Can a mandate for inclusion change school choices for disadvantaged parents? – Evidence from Urban India

Ambrish Dongre, Ankur Sarin and Karan Singhal

Abstract

Can inequalities in private school access be bridged through a government mandate? Enacted in 2009, India's "Right to Education" mandated almost all private schools to admit at least 25 percent of children in their entry class from "economically weak and socially disadvantaged" groups. In this paper, we investigate the impact of the mandate on the nature of schools chosen by targeted households in one of the largest cities in India. Applying a double-difference estimation strategy, we compare the school choices of the targeted children and their elder siblings (not eligible for the mandate) between the households who received and those who failed to receive an allotment under the mandate. In addition, we compare schools that the households applied to but were not allotted under the mandate with the schools they are currently attending. The empirical results suggest that the mandate enables households to access schools that are more likely to be private, use English as a medium of instruction, located further away from home and charge a higher tuition fee compared to the schools that they might have accessed in the absence of the mandate. Given that these are all attributes typically associated with privilege, the mandate arguably has expanded the choices for these households. The effects are larger for households whose fallback option was government schools. But within the targeted populations, more advantaged households are more likely to apply and receive admissions via the mandate. Further, even though choice set of schools has expanded, the expanded set doesn't include schools that charge relatively higher tuition (i.e. elite schools). Our findings speak to the transformative potential of such mandates in environments with poor track records of policy implementation and the challenges in strengthening them.

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1. Introduction

India, like other developing countries, has witnessed a sustained increase in private provision of schooling (National Sample Survey 2015; Kingdon 2017). Increased salience of private schools implies that socio-economic inequalities also reflect in schooling choices and experiences. Multiple surveys indicate that children attending private schools in India come from more advantaged backgrounds, in terms of gender, parental education and socio-economic status, compared to their counterparts in government schools (Desai et al. 2009; ASER 2014; National Sample Survey 2015). Such segregation contributes to inequality in education experience, and inequality in opportunities for social and economic mobility which in turn reinforces existing societal divides (Sen 1999).

Segregation and accompanying differential access to quality schooling is problematic on both normative and instrumental grounds. While "separate cannot be equal" might be accepted as a principal, the principal is clearly under threat with differential ability to pay increasingly serving as defensible criteria for separation. In most societies today, schools are charged with making 'equal opportunity' a reality and a society relies on it to level the playing field especially for children who are born into disadvantaged circumstances (Duncan and Murnane 2011). Inclusion in schools is thought to be desirable as it helps inculcate values and beliefs of social justice and equality among children (Miles and Singal 2010). Empirically, desegregation in schools has shown to help improve learning for the disadvantaged (Mickelson 2001), and improve attitudes

and increase prosocial behavior among the advantaged (Schofield and Eurich-Fulcer 2008; Rao 2014).

In an effort to address the challenges of segregation in education, India passed a Right to Free and Compulsory Education (RTE) Act in 2010. One of the most controversial (and potentially transformative) mandates of the RTE is spelled out in Section 12(1)(c) of the act. The mandate potentially mitigates economic and social barriers in private school access by reserving at least 25% of seats ("25% Mandate") at entry level grades (pre-primary or 1st grade) in (almost all) private schools for students from economically weaker sections (EWS), or socially disadvantaged groups (details later). Private schools admitting such children are to be reimbursed by the state, and the reimbursement per student is capped at the maximum of per student expenditure incurred in government schools or the fees charged by the concerned private school, whichever is lower. Allocation of seats for oversubscribed schools are to be decided through a lottery, and schools can't legally deny admission once all the eligibility criteria, as mandated by the government, are fulfilled. Finally, students do not have to pay any fees even if the school fees are higher than the per student expenditure in government schools. It's the school which is expected to bear the burden, at least as per the rules. This makes the mandate different from a typical voucher program and at least in theory, allows applicants an unrestricted choice (Epple et al., 2017)[i]. With the potential of impacting over 18 million children over a period of eight years, it can become the world's largest 'school choice' mandate (Sarin et al. 2015).

Given the motivation behind the mandate, this paper raises a simple yet important question: ***has the mandate expanded the choice set of schools for disadvantaged parents and enabled them to***

access different schools? Answer to this question is central to the transformational change that the mandate hopes to usher. The large and rigorous literature examining school choice points to several factors hindering households, especially the disadvantaged, from fully exploiting the benefits of a school choice system (Schneider and Buckley 2002; Hastings and Weinstein 2008; Burgess et al. 2015; Condliffe et al. 2015; Harris and Larsen 2015; Muralidharan and Sundararaman, 2015; Glazerman and Dotter 2017; Abdulkadiroglu et al. 2018; Corcoran et al. 2018). These factors include indirect costs, school demographics, distance to school, safety concerns, the feasible choice-set of schools, lack of objective information on various aspects of school quality, lack of parental guidance, family and neighborhood contexts, as well as cumbersome administrative procedures. Thus, mere existence of a school choice program does not guarantee that intended beneficiaries are able to access schools which they otherwise would not access.

The factors pointed to in the literature are likely to influence school choice under the 25% mandate as well. In fact, the impact of these factors might be exacerbated by issues specific to the Indian context where socio-economic inequalities are starker and governance structures are weaker. Earlier studies on the implementation of the mandate point to various challenges. These include resistance by private school leadership; corruption with relatively more 'advantaged' households managing to secure admissions; high out-of-pocket expenses incurred by the households despite tuition fees being waived; local administration which is unprepared and in some cases, unwilling to implement this mandate, and challenges that disadvantaged household face at each stage of the admission and application process (Sarin and Gupta, 2014; Namala et al., 2015**;** Srivastava and Noronha 2016; Damera 2017; Sarin et al., 2017)**.**

In this paper, we analyze the impact of the mandate on school choices of relatively disadvantaged households living in Ahmedabad, the seventh largest city in India. We investigate the journey of households from application to admission through the mandate for the academic year 2015-16 once they are provided information through various modes about the mandate and how to access it (details later). The survey of over 1500 households, conducted one and half years after admissions at the end of 2016, provides us information on whether a household applied through the mandate; the schools applied to and allotted a seat in, and finally the school which the household finally took admission in. In addition to collecting this data on the sampled child (i.e. the child who was potentially eligible to avail the benefits from the mandate), we also collected information on the school being attended by (older) siblings. Thus, we are able to observe actual choices or revealed preferences of the households[ii]. We also have information on schools currently attended by the children who were not allotted a seat or chose not to take-up the allotment. We use this data to compare the schooling choices of those who *received allotment* versus those who did not vis-à-vis their siblings, and schooling choices of those who *accepted the allotment* versus those who did not receive an allotment vis-à-vis their siblings. For the households who did not receive an allotment, we also compare schools they applied to with the schools they are currently attending.

Overall, our results indicate that the mandate enabled the applicants to access schools that they might not have accessed without it. Compared to the schools being attended to by their siblings, children who were allotted schools as part of the mandate were more likely to have received admission in schools that are private, schools that have English medium and schools which are

beyond 15 minutes of walking distance from the applicants' house. No such differences are found among the schools currently attended by the sampled children who did not receive an allotment, and schools of their siblings. These results are confirmed in a difference-in-difference estimation. We also compare schools currently attended by those who didn't receive an allotment to the schools they applied through the mandate. We find that the schools that they applied through the mandate are more likely to be beyond 15 minutes of walking distance, more likely to have English as a medium of instruction, and importantly, charge higher fees than the fee of schools they currently attend. These effects are larger in magnitude for the applicants whose fallback option was government schools.

The analysis points out areas of concern and raises questions of the policy as well. Even among this sample of relatively disadvantaged households who were provided information about the policy, the households who applied, and the households who received allotments are more resourceful in terms of wealth, parental education, female mobile ownership and being able to speak the local language (and therefore be non-migrants). This suggests considerable challenges in navigating the application process. Further, even though the mandate seems to have expanded school choices, the expanded choice set doesn't include schools that charge relatively higher tuition. For example, the schools in the expanded set have fees which are, on average, significantly lower than what the state spends on each student in government schools. In other words, 'elite' schools still remain out of reach. Our field experiences suggest that worries about high levels of non-tuition expenditure, unpleasant experiences during admission process and fear of discrimination post admission may party explain why the disadvantaged households avoid

'elite' schools despite the mandate. This raises questions of the value of the mandate and its transformative potential.

This is the one of the few studies to investigate impact of a 'school choice' system on schools accessed by disadvantaged households in a developing country context. The paper contributes to relatively limited literature on impact of the RTE mandate as well. To our knowledge, Damera (2017) is the only other paper which rigorously analyzes impact of the mandate on learning outcomes and on school choices of the applicants in Karnataka. His intent-to-treat (ITT) estimates (with 18% cross-over from the control group) suggest that while successful applicants are likely to have attended similar schools anyway, the schools they attend charge 11.6% more annual fees than the schools attended by non-successful applicants. Though not exactly comparable, our results are in a similar direction but of larger magnitude (33.5%). More broadly, we feel, the estimates in Damera (2017) represent a "business-as-usual" scenario, and hence can be conservative while results in this paper are rooted in the context of information provision to potentially eligible households who are more disadvantaged compared to the households in Damera (2017). Information provision enhanced awareness about the mandate, and consequently application rates among these households. Hence, our results, in some sense, suggest potential of the act, even when faced with implementation challenges.

In the next section, we describe the context in which we study school choices under the mandate, describing the mandate and it implementation process in more detail. In Section 3, we describe data we use for the analysis, their sources and our sampling strategy for the primary. Section 4

elaborates on the empirical strategy, while findings are shared and discussed in section 5. We conclude in Section 6.

2. The "25% Mandate" and its implementation

Gujarat was one of the early implementers of the mandate and within Gujarat, Ahmedabad was one of the first cities to initiate its implementation[iii].

Admission process in Ahmedabad for academic year 2015-16

The overall process of admission through the mandate can broadly be divided in three stages - (a) an eligible household applies to a set of schools permissible under the mandate; (b) an applicant receives an allotment of a seat in a school, and (c) an applicant receiving allotment takes admission in that school.

As mentioned earlier, the mandate is meant for disadvantaged sections of the society. For the 2015-16 admission cycle, all 'poor' households as defined by possession of a 'Below Poverty Line' (BPL) card were eligible to apply through the mandate[iv]. Further, households belonging to the Scheduled Caste (SC) and Scheduled Tribes (ST) were eligible if their annual income were less than Rs.200000 (~$3000). The corresponding amounts for households belonging to 'Other Backward Classes' (OBC) and the 'General' category were Rs.100000 (~$1500) and Rs.68000 (~$1000) respectively[v]. Table A2 in the annexure describes these criteria and also lists the age

and distance criteria. The eligibility was to be proven by submitting the documents mentioned in the table.

The application form sought information about annual earnings, caste category, the child's age, any other kind of disadvantage that the child might face (such as disability), and finally the schools they wished to apply to. Applicants were supposed to list up to five schools in their order of preference. Parents were provided with a list of school names that they were eligible to apply to on the basis of their place of residence, and the distance criteria. No other information about the school (such as performance of school in academic and non-academic fields, infrastructure, teachers etc.) was provided. The local administration had opened help centers to facilitate applications recognizing that the households targeted by the mandate would find it difficult to put together a complete and correct application[vi].

For the academic year studied, the actual school allotments were carried out by the office of the District Education Officer (DEO), the official in-charge of school education-related matters at the district level. Allotments were to be done school-wise, where all households who had recorded that school as their first preference were to be considered first, and a lottery conducted in case of excess demand[vii]. While further details of the allotment process were specified in later years, the process remains a black box beyond the details described here. The households were to be informed about their allotment through postal services and SMSs on their mobile phones.

Once allotment was received, applicants were required to present proof of their allotment along with eligibility documents (described in Table A2 in annexure) at the allotted school if they

wished to take admission. The schools were not supposed to deny admission to anybody with a valid allotment, and were prohibited from carrying out screening in any form (such as interviews of parents or testing of the child etc.). Once admitted, they were to be granted 'free' education till grade 8 i.e. the schools were not supposed to charge any fees from children admitted through 12(1)(c). Additionally, for those households that admit their child, the state government had promised annual cash transfer of Rs.3000 towards books and uniforms.

Even though rules and regulations governing the admission process through 12(1)(c) seem fair and comprehensive, the process on ground was certainly not as smooth. There were numerous complaints about difficulty in obtaining eligibility documents, ill-equipped help centers, lack of information on application status, processing of applications and allotments, and complaints about schools creating hurdles in granting admissions despite receiving allotments (Sarin et al., 2017).

3. Data

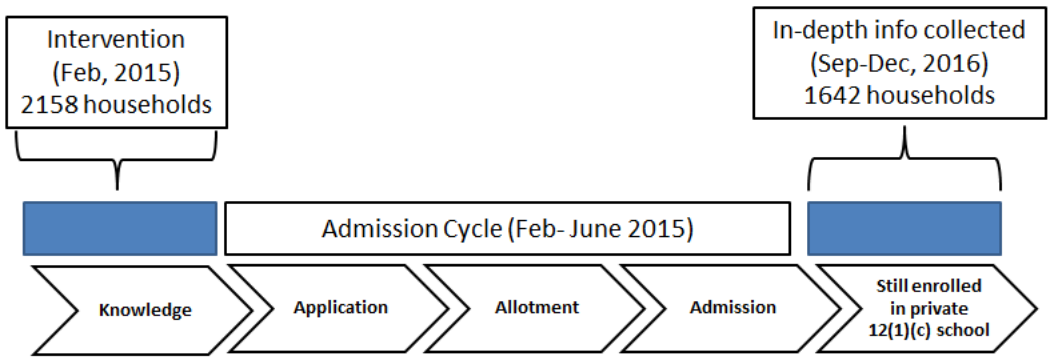
Data for this study was collected as part of a larger research project initiated in Ahmedabad in early 2015, just before the application process under the mandate. Prior field research had pointed to a lack of information and awareness as significant challenges in the mandate's implementation. A team of researchers including one of the authors of this paper, devised an information campaign in collaboration with local administration and several non-governmental organizations. The information campaign was focused on informing households about the mandate, the eligibility conditions, where to obtain relevant documents from and various

deadlines to be followed. It was not meant for and did not give any information about any specific private schools where children could apply through the mandate. Since this information campaign shaped the data collection, we discuss the relevant details below.

Sampling

An *Anganwadi Center* (AWC) formed the sampling unit for the study[viii]. 10% of the AWCs in the district of urban Ahmedabad were sampled yielding a sample of 215 AWCs. These AWCs were spread across all the 10 ICDS administrative blocks (Figure A1 in Annexure). Households in the feeder areas of each sampled AWC were invited for a meeting at the AWC to inform them about the mandate in February 2015, just prior to the onset of the application and admission cycle for academic year 2015-16. 2158 households deemed to be eligible were sampled at this stage, and were exposed to awareness about RTE through different communication interventions, in addition to other awareness efforts by the government[ix]. The research team attempted to follow up with all the households again during September to December 2016, one and half years after the interventions, and managed to track 1642 (76.1%) households (see Figure 1 for timeline). This paper reports findings based on the survey conducted in 2016[x]. As a result of focusing on households that were deemed eligible to avail the policy, our overall sample is relatively disadvantaged compared to an urban Gujarat sample and urban Ahmedabad sample from National Sample Survey (NSS), a credible household surveys in India (Table A4 in the annexure). For example, in line with policy intentions, our sample has higher fraction of households belonging to historically disadvantaged groups, and lower monthly per capita *income* than monthly per capita *expenditure* in NSS for urban Ahmedabad.

Figure 1: Timeline of admission process and data collection



The 2016 survey captured socio-economic characteristics of the households such as educational and occupational details of the household members, household income, possession of assets, social and religious background and social networks of the household (see Table A5 in the annexure). The survey also captured schooling status of the sampled child and his/her siblings, expenditure on education, and basic details of the school currently being attended by the sampled child and siblings. The details consisted of medium of instruction, school management type (government or private), whether the school was within fifteen minutes walking distance from home and school fees[xi].

A set of questions were specifically designed and administered to households who applied through the mandate. These included names of schools that they applied to, allotted to (if they were), admitted their children in, along with basic details about these schools (medium of instruction, school fees, and walking distance). We also asked parents if they would have applied to each school mentioned in their application in the absence of the mandate.

Within our sample, 81% households knew about the mandate (Table 1)[xii]. Conditional on knowledge, approximately 92% applied. Thus, generating awareness turned out to be critical in this context. However, conditional on applying, only 54% of the applicants were allotted a school through 12(1)(c)[xiii]. Of those who received an allotment, 75% took admission in the allotted school. Column 2 of Table 1 shows these as percentages of the overall sample.

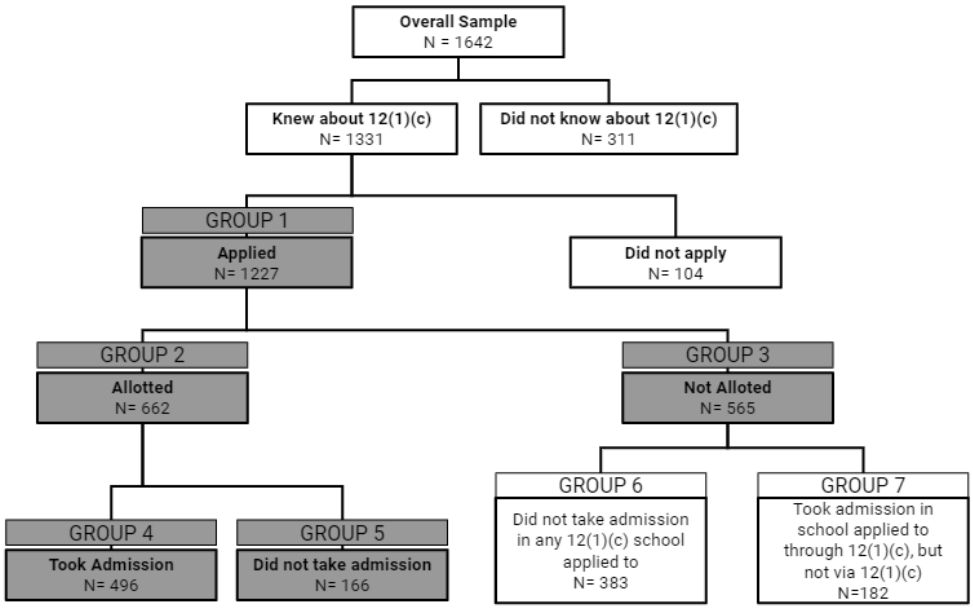
Table 1: Stages of 12(1)(C)

Stages of process	(1) % Of preceding group	(2) % Of Overall Sample
Knowledge of 12(1)c	81.06 (1331 of 1642)	81.06 (1331 of 1642)
Applied of those with knowledge	92.19 (1227 of 1331)	74.73 (1227 of 1642)
Allotted of those applying	53.95 (662 of 1227)	40.32 (662 of 1642)
Admitted of those allotted	74.92 (496 of 662)	30.21 (496 of 1642)

Note: Number of observations given in parentheses.

Based on these stages of application and admission process, the households in the sample can be categorized in various groups as shown in Figure 2.

Figure 2: Categorization of households into groups



Note: The category of households used in our analysis have been highlighted

Background characteristics of these groups are shown in Table A4 in the annexure. It shows that households applying to schools through 12(1)(c) (Group 1) were relatively more advantaged in terms of condition of the house (*pucca*[xiv] walls, flush toilets), parental education levels, mother tongue being Gujarati and mother's mobile phone ownership compared to those who did not apply[xv]. Similar differences are also evident in comparisons between those who were allotted (group 2) and those who were not (Group 3), when the sample is restricted to only those who applied. On the other hand, no significant differences are observed between those who accept the allotment (Group 4) and those who reject the allotment (Group 5). Interestingly, there are no

gender differences either at application stage or at the stage of acceptance (or rejection) of the allotments, the decisions which are controlled by the households.

Table 2 which shows the status of school attendance 15-18 months after the (possible) allotments suggests that of the overall sample, 29.2% were studying in private schools through the mandate, 25.3% were enrolled in government schools, and 43.8% were enrolled in private schools without the mandate. Among those who received an allotment to a school under the mandate (662), 72.4% are in private schools through it. Of those who took admission (496), 96.6% continue to study in the school that they received admission in through the mandate while the rest (3.43% or 17 students) have moved out from that school. 12 have moved to other private schools (2.4%), while four have moved to government school and one has dropped out of schooling system. Of those who did not receive the allotment (565), 60% are in private schools while 38% are in government schools, while 1.95% have dropped out of schooling system[xvi]. Of the 166 children who rejected the allotment and did not take admission through the mandate, 21.1% are in government schools, 77.11% are in private schools, and 3 have dropped out of schooling system.

Table 2: Status of School Attendance on the Date of Survey across Different Categories

Enrollment status (%)					
Group	Dropped out	Government school	Private school (without 12(1)(c))	Private school (through 12(1)(c))	N
Applied through 12(1)(c) (Group 1)	1.22	20.7	39.04	39.04	1227
Received allotment (Group 2)	0.6	5.89	21.15	72.36	662
Took admission as per the allotment (Group 4)	0.2	0.81	2.42	96.57	496
Did not receive the allotment (Group 3)	1.95	38.05	60	0	565
Did not take admission/ rejected allotment (Group 5)	1.81	21.08	77.11	0	166
Overall	1.77	25.27	43.79	29.17	1642

4. Empirical Strategy

We are interested in understanding if the RTE mandate, whose design potentially reduces socio-economic constraints for disadvantaged parents, substantively changes the nature of schools their children attend. Our empirical strategy tries to identify the impact of the mandate from other factors that might be correlated with the decision to apply under the mandate, receive an allotment and the final choice of school. To account for unobserved differences between households that are time invariant (household fixed effects), we do inter-sibling comparisons i.e.

compare the differences in schools chosen by parents for their elder children (not eligible under the mandate) and the school allotted to the eligible child. Further, to account for unobserved changes in the schooling environment and parental preferences over time that also impinge on school choice, we compare these differences between households who were allotted a school under the mandate and those who were not.

Our double-difference estimator (α_3) is estimated using the following specification:

$$\text{Prob}\,(Y_{ih} = 1) = \alpha_0 + \alpha_1 * [12(1)(c)Household_h] + \alpha_2 * [Sampled\ Child_{ih}] + \alpha_3 * [12(1)(c)Household_h * Sampled\ Child_{ih}] + \beta * X_{ih} + \theta_h + \mu_i \quad (1)$$

where Y_{ih} refers to characteristic of school accessed (allotted or attended) by child *i* in household *h* (in particular whether the school is English medium, within walking distance or not, whether the school management is government or private). $12(1)(c)Household_h$ takes value of 1 if household *h* is allotted a school under the RTE Mandate, and 0 otherwise while $Sampled\ Child_{ih}$ takes value of 1 if admission is sought under the RTE mandate for child, and 0 otherwise. In this specification, α_1 captures difference between characteristics of schools currently attended by siblings of children who were allotted a school and who were not, thus controlling for differences between Group 2 and Group 3 households. α_2 captures the difference between schools currently attended by children who had applied but were not allotted schools and their siblings (i.e. sibling differences within households in Group 3), thereby controlling for changes over time in school preferences and characteristics. α_3, the coefficient on the interaction term, is the difference-in-difference estimate capturing changes in school characteristics between the children who

received allotment and their siblings (i.e. between siblings, within Group 2) relative to children who did not receive allotment and their siblings (i.e. between siblings, within Group 3). We also control for age and gender of the child. All household level observable and unobservable characteristics are automatically controlled for since we are comparing children from the same household, as indicated by household fixed effect, θ_h.

As mentioned, allotments were decided by the administration. The households may or may not accept these allotments. Hence, we carry out similar analysis for children in Group 4 (those who *accept* the allotment, and their siblings) and Group 3 (those who don't receive the allotment and their siblings) as well to assess household choices once they have received the allotment.

While, the double-difference estimates account for time invariant factors that differentiate households and common time trends, they can be biased if households in the comparison groups vary in their response to the opportunities provided by the mandate or if school preferences change differentially over time for households.

To account for the possibility of such biases, we also estimate the impact of the mandate by comparing schools that households applied to with the school they finally attended. We do this only for those who were not allotted schools (Group 3): whose expressed preference under the mandate was conveyed to us, but could not receive the mandate benefit s. If the mandate is expanding the choice set of schools, then we would expect that characteristics of school they desired admitting their children to (under the mandate) be *qualitatively different* (*more 'desirable'*) compared to the schools that they finally attend.

5. Findings

We start with intra-household comparisons in Table 3. Panel A restricts the sample to the Group 2 households while panel B restricts the sample to those not allotted schools (Group 3 households). The columns indicate various characteristics of schools, obtained from primary data.

Row (*a*) in Panel A indicates that 14.24% of the sampled children in Group 2 were allotted English medium schools. Restricting the sample to only those children who have siblings in the relevant age group, the number of observations drop from 618 to 280, while the percent of children attending English medium schools drop to 12.14% (row *b*). The fraction of their siblings attending English medium schools is 6.79% (row *c*). Thus, difference in fraction of children attending English medium schools through the mandate and children in the elder cohort is 7.45%. Restricting the sample to households with siblings in the relevant age-range yields the difference of 5.35% (row *e*). Similarly, we see that 59.22% of the sampled children in Group 2 were allotted schools which are within 15 minutes of walking distance, while the fraction of their siblings attending a school within 15 minutes of walking distance is 76.79%. Further, none of the schools allotted through the mandate are government schools (by law), while 20.7% of the siblings attend government schools. Corresponding results for Group 3 households are in Panel B.

Table 3: Differences in characteristics of schools between sampled children and their siblings– Group 2 and Group 3

Row	Sample description	% English as medium of instruction	% Within 15 minutes walking Distance	% attending government schools
	PANEL A (Group 2 households)			
A	Schools allotted through 12(1)(c)	14.24	59.22	0
	N	618	618	662
B	Schools allotted through 12(1)(c)	12.14	61.07	0
	(Restricted to those where relevant sibling data available)			
	N	280	280	302
C	Schools currently attended by siblings	6.79	76.79	21.85
	N	280	280	302
D	(a) - (c)	**7.45****	**-17.57*****	**-21.85*****
E	(b)-(c)	**5.35***	**-15.72****	**-21.85*****
	PANEL B (Group 3 households)			

F	School currently attend by household not allotted a school through 12(1)(c)	10.8	72.86	38.05
	N	565	560	565
G	School currently attend by household not allotted a school through 12(1)(c)	6.93	73.72	46.35
	(Restricted to those where sibling data available)			
	N	274	274	274
H	Schools currently attended by siblings	5.84	72.26	48.91
	N	274	274	274
I	(f)-(h)	**4.96****	**0.6**	**-10.86****
J	(g)-(h)	**1.09**	**1.46**	**-2.56***

Note: This table compares characteristics of schools of sampled children from Groups 2 and 3 (from the household categorization above), to schools being attended by their respective siblings (within a restricted age group). Panel A compares schools allotted to the sampled children in Group 2 to the schools currently attended by their siblings. Panel B compared schools currently attended by sampled children in Group 3 (who were not allotted any school through 12(1)(c)) to the schools attended by their siblings. Significance levels have been calculated using t-tests; *At 10% level of significance. **At 5% level of significance. ***At 1% level of significance.

Table 4: School characteristics of the sampled child and their sibling across in Group 2 and Group 3- Difference-in-Difference estimation

	% English as medium of instruction	% Within 15 minutes walking Distance	Child attending government school
12(1)(c) Household * Sampled Child			
Coefficient	0.0425**	-0.172***	-0.195***
Standard Error	(0.0209)	(0.0368)	(0.0336)
N	1108	1108	1152

Note: We use a difference-in-difference specification to test relative differences between characteristics of schools being allotted by the sampled child and their sibling (next eldest sibling under 13 years of age) in households in Group 2 compared to those in Group 3. All household-level observable and unobservable characteristics are controlled for through Household fixed effects, and child-level controls of age and gender have been included. Coefficients represent (interaction term) from the specification given in the "Empirical Strategy" section. See Table A6 in Annexure for complete results (including coefficients of other covariates). Statistical significance is given using t-test. *At 10% level of significance. **At 5% level of significance. ***At 1% level of significance.

Table 4 shows the results from double-difference estimation and confirms the trends visible in Table 3[xvii]. Table 5 shows results for sampled children and their siblings in Group 4 and Group 3. Again, trends are qualitatively similar.

Overall, the double-difference estimates suggest that the mandate does lead to a significant shift toward private schools and that a large part of this shift is away from government schools (and

not just from other private schools). Further, the opportunity provided by the mandate leads to parents choosing schools that are further away from their homes and toward English-medium schools.

Table 5: School characteristics of the sampled child and their sibling across in Group 4 and Group 3-Difference-in-Difference estimation

	% English as medium of instruction	% Within 15 minutes walking Distance	Child attending government school
(a) Attending 12(1)(c) * Sampled Child (school management not controlled)			
Coefficient	0.042**	-0.103***	-0.185***
Standard Error	(0.021)	(0.035)	(0.036)
N	998	998	998

Note: We use a difference-in-difference specification to test relative differences between characteristics of schools being attended by our sampled child and their sibling (next eldest sibling under 13 years of age) in households in Group 4 compared to those in Group 3. All household-level observable and unobservable characteristics are controlled for through Household fixed effects, and child-level controls of age and gender have been included. Coefficients represent (interaction term) from the specification given in the "Empirical Strategy" section. See Table A7 in Annexure for complete results (including coefficients of other covariates). *At 10% level of significance. **At 5% level of significance. ***At 1% level of significance.

In Table 6, we compare characteristics of schools currently attended by the sampled children, who did not receive an allotment through the mandate, with those they had applied through the mandate. Panel A shows the results for all the Group 3 households, while Panel B restricts the sample only to those currently attending private schools.

Results in Panel A indicate that these children applied to schools that are less likely to be within 15 minutes of walking distance, more likely to have English as a medium of instruction, and have monthly tuition fees which are higher by Rs. 210 on average (almost twice that of the schools that they are currently attending)[xviii]. The results are qualitatively similar but smaller in magnitude when we restrict the sample to those children who are currently attending private schools (Panel B). The schools applied to are more likely to be English medium but the difference has declined by one percentage point, and the difference is no longer statistically significant. The probability of schools applied being more than 15 minutes of walking distance remains larger and significant, while the fee differential drops from Rs.210 to Rs.116.5 remaining statistically significant. It is still significantly higher than the fees of the schools they are currently attending by 33.5%, a substantial increase from a household's point of view[xix].

Table 6: Comparison of current schools with those applied to under mandate (Group 3 households: Not allotted schools under mandate)

	% English as medium of instruction	% Outside 15 minutes walking Distance	Average monthly tuition fee in Rs.
Panel A (Children currently attending either government or private schools)			
(a) School attended by 12(1)(c) applicants not allotted a school	10.8	27.14	223.12
N	*565*	*560*	*475*
(b) School applied to by the same household (at least one school that has/is)	14.36	50.74	432.93
N	*411*	*408*	*303*
(a)-(b)	-3.56*	-23.6***	-209.81***
Panel B (Children currently attending private schools)			
(a) School attended by 12(1)(c) applicants not allotted a school	17.4	31.64	347.82
N	*339*	*335*	*293*
(b) School applied to by the same household (at least one school that has/is)	19.92	51.97	464.28
N	*256*	*254*	*219*
(a)-(b)	-2.52	-20.33***	-116.46***

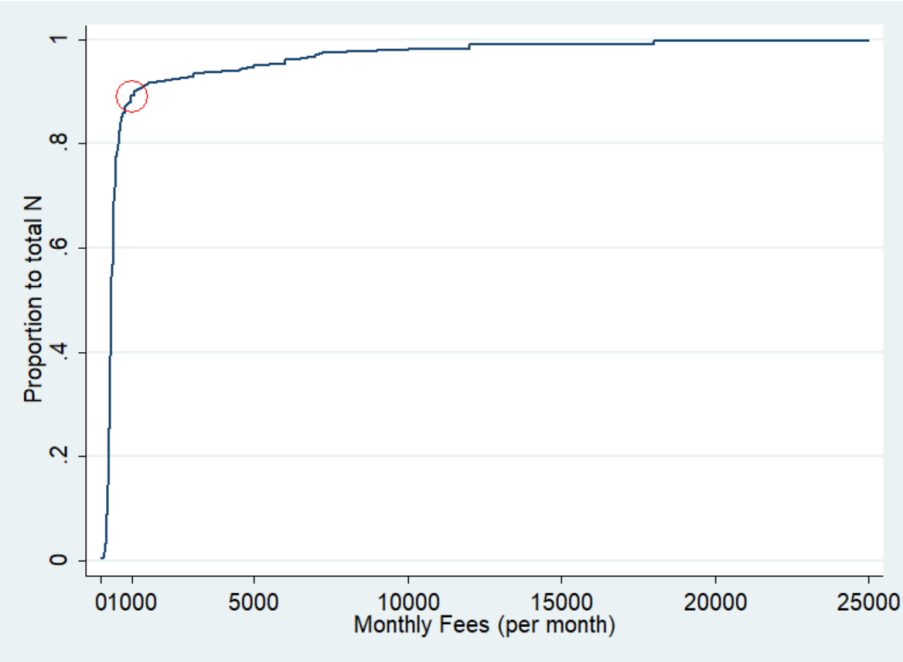
Note: The sample for row (a) and (b) is restricted to the 565 households who had applied to 12(1)(c) in the 2015 application cycle, but were not allotted any school through the provision. Where households reported multiple schools they had applied to, average fee was calculated. Note that the fees reported for schools that they applied can be interpreted as the fees one would have to pay to access the school in the absence of 12(1)(c). For analyzing average monthly tuition fee (row (a)), the sample is restricted to only those children who are currently attending private schools. *At 10% Level of significance. **At 5% level of significance. ***At 1% level of significance.

6. Discussion

Exclusion of 'elite' schools

Does the mandate enable the disadvantaged households to access 'elite' schools? One way to define 'elite' schools could be the schools that charge fees which at least equal to or higher than what the State spends on students in its own schools. Gujarat government spends close to Rs.17000 per annum per student in government schools[xx]. Thus, the households in our sample are applying to private schools whose fee-levels are on average, 67% less than per child expenditure in government schools. Even when we focus on school with the highest fees among the ones applied through the mandate, we find that only 12.2% of the households that applied through the mandate, applied to a school which charges at least Rs.1000 per month as tuition fee (Figure 3). Thus, even though the mandate is expanding choice-set of schools, the expanded choice-set doesn't include schools which charge relatively higher fees (at least what the state spends or more than that).

Figure 3. Distribution of highest school fees (Rupees/month)



The exclusion of relatively 'elite' schools in the choice sets of disadvantaged households is not unique to this policy. Enrollment of children in relatively elite schools has been found to be low in voucher programs across 'developed' and 'under-developed' countries (Angrist et al. 2002; Epple et al. 2017; Murnane et al. 2017). Some of the reasons include lower participation of elite schools in such programs, inability of applicants to pay additional fees (that exceed the voucher amount), and schools seeing students from low income households as undesirable. In the context of the mandate in India, the private schools don't have the freedom to opt out, and can't refuse admission once the allotments are made. Further, many private schools are reported to be unsatisfied with the per student reimbursement amounts decided by the respective state

governments since their fees are much higher than what the state spends, and there are substantial delays in receiving those reimbursements[xxi,xxii]. The schools also resort to charging substantially high non-tuition fees (towards books, uniform, stationery and extra-curricular activities) to the applicant which has made it unaffordable for disadvantaged households despite a tuition fee waiver [xxiii]. Our field experiences corroborate these findings. Further, parents may be apprehensive of applying to such schools due instances of discrimination reported in the press[xxiv].

Strengthening the potential of such mandates

Strengthening efforts to provide information and support to eligible households is a necessity for such a mandate, even if that may not sufficient. Simplification of the application procedure and more specifically, ensuring that disadvantaged households are able to procure eligibility documents should be dealt with priority. A number of states including Gujarat, have now initiated online application and computerized lotteries that appear to make the process more predictable and transparent. But they also potentially increase the transaction costs for disadvantaged households. Hence, efforts to streamline administrative processes should keep in mind what impact it would have on access to the mandate itself (Sarin et al., 2017). Currently, parents have no information (other than distance to school) about the schools on the online application portal. A beginning could be made by making information which the government already has, available and visible in the application portal. Going forward, the government can include information about learning outcomes, which has proven to positively influence choices

of disadvantaged households (Hastings and Weinstein 2008; Afridi, Barooah, and Somanathan 2017; Andrabi, Das, and Khwaja 2017).

7. Conclusion

The "25% mandate" of the Right to Education (RTE) has potential to bridge the socio-economic inequalities in access to quality private schools, and make classrooms more diverse and inclusive. This study, based on data from more than 1500 potentially eligible households in one of the largest cities in India, and located as part of a larger intervention to provide information to these households finds that the mandate does expand the choice set of schools that a disadvantaged household can access. Our double-difference estimation combined with comparison of schools applied to under the mandate and schools actually attended by the children whose application was rejected informs us that the schools accessed through the mandate are more likely to be English medium, beyond 15 minutes of walking distance, and charge higher tuition. The effects are larger for those whose fallback option is government schools. On the flipside, we find that despite the provision, the households aren't applying to 'elite' schools i.e. schools that charge relatively higher tuition. Further, even within this sample of disadvantaged households, relatively more advantaged households are more likely to apply and receive allotments through the mandate. Thus, the results speak to the transformative potential of such mandates in environments with poor track records of policy implementation and the challenges in strengthening them.

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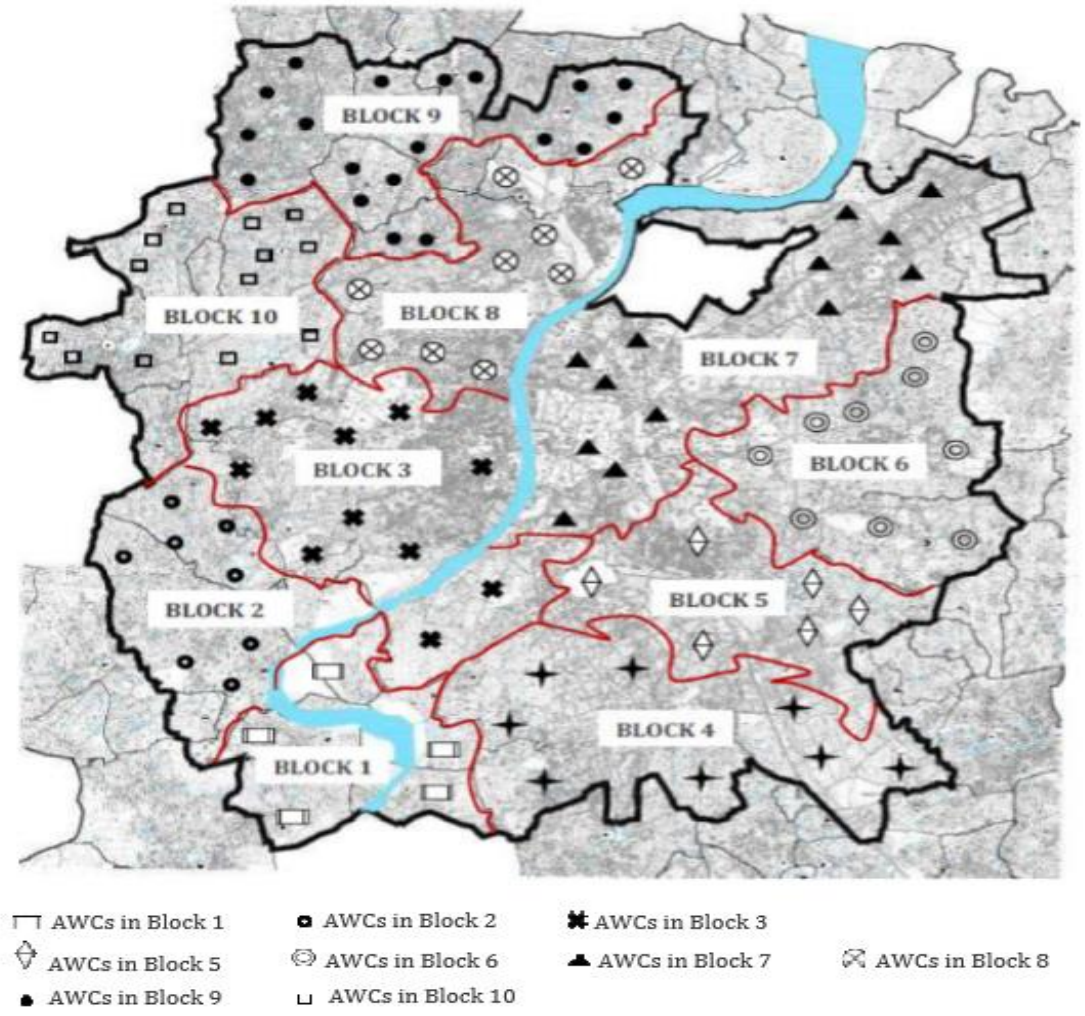
Annexure

Figures

Figure A1: Distribution of sampled AWCs across blocks in the city



Note: Map is indicative of urban district of Ahmedabad in Gujarat. In 2015, the city was divided into ten blocks by the district administration for the purposes of implementation of ICDS. The data collection was stratified with respect to block population from which a total of 215 *Anganwadis* were sampled.

Tables

Table A1: Comparison of 25% mandate of RTE in India to some other school choice programs in middle and low-income countries

	Chile (Vouchers)	**Uganda (PPP)**	**Pakistan (Vouchers in Lahore)**	**Pakistan (PPP)**	**Colombia (Vouchers)**	**India (Vouchers in Andhra Pradesh)**	**India (National mandate under Right to Education)**
Age criteria/ point of entry	Primary and secondary	Secondary For those who have finished primary; No age criteria	Primary/ Upper Primary No age criteria	Primary *and* *Secondary*	Upper Primary/Secondary Children entering grade 6 Below 16 years of age	Primary Those who had finished kindergarten or grade 1 were eligible	Primary Entry level (either pre-primary or grade 1) Eligible age range is defined by the state
Continuity	No conditions, valid till the highest grade	No conditions, valid till the highest grade	All children of the household between 5-13 must be admitted in some school	No conditions, valid till secondary school	Valid the highest grade Based on Satisfactory performance/ Promotion to the next grade	Till Grade 5 No detention policy in primary school meant students cannot be failed	Till Grade 8 No detention policy in primary school meant students cannot be failed

Targeting	Universal After 2008, households belonging to bottom 40% economically receive 50% greater voucher amounts	Students receiving lower than the average passing grade in their Primary Leaving Examination (PLE)	5 areas selected (which were slums catering to low income families)	8 poorest-ranked districts selected based on out-of-school population, gender disparity and distance to school	Low income families Vouchers awarded through lottery when demand exceeded supply	Households from 180 selected villages whose children were in public schools were eligible to apply for the vouchers and households from 90 villages were allocated vouchers through lottery These villages were in 5 districts which had at least one private school	Social and Economic Disadvantage as defined by the state
Any neighborhood criteria	No	No	Yes Schools eligible to participate had to be within 0.5km radius of targeted area	No	No	No	Yes School chosen by the household should be within distance criteria set by the state
Coverage of Private schools	Voluntary participation	Voluntary participation	Voluntary participation	Voluntary participation	Voluntary participation	Voluntary participation	Compulsory for all private unaided schools

Private schools free to 'choose' students	Yes* If schools participated in the Preferential School Subsidy Law (SEP) program they were not allowed to select or expel students on academic grounds	Yes	Yes	Yes	Yes	No	No
Admission in oversubscribed schools	-	-	-	-	-	Lottery	Lottery
Fee inclusions for the student	School Tuition (up to voucher amount) Any additional fees charged by schools	School Tuition and all other "non-boarding fees"	School Tuition and other fees (up to voucher amount)	School Tuition + free school, free textbooks, learning materials, stationery and school bags	School Tuition (up to voucher amount)	School tuition (in full) + cost of textbooks and notebooks, uniforms, stationary and shoes	School Tuition (in full) Other expenses at the prerogative of the state. E.g.- Government of Gujarat

	covered those under SEP program						promises an annual transfer of Rs.3000 towards uniform
Funded by	National/Central Government	National/Central Government	Punjab Education Foundation and Open Society Institute	State/Provincial Government	National/ Central Government and participating Muncipalities	Azim Premji Foundation, World Bank and Government of Andhra Pradesh	State/ Provincial Governments (mandated by National/Central government)
Per child reimbursement to schools	Voucher amount + bonuses given to schools under SEP admitting disadvantaged students	Fixed amount	Up to voucher amount	Fixed amounts A higher gender differentiated subsidy given for female enrollments School leadership and teacher trainings, and teaching materials also provided	Up to voucher amount	All fees incurred by the school covered for the student and paid by the foundation	Tuition fees of school or per student expenditure incurred by the state in government primary schools whichever is lower Some states (like Gujarat) were giving fixed/flat reimbursements

Year initiated	1981 Substantial changes made in 2008	2007	2006	2007	1991	2008	2010
References	(Murnane et al. 2017; Hsieh and Urquiola 2006)	(Barrera-Osorio et al. 2016)	(Salman 2010)	(Barrera-Osorio et al. 2017)	(Angrist et al. 2002)	Muralidharan and Sundararaman (2015)	Sarin et al. (2015), Sarin, Dongre and Wad (2017)

Table A2: 12(1)(c) Eligibility Criteria for 2015-16 Application process in Gujarat

Age (of the child)	Completed 5 years and not 6 years (as on June 1st) for schools affiliated to state curriculum board (Gujarat State Board); Completed 6 years and not 7 years for schools affiliated to central curriculum boards (Central Board for Secondary Education)
Household Income	Up to Rs. 68,000 (approx. 1000$) for 'General' category; Up to Rs. 1,00,000 (approx. 1500$) for 'Other Backward Classes' category; and Rs. 2,00,000 (approx. 3000$) for 'Scheduled Caste' and 'Scheduled Tribe' categories. (Any household with ' Below Poverty Line' cards issued by the government are eligible and need not show proof of income)
Documents required	*Proof of identity* (of parent/ guardian): Voter ID card, Ration Card, any other government issued ID card *Proof of income*: Income certificate issued by the district authority or 'Below Poverty Line' (BPL) card *Proof of social disadvantage* (if applicable): Caste Certificate issued by the district authority as per state rules *Proof of Address*: Electricity bill or Rental Agreement *Proof of Date Of Birth of the child*: Birth Certificate
Application time-lines (admission for academic year 2015-16)	Advertisement announced: Mid-February 2015 Application period: Mid-February to Mid-March, 2015 Allotment announced: Mid-May, 2015 Admission: Early to mid-June, 2015 Commencement of school: End of June, 2015

Eligible Schools	Up to 5 (non-minority[1] & unaided[2]) private schools within 3 kilometers radius of the household

Note: [1]Indian constitution identifies minority groups on the basis of language and religion. The RTE Act doesn't apply to schools which are run by minority institutions. The exact definition of 'minority' institution varies from state to state. The issue has come under spot-light since passing of RTE act since anecdotal reports suggests that some institutions are attempting to declare themselves to be a minority institution so to escape section 12(1)(c).

[2]A private school in Gujarat (and in some other Indian states) can be either aided or unaided. Aided schools, as the name suggests, receives aid from the government, typically in the form of salary for teachers. Unaided schools don't receive any aid from government.

Table A3: Sample Distribution across administrative blocks in two rounds

BLOCKS	2015 February (%)	2016 September to December (%)
B1	8.67%	7.49%
B2	25.25%	25.33%
B3	5.28%	4.75%
B4	9.68%	9.38%
B5	3.85%	3.90%
B6	4.49%	4.87%
B7	8.53%	8.22%
B8	4.03%	4.38%
B9	8.80%	8.16%
B10	21.41%	23.51%
N	*2158*	*1642*

Table A4: Comparing socioeconomic characteristics of households in our sample to NFHS (2016) and National Sample Survey (2015)

	NSS (2015)		**2016 primary study**
	Gujarat (Urban)	Ahmedabad (Urban)	Ahmedabad (Urban)
Caste/ Religion			
Forward Castes or Brahmin (Hindu) / 'Others' (Hindu)	41.7	40.56	8.89
ST (Hindu)	5.93	2.57	6.76
OBC (Hindu)	26.79	20.61	36.18
SC (Hindu)	9.4	22.37	32.22
Muslim	11.23	5.93	12.67
Christian/Other religions	4.95	7.96	3.29
Monthly Income per capita/ Monthly Expenditure per capita (mean in Rs.)	2846.49	2806.42	1925.77
N	*1431*	*240*	*1642*[1]

Education expenditure (primary level)		
Students in government schools	202.77	198.82
Students in private schools	1161.43	831.9*

* includes those who are enrolled in private schools without 12(1)(c).

Table A5: Comparing socioeconomic characteristics of households, conditional on 12(1)(c) application and allotment status

	(1) Overall	(2a) Not Applied	(2b) Applied	(2b)-(2a)	(3a) Not Allotted	(3b) Allotted	(3b)-(3a)	(4a) Not Admitted	(4b) Admitted	(4b)-(4a)
(%)										
Gender of child is Male	51.52	50.84	51.75	0.91	50.84	53.02	2.18	53.01	53.02	0.01
Mother Tongue- Gujarati	77.1	71.57	78.97	7.4***	72.74	84.29	11.55***	83.73	84.48	0.75
Household Size	5.79	5.83	5.77	-0.06	5.75	5.79	0.04	5.72	5.82	0.1
Caste/Religion										
General	8.89	8.92	8.88	-0.04	9.73	8.16	-1.57	7.83	8.27	0.44
ST	6.76	8.67	6.11	-2.56	4.42	7.55	3.13**	5.42	8.27	2.85
OBC	32.22	33.73	31.7	-2.03	34.34	29.46	-4.88	30.12	29.23	-0.89
SC	36.18	26.99	39.28	12.29	32.92	44.71	11.79***	46.99	43.95	-3.04
Muslim	12.67	16.39	11.41	-4.98	14.51	8.76	-5.75	8.43	8.87	0.44
Christian/ Others	3.29	5.3	2.61	-2.69*	4.07	1.36	-2.71**	1.2	1.41	0.21
Mean age of child (in	6.76	6.8	6.75	-0.05	6.84	6.67	-0.17***	6.7		

completed years)									6.66	-0.04
Household has flush toilet	74	70.84	75.06	4.22***	71.68	77.95	6.27***	83.73	76.01	-7.72*
Household has *pucca* wall	83.31	77.59	85.25	7.66***	82.12	87.92	5.8***	86.75	88.31	1.56
Median monthly per capita Income (in Rs.)	1666.67	1625	1700	75	1666.67	1750	83.33	1775	1666.67	-108.33
Mean income per capita (in Rs.)	1925.77	1843.31	1953.48	110.17	1942.88	1962.52	19.64	2080.77	1922.78	-157.99
N	*1642*	*415*	*1227*		*565*	*662*		*166*	*496*	

Table A5 (contd.): Comparing socioeconomic characteristics of households within our sample across Groups used for categorization of households

	(1) Overall	(2a) Not Applied	(2b) Applied	(2b)-(2a)	(3a) Not Allotted	(3b) Allotted	(3b)-(3a)	(4a) Not Admitted	(4b) Admitted	(4b)-(4a)
(%)										
Mother owns a Mobile phone	49.57	43.83	51.52	7.69***	46.18	56.08	9.9***	57.83	55.49	-2.34
Mother's Education Level (%)										
None	17.3	22.52	15.54	-6.98	19.5	12.14	-7.36	12.05	12.17	0.12
5th or below	16.69	20.82	15.29	-5.53	18.62	12.44	-6.18	12.05	12.58	0.53
6th to 10th	54.46	49.15	56.26	7.11***	49.29	62.22	12.93***	62.65	62.07	-0.58
Above 10th	11.55	7.51	12.92	5.41***	12.59	13.2	0.61	13.25	13.18	-0.07
Sample Size	*1636*	*413*	*1223*		*564*	*659*	95	*166*	*493*	327
Father's Education Level (%)										
None	7.46	10.19	6.54	-3.65	8.01	5.3	-2.71	3.61	5.86	2.25

5^{th} or below	12.05	16.26	10.63	-5.63	13.88	7.87	-6.01	9.04	7.47	-1.57
6^{th} to 10^{th}	61.9	57.52	63.37	5.85**	60.85	65.51	4.66*	66.87	65.05	-1.82
Above 10^{th}	18.59	16.02	19.46	3.44**	17.26	21.33	4.07**	20.48	21.62	1.14
N	*1635*	*412*	*1223*		*562*	*661*		*166*	*495*	

Note: This table compares characteristics across those who applied and did not apply (column 2), received allotment and did not receive allotment (column 3) and secured admission and did not secure admission (column 4) under the 12(1)(c) mandate. The first column shows the characteristics of the entire sample. Significance levels have been calculated using a linear probability model or OLS (whichever is applicable) which includes block dummies. Standard errors have been clustered at the *anganwadi* level. *At 10% Level of significance. **At 5% level of significance. ***At 1% level of significance.

Table A6. School characteristics of the sampled child and their sibling across in Group 2 and Group 3: Difference-in-Difference estimation

	% English as medium of instruction	% Within 15 minutes walking Distance	Child attending government school
Ref: Sibling			
Sample Child	0.00699	-0.0267	-0.0188
	(0.0271)	(0.0477)	(0.0440)
Allotted 12(1)(c) school X Sampled Child	0.0425**	-0.172***	-0.195***
	(0.0209)	(0.0368)	(0.0336)
Child's age	-0.00134	-0.0135	0.00140
	(0.00796)	(0.0140)	(0.0128)
Child is male	-0.00138	-0.0284	0.0268
	(0.0152)	(0.0267)	(0.0245)
Constant	0.0769	0.892***	0.318**
	(0.0777)	(0.137)	(0.125)
N	1108	1108	1152

Note: The table contains complete results for row (a) in Table 4 based on specification (1) given in the "Empirical Strategy" section. We use a difference-in-difference specification to test relative differences between characteristics of schools being allotted/ attended by the sampled child and their sibling (next eldest sibling under 13 years of age) in households in Group 2 compared to those in Group 3. All household-level observable and unobservable characteristics are controlled for, and child-level controls of age and gender have been included. *At 10% level of significance. **At 5% level of significance. ***At 1% level of significance.

Table A7: School characteristics of the sampled child and their sibling across in Group 4 and Group 3: Difference-in-Difference estimation

	% English as medium of instruction	% Within 15 minutes walking Distance	Child attending government school
Ref: Sibling			
Sample Child	0.0233	-0.0382	-0.00799
	(0.0267)	(0.0446)	(0.0459)
Attending 12(1)(c) X Sampled Child	0.0424**	-0.103***	-0.185***
	(0.0208)	(0.0348)	(0.0358)
Child's age	0.00411	-0.0172	0.00530
	(0.00797)	(0.0133)	(0.0137)
Child is male	0.00619	-0.0374	0.0239
	(0.0150)	(0.0251)	(0.0258)
Constant	0.0228	0.938***	0.297**
	(0.0778)	(0.130)	(0.134)
N	998	998	998

Note: The table contains complete results for row (a) in Table 5 based on specification (1) given in the "Empirical Strategy" section. We use a difference-in-difference specification to test relative differences between characteristics of schools being attended by the sampled child and their sibling (next eldest sibling under 13 years of age) in households in Group 4 compared to those in Group 3. All household-level observable and unobservable characteristics are controlled for, and child-level controls of

age and gender have been included. *At 10% level of significance. **At 5% level of significance. ***At 1% level of significance.

Table A8: Characteristics of current schools of sampled children not allotted a 12(1)(c) school, and schools they applied to through 12(1)(c) (Households in Group 3) (*Paired comparison*)

	% English as medium of instruction	% **Outside** 15 minutes walking Distance	Average monthly tuition fee in Rs.
Panel A (Children currently attending either government or private school)			
(a) School attended by 12(1)(c) applicants not allotted a school	11.19	29.8	296.95
(b) School applied to by the same household (at least one school that has/is)	14.36	50.49	442.91
N	*411*	*406*	*247*
(a)-(b)	-3.17**	-20.69***	-145.96***
Panel B (Children currently attending private school)			
(a) School attended by 12(1)(c) applicants not allotted a school	17.19	32.54	387.36
(b) School applied to by the same household (at least one school that has/is)	19.92	51.59	467.38
N	*256*	*252*	*185*
(a)-(b)	-2.73	-19.05***	-80.02

Endnotes

[i] Table A1 in the annexure compares the mandate with similar school choice initiatives recently studied in middle and low income countries- voucher programs in Colombia, Pakistan, and India, and Public-Private Partnership (PPP) models in Uganda and Pakistan.

[ii] Stated choices might suffer from social desirability bias, and hence may not elicit true preferences. See Schneider & Buckley (2002), Burgess et al. (2009) and Haris & Larsen (2015) for more details.

[iii] Similar to other social programs, there is tremendous variation in implementation of 12(1)(c) across states in India. For details on implementation and various issues involved, see Sarin et al. (2017)

[iv] A 'Below Poverty Line' (BPL) card is issued to a household if the household is classified to be so as per the specific criterion decided in advance. Periodic census is carried out to identify such households. The latest such census, known as Socio Economics Caste Census (SECC) was carried out in 2012.

[v] 'OBC', 'SC', and 'ST' categories are the legal and administrative terms indicating position of various groups in the traditional caste system around which social relations were organized. According to Deshpande (2013), "The caste system in India consists of mutually exclusive, endogamous, and hereditary groups, traditionally organized around rules related to commensality and ritual purity, which in turn were linked to the occupations that the specific castes were pursuing". The 'general' category includes households who belong to 'upper' castes, i.e. the groups who have been at the top of caste system- Brahmin (the priest class), Kshatriya (rulers and warriors), and the Vaishya (merchants, businessman) castes. This group is followed by 'Other Backward Classes' which includes a large number of castes which traditionally performed menial jobs. The 'Scheduled Castes' were at the bottom of this social hierarchy and were regarded as 'untouchables'. The 'Scheduled Tribes' mainly consist of indigenous tribal people who were outside of development process for a long time, and were exploited during colonial rule.

[vi] Several non-government organizations as well as volunteers were also involved in helping households in this process.

[vii] Further details of the 12(1)(c) application and admission procedure for academic year 2015-16, and more recent changes can be found in Sarin et al. (2017)

[viii] *Anganwadi Centers* were established to provide health and education services under the Integrated Child Development Services (ICDS) scheme of the Government of India. The services provided for women and children

include supplementary nutrition, immunization, health check-ups, nutrition and health education, non-formal pre-school education etc.

[ix] Details can be found in Milap and Sarin (2016).

[x] We could not track 516 households (23.91%) mainly due to households shifting their residences or migrating outside city. The tracked sample (76.09%) was well distributed across all the surveyed blocks (table A3 in the annexure).

[xi] We had also asked about the fees of schools attended by the sibling. But errors in data collection prevented it from being used in the analysis.

[xii] The high percentage of households within our sample having knowledge of 12(1)(c) is probably a result of the information campaigns. Awareness otherwise would have been very low (Milap and Sarin (2016)).

[xiii] Reasons for not being allotted a school could include 1) rejection of applications due to incomplete forms or ineligibility, 2) households not being informed of allotment results, and 3) due to oversubscription of applied schools (in which case seats were supposed to be allotted through a lottery system).

[xiv] 'Pucca' houses are where walls, roof and floors are made from materials such as cement, brick, stone, concrete, etc. They are relatively permanent structures; this is distinct from 'kutcha' homes that might be temporary, and/ or made from mud, leaves or other low-quality materials.

[xv] Muralidharan and Sundararaman (2015) too find more advantaged households applying for a school voucher program in Andhra Pradesh.

[xvi] Damera (2017) finds that 94% of those who did not receive the allotment ended up in private schools.

[xvii] We also run a triple difference specification to assess if there impacts differ according to the gender. Contrary to Damera (2017), we do not find any significant difference in impacts between male and female children.

[xviii] The results remain qualitatively unchanged when median is used instead of mean. Median monthly tuition for schools currently attended is Rs.200 per month, while median monthly tuition for schools applied is Rs.350 per month. Thus, difference between rows (a) and (b) drops from Rs.209 to Rs.150 when median is used.

[xix] Table A8 in the annexure shows results for pair-wise comparisons.

[xx] See Dongre and Kapur (2016) for per student spending by Gujarat government.

[xxi] "Private schools miffed with govt's RTE reimbursement amount", *The Times of India*, 2nd January 2018

Available at: https://timesofindia.indiatimes.com/city/pune/private-schools-miffed-with-govts-rte-reimbursement-amount-offer/articleshow/62330234.cms; last accessed on: 14th October, 2018

[xxii] "Mumbai: 60 private schools refuse admission under RTE, get notice", *The Indian Express*, 12th April, 2018

Available at: https://indianexpress.com/article/education/mumbai-60-private-schools-refuse-admission-under-rte-get-notice-5133791/l; last accessed on: 14th October 2018

[xxiii] "Schools collect fee for RTE admission", *The Hindu*, 3rd July 2017

Available at: https://www.thehindu.com/todays-paper/schools-collect-fee-for-rte-admission/article19201231.ece; last accessed on: 14th October, 2018

[xxiv] "Bengaluru: Children admitted under RTE discriminated in private school", *India Today*, 23rd June 2017

Available at: https://www.indiatoday.in/india/karnataka/story/right-to-education-children-discriminated-brigade-school-jp-nagar-984335-2017-06-23; last accessed on: 14th October ,2018