Factors Affecting Successful Completion of Secondary Education in India: Lessons from Young Lives

Against the backdrop of rapid economic growth and increased demand for skilled workers, and set within the framework of the recently agreed Sustainable Development Goals, the Government of India's national mission for secondary education, Rashtriya Madhyamik Shiksha Abhiyan, has set an ambitious target of achieving near-universal enrolment in secondary education by 2017. This policy brief presents longitudinal analysis from Young Lives in Andhra Pradesh. In the most recent survey round, 71% of children had completed secondary school at age 19. Longitudinal data allow us to analyse the factors which help or hinder children to progress through school – including gender, household wealth and ethnic background, and school achievement at early ages. The link to early grade achievement has significant policy implications for primary school programmes such as the Sarva Shiksha Abhiyan and Beti Bachao Beti Padhao as well as the 2015 Child Labour Amendment Act. There is now a strong imperative to ensure that children are provided with quality teaching and relevant curriculum if they are to pursue their education and acquire the skills required for the twenty-first century.



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In the past decade India has made huge strides in increasing access to schooling with net enrolment now having reached 70% at upper primary level (Grade 6 to Grade 8) in 2013-14 (NUEPA 2014a). While India is among 10 countries that have made the fastest progress in reducing the number of children who are not in school at elementary level, the challenge is now to ensure that improved access is accompanied with improved levels of learning, since a large number of children leave school, without having mastered the basic skills (ASER 2014).

Acknowledging the link between education and economic development, and the importance of preparing young people with life skills to enable them to find productive and fulfilling employment, policymakers have turned their attention towards universalising secondary education. The CABE Committee Report highlighted that: 'universal secondary education is a pre-condition for equitable social development, widening participation in India's democratic functioning, building up of an enlightened secular republic, and be globally competitive' (CABE 2005: 14).

To meet the challenge of dramatically improving access, equity and quality of secondary education simultaneously, the Government of India launched a national mission for secondary education in 2009 (Rashtriya Madhyamik Shiksha Abhiyan, RMSA) to increase enrolment in Grades 9 and 10.

The programme aims to provide a secondary school within a reasonable distance of every habitation, to improve the quality of education by ensuring all schools conform to prescribed standards and norms, and to remove gender, socio-economic and disability barriers. In this way the Government aims to achieve near universal enrolment by 2017. Despite this initiative, retention remains a challenge with gross enrolment ratio of just 76.64 for Grades 9 and 10 in 2013-14, and net enrolment as low as 45.63 (NUEPA 2014b).

Key findings

- 71% of the Young Lives Older Cohort had completed secondary school (when surveyed at the age of 19).
- Boys were more likely than girls to stay in school and complete their secondary education (66% of girls compared with 77% of boys).
- Children from households from the top wealth tercile were most likely to complete secondary school (85.8%), compared to just 60.4% of children from households in the poorest wealth tercile.
- Children whose parents had completed secondary education were over 90% likely to complete secondary school, compared to just over 60% of children whose parents had little or no education.
- Children from Scheduled Castes (66%) and Scheduled Tribes (69%) were less likely to complete secondary school than children from Other Castes (80%).
- The first-born child in a family was most likely to stay in school until the end of secondary education (78.6%). A child who was fourth-born (or later) was much less likely (62.6%).
- 65.5% of children who engaged in domestic chores for more than three hours a day and 51.6% of children who were engaged in paid work at the age of 12 did not complete their secondary education.

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This policy brief uses longitudinal evidence from Young Lives to examine which children left school without completing secondary school (Figure 1), and how factors and circumstances early in their lives shaped this (Figure 2). Information collected from the same children at different ages is used to show how early circumstances shape late outcomes.

Less than half of the Older Cohort of Young Lives children (who we have been following since the age of 7 to 8 in 2002) were still in education at the age of 19. By this age, 71% had successfully completed secondary school up to Grade 10, although there are marked differences within this – particularly between girls and boys and children from better-off or poorer families (Figure 1).

We used multivariate analysis to identify the underlying predictors of completing secondary schooling. This analysis uses logistic regression, a technique which allows us to take account of a range of possible influences on whether or not children complete secondary school, expressed in terms of the impact on the chances of completing. Our analysis shows there are a multitude of factors which affect a child's successful progression through secondary education, after controlling for confounding factors.

Factors that help (or hinder) children to stay in school

We constructed four models and found that there are seven direct determinants (Model 4, direct effects) and another three that are significant (Model 3, indirect effects) (Singh and Mukherjee 2015). Results from direct effects are summarised in Figure 2.

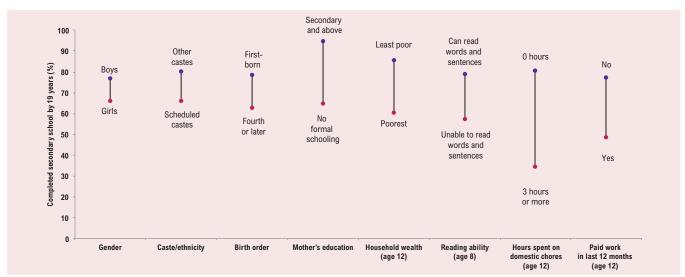
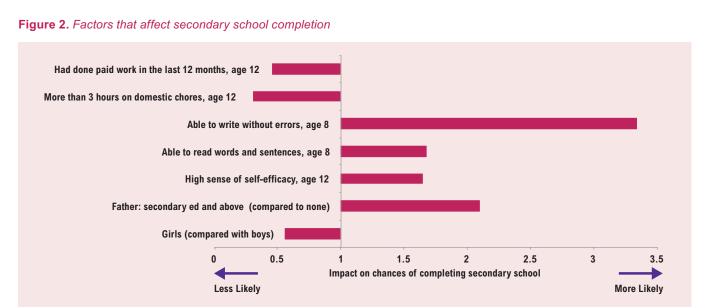


Figure 1. Which children are most likely to complete secondary education

Source: Young Lives data, Rounds 1 to 4.



Note: All reported findings significant at 99% level. Full models in Singh and Mukherjee (2015).

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Gender

Boys were 1.8 times more likely than girls to complete secondary school, even after controlling for variables related to individual characteristics. The in-depth qualitative research also carried out by the Young Lives team highlights various factors that influence girls' progress through secondary education, including familial, societal and school-related issues, such as safety concerns related to travel to school, and the expectation that girls will support the family in domestic chores or will work to supplement household income. Problems experienced by the family often have a disproportionate effect on girls.

Latha's story

Latha lives in Katur, a rural poor mandal in Rayalseema region, with her parents who are agricultural labourers. Latha dropped out of school to help her parents with domestic chores as well as doing day-labour harvesting groundnuts, weeding, etc. Latha told us that she left school in Grade 7 but wishes her parents had allowed her to continue her studies. Latha's mother explains that she would have liked her daughter to study up to Grade 10, but her elder son ran away with a girl, without their (family) blessings therefore "we did not send Latha (to school) fearing that she too may do something similar... by having friendship with different people."

Parental education

Levels of parental education are an important determinant of children completing secondary education. Children whose father completed secondary school and above are 2.1 times more likely to complete school than children whose fathers had little or no education. Maternal education, while positively correlated with secondary school completion, did not emerge as a significant factor in the final (directs effect) model (although maternal education is itself likely to be associated with paternal education). The importance of parental education prompts questions about how policymakers can support parents with lower levels of education to support their children and help them through school.

Early literacy

Our results also show that children's early literacy skills, such as the ability to read words and sentences fluently at the age of 8, means a child is 1.7 times more likely to complete secondary school than children who weren't able to do so. Similarly, children who showed better writing skills at age 8 were 3.3 times more likely to progress than children who were not able to write without errors. Clearly this suggests that children's successful transition through secondary education begins with effective learning in pre-school and early primary, where the foundations for learning are established.

Self -efficacy

Self-efficacy, defined as one's belief or perception in their

capabilities to successfully perform a task or behaviour, emerges in our analysis as another important determinant of secondary school completion. Children with high self-efficacy were 1.6 times more likely to complete secondary education. This is not surprising since self-efficacy affects students' motivation to learn and their persistence in learning difficult new concepts. This suggests it is important to understand how self-efficacy is itself shaped.

Pressures on children to work

Children who did not spend time on domestic chores at age 12, were 3.3 times more likely to complete secondary school than children who did 3 or more hours of domestic work a day. Similarly, children who did not participate in paid work at age 12 were 2.2 times more likely to complete secondary education than those children who participated in paid work.

Indirect effects

We also found other factors that were initially significant but did not emerge as significant in the last regression model, and which may have an indirect effect, for example by shaping other factors such as learning achievement which in turn influences school completion. As such, these factors remain of interest as potential underlying causes.

These indirect effects are examined in depth in Singh and Mukherjee (2015), where we also control for a range of household and community factors. Some of these indirect factors are: (a) early childhood education, particularly private pre-school attendance, which is correlated to completion of secondary schooling; (b) birth order with children born fourth or later within a family 26% less likely to complete secondary education than first-born children; (c) household wealth with children from the top wealth tercile 1.5 times more likely to complete secondary schooling than children in the bottom tercile; (d) caste is a significant factor in model 1, with Scheduled Caste children 44% less likely to complete secondary education than children from Other Castes or more socially privileged background; and (e) rural children remain at a disadvantage compared to urban children.

Policy implications

This policy brief aims to contribute understanding of what predicts whether or not children complete secondary school. Our analysis is therefore relevant for the RMSA aim to increase secondary school retention to over 90% by 2017.

The factors we have identified as important determinants include: parental education above secondary level, being a boy, higher literacy skills in the early primary grades, high self-efficacy, and non-participation in paid work and long hours of domestic chores before the age of 12. Our analysis suggests there needs to be a multi-pronged approach to enhancing secondary school completion to meet the triple challenge of addressing access, quality and equity and meet the goal of universal secondary education through RMSA, and for girls in particular.

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Focus on laying a strong foundation in early grades

First, we see to the importance of a 'life-course' perspective. Our analysis shows how children who do not do well in the early years of school are more likely to drop out. The link between early literacy and secondary school completion needs policy attention. Recently the Sarva Shiksha Abhiyan has launched the an early education programme (Padhe Bharat Badhe Bharat) with the goal that 85% of children in Grade 1 and Grade 2 should reach specified learning indicators in 2016-17. It is critical that pre-school and primary teachers are effectively trained to develop early literacy to ensure children both acquire skills and retain interest in learning. The ongoing process to formulate a new National Policy on Education is an opportunity which must be seized in this area.

Ensure that social protection is provided for the poorest families

Second, it is important to ensure that families can effectively support children in their learning. Since the poorest children in rural locations and children from Scheduled Caste backgrounds are clearly disadvantaged, strengthening social protection programmes would help families to meet the direct and indirect costs of secondary school (which remain higher than for elementary school). Furthermore, the proposed amendment to the Prevention of Child Labour Act needs to be implemented in both letter and spirit, and avoid young children being involved in paid work or long hours of domestic work that affect their school attendance and performance.

Address specific barriers faced by girls

The Sustainable Development Goals recently adopted by the United Nations set gender equality and empowerment through completion of quality secondary education as an imperative. The fact that boys are 1.8 times more likely than girls to complete secondary education clearly highlights the need for interventions focused on girls in order to provide them a level playing field for a better future. The safety concerns relating to, for example, travel to school or distance from home, which emerge in our in-depth interviews with parents and girls themselves, lead us to suggest strategies to reduce safety concerns would consider expanding residential facilities for girls in remote locations as well as investing in safe school transport. Finally, given that marriage was cited as the key reason by almost a third of girls for leaving school and one out of four girls was married by the age of 18, it is essential that we make education both empowering and relevant for all children and ensure that they are provided the requisite skills required to enter the labour market and break the cycle of inter-generational poverty.

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