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Changes in School Completion Rate of Children in India: Examining the Right to Education Act, 2009

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ABSTRACT

Over the last few decades, countries across the globe have taken active steps to increase school enrolment and completion of children. India passed the Right of Children to Free and Compulsory Education Act, commonly known as the Right to Education or RTE Act in 2009, making elementary education free and compulsory for all children aged 6-14 years. The paper argues that although the Act was universal by design, the clauses under RTE were more likely to improve the school completion rates of children from rural low-income backgrounds, relative to children from rural high-income backgrounds. The latter group would have had the resources and finances to afford and complete education even before the passage of the RTE Act. Given this context, the paper examines: has primary and lower-secondary school completion rates of children from rural low-income families improved relative to the children from rural high-income families due to the passage of the RTE Act? This is examined using three waves of National Sample Survey Organisation's Survey of Education data, which are nationally representative and span over the decade 2007-08 to 2017-18. The analysis is done by gender, socio-religious groups, and place of residence. The results indicate that there has been a significant increase in school completion rates of children from low-income backgrounds in the post-RTE period relative to the children from high-income backgrounds, but the increase has been uneven across groups. The paper examines one of the possible pathways for school completion, by looking into the role of private unaided schools in implementing the RTE Act. Under RTE, Section 12(1)(c) mandates private unaided schools to admit children from economically weaker sections and disadvantaged backgrounds at the entry-level of school. The results show that the participation of private schools has been low and the private sector has not fulfilled its roles to a large extent. Thus, the school completion rates increased for some groups, and it did mostly through the public sector, with limited help from the private sector. The results pave way for policy recommendations.

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1. Introduction

In the last few decades, the policy focus at the global level has been towards increasing school enrolment and completion rates, and on reducing gender disparity in education¹. The global impetus has resulted in a fall in the magnitude of out-of-school² children and an increase in school enrolment rates across countries. An increase in enrolment, however, has not resulted in an equal increase in school completion rates as the drop-out rate has remained high. Household survey data over the years 2013-2017 shows that globally, 85 percent of children complete primary school, 73 percent complete lower-secondary school whereas only 49 percent complete secondary school (UNESCO, 2019).

Several factors like socio-economic status of the family, gender of child, country, and sector of residence, religion, ethnicity interplay to determine who completes school and who does not. Imchen & Nden (2020) shows that globally, among individuals aged 10-19 years, 34 percent of boys and 44 percent of girls in the poorest families have never attended school or had dropped out of school before completing primary education. The differences in school completion rate by household income have been echoed in UNESCO (2020). The Global Education Monitoring Report 2020 finds that adolescents from the richest 20 percent of households in low-and-middle-income countries are three times as likely to complete lower-secondary school as those from the poorest households. Given this stark difference in school completion by socio-economic status of a family, it becomes imperative to identify the policies that have enhanced school completion rates and bridged the socio-economic gaps in different countries.

This paper investigates whether the large-scale implementation of the Right of Children to Free and Compulsory Education (RTE) Act, 2009, which made elementary education free and compulsory for all children aged 6-14 years in India, was able to bridge the socio-economic gap in school completion. The study design stems from the argument that although the Act was universal by design, the clauses in RTE were more likely to improve school completion rates of children from low-income backgrounds, relative to children from high-income backgrounds, who would have had the resources and finances to afford education even before the passage of the RTE Act. Given this background the paper asks, has the school completion rates of children from the poorest 20 percent (low-income) families in rural India increased relative to that of children in the richest 20 percent (high-income) families due to the implementation of the RTE Act? The Act specifies the roles of various stakeholders, government as well as private providers of education in ensuring and protecting children's right to education. The paper, thus, examines one of the mechanisms of implementation, namely the participation of private unaided schools, to understand and contextualize the results.

¹ The fourth Sustainable Development Goal emphasises on provision of Quality education. Within the goal, target 4.1 is to “ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes” by 2030. <https://sdg4education2030.org/the-goal>

² At the global level, 1 in 12 primary school children and 1 in 6 lower-secondary school aged adolescents are out of school (UNESCO, 2020).

The results show that the school completion rates increased for some groups, and it did mostly with limited help of private schools, that have fulfilled their roles to a limited extent.

The analysis uses three waves of nationally representative data from the National Sample Survey Organisation's (NSSO) Survey of Education, spanning the decade 2007-08 to 2017-18 to examine the causal effect of RTE on children from low-income families. Findings suggest that the primary school completion rate of rural low-income children increased by 6.3 percent due to the passage of the RTE Act. Classification by gender shows that the increase was by 4.8 percent for low-income boys, and it was 7.4 percent for rural low-income girls, relative to their respective comparison groups. A further inspection is done to check whether low-income children belonging to various sub-groups saw an increase in school completion. This becomes important in the Indian context, given its vast diversity and social structure, where certain sub-groups of children are more disadvantaged than the others. The result of the within-group analysis suggests that low-income children belonging to Scheduled Caste (SC) communities and Scheduled Tribe (ST) communities saw an improvement in school completion rates relative to their respective comparison groups. Among the religious groups, low-income children from Muslim families did not see any improvement in the post-RTE period, but the ones from other religious minority groups did. A classification within states brings out the heterogeneity in school completion rates by state of residence.

This study builds on previous studies that have examined the policy implications of successive educational policies in India (Azam & Saing, 2017; Chatterjee et al., 2018; Datta Gupta et al., 2018) and complements the branch of literature that has examined the effect of the RTE Act in particular (Agarwal, 2020; Shah & Steinberg, 2019).

The paper unfolds as follows. Section 2 discusses the RTE Act and Section 3 presents the literature review. Section 4 discusses the data and methodology used for analysis. The main results are presented in Section 5, results by sub-groups of religion, social group, and state of residence are presented in Section 6. Section 7 examines one of the possible mechanisms of implementation, namely the participation of private unaided schools. In Section 8, the results are discussed in the context of the National Education Policy 2020, and the study concludes with policy recommendations.

2. The Right to Education Act, 2009

Since the 2000s, India has implemented several policies to universalise primary and lower-secondary education for all children. In 2002, the 86th amendment of the Constitution of India made elementary education a fundamental right of children aged 6-14 years in India. Subsequently, India passed the RTE Act in 2009 making primary and lower-secondary education free, compulsory, and justiciable in the country.

Globally, 155 countries guarantee at least nine years of free and compulsory education, and 99 countries have a legal framework that guarantees 12 years of free education³. In the South-Asian region, school education in Bangladesh is not justiciable, but the country mandates primary school for children, starting at the age of six years and continuing for five years thereafter (Amin, 2007). The legal framework in Nepal follows free and compulsory education for children in Grades 1-8, with provision for free books for all children and scholarships for the poor (Lohani et al., 2010). Basic education in Bhutan starts at the age of 6 years and is free till middle secondary level (or Grade 10), with seven years of primary education, however, it is neither justiciable nor compulsory (Gupta, 2007). School education is not compulsory in Pakistan as well, but the official age to attend primary school is 5-10 years (Siddiqui, 2017).

By making school education justiciable, India reached a major milestone. The Act was implemented in the year 2010 and was extended to all the states in India, except the state of Jammu and Kashmir, because of its special autonomous status. The Act decentralised⁴ education, provided legal backing to the fundamental right of education, and elaborated the role of the stakeholders, viz., parents, teachers, and government authorities. The parents were made responsible to enrol their children in school. Local government authorities were responsible for maintaining the records of children aged 6-14 years residing in their jurisdiction, providing schools in the vicinity of the residences, and ensuring that the children were enrolled in school at the right age and completed primary and lower-secondary education.

The RTE rules, which were based on the Act, suggest that there should be a primary school within 1 kilometer (km) of the residence of children and a lower-secondary school within a range of 3 km (Government of India, 2009). An analysis of NSSO's Survey of Education shows that 93 percent of children in the rural sector had a primary school within 1 km⁵ in 2017-18. As for a lower-secondary school, 92 percent of the households had a lower-secondary school within 3 km in 2007-08 and it increased to 96 percent in 2017-18. Furthermore, the percentage of lower-secondary schools within 1 km increased from 66 percent in 2007-08 to 75 percent in 2017-18.

The pre-RTE period (2007-08) is used to examine who in rural India dropped out of school because school was far away. Data suggests that among every hundred students who dropped out of school, 35 children were from the lowest consumption quintile, whereas only 6 belonged to the topmost consumption expenditure quintile. This suggests that schools in the vicinity can improve school completion rates, especially for children from low-income backgrounds. Evidence from India shows that provision of a secondary school in the vicinity has improved enrolment at the primary levels (Mukhopadhyay & Sahoo, 2016).

Similarly, free and compulsory school education under RTE Act is more likely to benefit children from a low-income background. Among every hundred students who were not attending school in 2007-08 because of financial

³ <https://en.unesco.org/news/what-you-need-know-about-right-education>

⁴ Education is a joint responsibility of the central and state governments in India. The RTE Act also made the third tier of government, the local authorities (Panchayats in rural areas and Urban Local Bodies in the urban areas) central to the process of universalising education.

⁵ The access to school, measured by the distance between home and school, varies with the topology of the region. RTE rules specify the mandate of neighbourhood schools, but the rules acknowledge the presence of places "with difficult terrain, risk of landslides, floods, lack of roads" that can pose as danger for children, and asks the government to be cognizant of the same while locating schools in these neighbourhoods. Thus, distance can vary across states and this is not particular to India. Children residing in the eastern mountains and hills of Nepal face considerable disadvantages due to the geographical terrain, with only 78 percent of children having access to a school within a half-an-hour walking distance, compared to 98 percent in the western Terai (Lohani et al., 2010).

constraints, 24 children belonged to the lowest consumption expenditure quintile whereas only 9 belonged to the topmost quintile.

Based on the RTE Act, the Sarva Shiksha Abhiyan (SSA - *Education for All*) framework was revamped, and a draft elaborated the guidelines to implement RTE across the states (Government of India, 2011). A closer look at the framework of implementation brings out the fact that children in rural India and children from low-income backgrounds, who were historically lagging relative to their counterparts in urban India or from richer families, were given more attention. For instance, higher attention was paid to children from the backward socio-economic groups of ST and SC and Other Backward Classes (OBC) relative to those from the General category.

The SSA draft recognised the unique challenges and lived realities of children hailing from socially backward groups. It suggested several strategies like providing Special Training to out-of-school children, consisting of children from ST, SC, and Muslim families. Under this arrangement, out-of-school children, or children with disrupted attendance in the academic year, are provided with the training to impart the necessary skills to integrate them with the other children in mainstream education. The draft addressed the exclusion of girls, and specified the urgency of preparing need-based and context-specific strategies to ensure enrolment, retention, and school completion of these hard-to-reach children.

Studies have shown that there has been an increase in school attendance and enrolment over time (Chatterjee et al., 2018; Shah & Steinberg, 2019), but have also indicated how the policy has failed to retain some of the hard-to-reach children, for example, children from short-term migrant families in rural India (Bhattacharya, 2019; Coffey, 2013). The challenge of retention has been commonly faced in other countries too, many of which have reached universal enrolment rates. Kono et al (2018) state that children in Bangladesh drop out of school due to seasonality, since the academic year overlaps with the farming calendar. In addition, an overlap of caste identity, parental occupation, age, and marital status has also been shown to affect drop-out rates in Nepal (Devkota et al., 2020).

Over time, as enrolment became near-universal across countries, the focus has evolved from tracking enrolment numbers to ensuring school completion. However, most of the countries do not consider access and quality as integrated concepts that need to be tackled together. Without quality education and access, school drop-outs can become more common, and retention and completion can pose a challenge, especially for those from low-income backgrounds. The next section discusses the literature in the context of the study.

3. Literature Review

Literature has widely discussed the schooling patterns of children in both developed and developing country contexts. This section presents a brief overview of the studies, drawing upon the factors that affect school completion and drop-out rates of children.

The literature has provided evidence that free and compulsory education is beneficial for society. Angrist and Krueger (1991) state that 25 percent of the students who would potentially drop out of school, stay longer in school because of compulsory schooling laws. Compulsory schooling laws have been shown to increase earnings and wages, improve years of school attended, and reduce drop-out rates. Clay et al (2021) use 1940 US Census data and estimate that the first wave of compulsory schooling laws in the USA that required completion of seven or eight years of school, led to an increase in years of school attended by 0.1 years and an increase in returns to school.

Compulsory schooling reforms across Europe have proven to be beneficial in terms of years of school completed. An analysis of individual data from 14 European countries using microdata from the European Social Survey, conducted in various years between 2002 and 2013 shows that exposure to compulsory schooling reforms led to an increase in years of completed education and a fall in superstitious beliefs (Mocan & Pogorelova, 2017). The authors use the time of reform among these countries as a source of exogenous variation to estimate the causal impact. The countries included in this study are Austria, Belgium, Denmark, France, Germany, Greece, Hungary, Ireland, Italy, Poland, Portugal, Spain, Sweden, and the United Kingdom. In the Netherlands, the mandatory schooling age was increased in 2007 from 17 years of age, to the age of 18 years, or till the time the child completed a higher-secondary diploma. An analysis of combined register data by the Dutch Ministry of Education using difference-in-differences estimates shows that the one-year increase in compulsory schooling led to a fall in the drop-out rate by 2.5 percentage points (Cabus & De Witte, 2011).

Compulsory schooling laws in China have been examined in the context of different educational indicators. Shi (2016) uses a difference-in-difference approach and finds a positive causal impact of fee reduction reform on the school enrolment of children aged 13-16 years in rural China. A different study has shown that the effect of a free and compulsory education reform reduced the incidence of child labour for boys and the effect was stronger for households with lower socio-economic status (Tang et al., 2020).

The overlap between socio-economic characteristics, gender, and household resources as factors that affect school completion rates is also evident in the literature. Sznitman et al (2017) use the Norwegian Health Study and the U.S. National Longitudinal Survey of Youth 1997 and find that children from lower socio-economic backgrounds were more likely to repeat a grade, which could lead them to drop out of school and not complete education. In Spain, the socio-economic identity of the family has been found to significantly affect the school completion rates of individuals (Peraita & Pastor, 2000). Langsten and Hassan (2018) use education data from the Egypt Demographic and Health Surveys (DHS) from 1988 to 2014 and find that while children from wealthy families achieve universal primary education, middle-class and poor families fall behind. Tas et al (2014) examine how gender and ethnic identity affect educational indicators in African and Latin American countries of Bolivia, Peru, Mexico, Senegal, and Sierra Leone using the Integrated Public Use Microdata Series-International (IPUMS-I) database. The authors use the difference-in-differences method and find that gender-based differences in literacy and school completion rates are greater among the ethnic minority groups relative to the others and ethnicity-based differences are larger for women than for men.

In the Indian context, Borooah (2012) uses nationally representative data from India Human Development Survey (IHDS) 2005 and examines the inequalities within social groups for children aged 8-11 years. The author finds that compared to the upper-caste children, those from the other disadvantaged groups lagged in some or all of the three competencies of reading, writing, and mathematics. The disadvantage was especially evident for children belonging to ST, SC, or Muslim families. Completion of primary school in Nepal has also been found to vary considerably by caste. Conditional on every child enrolling in school, children belonging to high-caste families are consistently most likely to complete primary school, whereas the rate is quite low among the low caste families, with around half of the students completing primary school (Stash & Hannum, 2001).

Evidence from the state of West Bengal in India suggests that children from Muslim families are less likely to complete primary schools relative to Hindu upper-caste as well as Hindu lower-caste social groups (Husain & Chatterjee, 2009). Survival analysis using NSSO's Employment and Unemployment Survey 2011-12 shows that a high proportion of students who are enrolled in school complete primary levels, but there is a significant drop-out soon after that (Goel & Husain, 2018). The authors also highlight how children from Muslim families tend to fall behind their counterparts from Hindu forward castes and shed light on the persisting gender gap in the rural sector.

In this paper, the impact of RTE is inspected on the school completion rate for rural low-income children. By doing so, it adds to the recent literature that has examined the changes in the education landscape in India post the implementation of the RTE Act (Chatterjee et al., 2018; Shah & Steinberg, 2019). Chatterjee et al (2018) use IHDS, rounds 1 and 2, and show an increase in school enrolment of children over the period 2005-11. Shah and Steinberg (2019) use data from successive years of NSSO's Employment and Unemployment Survey, District Information System for Education (DISE), and Annual State of Education Report (ASER) for their analysis and find an increase in school attendance in the post-RTE period. The authors also note a stark fall in the number of students who repeated a grade, in line with the Act. Both the studies find an improvement in infrastructure, but a fall in learning levels in the post-RTE period. They mainly discuss the association of these factors with the RTE Act but establishing a causal link lies beyond the scope of these papers. Agarwal (2020) uses IHDS data and a difference-in-differences method to estimate the effect of the no-detention clause of the RTE Act on drop-out rates and learning outcomes of children in India. The study finds that the policy led to a fall in the drop-out rate of children and the effect was especially strong for children from low socio-economic backgrounds.

A study that is closely related to the design of the present study inspects the causal impact of educational reforms of the mid-1990s, that is, the mid-day meal scheme, Sarva Shiksha Abhiyan and District Primary Education Program, on school attendance of rural low-income children aged 6-14 years in India (Datta Gupta et al., 2018). The authors use five waves of nationally representative data and use a triple-difference framework, and find that the school attendance of rural low-income boys (girls) increased by 9 (5) percent in the post-reform period compared to the pre-reform period and relative to rural high-income children. The effect was driven by girls, and by children in the age group 11-16 years. A similar question in the context of the RTE Act is explored in this study.

4. Data and Methodology

4.1. Data

The data sources used in this study are the Education surveys conducted by NSSO, the Ministry of Statistics and Program Implementation, Government of India. The study is based on three rounds of nationally representative data, spanning over the decade 2007-08 to 2017-18.

The first round of data used is the survey on 'Participation and Expenditure in Education', collected as part of the 64th round of NSSO that was conducted from July 2007 to June 2008 (Government of India, 2010). It was conducted for 7953 villages and 4682 sample blocks in rural and urban areas respectively. From each sample of villages or urban blocks, 8 households were selected to take part in the survey. The survey collected information on a total of 445,960 persons covering 63,318 households in the rural sector and 37,263 households in the urban sector from various states and Union Territories (UT) in India. The survey was specifically designed to collect information on participation and non-participation in educational institutions for people aged 5-29 years in India. For those individuals who were attending educational institutions, information was collected on private expenditure on education incurred, the type of school attended by the children, and the extent of usage of infrastructure, facilities, scholarships, and other incentives that were provided by the Government. For the ones who were not attending educational institutions during the study period, information was collected on the grade completed, type of school last attended, and the reason for discontinuing or never attending school among others. The survey collected information about the major activity performed by the children who were out of school.

The second round of data is taken from the survey on 'Social Consumption: Education' conducted as a part of the 71st round of surveys conducted by NSSO (Government of India, 2015). This round was conducted from January to June 2014 covering a total of 4577 villages and 3720 blocks in rural and urban sectors respectively. In each of the sample villages or urban blocks, 8 households were selected to take part in the survey. Overall, 36,479 households were surveyed in rural India and 29,447 households were surveyed in urban India. Like the 64th round of the Education Survey, the 71st round collected information about individuals aged 5-29 years. The objective of the surveys was similar, that is, to collect details about the participation and non-participation of individuals in educational institutions. Details related to private expenditure on education and availing facilities were collected for those who were attending school. For the individuals who were not attending school, the survey collected information on the last grade completed before dropping out and the reason for discontinuing or never enrolling in school. The report prepared for the 71st round states that the survey in 2014 was '*broadly similar to that undertaken in the 64th round of NSS*' with certain additions and modifications made as per the needs of the stakeholders.

The third wave of data is used from the 'Household Social Consumption: Education' round conducted by NSSO from July 2017 to June 2018 (Government of India, 2019a). This round covered 8,097 villages and 6,188 urban blocks across India. From every village and urban block, a sample of 8 households was surveyed. In total, 64,519 rural households and 49,238 urban households were covered across states and UTs in India. This round collected information on

individuals aged 3-35 years in India, which was an extension over the earlier age group of 5-29 years. Similar to the earlier rounds, the primary objective of this round was to assess the extent of benefits received by the individuals in India belonging to various sub-sections of the society. The survey collected information on private expenditure, and the reason for dropping out or discontinuing education, similar to the earlier rounds.

The additions and modifications to the three waves of data are specified as follows. The first is the definition followed in terms of measuring primary and lower-secondary grades. In the 64th round of the surveys, the primary and lower-secondary completion of students were considered based on the respective state mandate, which varied across states. However, from the 71st round onward, the uniform cut-off was considered for all children, where Grades 1-5 were considered as primary and Grades 6-8 were considered as lower secondary, irrespective of the practices followed by states and UTs. To maintain consistency across rounds, primary completion is defined as the completion of Grade 5 and lower-secondary completion as completion of Grade 8, disregarding the state-specific mandates. Additionally, the state boundaries are adjusted to have consistency across the three rounds. That is, the newer state of Telangana, which was formed out of Andhra Pradesh, and the newly formed sub-part of Andhra Pradesh are considered as one unit, for comparability across rounds. The RTE Act 2009 only became applicable in the state of Jammu and Kashmir with the enactment of The Jammu and Kashmir Reorganisation Act 2019⁶ in August 2019. Since this is beyond the period of analysis, the state is excluded from the analysis.

The RTE Act was passed in 2009 but it was implemented in 2010. Some of the clauses under RTE, like setting up of neighbourhood schools, had a timeline of 3 years from the date of implementation of the Act. Furthermore, the immediate effect of RTE could be reflected in examining school enrolment or attendance, but an effect on school completion is likely to be observed with a lag. Taking these considerations into account, this study considers the 64th (2007-08) and the 71st (2014) rounds as the pre-RTE period and the 75th round, that is the round corresponding to the years 2017-18, as the post-RTE period.

4.2. Methodology Description

The study design compares school completion rates of children from low-income families and that of children from high-income families in rural India. To make this classification, first, each state is divided into the rural and urban sectors. In each sector, the households are divided into five groups, based on their monthly per-capita consumption expenditure. The households in the lowest consumption quintile (bottom 20 percent) are considered low-income households and the ones in the highest quintile (top 20 percent) as high-income households. The analysis is based on the rural sector, which is likely to be more impacted by the RTE Act.

The main variable of interest is the completion of primary school. A child is considered to have completed primary school if she or he has completed at least fifth grade. According to the RTE Act, a child should complete primary grade

⁶ For more details see the minutes of Project Approval and Board (PAB) minutes of the year 2020-21 here <https://dse1.education.gov.in/sites/default/files/2020-08/J%26K.pdf>

by the age of 10 years. Hence, it is checked whether a child aged 13-15 years has completed primary education or not. The age group considered in this study corresponds to 3-5 years after the ideal age of completing primary school. This is consistent with the protocol followed while measuring progress in Sustainable Development Goal 4 (SDG 4) to compare school completion rates across the countries (UIS, 2018). The second outcome variable that is focused on is the lower-secondary completion rate of children. The age group considered is 17-19 years, which corresponds to 3-5 years after the expected lower-secondary school completion age of 14 years.

The control variables used are in line with the reviewed literature and include age, the square of the age of the child, and gender of the child (Datta Gupta et al., 2018). Among the household controls (HH), religion and social group are accounted for. The children from Muslim families have historically fallen behind their counterparts from Hindu and other religious groups of India, as discussed in the literature. Children from Hindu families are considered as the base category and the progress of children from Muslim families, and the other minority groups are examined relative to the base category. Among the social groups, children from SC and ST fall behind their counterparts from the 'general' social groups, who are relatively advantaged. Children from the general social groups are considered as the base category and changes in ST, SC, and OBC social groups are examined relative to that. The other household controls include the gender of the household head and whether or not the head is literate and the number of children below the age of 6 years in the family.

As an additional variable, the distance (*Distance*) from the house to the nearest lower-secondary school is controlled, for examining the change in the primary completion rate of children. It is argued that a nearby school that could provide the next level of schooling could be an incentive to complete the last grade of the present level of education. The state-fixed effects are considered and standard errors are clustered at the state level⁷.

The difference-in-differences estimates are obtained through a linear probability model⁸ with the following specification

$$Complete_{ihds} = \alpha + \delta_1 treated_{ihds} + \delta_2 (treated_{ihds} * after_{ihds}) + \delta_3 after_{ihds} + \beta_1 Age_{ihds} + \beta_2 Age_sq_{ihds} + \beta_3 Gender_{ihds} + \beta_4 Distance_{ihds} + \beta_5 HH_{hds} + \gamma_s + \varepsilon_{ihds}$$

Where 'Complete' is a binary variable representing completion of primary or lower-secondary levels for individual 'i' residing in household 'h', district 'd', state 's' in the rural sector. The variable 'treated' takes the value 1 for children from rural low-income families and 0 for children from rural high-income families, and the variable 'after' takes the value 0 for 2007-08 and 2014 and 1 for the year 2017-18. It is argued that children from low-income families are more likely than children from high-income families to get treated under the RTE Act, but it is not known who in the group received the treatment. Hence, intention-to-treat (ITT) estimates are obtained here.

⁷ The results are presented using sampling weights in the main text for representation of the entire population. Unweighted regressions yield similar results and are available upon request.

⁸ Difference-in-differences model is empirically difficult to estimate through the non-linear method, hence linear probability model is used for estimation.

The coefficient of interest is δ_2 which would give the change in the school completion rate of the rural low-income children, that is the treatment group, in the post-RTE period⁹. The models are estimated separately by gender. Sub-group analysis is done by the state of residence, social group, and by religious groups.

5. General Finding

The section begins by checking the parallel trend assumption that needs to hold for estimating the causal impact through the difference-in-differences approach. Following that, the main results for the whole sample and the results by sub-group are presented. The section primarily examines and discusses the completion of primary level and briefly dwells on the lower-secondary completion of children. The entire analysis is presented for individuals residing in rural India.

5.1. Parallel Trend Assumption

The change in primary school completion rate is presented graphically. Figure 1 shows the proportion of children aged 13-15 years who have completed primary school each year. It is seen that the slope of improvement was similar for children from high-income families and children from low-income families between 2007-08 and 2014, indicating the possibility of parallel trends in school completion rate. On the other hand, a convergence in school completion is observed over time.

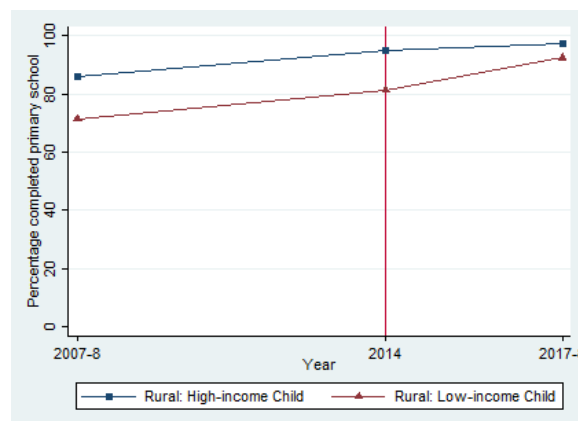


Figure 1: Percentage of children aged 13-15 years in rural India who completed primary school

Source: NSSO Education Rounds

The causal impact of the difference-in-difference estimation hinges upon the fulfillment of the parallel trend assumption. For checking the parallel-trend assumption, the 64th round is considered as the pre-RTE period and the

⁹ There is a possibility of serial correlation in outcome variables when a DID model is considered. Studies that ignore this possibility, often tend to obtain incorrect estimates as standard errors understate the standard deviation of the DID estimator (Bertrand et al., 2004). This is corrected by the method suggested by Bertrand et al. (2004).

71st round as the placebo post-RTE period. A difference-in-differences model is estimated under this specification. Any observed change within this period would lead to the belief that the changes were not specific to the RTE Act, whereas insignificant results would strengthen the argument about the causal effects of the Act. The estimates from the parallel trend assumption are presented in Table 1. The difference-in-difference estimator is insignificant and close to zero, suggesting that there was no significant change in primary school completion rate between children from low-income families and high-income families between 2007-08 and 2014. This was seen for both genders as well. Hence, it can be argued that the results obtained for school completion rates in the post-RTE period in rural India can be attributed to the implementation of the RTE Act.

While focusing on children who were falling behind, RTE emphasised urban deprived children as well. School completion rates of low-income children in urban India increased from 77 percent in 2007-08 to 92 percent in 2017-18. The primary completion rate for children from urban high-income families was already 98 percent in 2007-08 and has remained very high throughout. Thus, in the present study design, the trend in urban India did not satisfy parallel assumption and the change in completion rate cannot be attributed to the RTE Act. Owing to this reason, we restrict our analysis on causality in the rural sector.

Table 1: DID estimates of primary school completion of children aged 13-15 years in rural India considering 2007-08 as the pre-RTE period and 2014 as the placebo post-RTE period

VARIABLES	Both Boys and Girls	Boys	Girls
	(1)	(2)	(3)
Treated*after	-0.016 (0.031)	-0.031 (0.025)	0.002 (0.043)
Treated	-0.063*** (0.011)	-0.059*** (0.015)	-0.066*** (0.015)
After	0.063** (0.026)	0.049** (0.023)	0.079** (0.033)
Age	0.455** (0.175)	0.665*** (0.185)	0.206 (0.296)
Age squared	-0.016** (0.006)	-0.023*** (0.006)	-0.007 (0.011)
Female child	-0.024** (0.011)		
Household head literate	0.135*** (0.022)	0.133*** (0.025)	0.135*** (0.024)
Female household head	0.028* (0.017)	0.022 (0.016)	0.041* (0.020)
Religion: Hindu			
Muslim	-0.131*** (0.034)	-0.097*** (0.021)	-0.169*** (0.055)
Other religion	-0.007 (0.025)	-0.016 (0.022)	-0.001 (0.033)
Social group: General			
ST	-0.064*** (0.022)	-0.062*** (0.022)	-0.065** (0.031)
SC	-0.052** (0.023)	-0.060** (0.024)	-0.044 (0.027)
OBC	-0.010 (0.011)	-0.019 (0.015)	-0.000 (0.017)
Total number of children below 6 years	-0.033** (0.013)	-0.034*** (0.011)	-0.032** (0.015)
Distance to the nearest lower-secondary school: Less than 1 km			
>=1 & <2 km	-0.031** (0.012)	-0.024** (0.011)	-0.037 (0.024)
>=2 km	-0.052*** (0.011)	-0.045*** (0.015)	-0.058** (0.024)
Constant	-2.343* (1.192)	-3.817*** (1.334)	-0.632 (2.053)
Observations	10,797	5,741	5,056
R-squared	0.137	0.141	0.144
State FE	Yes	Yes	Yes

Source: Author's calculation from NSSO Survey of Education 2007-08, 2014. Robust standard errors clustered at the state level are presented in the parentheses. Sampling weights have been used for estimation. Level of significance * <0.1, ** <0.05, *** <0.01.

5.2. Main Results

The regression results for primary school completion rate are presented for all children, as well as separately, for boys and girls aged 13-15 years in rural India (Table 2). The slope parameter (treated*after) shows a 6 percent statistically significant increase in the school completion rate in the post-RTE period. There was a higher increase for girls, as compared to boys. The result suggests that the school completion rate statistically increased for children from low-income backgrounds due to the passage of the RTE Act.

The rest of the variables, their statistical significance, and direction remain similar for both boys and girls. The estimates and the effects of the other control variables are briefly explained here. It is important to keep in mind that the control variables represent associations and cannot be given a causal interpretation. It is seen that relative to a household head who is illiterate, the effect of school completion rate is stronger for children with a literate household head. Having a literate head is associated with a 12 percent increase in the school completion rate for children. A literate head might place a greater value on the education of children, resulting in a greater school completion rate. On the other hand, the presence of small children in the household can negatively affect school completion rates of the older children in the family, further mediated by gender norms prevalent in society. For instance, having a greater number of younger children might push the older brother to drop out of school and join work, leading to a fall in the school completion rate. On the other hand, an increase in the burden of child care can lead to a lower school completion rate for an older girl child. It is found that the presence of smaller children in a family weakens school completion of children by 3 percent overall, slightly more for boys than girls.

An inspection of the socio-religious identity of the children and their association with school completion rates deserves merit. The base category is formed by children belonging to Hindu families. The result shows that the effect is weaker for children belonging to Muslim families. The result also suggests that relative to the base category of children from the general social groups, the effect is weaker for children from SC and ST backgrounds.

Further, the result suggests that RTE has a stronger effect on households that have a lower-secondary school nearby, but the effect is weaker as the distance between home and the nearby school increases. As the distance between home and the nearest lower-secondary school increases, it has a stronger negative effect on the primary completion rate of girls. If the nearest lower-secondary school is greater than 2 km from the residence of the child, it reduces the primary school completion rate of boys by 4 percent and that of girls by 6 percent.

Overall, the results suggest that the primary school completion rate of children in rural India has increased for low-income children due to the passage of the RTE Act. This result suggests that eventually, the gap in primary school completion rate between children from high-income families and those from low-income families will fall, leading to convergence over time. This is similar to what was observed in Figure 1.

Table 2: DID estimates of primary school completion of children aged 13-15 years in rural India

VARIABLES	Both Boys and Girls	Boys	Girls
	(1)	(2)	(3)
Treated*after	0.063** (0.023)	0.048*** (0.015)	0.074* (0.042)
Treated	-0.076*** (0.008)	-0.081*** (0.010)	-0.067*** (0.019)
After	0.049*** (0.014)	0.047*** (0.015)	0.056*** (0.019)
Age	0.378*** (0.117)	0.661*** (0.160)	0.041 (0.282)
Age squared	-0.013*** (0.004)	-0.023*** (0.005)	-0.001 (0.010)
Female child	-0.016* (0.008)		
Social Group: General			
ST	-0.068*** (0.020)	-0.070*** (0.023)	-0.063** (0.026)
SC	-0.033* (0.017)	-0.048** (0.021)	-0.018 (0.021)
OBC	-0.009 (0.009)	-0.018 (0.013)	-0.000 (0.014)
Religion: Hindu			
Muslim	-0.117*** (0.026)	-0.098*** (0.023)	-0.138*** (0.034)
Other religion	0.003 (0.019)	-0.005 (0.019)	0.011 (0.022)
Household head illiterate			
Household head literate	0.117*** (0.017)	0.110*** (0.014)	0.124*** (0.024)
Female household head	0.021 (0.012)	0.018 (0.011)	0.025 (0.016)
Total number of children below six years	-0.027*** (0.009)	-0.038*** (0.010)	-0.017* (0.009)
Distance to the nearest lower-secondary school: Less than 1 km			
>=1 & <2 km	-0.026** (0.010)	-0.022*** (0.008)	-0.030* (0.015)
>=2 km	-0.049*** (0.012)	-0.039*** (0.008)	-0.062*** (0.022)
Constant	-1.776** (0.793)	-3.741*** (1.169)	0.543 (1.933)
Observations	18,163	9,686	8,477
R-squared	0.131	0.135	0.134
State FE	Yes	Yes	Yes

Source: Author's calculation from NSSO Survey of Education 2007-08, 2014, 2017-18. Robust standard errors clustered at the state level are presented in the parentheses. Sampling weights have been used for estimation. Level of significance * <0.1 , ** <0.05 , *** <0.01 .

A similar analysis is done to check whether the lower-secondary school completion of low-income children improved due to the implementation of the RTE Act. Individuals aged 17-19 years and residing in rural India are considered in the analysis and the definitions of low-and-high income children are kept the same as before. A possible caveat of this analysis is the age group considered for this specific analysis. The legal marriage age in India is 18 years for girls and 21 years for boys. Given the patrilocal nature of society, the girls change their residence post marriage. Hence, the household controls used in the estimation will not be able to correctly represent the characteristics of a married individual who has changed her residence. Accounting for this, the analysis is performed for different groups based on their marital status (Appendix Table A4.2). The first model considers the full sample and estimates the regression by using individual controls of age and gender, which will not change irrespective of the marital status of an individual. To check whether the result is an artifact of the study design, in the second model, the sub-sample of unmarried individuals is considered and regression is estimated with the whole set of control variables. The result suggests that low-income individuals in both groups have seen an improvement in lower-secondary completion rates due to the implementation of the RTE Act. The improvement was seen for both boys and girls. The methodology and tables are elaborated in Appendix 4.

6. Differential Impact by Sub-groups

6.1. Socio-religious groups

The impact of RTE on school completion rates of children from different socio-religious identities becomes important to examine. This is more so because the RTE Act had special provisions for children from disadvantaged socio-economic groups. While certain groups have consistently performed well on education indicators, others from ST and SC backgrounds have faced historical disadvantages. The policy documents have been cognizant of the challenges faced by these groups of children who get excluded. For instance, the framework that was drafted to implement the RTE Act *'attempts to reach out to girls and children belonging to SC, ST and Muslim Minority communities'* (pp. 23, Government of India, 2011). The framework addresses the need to create equal opportunity for every child and provide access to them. In doing so, it stresses including *'children of SC, ST, a Muslim minority, landless agricultural workers and children with special needs.'* (pp. 24, Government of India, 2011).

Given this background, it is examined how RTE affected school completion rates within each of the socio-religious groups. The focus is primarily on children belonging to socially disadvantaged ST and SC families. Among the religious groups, the changes for children belonging to Muslim religious groups and those from the other minority religious groups are examined.

The regression results are presented in Table 3. It can be seen that children from low-income families belonging to ST or SC communities have seen considerable improvement in primary school completion rate due to the implementation of the RTE Act.

Low-income children from 'other' religious minority groups saw around 12 percent improvement in school completion. However, those belonging to Muslim religious groups did not see any improvement. A classification by gender shows that the insignificant result is not particular to either gender and is seen in both boys and girls in the rural areas. The results of the control variables are comparable to the ones that were obtained from the baseline model.

The results obtained for the social groups were not surprising given the focus of RTE on improving the education of children from backward social groups. What poses a question is the lack of improvement in the education of children from Muslim communities. An inspection of data from NSSO's Survey of Education 2017-18 suggests that 13 percent of children aged 6-14 years hailing from Muslim families in rural India had never enrolled in school, or had enrolled in school but were not attending in the academic year. Disinterest in education and financial constraint was the most often cited reasons for discontinuing school. A large share of boys also cited participating in economic activities as a reason to discontinue school, whereas engagement in domestic activities was more common among girls. Among low-income Muslim families, 17 percent of children were not attending school.

Furthermore, among those who were attending school, 25 percent of the children were attending 'unrecognised institutions'. Among the other minority groups, 7 percent were attending unrecognised institutions. The data does not allow to identify which schools the children were attending – whether it was a minority institution or not.

Primary school completion rates increased for children from other religious minority groups. Further research needs to explore the pathway between religion, type of school attended, and its relation with school completion rates. There is a need to identify the possible barriers for children from Muslim families, especially those from low-income backgrounds, and examine possible strategies to mitigate the same.

VARIABLES	ST	SC	Muslim	Others
	(1)	(2)	(3)	(4)
Treated*after	0.109* (0.056)	0.087** (0.035)	-0.019 (0.096)	0.129*** (0.046)
Treated	-0.136*** (0.035)	-0.088*** (0.021)	-0.059 (0.045)	-0.132*** (0.042)
After	-0.015 (0.042)	0.075*** (0.019)	0.143** (0.068)	0.026 (0.024)
Age	0.271 (0.530)	0.923** (0.348)	-0.133 (0.705)	0.419 (0.385)
Age squared	-0.010 (0.019)	-0.032** (0.012)	0.005 (0.025)	-0.015 (0.014)
Female child	-0.016 (0.022)	0.003 (0.016)	-0.041 (0.027)	0.002 (0.011)
Household head illiterate				
Household head literate	0.148*** (0.025)	0.137*** (0.032)	0.160*** (0.047)	0.090*** (0.028)
Female household head	-0.033* (0.019)	0.040* (0.021)	0.041 (0.032)	-0.014 (0.058)
Number of children below 6 years	-0.032* (0.016)	-0.020 (0.018)	-0.037** (0.016)	-0.033* (0.019)
Distance to the nearest lower-secondary school: Less than 1 km				
>=1 & <2 km	-0.004 (0.019)	-0.061 (0.037)	-0.067 (0.040)	0.001 (0.021)
>=2 km	-0.061** (0.025)	-0.051 (0.035)	-0.054* (0.027)	-0.002 (0.022)
Constant	-0.877 (3.697)	-5.720** (2.445)	1.522 (4.933)	-2.091 (2.716)
Observations	3,530	3,436	2,036	2,147
R-squared	0.121	0.159	0.161	0.140
State FE	Yes	Yes	Yes	Yes

Source: Author's calculation from NSSO Survey of Education 2007-08, 2014, 2017-18. Robust standard errors clustered at the state level are presented in the parentheses. Sampling weights have been used for estimation. Level of significance * < 0.1, ** < 0.05, *** < 0.01

6.2. State of residence

India is quite diverse in terms of geography; the states differ in terms of population, GDP, level of development, caste composition, progress in school enrolment, and language among the others (Appendix Table A1). A closer look at the school attendance for the years 2007-08 shows that Bihar and Uttar Pradesh, two of the populous and relatively poor states of India, had lower school attendance relative to that at the national level (Appendix Table A2). The differences are also evident upon grouping the states. For instance, the states in the southern part of India have out-performed the other states in terms of school attendance even before the RTE Act (Datta Gupta et al., 2018). Of all the Indian states, Kerala, a south-western coastal state of India, has the highest mean average years of schooling and lowest variance in terms of educational attainment (Varughese & Bairagya, 2020). On the other hand, states in the western and central regions have been found to lag behind. Chatterjee et al (2018) examine the changes in educational indicators over the period 2005-11 and find regional disparity to be persisting even in 2011. States in northern and eastern areas performed poorly whereas those in the extreme north and extreme south have reached near-universal enrolment rates.

The states also differ in how they have adopted and implemented RTE. The RTE Act was passed centrally in 2010. Based on that, each of the states formed their own RTE state rules¹⁰ to implement the Act in their respective states. All the states stress providing non-discriminatory and free education to children aged 6-14 years. They differ in definitions, for instance, in terms of the definition of children from disadvantaged groups or economically weaker sections. How the Act is implemented in each state, and the extent of implementation, will also determine the eventual changes in educational indicators of children.

The states in India are divided into six groups – North, Central, East, North-East, West and South India, to understand the progress made within each of the groups. The states and UTs are classified as follows: North India comprises Himachal Pradesh, Punjab, Chandigarh, Uttarakhand, Haryana, Delhi, and Uttar Pradesh; Central India comprises of Chhattisgarh and Madhya Pradesh; East India is comprised of Bihar, Jharkhand, Odisha, and West Bengal; West India comprises of Gujarat, Rajasthan, Daman & Diu, Dadra, and Nagar Haveli, Maharashtra and Goa; North-East India comprises of Assam, Arunachal Pradesh, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim, and Tripura; and South India comprises of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Lakshadweep, Pondicherry and Andaman, and the Nicobar Islands.

The results are presented in Table 4. The estimates suggest that children from low-income families in North or Central India have not seen improvement in school completion rates after the implementation of the RTE Act. Among the states in North India, Uttar Pradesh was driving the result. The improvement seen by children from low-income families in Western India is low and only weakly significant. A stronger result is obtained in the Eastern, North-Eastern region and the Southern states.

¹⁰ https://www.education.gov.in/en/rte_state_rules

Table 4: DID estimates of primary school completion of children aged 13-15 years in rural India by the state of residence

VARIABLES	North (1)	Central (2)	East (3)	North-East (4)	West (5)	South (6)
Treated*after	-0.001 (0.022)	0.059 (0.021)	0.121** (0.024)	0.139*** (0.018)	0.033* (0.014)	0.083** (0.029)
Treated	-0.064*** (0.009)	-0.069* (0.007)	-0.115*** (0.015)	-0.118*** (0.016)	-0.057** (0.015)	-0.061** (0.025)
After	0.088*** (0.015)	0.035 (0.013)	0.055*** (0.009)	0.048*** (0.008)	0.034*** (0.002)	0.006 (0.009)
Age	0.189* (0.081)	0.706 (0.378)	0.546 (0.261)	0.096 (0.124)	0.663** (0.247)	0.208 (0.153)
Age squared	-0.006 (0.003)	-0.025 (0.013)	-0.019 (0.009)	-0.004 (0.004)	-0.023** (0.009)	-0.008 (0.006)
Female child	-0.011 (0.008)	-0.030*** (0.000)	-0.003 (0.023)	0.008 (0.009)	-0.043 (0.028)	-0.010 (0.013)
Household head literate	0.124*** (0.021)	0.070** (0.005)	0.161** (0.035)	0.158*** (0.025)	0.096*** (0.018)	0.055*** (0.009)
Female household head	0.052*** (0.003)	-0.056 (0.026)	-0.004 (0.020)	-0.004 (0.009)	0.062 (0.034)	0.015 (0.021)
Hindu						
Muslim	-0.176*** (0.011)	-0.084 (0.021)	-0.109* (0.039)	-0.021 (0.016)	-0.111 (0.085)	-0.013 (0.013)
Other religion	-0.050*** (0.012)	0.013 (0.042)	0.074** (0.019)	-0.015 (0.009)	0.072*** (0.013)	0.016 (0.027)
General						
ST	-0.026** (0.010)	0.022 (0.032)	-0.129** (0.032)	0.036 (0.021)	-0.052 (0.053)	-0.085 (0.054)
SC	-0.034* (0.016)	0.035 (0.044)	-0.056 (0.051)	-0.053*** (0.012)	-0.037 (0.037)	-0.012 (0.034)
OBC	-0.014 (0.014)	0.068 (0.021)	-0.019 (0.019)	0.005 (0.004)	-0.013 (0.019)	0.013 (0.019)
Number of children below 6 years	-0.009** (0.003)	-0.023* (0.003)	-0.041 (0.020)	-0.021*** (0.003)	-0.036*** (0.004)	-0.057* (0.024)
Distance to the nearest lower-secondary school Less than 1 km						
>=1 & <2 km	-0.022* (0.010)	0.013 (0.008)	-0.055 (0.024)	-0.008 (0.005)	-0.017** (0.005)	-0.008 (0.021)
>=2 km	-0.062** (0.022)	-0.036 (0.014)	-0.062 (0.032)	-0.021** (0.007)	-0.049** (0.018)	-0.024 (0.035)
Constant	-0.636 (0.574)	-4.096 (2.616)	-3.109 (1.830)	0.064 (0.898)	-3.787* (1.745)	-0.488 (1.061)
Observations	4,059	1,595	4,087	2,599	2,848	2,975
R-squared	0.126	0.067	0.171	0.148	0.116	0.115
State FE	Yes	Yes	Yes	Yes	Yes	Yes

Source: Author's calculation from NSSO Survey of Education 2007-08, 2014, 2017-18. Robust standard errors clustered at the state level are presented in the parentheses. Sampling weights have been used for estimation. Level of significance * < 0.1, ** < 0.05, *** < 0.01.

7. Role of Private Schools in Implementing the RTE Act

The RTE Act explicitly specifies the role of non-state actors and has made them central to the proper implementation of the Act. Under Section 12(1)(c) of the RTE Act, private schools are mandated to admit children from disadvantaged groups (DG) or economically weaker sections (EWS) up to 25 percent of the total number of students admitted in Grade 1¹¹ (also referred to as the 'RTE quota'). That is, they are mandated to admit children from DG or EWS up to one-fourth of the strength of Grade 1. While the private schools require to enroll and provide education to these children, the government reimburses the private schools for their education. This section examines the participation of private schools in the implementation of the RTE Act. It explores whether this could be a possible channel to explain an increase in the school completion rate of children from low-income backgrounds.

A preliminary examination shows that although RTE Act was implemented in the year 2010, according to the Government of India report, even in 2013 only 27 states and UTs had started implementing the clause (Government of India, 2014). Among the states and UTs in India, the Union Territory Lakshadweep does not record any private schools, so this clause is not effective there and Jammu and Kashmir was excluded.

The definition of children who were identified as being from the EWS or DG varied from state to state, based on the definition set by the respective states¹².

For instance, Bihar, a state in northern India defines children to be from an EWS category if the annual income of the parents is less than two lakh rupees (around \$2500 per year). Children from DG are those whose parents had an annual income of less than one lakh rupees and belonged to SC, ST, or minority groups. Delhi, the capital of India, defined EWS as children belonging to families having an income of less than one lakh rupees from all sources. DG included children from SC, ST, or OBC families, children with special needs, having some forms of disability, orphan or transgender students.

Himachal Pradesh mandates private schools to admit children under the RTE quota but specifies that the state government will not reimburse the per-child cost to the private schools in case seats remain vacant in neighbouring government schools. Punjab specifies that children from weaker backgrounds can only apply for admission in private schools under the quota if they are unable to seek admission in the nearby government schools for lack of available seats, or other reasons (Government of Punjab, 2011). The Karnataka state rules of 2012, that directed private schools to admit children under the RTE quota, were amended in January 2019. The amendment mentioned that private schools were not mandated to admit children under the RTE quota, in case there were government schools in the

¹¹ Some states also consider pre-primary grades as the entry-level to admit children from DG or EWS background

¹² https://www.education.gov.in/en/rte_dws

same locality. This resulted in a lot of controversies and the amendment was challenged in the High Court of Karnataka, which ruled in favour of the amendment in May 2019 (High Court of Karnataka, 2019). The case was moved to the apex court, the Supreme Court of India, which sought a reply from the Government of Karnataka in August 2019 (The Hindu, August 19, 2019). Based on the definitions and process of implementation, the states are required to inform about their rules and admit children in their respective schools.

Nationally representative DISE¹³ data is used to check the percentage of seats filled under Section 12(1)(c) of the RTE Act and to examine how the states have implemented it. The DISE data is mainly self-reported by the schools and might not yield the exact picture, but it is widely used in the literature (see for example Sarin et al., 2018; Shah & Steinberg, 2019). Furthermore, it is the only source of data that captures information related to admission under the RTE quota at the national level.

The minority private schools are exempted from implementing the RTE quota, but in the initial surveys till 2017-18, data is not available on the minority status of the school. Hence, all private unaided schools, irrespective of their minority status, are considered in Figure 2. The increasing trend in the number of available seats under this quota is evident in Figure 2. In the year 2019-20, 2.4 million seats were available under the RTE quota in Grade 1 of private unaided schools across India.

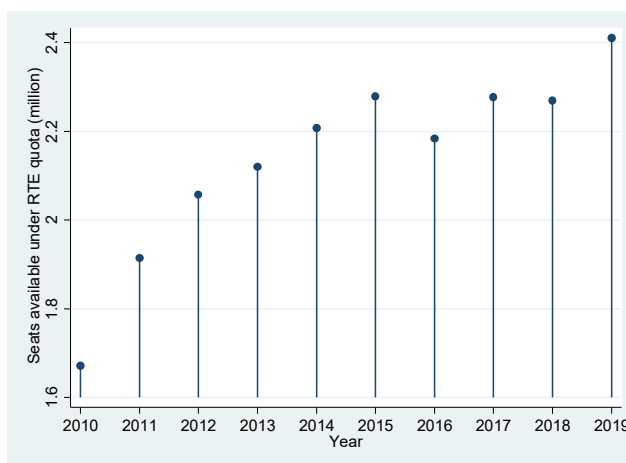


Figure 2: Seats available at private schools under the RTE quota

Source: Author’s calculation from DISE data

From the year 2018-19, data was made available on the minority status of schools, making a more nuanced analysis possible. Since it was possible to segregate unaided private schools based on their minority status, only non-minority private unaided schools were considered for the rest of the analysis.

Further, schools that report greater enrolment under the RTE quota for Grade 1, than the total enrolment in Grade 1, are dropped. This leads to less than 1 percent sample being dropped. In 2018-19, out of the 2.08 million seats that

¹³ As an alternative data source, data reported by the Central Government as a part of Parliamentary debates are presented (Lok Sabha, July 1, 2019) in Appendix Table A3. The data suggest that 7 states, viz., Assam, Chhattisgarh, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, and Tamil Nadu accounted for over 85 percent of all-India students who were admitted under the RTE quota, across the years. Of these seven states, Maharashtra and Rajasthan accounted for the largest share. However, a discrepancy was observed in some other states like West Bengal which reported zero enrolments under the specified data, but positive enrolment under DISE data.

were available under the RTE quota in non-minority private unaided schools, only 0.75 million seats were filled. That is, only 36 percent of the available seats were filled. In 2019-20, 38 percent of the seats were filled (Table 5). The table refers to this as the uncapped¹⁴ figures. Although the numbers remain low, the share of seats that were filled under the quota has increased over the years. In 2012-13, 21.5 percent of the available seats were filled while the corresponding share of 2013-14 was 31 percent.

In some of the schools, the reported enrolment under 12(1)(c) was greater than one-fourth of the total students in Grade 1 that was earmarked for the students. Aside from the state of Madhya Pradesh, the other state governments only provide reimbursement for 25 percent of the total number of students in that class. Hence, it is less likely that schools would enroll more students under this quota, and this could be a discrepancy in reporting. An alternate estimate is provided, where the effective enrolment under this quota is capped at one-fourth of the number of students in Grade 1 in these schools (Sarin et al., 2018). Under this estimation, the seat-fill rate for the year 2018-19 falls to 23.1 percent and that of 2019-20 falls to 27.5 percent. In this way of estimation, the fill rate for 2013-14 and 2014-15 was 14.66 percent and 15.12 percent respectively (Sarin et al., 2018).

There was considerable heterogeneity among the states. Among the major states that had enrolled students under this quota, only Gujarat, Odisha, Rajasthan, Tamil Nadu, and West Bengal had filled up more than 50 percent of their available seats (Table 5). Andhra Pradesh and Telangana did not report any enrolment under the RTE quota. The non-compliance with RTE Act was brought to the courts through Public Interest Litigations (PIL), which were filed by advocates in the State High Court of Andhra Pradesh and State High Court of Telangana. Recent media reports suggest that the School Education Department in Andhra Pradesh is working on implementing the RTE quota from the next academic year (The Hindu, January 1, 2022), but the Government of Telangana is yet to notify the criteria for being DG and EWS who are eligible for seeking admission under the RTE quota (Lok Sabha, March 23, 2020). The Government of Punjab had notified EWS and DG for admission in private unaided schools but had not initiated the process of enrolment of students under Section 12(1)(c) as per state report in the year 2019-20 (Government of Punjab, 2019).

The number of schools that were taking admission under the quota also varied over the years. In 2019-20, out of all the private unaided non-minority schools, only 26 percent of schools admitted children under the RTE quota. There was wide variation across states in terms of school participation rates. Over half of the private unaided schools recorded positive enrolment under the RTE quota in Chhattisgarh, Chandigarh, Gujarat, Rajasthan, Tamil Nadu whereas private unaided schools in Andhra Pradesh and Telangana did not record any positive enrolment even in 2019-20.

A point of concern that remains is ensuring that the children who seek enrolment under this clause complete their education. Karnataka, one of the southern states of India, implemented admission under the RTE quota in 2012. Of

¹⁴ Uncapped figure: (Total enrolment (E) under Section 12(1)(c) in Grade 1 of school (S)) / (25 percent of Total students (T) in Grade 1 of School (S)) ; S<T
Capped figure: (Total enrolment (E) under Section 12(1)(c) in Grade 1 of school (S)) / (25 percent of Total students (T) in Grade 1 of School (S)) ; where E has been capped at 25 percent of T, that is, $E \leq 0.25XT$

the 43,626 children who were admitted in the first year in 2012, only 13,910 children were continuing in eight years, showing a 68 percent fall in retention from the first year (The Hindu, October 14, 2020).

Table 5: State share of seats available and filled in private unaided non-minority schools under Section 12 (1)(c) of the RTE Act in 2019-20

	Seats available in Grade 1	Seats filled (uncapped)	% of seats filled	
			Uncapped	Capped
Himachal Pradesh	57286	7199	50.3	18.2
Punjab	258637	0	0	0
Chandigarh	3854	572	59.4	58.1
Uttarakhand	124878	8354	26.8	23.4
Haryana	309517	4433	5.7	3.1
Delhi	171659	22163	51.6	39.7
Rajasthan	931165	132143	56.8	49.7
Uttar Pradesh	2053215	91114	17.8	8.8
Bihar	303364	30194	39.8	31.3
Sikkim	4742	197	16.6	8.2
Arunachal Pradesh	11823	1413	47.8	23.7
Nagaland	18914	713	15.1	7.3
Manipur	33500	2157	25.8	11.8
Mizoram	14832	424	11.4	3
Tripura	10991	1161	42.3	20.9
Meghalaya	25489	1409	22.1	7
Assam	165132	22454	54.4	29.3
West Bengal	327056	70918	86.7	30.9
Jharkhand	54886	3140	22.9	17.2
Odisha	137155	30119	87.8	45.6
Chhattisgarh	179583	32729	72.9	54.5
Madhya Pradesh	687919	79180	46	30.8
Gujarat	448358	75851	67.7	61.1
Daman & Diu	1537	13	3.4	3.4
Dadra & Nagar Haveli	2787	41	5.9	5.9
Maharashtra	511969	82849	64.7	55.9
Andhra Pradesh	401718	0	0	0
Karnataka	490271	52781	43.1	35.6
Goa	5067	807	63.7	16.5
Lakshadweep				
Kerala	111844	5111	18.3	5.3
Tamil Nadu	508605	74938	58.9	52
Pondicherry	10968	616	22.5	6.6
Andaman & Nicobar Island	1671	39	9.3	9.2
Telangana	363538	0	0	0
India	2185983	835232	38.21	27.5

Source: The author's calculation from DISE microdata for 2019-20 is based on the data obtained from <https://udiseplus.gov.in/#/home>. Data from Jammu and Kashmir is not reported here. Lakshadweep does not have any private school, hence the row is left empty. Uncapped figure: (Total enrolment (E) under Section 12(1)(c) in Grade 1 of school (S)) / (25 percent of Total students (T) in Grade 1 of School (S)); $S < T$. Capped figure: (Total enrolment (E) under Section 12(1)(c) in Grade 1 of school (S)) / (25 percent of Total students (T) in Grade 1 of School (S)); where E has been capped at 25 percent of T, that is, $E \leq 0.25XT$

The DISE data provides evidence at the sub-national level, but the data cannot provide any evidence at the individual level. For a more detailed picture at the individual level, data is used from NSSO's Survey of Education over the years 2007-08 to 2017-18. The type of school attended by children aged 6-14 years, based on the consumption expenditure of families is presented in Figure 3. There has been an overall increase in attendance in private schools for each consumption quintile between 2007 and 2017. As is evident from the figure, the trends in the urban sector were higher than the ones in the rural sector. In the urban sector, at each consumption quintile, a greater share of children was attending private school than in the rural sector.

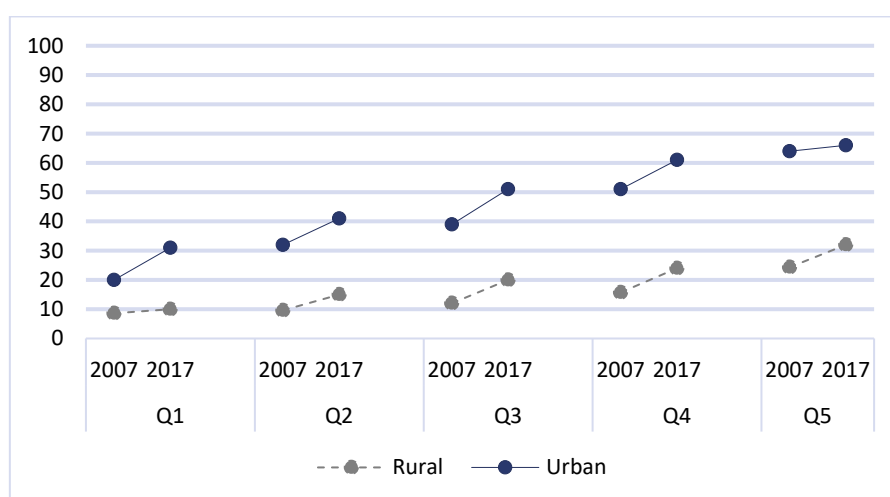


Figure 3: Type of school attended by consumption expenditure quintiles in India in 2007-08 and 2017-18

Source: Author's calculation from NSSO Survey of Education 2007-08 and 2017-18

In both sectors, the children reported traveling a greater distance to reach private school. In 2017-18, 3 percent of the children in India traveled more than 5 km to reach a government school whereas 18 percent traveled more than 5 km to reach a private unaided school. This is not driven by the absence of schools in the vicinity, as was shown earlier. The three main reasons for attending private schools that emerge from the data were dissatisfaction regarding the quality of education in government schools, the location of private schools in the vicinity, and having English as a preferred medium of instruction (Table 6).

Table 6: Major reason for attending private school

	Rural			Urban		
	Boy	Girl	Total	Boy	Girl	Total
The school is located nearby	17	18	17	27	29	28
Social Reasons	10	10	10	8	8	8
Availability of special facilities	12	9	11	12	9	11
The medium of instruction is English	15	13	14	18	17	18
Quality of education in nearby government institutions is perceived to be not satisfactory	39	42	40	27	29	28
Other reasons	7	8	8	8	8	7
Total	100	100	100	100	100	100

Source: NSSO's Survey of Education 2017-18

Overall, the evidence presented in this section shows that a very limited role of private schools is observed in implementing RTE. The ways to increase engagement and the role of private school calls for further research.

8. Conclusion and Policy Recommendation

The year 2020 marked a decade after the implementation of the RTE Act and enrolment of children has reportedly increased over time. 2020 also marks the year in which India passed the National Education Policy (NEP) after a gap of three decades from the previous National Policy on Education, 1986. This section will discuss how three important results of this paper regarding the RTE Act are dealt with in the NEP, namely, the low school completion rate of children from Muslim families, the limited role of private unaided schools in implementing RTE, and the progress toward the overall target of increasing school completion rate. Based on these, a couple of policy recommendations are proposed.

This study discusses the change in the school completion rate of children due to the passage of the RTE Act. The findings suggest that there was an improvement in school completion rates of rural low-income children, both for boys and girls, due to the passage of the RTE Act. However, the increase was not uniform across the sub groups of children. An examination within groups has shown that low-income children belonging to Muslim families in rural India did not see an improvement in school completion rates.

The low participation of children from the Muslim community has been observed by Indian policymakers. Both Draft NEP 2019 and NEP 2020 acknowledge the need to have interventions to promote the education of children from religious or linguistic minority groups, especially the ones who are under-represented. The draft talks about incentivising Muslims and other educationally under-represented minorities to complete school education, strengthening minority institutions like *madrasahs*, modernising education, including the children in national examinations, but falls short of suggesting that the minority institutions should be brought under the purview of the RTE Act (pp. 151, Government of India, 2019b).

Could the lack of improvement within the Muslim community be stemming from the choice of schools attended – that is, minority or non-minority schools? This question could not be answered in this study because of data limitations, but it could be a possible channel. The RTE Act applies to government schools, aided and unaided non-minority schools, but the minority schools are exempted from RTE Act to give them the freedom to conserve their language, script, and culture.

In *'Society for Un-aided Private Schools of Rajasthan vs. Union of India'*¹⁵ in 2012, the Supreme Court exempted the unaided private minority schools from implementing the RTE quota. That is, all the minority schools that did not receive any funding from the government, did not need to admit children from weaker sections in their schools. Two years later, in *'Pramati Educational & Cultural Trust & Other vs. the Union of India'*¹⁶, 2014, the Supreme court extended the exemption to all minority schools. After these judgments, there was a surge in the number of schools that secured Minority Status Certificates to avoid admitting children from weaker sections (Kothari & Ravi, 2017). Furthermore, evidence suggests that 62.5 percent of students who were studying in the minority schools are from

¹⁵ The Supreme Court judgement dated April 12, 2012: <https://main.sci.gov.in/judgment/judis/39251.pdf>

¹⁶The Supreme Court judgement dated May 6, 2014 <https://main.sci.gov.in/judgment/judis/41505.pdf>

non-minority communities, and only 8.76 percent of the students in minority schools belong to socially and economically disadvantaged backgrounds (Government of India, 2021). This pattern has been highlighted in draft NEP 2019 as a ‘misuse’ of judicial exemption granted by the Supreme Court. The minority schools remain outside the ambit of RTE as of early 2022, despite the recommendation of the government to include them in RTE (Government of India, 2021). In February 2022, the Supreme Court of India refused to intervene in a petition challenging the sections of RTE that excludes Vedic *pathshalas*, *madrasahs*, and institutions imparting religious education from its realm¹⁷.

The first recommendation of this study is to increase the attention paid to the education of children from Muslim communities. This can be done by proper implementation of NEP 2020 along with the strategies elaborated in Draft NEP 2019. A recent report by the National Commission for Protection of Child Rights (NCPCR) mentions that ‘*the schools being run by the Muslim community have more than 75% of the student population belonging to the Muslim community*’ (pp.11, Government of India, 2021). Thus, strengthening the minority institutions, and bringing the minority schools under the purview of the RTE Act can be the other possible channel of improving the school completion rates of children from low-income Muslim families.

Second, is the role of private schools in implementing the RTE Act. There has been an increase in the enrolment of children under Section 12(1)(c) but the future of this clause remains uncertain. Draft NEP 2019 mentioned that Section 12(1)(c) will be reviewed based on the evidence present, but the tone of the discussion cast doubt on its inclusion in the final policy. It mentioned ‘*the large amounts of money and effort spent on implementing this clause may be more effectively spent, e.g. by investing the money on the public schooling system – particularly in disadvantaged areas – which would directly support many more students from underprivileged backgrounds in a sustainable manner.*’ (p. 194, Government of India, 2019). Not surprisingly, NEP 2020 remains silent on the implementation of Section 12(1)(c) of the RTE Act. Neither the clause nor the mandates under the clause, are explicitly mentioned in the policy. Hence, there could be an ambiguity in the implementation of Section 12(1)(c) once NEP is implemented across India. The second recommendation of this paper in this regard, is to ensure proper implementation of clause 12 (1)(c), which would ensure that children from DG and EWS background can attend private unaided schools.

The effect of having a mixed group of students in the classroom has benefits for both the advantaged and the disadvantaged children in the classroom. Rao (2019) studied the peer effects that children from poor families have on students from relatively wealthier families in 17 schools in Delhi, India. The study finds that having poor classmates made their richer counterparts more pro-social; they were more likely to attend charitable events and help raise funds. The effect of this clause moves beyond the classroom, as wealthier children from more economically diverse classrooms were less likely to discriminate, even outside of school.

Overall, the question that is explored in this study is in line with the targets under RTE and is still relevant in the context of NEP 2020 (Government of India, 2020). One of the targets set under NEP 2020 is to curtail dropout rates and to ensure that the children who are enrolled in school attend classes, and are retained till the completion of school

¹⁷ Date 11 February 2022, Writ Petition(s)(Civil) No(s).1382/2021, <https://main.sci.gov.in/judgments>

education. The policy, in line with RTE Act, talks about bringing the students who drop-out, back into the educational system and ensuring that these students do not drop out of the system once again. NEP 2020 aims to achieve this goal through easing access to quality schools, providing appropriate infrastructure, and tracking students and their learning levels as they move through the schooling system.

States across India have started preparing for the implementation of NEP 2020. Moving ahead, only through proper implementation of policy along with active participation of the stakeholders, India can achieve the target of not only universal school enrolment, but universal school completion and learning.

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APPENDICES

Appendix 1: Details of the state population, caste composition and gross domestic state product in India

Table A1: Details of population, socio-religious composition, female literacy, and gross domestic state product in 2011

State	Total population	Percentage of population				Female Literacy	GSDP 2011-12 (rupees lakh)
		6-14 years	SC	ST	Muslim		
Jammu And Kashmir	12541302	20	7	12	68	22	7825555
Himachal Pradesh	6864602	16	25	6	2	33	7271983
Punjab	27743338	16	32		2	30	26662827
Chandigarh	1055450	16	19		5	32	1876816
Uttarakhand	10086292	20	19	3	14	30	11532759
Haryana	25351462	18	20		7	27	29753852
Delhi	16787941	17	17		13	33	34379750
Rajasthan	68548437	21	18	13	9	21	43483664
Uttar Pradesh	199812341	23	21	1	19	23	72405044
Bihar	104099452	25	16	1	17	20	24714396
Sikkim	610577	19	5	34	2	32	1116510
Arunachal Pradesh	1383727	23		69	2	24	1106269
Nagaland	1978502	22		86	2	31	1217674
Manipur	2855794	19	3	41	8	30	1291460
Mizoram	1097206	19	0	94	1	37	725869
Tripura	3673917	17	18	32	9	35	1920841
Meghalaya	2966889	23	1	86	4	29	1991774
Assam	31205576	20	7	12	34	28	14317491
West Bengal	91276115	17	24	6	27	30	52048504
Jharkhand	32988134	22	12	26	15	23	15091759
Odisha	41974218	18	17	23	2	28	23098708
Chhattisgarh	25545198	20	13	31	2	26	15807382
Madhya Pradesh	72626809	21	16	21	7	24	31556159
Gujarat	60439692	18	7	15	10	29	61560607
Daman And Diu	243247	13	3	6	8	26	
Dadra And Nagar Haveli	343709	19	2	52	4	23	
Maharashtra	112374333	17	12	9	12	32	128036944
Andhra Pradesh	84580777	17	16	7	10	26	37940203
Karnataka	61095297	16	17	7	13	30	60600981
Goa	1458545	13	2	10	8	38	4236666
Lakshadweep	64473	16		95	97	38	
Kerala	33406061	15	9	1	27	43	36404789
Tamil Nadu	72147030	15	20	1	6	33	75148576
Puducherry	1247953	15	16		6	37	1681801
Andaman And Nicobar Islands	380581	15		7	9	34	397843
India	1210854977	19	17	9	14	27	--

Source: The population numbers are calculated by the author from the Census of India, 2011. The Gross Domestic State Product (GSDP) is reported at constant prices with a base of 2011-12, taken from the Reserve Bank of India website, which is taken from the National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.

Appendix 2: Attendance percentage by state

Table A2: Attendance percentage by state and sector of residence

State	2007-08			2017-18		
	Rural	Urban	Total	Rural	Urban	Total
Himachal Pradesh	98	98	98	100	100	100
Punjab	89	84	87	98	95	97
Chandigarh	86	91	90	100	99	99
Uttarakhand	92	89	91	99	99	99
Haryana	90	92	90	96	97	96
Delhi	95	92	93	88	95	95
Rajasthan	84	92	85	91	96	92
Uttar Pradesh	85	81	84	89	90	89
Bihar	75	83	76	92	94	92
Sikkim	97	90	96	99	100	99
Arunachal Pradesh	83	96	86	91	94	91
Nagaland	95	95	95	95	96	95
Manipur	93	97	94	98	98	98
Mizoram	98	99	98	97	100	98
Tripura	88	93	89	99	98	99
Meghalaya	94	96	94	96	98	96
Assam	91	91	91	96	99	96
West Bengal	86	88	86	95	96	95
Jharkhand	85	94	86	96	97	96
Odisha	84	88	85	95	99	96
Chhattisgarh	90	91	90	96	97	96
Madhya Pradesh	89	91	89	91	96	92
Gujarat	85	92	87	94	98	96
Daman & Diu	96	98	97	100	83	87
Dadra & Nagar Haveli	87	99	88	98	94	97
Maharashtra	91	94	92	97	98	97
Andhra Pradesh	88	94	90	97	99	98
Karnataka	90	97	92	96	98	97
Goa	94	92	93	100	100	100
Lakshadweep	100	94	97	95	100	98
Kerala	99	100	99	100	100	100
Tamil Nadu	97	97	97	99	100	99
Pondicherry	96	99	98	97	100	99
Andaman & Nicobar Island	96	99	97	98	99	98
India	86	91	87	93	96	94

Source: NSSO's Survey of Education

Appendix 3: Number of children admitted and studying under clause 12(1)(c) of the RTE Act by state

Table A3: State wise report on the number of children who are admitted and are studying under Section 12(1)(c) of RTE Act					
	2014-15	2015-16	2016-17	2017-18	2018-19
Andaman & Nicobar Island	394	540	725	1017	0*
Andhra Pradesh	0	0	0	0	0
Arunachal Pradesh	0	0	0	0	0
Assam	4653	3242	15062	20731	0*
Bihar	61887	97717	139418	167039	225597
Chandigarh	2145	2825	3487	3915	4597
Chhattisgarh	100927	128639	167044	196146	236400
D & N Haveli	0	0	0	0	0
Daman & Diu	0	0	0	0	0
Delhi	33201	49043	51254	124605	158242
Goa	0	0	0	0	0
Gujarat	13033	41586	83734	141365	215820
Haryana	0	0	0	0	0
Himachal Pradesh	0	0	0	0	100
Jammu & Kashmir	The RTE Act is not applicable				
Jharkhand	8237	10489	13244	10539	14913
Karnataka	217306	316115	414106	523139	639398
Kerala	0	0	0	0	0
Lakshadweep	No Private Unaided School				
Madhya Pradesh	637123	795225	851538	936255	1118433
Maharashtra	65719	104945	142112	197044	254351
Manipur	0	0	0	0	0
Meghalaya	0	0	0	0	0
Mizoram	0	0	0	0	0
Nagaland	0	0	0	0	0
Odisha	31150	31994	38820	44519	20650
Puducherry	0	0	0	0	0
Punjab	0	0	0	0	0
Rajasthan	436070	555966	600666	622271	675907
Sikkim	0	0	0	0	0
Tamil Nadu	131566	197369	287068	346510	394032
Telangana	0	0	0	0	0
Tripura	0	0		0	0
Uttar Pradesh	108	3278	21598	46188	72428
Uttarakhand	66851	83450	95427	102736	104147
West Bengal	0	0	0	0	0
Total	1810370	2422423	2925303	3484019	4135015

Source: Lok Sabha Debate dated July 1, 2019 (Lok Sabha, July 1, 2019)

Appendix 4: Lower-secondary school completion

This sub-section assesses the extent to which lower-secondary school completion of children aged 17-19 years, belonging to rural low-income families, increased due to the passage of the RTE Act. The paper recognizes the fact that while the household characteristics will not lead to an estimation issue for unmarried individuals in this particular age group, the patrilocal structure in Indian society might change the characteristics of married women. This will lead to the improper use of control variables, which could lead to incorrect estimation.

There is also a possibility that children from low-income backgrounds might get married at an earlier age. Appendix Table A4.1 shows the marital status of individuals aged 17-19 years by year and gender in rural India. It can be seen that the percentage of married individuals in that age group has fallen over time, but in all the years, women from low-income backgrounds are more likely than men to be married. Thus, an estimation that would consider only unmarried individuals, might disproportionately affect low-income women.

	2007-08				2014				2017-18			
	Low-income		High-income		Low-income		High-income		Low-income		High-income	
	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
Never Married	94	68	98	77	97	79	99	90	98	86	99	93
Married	6	32	2	23	3	10	1	10	3	14	1	7
Widowed/ Divorced	0	0	0	0	0	0	0	0	0	0	0	0
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: Author's calculation from Survey of Education

Keeping this in mind multiple models are estimated and the results are presented in Appendix Table A4.2. In the first model, the results are presented with the full sample but household characteristics are not controlled for. Models without and with state-fixed effects are presented in Columns 1 and 2 respectively. In the next model (Column 3), the analysis is restricted to unmarried individuals. The parallel trends assumption is examined and is found to be satisfied. Finally, the regression results suggest that the lower-secondary completion rate of rural low-income individuals has increased in the post-RTE period. The positive effect of RTE was seen on low-income individuals of both genders. This indicates possible convergence in lower-secondary school completion rates between the high-income individuals and low-income individuals over time.

Appendix Table A4.2: Estimates for lower-secondary completion of individuals aged 17-19 years in rural India

VARIABLES	Full sample	Full sample	Unmarried sample
	Without state fixed effects	With state fixed effects	
	(1)	(2)	(3)
Treated*after	0.118*** (0.023)	0.126*** (0.026)	0.105*** (0.022)
Treated	-0.262*** (0.027)	-0.261*** (0.028)	-0.167*** (0.020)
After	0.081*** (0.012)	0.085*** (0.012)	0.071*** (0.013)
Age	-1.519*** (0.267)	-1.102*** (0.242)	-0.761*** (0.260)
Age squared	0.041*** (0.007)	0.030*** (0.007)	0.021*** (0.007)
Female child	-0.051*** (0.014)	-0.054*** (0.014)	-0.009 (0.013)
The household head is illiterate			0.174*** (0.013)
Household head literate			0.015 (0.019)
Female household head			-0.156*** (0.038)
Hindu			-0.003 (0.022)
Muslim			-0.084*** (0.023)
Other religion			-0.072*** (0.022)
General			-0.039*** (0.014)
ST			-0.022** (0.010)
SC			-0.005 (0.012)
OBC			-0.051*** (0.012)
Number of children below 6 years			7.782*** (2.328)
Distance to the nearest secondary school			
Less than 1 km			
>=1 & <2 km			-0.005 (0.012)
>=2 km			-0.051*** (0.012)
Constant	14.783*** (2.386)	11.173*** (2.153)	7.782*** (2.328)
Observations	20,846	20,846	19,166
R-squared	0.097	0.120	0.158
State FE	No	Yes	Yes

Source: Author's calculation from NSSO Survey of Education 2007-08, 2014, 2017-18. Robust standard errors clustered at the state level are presented in the parentheses. Sampling weights have been used for estimation. Level of significance * < 0.1, ** < 0.05, *** < 0.01.