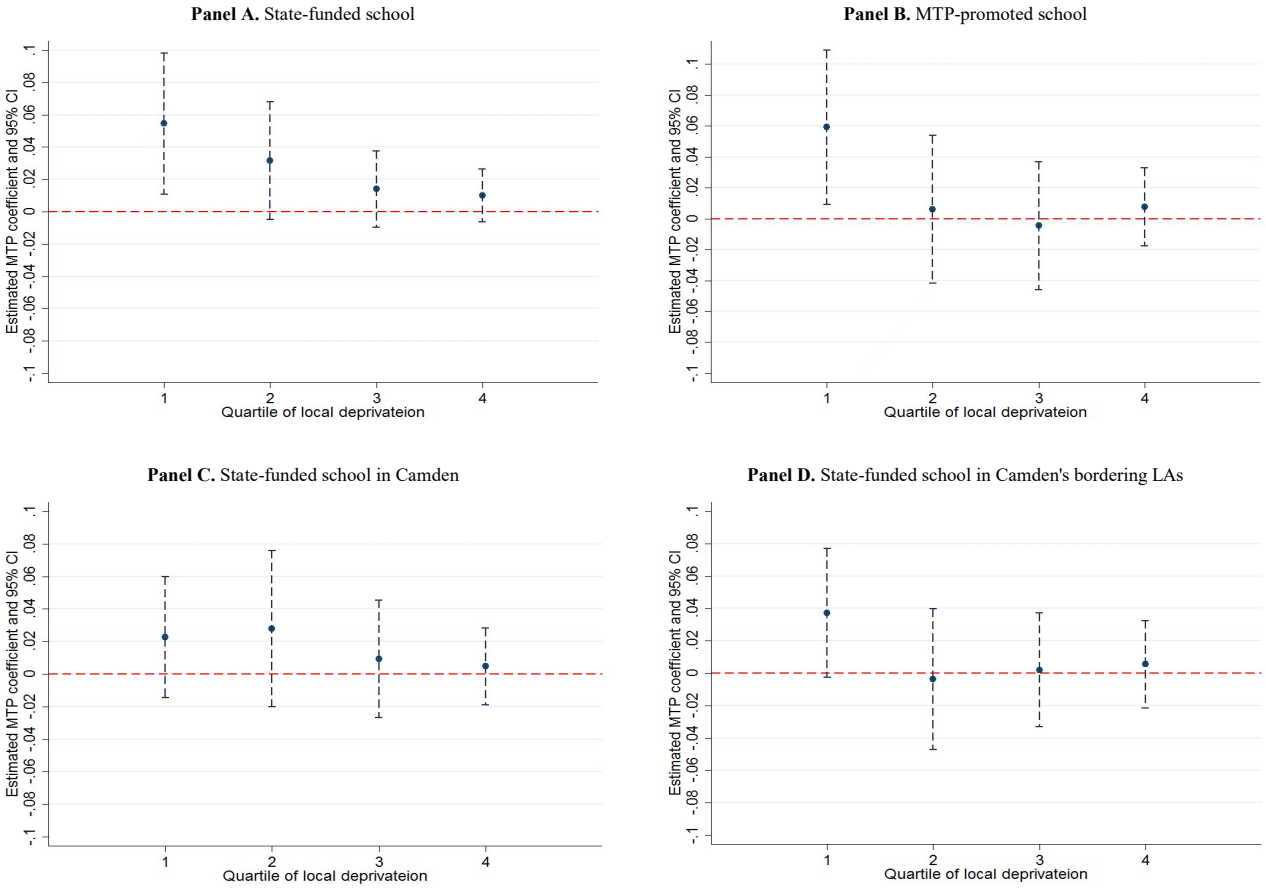
Note. The figure shows trends in student enrolment outcomes between 2006 and 2018. The sample considered is formed by students completing primary education in Camden or bordering school districts. Enrolment is measured at the first year of secondary school. See Section 4 for details.

Figure 5. MTP effects over time



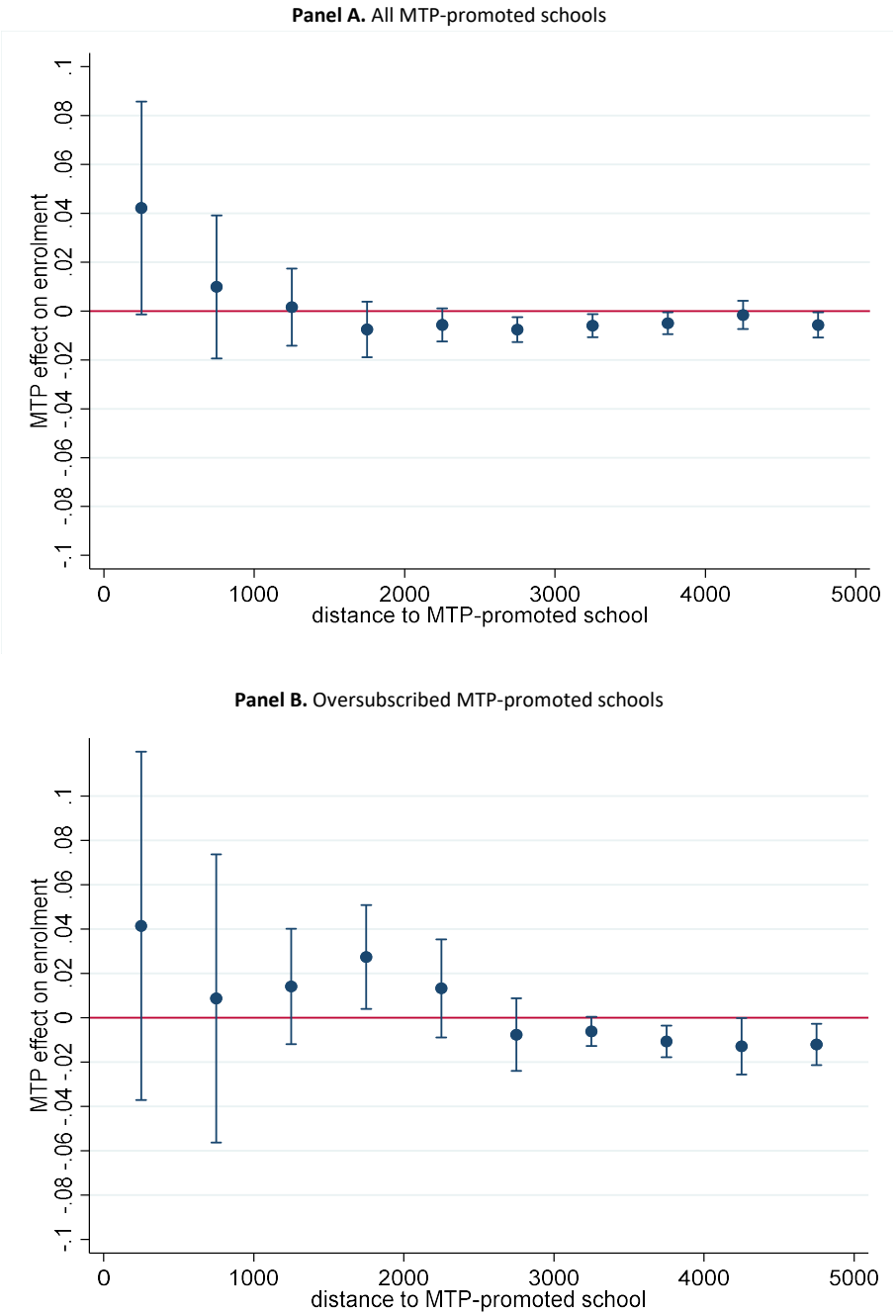
Note. The figure shows event graphs of student enrolment outcomes around the time of entrance into the MTP programme. The sample considered is formed by students completing primary education in Camden or bordering school districts. Time on the horizontal axis is computed subtracting the year where a given school entered MTP to the year of the observation. Control group students are considered in every time building placebo events. The figure plots time-specific coefficient of MTP treatment effect estimated from equation (2), along with 95% confidence intervals. Panel A considers enrolment into any state-funded secondary school, Panel B considers MTP-promoted schools, Panel C considers enrolment into any state-funded secondary school in Camden, and Panel D considers enrolment into any state-funded secondary school in Camden or bordering LAs. Enrolment is measured at the first year of secondary school. See Section 4 for details.

Figure 6. MTP effect by local area deprivation



Note. The figure shows heterogeneous effects of the MTP programme on student enrolment by deprivation in local area (LSOA). The sample considered is formed by students completing primary education in Camden or bordering school districts. Quartile of deprivation is plotted on the horizontal axis. Deprivation is measured by the IDACI index, based on average family income in the area. The figure plots coefficients from equation (1) estimated seprately by deprivation quartile, along with 95% confidence intervals. Panel A considers enrolment into any state-funded secondary school, Panel B considers MTP-promoted schools, Panel C considers enrolment into any state-funded secondary school in Camden, and Panel D considers enrolment into any state-funded secondary school in Camden or bordering LAs. Enrolment is measured at the first year of secondary school. See Section 5 for details.

Figure 7. MTP effect by distance to school



Note. The figure shows DID estimates of the impact of MTP on the probability of attending a secondary state-funded school promoted during MTP meetings. Plotted are coefficients from regressions similar to column (4) of Table 2, augmented with interactions between post-treatment indicator, MTP-exposure indicator, and home-school distance band indicators. Distance bands considered are 500-meter wide and coefficients are plotted at the central point of each band (e.g., the 0-500 meters coefficient is reported at a value of 250 of the x-axis). To plot this figure, a student-secondary-school level dataset is constructed by appending student-level records reporting home-school distance to each of the 22 secondary schools promoted during MTP meetings. Students residing further than 5 km from the school are not included. Outcome variable is a dummy indicating enrolment at the promoted secondary school considered, where Panel A includes all promoted institutions and Panel B restricts to oversubscribed promoted schools. The 95% confidence interval for each coefficient is plotted. See Section 5 for details.

Appendix A Additional Tables and Figures

Table A.1. Treated and control groups by year

	Number of:	
Year	Control students	Treated students
(1)	(2)	(3)
2006	16,743	0
2007	16,652	0
2008	17,083	0
2009	16,887	0
2010	16,695	0
2011	17,068	0
2012	16,759	58
2013	16,970	56
2014	17,325	476
2015	17,221	909
2016	17,916	943
2017	18,486	591
2018	18,832	957
Total	224637	3990

Note. The table shows n. of students in treatment and control group by year. Treatment group is defined as all students in a Year 5 or Year 6 when a MTP meeting is organised at their primary school. Control group is all other students enrolled in the same grades in a primary school in Camden or in bordering LAs. See Section 4 for details.

Table A.2. Effects of MTP on parental preference for state-funded schools

	Dependent variable: preference or enrolment indicator for secondary school						
	1st choice is a MTP-promoted school (1)	1st, 2nd or 3rd choice is a MTP-promoted school (2)	1st choice is a Camden school (3)	1st, 2nd or 3rd choice is a Camden school (4)	Enrolment at private school despite offered a state school (5)	Enrolment at private school despite offered a MTP-promoted school (6)	Enrolment at private school despite offered a Camden school (7)
MTP	-0.015	-0.015*	0.003	0.018*	-0.038***	-0.031***	-0.026*
	(0.012)	(0.009)	(0.010)	(0.010)	(0.010)	(0.012)	(0.013)
Observations	63,358	63,358	63,358	63,358	62,882	5,474	13,384
Year FE	Y	Y	Y	Y	Y	Y	Y
Census block (LSOA) FE	Y	Y	Y	Y	Y	Y	Y
Primary school FE	Y	Y	Y	Y	Y	Y	Y
Individual and primary school characteristics	Y	Y	Y	Y	Y	Y	Y

Note. The table shows DID estimates of the impact of MTP on the parental preferences for schools. Dependent variables in columns (1) and (2) are indicator for first choice school or one of the top three preferences being a MTP-promoted school, respectively. Dependent variables in columns (3) and (4) are indicator for first choice school or one of the top three preferences being a Camden school, respectively. All columns control for year, block (LSOA) and school fixed effects, as well as controls for individual characteristics (gender, ethnicity, language spoken at home, subsidised lunches eligibility and special educational needs) and school and block characteristics (quadratic polynomials in enrolment and number of children, respectively). Standard errors are clustered on schools and reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.3. Effects of MTP by parental participation to the meetings

	Dep. Var.: enrolment indicator at secondary school
	(1)
Panel A. State-funded school	
MTP	0.030***
	(0.011)
MTP*High_participation	-0.018
	(0.011)
Panel B. MTP-promoted school	
MTP	0.017
	(0.013)
MTP*High_participation	-0.009
	(0.016)
Panel C. State-funded school in Camden	
MTP	0.012
	(0.010)
MTP*High_participation	0.001
	(0.020)
Panel D. State-funded school in Camden's bordering LAs	
MTP	0.018*
	(0.010)
MTP*High_participation	-0.019
	(0.015)
Observations	180,398
Year FE	Y
Census block (LSOA) FE	Y
Primary school FE	Y
Individual and primary school characteristics	Y

Note. The table shows DID estimates of the heterogenous impact of MTP on secondary school enrolment by parental participation to the meeting. Dependent variables follow the ones in Table 2. Reported are estimates from equation (4) augmented with an interaction term between the MTP treatment indicator and a dummy variable equal to one if the number of parents participating to the meeting are above the median. Standard errors are clustered on schools and reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Figure A.1. MTP Meetings

Note. The figure shows an example of an MTP meeting.

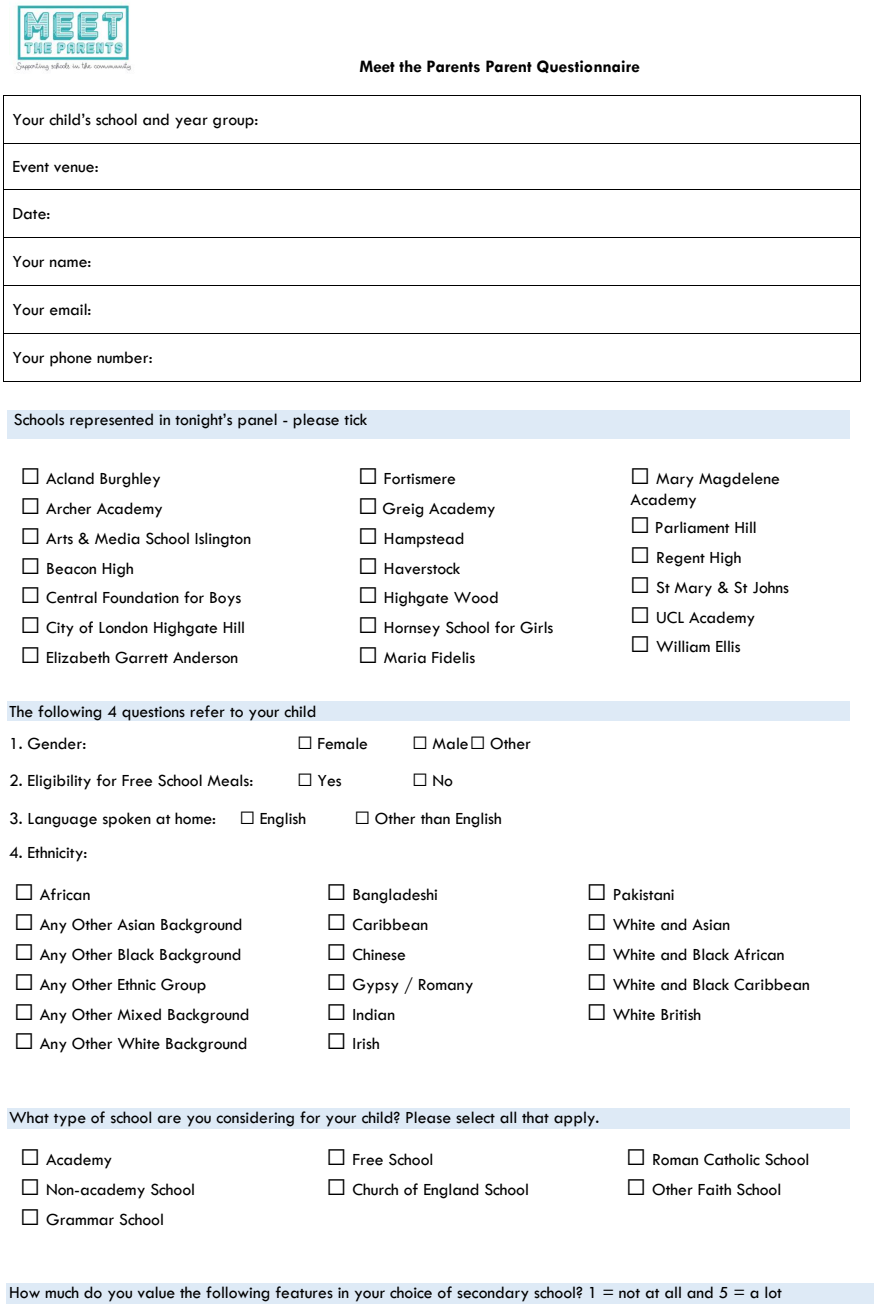
Figure A.2. MTP Meetings: panellists and attendees

Panel A. Parents and students in the panel

Panel B. Parents and students in the audience

Note. The figure shows an example of the structure of MTP meetings.

Figure A.3. Questionnaire administered to parents during MTP meetings (page 1)



MEET THE PARENTS

Supporting schools in the community

Meet the Parents Parent Questionnaire

Your child's school and year group:
Event venue:
Date:
Your name:
Your email:
Your phone number:

Schools represented in tonight's panel - please tick

- ☐ Acland Burghley
- ☐ Archer Academy
- ☐ Arts & Media School Islington
- ☐ Beacon High
- ☐ Central Foundation for Boys
- ☐ City of London Highgate Hill
- ☐ Elizabeth Garrett Anderson
- ☐ Fortismere
- ☐ Greig Academy
- ☐ Hampstead
- ☐ Haverstock
- ☐ Highgate Wood
- ☐ Hornsey School for Girls
- ☐ Maria Fidelis
- ☐ Mary Magdelene Academy
- ☐ Parliament Hill
- ☐ Regent High
- ☐ St Mary & St Johns
- ☐ UCL Academy
- ☐ William Ellis

The following 4 questions refer to your child

1. Gender: ☐ Female ☐ Male ☐ Other
2. Eligibility for Free School Meals: ☐ Yes ☐ No
3. Language spoken at home: ☐ English ☐ Other than English
4. Ethnicity:

- ☐ African
- ☐ Any Other Asian Background
- ☐ Any Other Black Background
- ☐ Any Other Ethnic Group
- ☐ Any Other Mixed Background
- ☐ Any Other White Background
- ☐ Bangladeshi
- ☐ Caribbean
- ☐ Chinese
- ☐ Gypsy / Romany
- ☐ Indian
- ☐ Irish
- ☐ Pakistani
- ☐ White and Asian
- ☐ White and Black African
- ☐ White and Black Caribbean
- ☐ White British

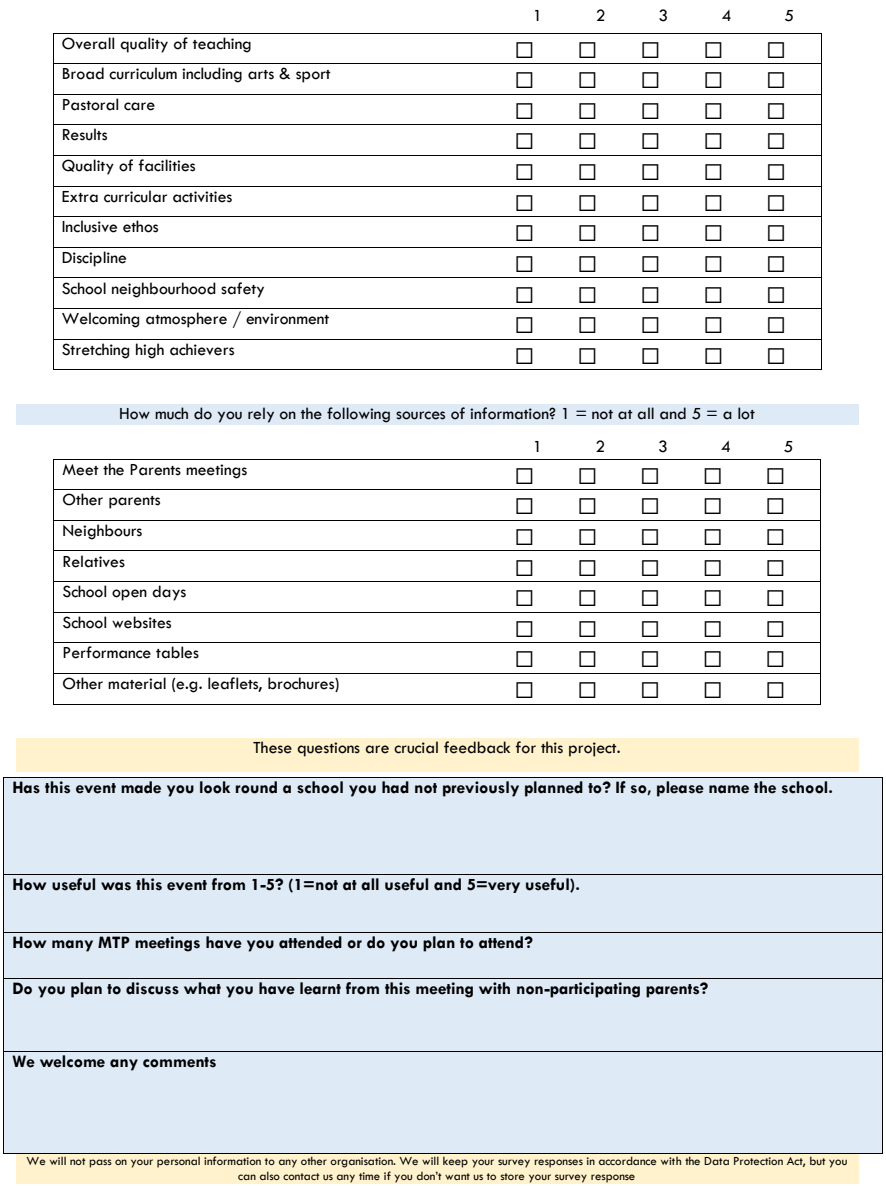
What type of school are you considering for your child? Please select all that apply.

- ☐ Academy
- ☐ Non-academy School
- ☐ Grammar School
- ☐ Free School
- ☐ Church of England School
- ☐ Roman Catholic School
- ☐ Other Faith School

How much do you value the following features in your choice of secondary school? 1 = not at all and 5 = a lot

Note. The figure shows the template of the questionnaire administered to parents (page 1).

Figure A.4. Questionnaire administered to parents during MTP meetings (page 2)



	1	2	3	4	5
Overall quality of teaching	☐	☐	☐	☐	☐
Broad curriculum including arts & sport	☐	☐	☐	☐	☐
Pastoral care	☐	☐	☐	☐	☐
Results	☐	☐	☐	☐	☐
Quality of facilities	☐	☐	☐	☐	☐
Extra curricular activities	☐	☐	☐	☐	☐
Inclusive ethos	☐	☐	☐	☐	☐
Discipline	☐	☐	☐	☐	☐
School neighbourhood safety	☐	☐	☐	☐	☐
Welcoming atmosphere / environment	☐	☐	☐	☐	☐
Stretching high achievers	☐	☐	☐	☐	☐

How much do you rely on the following sources of information? 1 = not at all and 5 = a lot

	1	2	3	4	5
Meet the Parents meetings	☐	☐	☐	☐	☐
Other parents	☐	☐	☐	☐	☐
Neighbours	☐	☐	☐	☐	☐
Relatives	☐	☐	☐	☐	☐
School open days	☐	☐	☐	☐	☐
School websites	☐	☐	☐	☐	☐
Performance tables	☐	☐	☐	☐	☐
Other material (e.g. leaflets, brochures)	☐	☐	☐	☐	☐

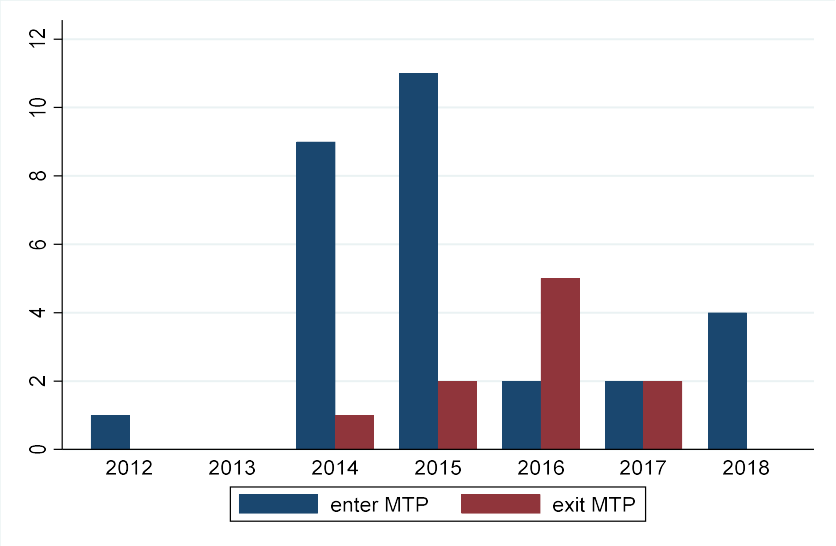
These questions are crucial feedback for this project.

Has this event made you look round a school you had not previously planned to? If so, please name the school.
How useful was this event from 1-5? (1=not at all useful and 5=very useful).
How many MTP meetings have you attended or do you plan to attend?
Do you plan to discuss what you have learnt from this meeting with non-participating parents?
We welcome any comments

We will not pass on your personal information to any other organisation. We will keep your survey responses in accordance with the Data Protection Act, but you can also contact us any time if you don't want us to store your survey response

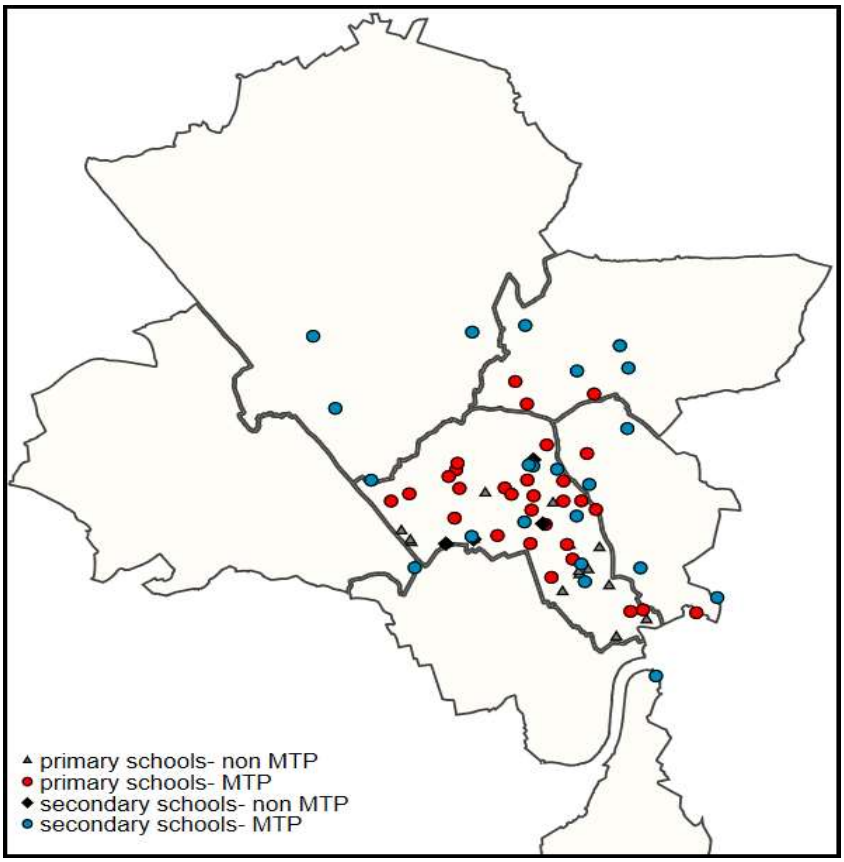
Note. The figure shows the template of the questionnaire administered to parents (page 2).

Figure A.5. N. of schools entering and exiting MTP



Note. The figure shows the number of primary schools joining or leaving the MTP programme by meeting year.

Figure A.6. Geographical location of participating school



Note. The figure depicts geographical location of primary and secondary schools participating to MTP as well as non-participating institutions in the borough of Camden. Location is based on school postcode centroids. Represented are the borough of Camden, at the centre of the figure, and (from south, clockwise) the boroughs of Lambeth, Westminster, Brent, Barnet, Haringey and Islington.

Appendix B Robustness checks

We turn here to explore the sensitivity of our results to alternative empirical specifications and potential threats to the validity of our estimates. First, because of the voluntary participation to the programme on a annually basis, schools (and then students they serve) can in principle leave and re-enter treatment, possibly more than once. Over the years considered, 10 out 29 primary schools leave the treatment before the end of the sample period: 2 in 2017, 5 in 2016, 2 in 2015 and 1 in 2014 (see Figure A.5). Moreover, 1 school exits treatment in 2017 and re-enters in 2018. On the other hand, the vast majority of schools enter treatment by 2015 (1 in 2012, 9 in 2014 and 11 in 2015). In our main specifications of equation (3), we keep all entries and exits as the nature of MTP can lead to effects that are year-specific. However, exit from the programme may happen endogenously as a result of the programme's effectiveness. We therefore estimate equation (3) by assigning to treatment all schools starting from the first year in which an MTP meeting was conducted, and we consider them treated thereafter irrespectively of whether they exited the programme. This procedure yields an 'intention-to-treat' estimate of the effect of MTP. The results on main enrolment outcomes are substantially unchanged, as shown in Table B.1.

Second, the choice of the control group – which we define as students attending untreated primary schools in Camden or bordering districts – is a priori unclear. Hence, we test the sensitivity of our results by broadening the control group to include all students attending any state-funded primary school in London. Indeed, as secondary schools take up large cohorts and students located further away from the institution, the choice of the parents does not necessarily need to be restricted to the local districts. Effects of MTP on enrolment using this alternative control group are similar to those presented in Table 2 (see Table B.2).

Finally, we explore the sensitivity of our estimates to choices concerning the treatment group. First, we estimate equation (3) without considering the first two years of the programme, 2012 and 2013, when MTP events were held only at one school and the initiative was at a pilot stage. Results from this approach mirror our main findings and are presented in Table B.3. Second, to provide evidence in support of the assumption that the entire cohort of students was exposed to the treatment, we estimate heterogeneous effects by parental participation. We augment equation (3) with an interaction term between the treatment indicator and a dummy variable equal to one if the number of parents participating to the meeting is above the median. As can be seen in Table A.3, the interaction terms are small and not statistically significant for

all outcomes considered. This result implies that, in line with our assumption, MTP impacts parental choice regardless actual participation to the meetings, most likely due to informational spillovers within parents in the same school-grade.[49]

Table B.1. Intention-to-treat effects of MTP

	Dependent variable: enrolment indicator at secondary school			
	(1)	(2)	(3)	(4)
		Panel A. State-funded school		
MTP	0.015	0.004	0.024**	0.021**
	(0.012)	(0.009)	(0.010)	(0.009)
		Panel B. MTP-promoted school		
MTP	0.558***	0.135***	0.018	0.016
	(0.035)	(0.022)	(0.013)	(0.012)
		Panel C. State-funded school in Camden		
MTP	0.597***	0.118***	0.011	0.010
	(0.052)	(0.020)	(0.010)	(0.009)
		Panel D. State-funded school in Camden's bordering LAs		
MTP	-0.505***	-0.105***	0.014	0.013
	(0.042)	(0.021)	(0.013)	(0.013)
Observations	180,398	180,398	180,398	180,398
Year FE	Y	Y	Y	Y
Census block (LSOA) FE	N	Y	Y	Y
Primary school FE	N	N	Y	Y
Individual and primary school characteristics	N	N	N	Y

Note. The table shows DID estimates of the intetion-to-treat impact of MTP on secondary school enrolment. Specifications and table structure follow the ones of Table 2. Here we keep all students in the treatment group once their school enters the programme, regardless early exit from MTP. Standard errors are clustered on schools and reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

[49]Results considering the fraction of parents with respect to cohort size, rather than the absolute number of participants, are very similar and available upon request.

Table B.2. Effects of MTP with alternative control group

	Dependent variable: enrolment indicator at secondary school			
	(1)	(2)	(3)	(4)
		Panel A. State-funded school		
MTP	0.021	0.014	0.033***	0.031***
	(0.014)	(0.011)	(0.010)	(0.010)
		Panel B. MTP-promoted school		
MTP	0.727***	0.137***	0.028**	0.027**
	(0.031)	(0.022)	(0.012)	(0.012)
		Panel C. State-funded school in Camden		
MTP	0.668***	0.113***	0.016	0.015
	(0.044)	(0.020)	(0.010)	(0.009)
		Panel D. State-funded school in Camden's bordering LAs		
MTP	0.054	-0.072***	0.026***	0.026***
	(0.034)	(0.022)	(0.010)	(0.009)
Observations	1,070,291	1,070,291	1,070,291	1,070,291
Year FE	Y	Y	Y	Y
Census block (LSOA) FE	N	Y	Y	Y
Primary school FE	N	N	Y	Y
Individual and primary school characteristics	N	N	N	Y

Note. The table shows DID estimates of the impact of MTP on secondary school enrolment. The Table follows structure and specifications of Table 2 and considers all students completing primary education l in untreated schools in Greater London as control group. See Section 5 for details. *** p<0.01, ** p<0.05, * p<0.1.

Table B.3. Effects of MTP ignoring the pilot stage

	Dependent variable: enrolment indicator at secondary school			
	(1)	(2)	(3)	(4)
		Panel A. State-funded school		
MTP	0.017	0.008	0.025**	0.024**
	(0.013)	(0.010)	(0.010)	(0.01)
		Panel B. MTP-promoted school		
MTP	0.553***	0.124***	0.013	0.012
	(0.036)	(0.022)	(0.013)	(0.012)
		Panel C. State-funded school in Camden		
MTP	0.593***	0.106***	0.012	0.011
	(0.046)	(0.019)	(0.09)	(0.009)
		Panel D. State-funded school in Camden's bordering LAs		
MTP	-0.497***	-0.089***	0.012	0.012
	(0.038)	(0.020)	(0.010)	(0.010)
Observations	180,284	180,284	180,284	180,284
Year FE	Y	Y	Y	Y
Census block (LSOA) FE	N	Y	Y	Y
Primary school FE	N	N	Y	Y
Individual and primary school characteristics	N	N	N	Y

Note. The table shows DID estimates of the impact of MTP on secondary school enrolment not considering the 2012 and 2013 waves, where the programme was at a pilot stage. Specifications and table structure follow the ones of Table 2. Here we drop school-year obseravations from the only primary institution where meetings were organised in 2012 and 2013. Standard errors are clustered on schools and reported in parentheses. *** p<0.01, ** p<0.05, * p<0.1.